

WORLD BANK EAST ASIA AND THE PACIFIC ECONOMIC UPDATE APRIL 2025

A LONGER VIEW

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Developing East Asia and Pacific comprises Cambodia, China, Indonesia, Lao People's Democratic Republic (PDR), Malaysia, Mongolia, Myanmar, Papua New Guinea, the Philippines, Thailand, Timor-Leste, Viet Nam, and the Pacific Island Countries.

The **Pacific Island Countries** comprise Fiji, Kiribati, the Marshall Islands, the Federated States of Micronesia, Nauru, Palau, Samoa, the Solomon Islands, Tonga, Tuvalu, and Vanuatu.

The **ASEAN** member countries comprise Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam.

The **ASEAN-5** comprise Indonesia, Malaysia, the Philippines, Thailand, and Viet Nam.

The analysis in this report is based on the latest country-level data available as of April 10, 2025.

List of Abbreviations

| AE | Advanced Economy |
|----------------|--|
| AD | Anti-dumping |
| ADB | Asian Development Bank |
| AI | Artificial Intelligence |
| ASEAN | The Association of Southeast Asian Nations |
| ASP | Adaptive social protection |
| BACI | Database for International Trade Analysis |
| BIS | Bank for International Settlements |
| BLS | Bureau of Labor Statistics |
| Brexit | The UK's withdrawal from the EU following a 2016 referendum |
| CBAM | Carbon Border Adjustment Mechanism |
| CCDR | Country Climate and Development Reports |
| CDS | Credit Default Swap |
| CEPII | Centre d'Études Prospectives et d'Informations Internationales |
| CME | Chicago Mercantile Exchange |
| COM- TRADE | United Nations Commodity Trade Statistics Database |
| COVID | Coronavirus Disease |
| CPI | Consumer Price Index |
| CPTPP | Comprehensive and Progressive Agreement for Trans-Pacific Partnership |
| DB | Defined Benefit |
| DEFA | Digital Economy Framework Agreement |
| DRM | Disaster Risk Management |
| DSM | Digital Single Market |
| EIU | Economic Intelligence Unit |
| EMDE | Emerging Markets and Developing Countries |
| ENVIS- AGE | Environmental Impact and Sustainability Applied General Equilibrium |
| ETS | Emission Trading System |
| EUDR | EU Deforestation Regulation |
| EU- ROSTAT | Statistical Office of the European Union |
| EV | Electric Vehicle |
| FDI | Foreign Direct Investment |
| FIR Databse | Firm-Level Industry Research Database |

| GDP | Gross Domestic Product |
|-----------------|--|
| GVC | Global Value Chain |
| HIC | High Income Country |
| ICIO | Inter-Country Input-Output |
| ICT | Information and Communications Technology |
| ID | Identification Document |
| IFR | International Federation of Robotics |
| IGO | Inter-governmental organizations |
| IIF | Institute of International Finance |
| IMF | International Monetary Fund |
| LCU | Local currency unit |
| LFP | Labor force participation |
| MIC | Middle-income countries |
| NDC | Nationally Determined Contribution |
| NPL | Nonperforming loans |
| OECD | Organisation for Economic Co-operation and Development |
| рр | Percentage point |
| PIT | Personal Income Tax |
| PPP | Purchasing Power Parity |
| PSTRI | Preferential Services Trade Restrictiveness Index |
| PTA | Preferential Trade Agreement |
| PV | Photovoltaic |
| R&D | Research and Development |
| RCEP | Regional Comprehensive Economic Partnership |
| RHS | Right Hand Side |
| ROW | Rest of the World |
| SME | Small and Medium Enterprise |
| SD | Standard Deviation |
| SOE | State-Owned Enterprise |
| STRI | Services trade restrictiveness index |
| SWC | Social Welfara Card |
| TFP | Total Factor Productivity |
| TIAM | Times Integrated Assessment Model |
| TLAC | Total loss-absorbing capacity |
| TTB database | Temporary trade barriers database |

| UN | United Nations |
|--------------|--|
| UNCTAD | United Nations Trade and Development |
| UNES- CAP | United Nations Economic and Social Commission for Asia and the Pacific |
| VIX | Volatility Index |
| WB | Word Bank |

| WBG | World Bank Group |
|------|---------------------------------|
| WDI | World Development Indicator |
| WEO | World Economic Outlook |
| WITS | World Integrated Trade Solution |
| WTO | World Trade Organization |

| Regions World Bank Classification and Country Groups | | |
|--|---------------------------------|--|
| EAP | East Asia and Pacific | |
| ECA | Eastern Europe and Central Asia | |

| Country/Economy Abbreviations | | | | |
|-------------------------------|----------------------------------|--|--|--|
| CHN | China | | | |
| EU | European Union | | | |
| F]I | Fiji | | | |
| FSM | Federated States of Micronesia | | | |
| HKG | Hong Kong SAR, China | | | |
| IDN | Indonesia | | | |
|]PN | Japan | | | |
| KHM | Cambodia | | | |
| KIR | Kiribati | | | |
| KOR | Republic of Korea | | | |
| LAO | Lao People's Democratic Republic | | | |
| MNG | Mongolia | | | |
| MMR | Myanmar | | | |
| MYS | Malaysia | | | |
| NRU | Nauru | | | |
| PHL | Philippines | | | |
| PICs | Pacific Island Countries | | | |
| PLW | Palau | | | |
| PNG | Papua New Guinea | | | |
| RMI | Republic of the Marshall Islands | | | |
| SLB | Solomon Islands | | | |
| THA | Thailand | | | |
| TLS | Timor-Leste | | | |
| TON | Tonga | | | |

| LAC | Latin America and the Caribbean |
|-----|---------------------------------|
| MNA | Middle East and North Africa |
| SAR | South Asia |
| SSA | Sub-Saharan Africa |

| TUV | Tuvalu |
|-------------|----------------|
| TWN | Taiwan, China |
| UK | United Kingdom |
| USA / US | United States |
| VNM | Viet Nam |
| VUT | Vanuatu |
| WSM | Samoa |

| CR | Cambodian riel |
|--------------|---------------------------|
| D | Vietnamese dong |
| F\$ | Fiji dollar |
| К | Myanmar kyat |
| К | Papua New Guinea kina |
| Кір | Lao kip |
| Р | Philippine peso |
| RM | Malaysian ringgit |
| RMB | Chinese renminbi |
| Rp | Indonesian rupiah |
| THB | Thai baht |
| SI\$ | Solomon Islands dollar |
| Тод | Mongolian tugrik |
| US\$ | Timor-Leste (U.S. dollar) |
| US\$/ USD | United States dollar |

Abstract

East Asia and the Pacific is one of the most dynamic regions in the world with growth of 5.0 percent in 2024. China's economy expanded by 5.0 percent, the rest of the region by 4.9 percent, and the Pacific Island Countries by 3.7 percent.

Economic performance in the region is shaped by both external and domestic developments. The key external factors are increased global economic policy uncertainty, a rising number of trade restrictions, and slower growth in the rest of the world. Among the domestic factors, the most important is the policy response, both structural and macroeconomic.

Rising global uncertainty, especially regarding trade policy, is affecting business and consumer confidence, reducing investment and consumption. New trade restrictions, including tariffs are expected to hurt exports. And slower global growth is likely to further reduce external demand.

Private consumption has supported growth, but consumer confidence is now weaker. In China, property sector weakness persists while industrial production remains strong. Private investment is still weak in the region, except in Malaysia and Viet Nam. Monetary policy remains constrained by the risk of capital outflows and currency depreciation, as interest rates abroad stay high. Fiscal policy is expansionary in China and Thailand, but other economies have adopted a more neutral stance in the face of high public debt.

In 2025, EAP regional growth is projected to slow to 4.0 percent. Growth in China is projected to slow to 4.0 percent, while growth in the rest of the region is likely to be 4.2 percent. Growth in the Pacific Island countries is projected to moderate to 2.5 percent. Uncertainty around these projections remains high, and growth outcomes will depend on global developments and national policy choices.

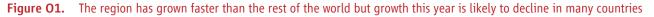
Short-term uncertainty should not obscure long-term changes in global economic integration, the environment, and demographics. These developments, which will affect trade, growth, and jobs in the EAP region, have been individually discussed in past World Bank EAP Economic Updates (April 2023. October 2024). But an integrated analysis may help policy makers take a longer view through the current fog of uncertainty of what ultimately matters and what needs to be done. This report illustrates the benefits of a synchronized, three-pronged approach: harnessing technological change, pursuing domestic reforms, and deepening international cooperation.

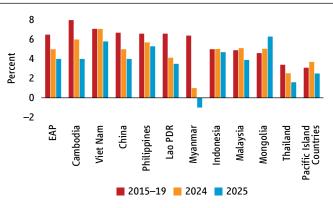
Summary

I. Recent developments

In 2024, developing East Asia and Pacific (EAP) grew faster than the rest of the world, but slower than before the pandemic. China's economy grew by 5.0 percent and the rest of the region by 4.9 percent (figure O1; table O1), slower than the 6.7 percent and 5.2 percent, respectively, during the 2015-19 period. The Pacific Island Countries, grew by an estimated 3.7 percent in 2024, faster than the 3.1 percent during 2015-19 period, reflecting a delayed rebound from the COVID-19 recession.

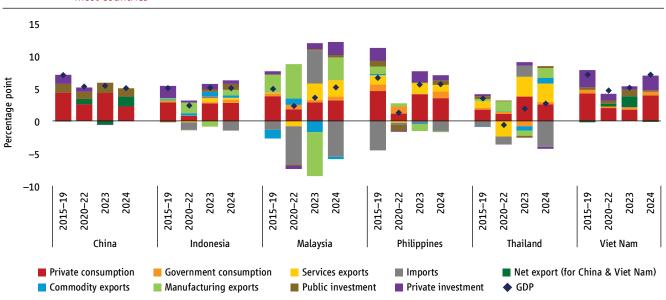
In 2025, regional growth is projected to slow to 4.0 percent and will be influenced by global developments and national policy choices. Growth in the largest economy, China, is projected to slow to 4.0 percent, in the face of rising trade restrictions, elevated global economic policy uncertainty, slowing global growth and a weak property sector. Growth in the rest of the region is likely to slow to 4.2 percent due to increased economic policy uncertainty, increased trade restrictions, and, weaker external demand. Cambodia, Malaysia, Thailand and Viet Nam are especially exposed to changes in external demand. Growth in the Pacific Island countries is projected to slow to 2.5 percent in 2025 due to lower external demand and as the post-COVID-19 rebound fades.





Source: World Bank.

Private consumption has supported growth in all major economies in recent years, but its contribution has been declining in China, the Philippines and Thailand (figure O2). Manufacturing exports have supported growth in Indonesia, Malaysia, and Thailand. Meanwhile, services exports have helped boost growth in Malaysia and Thailand, and to a lesser extent in the Philippines. Public investment has supported growth in China and Indonesia, while private investment has remained weak across much of the region, except in Malaysia and Viet Nam.





Source: Have Analytics; World Bank staff estimates.

Notes: The red bar for China denotes total final consumption and includes household and government consumption. Manufacturing and commodity exports are estimated using trade statistics. Public and private investment are estimated by using fixed assets investment statistics for China where public investment includes SOEs; government statistics for the Philippines (capital outlays on infrastructure, other capital outlays, and capital transfers to Local Government Units as a proxy for public investment); realized investment from the general government budget for Viet Nam; and government finance statistics (physical special allocation fund and general government capital expenditures as a proxy for public investment) for Indonesia. GDP deflator is used to calculate real values, and public investment is subtracted to estimate private investment when necessary.

External developments

Economic performance in the region is being shaped by three external developments: increasing global economic policy uncertainty – especially regarding trade; increasing trade restrictions including tariffs; and slowing global growth (figure O3).

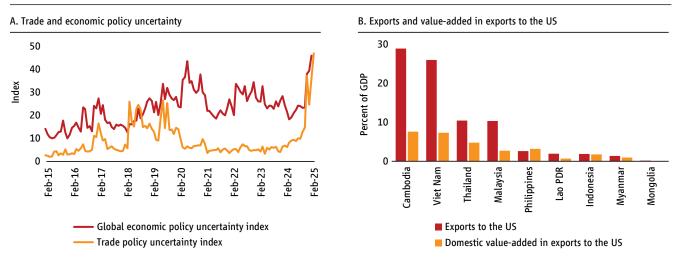
Three external factors will weigh on the region's economic performance. First, economic policy uncertainty, especially regarding trade policy, has increased in recent months (figure O4). Second, recent trade policy announcements in several large economies have raised tariffs in some markets and on certain products. Finally, growth in major economies is slowing down. Cambodia and Viet Nam are especially exposed to changes in external demand from the US, followed by Thailand and Malaysia.

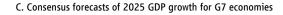


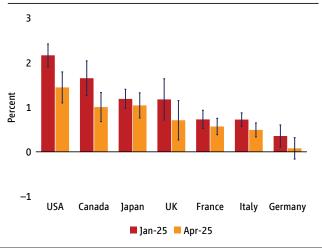
Figure O3. External factors are shaping near-term economic performance in the EAP countries

Source: World Bank staff illustration.

Figure O4. Global economic policy uncertainty, especially in relation to trade policy has increased in recent months; increased tariffs could reduce exports of some EAP countries; and growth in advanced economies is expected to decline







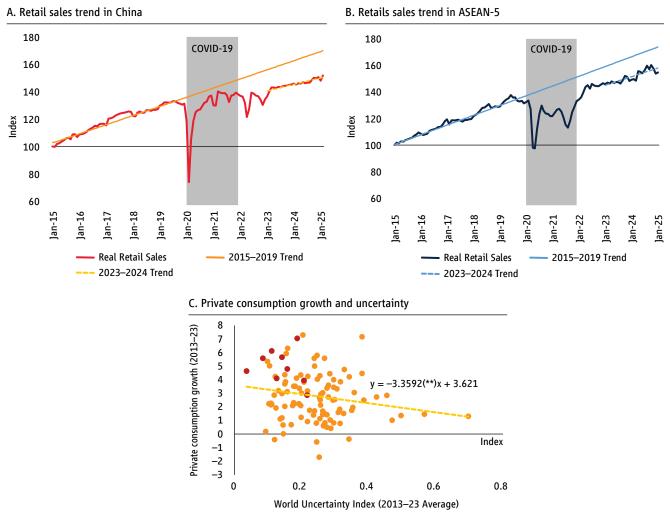
Source: Consensus forecast; Customs data; Davis, Steven J. (2016) and Caldara et al. (2020); OECD Trade in value-added database; World Bank *Note:* Global economic policy uncertainty index and trade policy uncertainty index tracks frequency of uncertainty-related articles in major English language newspapers. C. Whiskers show two standard deviation range across forecasters.

Domestic developments

Consumption

Consumption growth has thus far contributed to growth in the region, but the trend growth rate is lower now than it was before the pandemic. This trend is evident in the slower growth of retail sales compared to the pre-pandemic period (figure O5). In China, consumer spending has weakened due to sluggish income growth and falling property prices. In the rest of the region, retail sales slowed following a strong recovery in 2022, except in Thailand, where stimulus measures boosted consumption in the latter half of 2024. Going forward, high levels of household debt, especially in Thailand, and increased economic policy uncertainty are likely to reduce consumption growth.





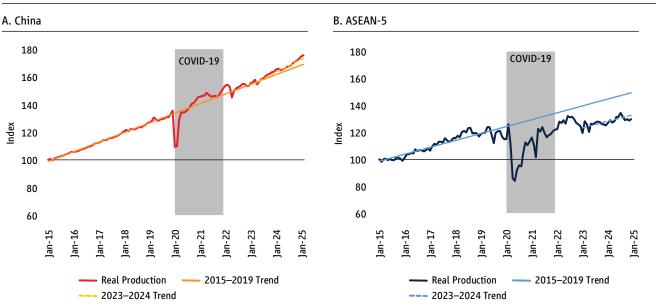
EAP Other countries

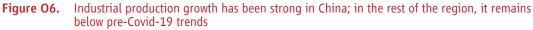
Source: Ahir, Bloom and Furceri (2022); Haver Analytics; World Development Indicators; World Bank staff estimates.

Note: Country-specific trends for ASEAN-5 countries are shown in the Appendix. ASEAN-5 includes Indonesia, Malaysia, the Philippines, Thailand and Viet Nam. For China and Vietnam, where no real retail sales index is available, nominal retail sales adjusted by the CPI index are used. For the Philippines, due to data limitations, manufacturing sales are used instead. C. Top/bottom 1% outliers excluded. Red dots represent EAP countries.

Industrial production

Industrial production growth has been strong in China, surpassing the growth trend before the pandemic, while it remains weak in the rest of the region (figure O6). In China, industrial production, especially in manufacturing, was fueled by robust external demand, a reorientation of credit flows from real estate sector to manufacturing, and government support including subsidies for equipment upgrade (Box 1). In the rest of the region, the trend of industrial production growth is weaker than before the pandemic.





Source: Haver Analytics; World Bank staff estimates.

Notes: A. B. Country-specific trends are shown in the Appendix. ASEAN-5 includes Indonesia, Malaysia, the Philippines, Thailand and Viet Nam. For China, Malaysia, and Viet Nam, we use Industrial Production Indexes excluding construction. For Indonesia, Thailand, and the Philippines, we use manufacturing indexes.

Investment

Private investment as a share of GDP remains below pre-pandemic levels in most countries due to high debt, tighter financial conditions and elevated policy uncertainty (figure O7). In 2024, China's private nominal fixed asset investment was virtually unchanged from the previous year, with a double-digit decline in private real estate fixed investment offset by an increase in private manufacturing and infrastructure investments. Thailand saw a decline in private investment amid tightened credit as the government reins in high private debt, whereas Malaysia experienced a surge drive by foreign direct investment (FDI) in ICT and manufacturing, particularly in data center construction. Public investment in China, Indonesia, and the Philippines helped offset the declines in private investment. Looking ahead, high government and corporate debt in some countries and economic policy uncertainty abroad are likely to constrain investment growth.

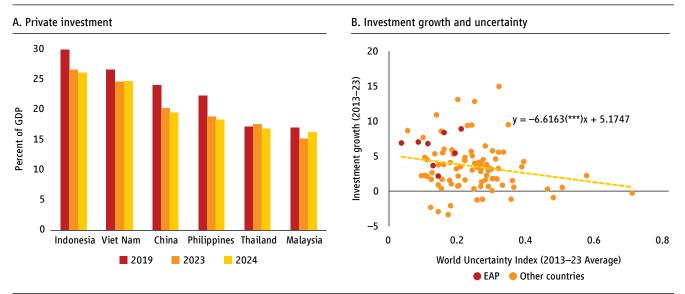


Figure 07. Private investment was weaker than in the pre-pandemic period across the region; higher uncertainty is correlated with lower investment growth

Source: H.Ahir et al. (2022); Haver Analytics; Government Finance Statistics; Philippines Quarterly Fiscal Program; World Development Indicators; World Bank staff estimates.

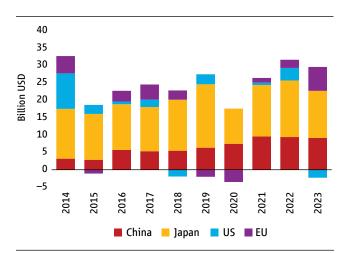
Note: B. Top/bottom 1% outliers excluded. Red dots represent EAP countries.

FDI inflows from China to developing EAP economies have increased by 67 percent since 2018 (figure O8), while inflows from Japan have remained consistently high. FDI inflows from the US and EU have been comparatively low in recent years.

Exports

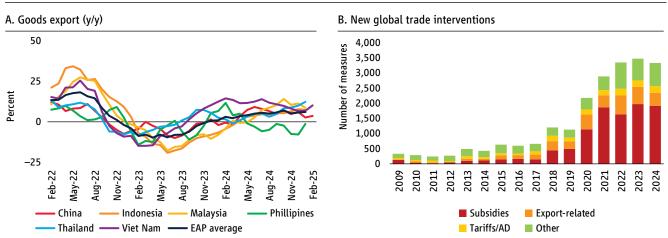
Goods exports recovered in 2024 after contracting in 2023, but growth momentum has slowed (figure O9). China's (nominal) goods exports grew by 5.9 percent, driven by higher external demand, while Viet Nam saw a 14 percent surge, led by strong electronics exports. In contrast, the Philippines experienced a decline in goods exports due to weaker semiconductor exports, especially to China. Meanwhile, subsidies, export restrictions, tariffs and other trade restrictions, especially in the G-20 economies, have significantly increased since the prepandemic period.

Figure O8. FDI inflows into developing EAP from China and Japan have been much larger than those from the EU and US



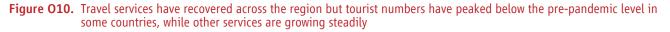
Source: Haver Analytics, Bureau of Economic Analysis in the US; Ministry of Commerce, China; Ministry of Finance, Japan; EUROSTAT. *Note:* Figure shows FDI inflow to ASEAN-5 countries.

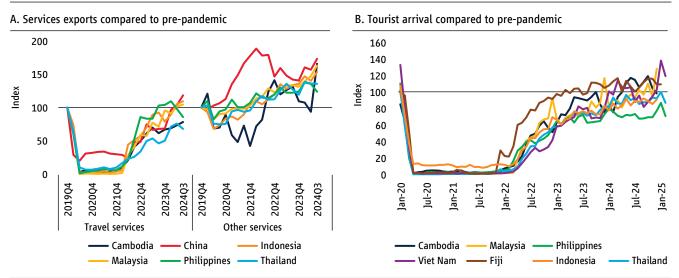
Growth of services exports other than travel (or tourism) have been strong across the region (Figure O10; World Bank 2024a). Meanwhile, tourist arrivals and travel-related service exports have reached pre-pandemic levels in some countries but have peaked below the pre-pandemic levels in others. Cambodia, Fiji, Malaysia, and Viet Nam have seen tourist arrivals return to or surpass pre-pandemic numbers, while in the rest of the EAP region, arrivals have plateaued below those levels, partly due to the slow recovery of China's outbound tourism. Additionally, discretionary spending by tourists remains below pre-pandemic levels in countries such as Thailand and Cambodia, reducing their overall contribution to the domestic economy.





Source: Haver Analytics; Global Trade Alert; Trade in Value-Added database, OECD; *Note:* A. 3-month moving average.





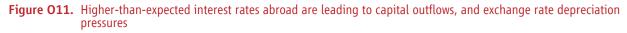
Source: Haver Analytics; World Bank staff estimates.

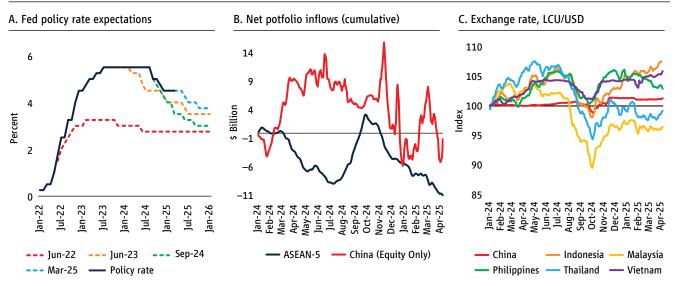
Note: indexed to the corresponding month/quarter in 2019. Cambodia's Other services exclude transport services.

Macroeconomic policy

Monetary policy

Policy rate expectations in the United States have edged up recently (figure O11), further limiting monetary policy space of EAP countries. Higher-than-expected interest rates in industrial economies could lead to capital outflows and exchange rate depreciation in developing EAP. In Indonesia, authorities in March 2025 extended a rule requiring natural resource exporters to retain all export proceeds domestically for 12 months to support foreign exchange reserves.





Source: Haver Analytics; Institute of International Finance; CME Fed watch.

Notes: A. Federal Reserve Board. B. Cumulative flows since January 1, 2024, are calculated using a 7-day moving average for each day. For Indonesia, Malaysia, and Thailand, the sum of equity and debt flows is used, while for China, Viet Nam, and the Philippines, only equity flows are available. C. A 7-day moving average is applied.

Amid rising uncertainty, EAP policymakers should strengthen prudential regulations, enhance transparency and boost credibility through clear communication and consistent actions, and deepen regional integration. The negative effects of uncertainty on consumption and investment are likely to be larger in countries with more vulnerable financial sectors. Safeguarding financial stability requires stress testing, foreign reserve buffers, and managing exchange rate volatility. Clear monetary policy communication and central bank independence can help anchor inflation expectations. Expanding regional trade agreements, boosting domestic demand, and improving competitiveness through technology and lower trade barriers can help mitigate trade risks.

Table O1. GDP growth forecast

| | 2015-19 | 2020-23 | 2024 | Apr 2025 forecast | | Oct 2024 forecast | |
|---------------------------------------|---------|---------|------|-------------------|------|-------------------|------|
| | | | | 2025 | 2026 | 2024 | 2025 |
| East Asia & Pacific | 6.5 | 4.4 | 5.0 | 4.0 | 4.1 | 4.8 | 4.4 |
| East Asia & Pacific (excluding China) | 5.2 | 2.3 | 4.9 | 4.2 | 4.5 | 4.7 | 4.9 |
| Pacific Island Countries | 3.1 | 0.4 | 3.7 | 2.5 | 2.7 | 3.5 | 3.4 |
| | | | | | | | |
| China | 6.7 | 4.8 | 5.0 | 4.0 | 4.0 | 4.8 | 4.3 |
| Indonesia | 5.0 | 3.0 | 5.0 | 4.7 | 4.8 | 5.0 | 5.1 |
| Malaysia | 4.9 | 2.6 | 5.1 | 3.9 | 4.3 | 4.9 | 4.5 |
| Philippines | 6.6 | 2.3 | 5.7 | 5.3 | 5.4 | 6.0 | 6.1 |
| Thailand | 3.4 | 0.0 | 2.5 | 1.6 | 1.8 | 2.4 | 3.0 |
| Viet Nam | 7.1 | 4.8 | 7.1 | 5.8 | 6.1 | 6.1 | 6.5 |
| Cambodia | 8.0 | 2.4 | 6.0 | 4.0 | 4.5 | 5.3 | 5.5 |
| Lao PDR | 6.6 | 2.4 | 4.1 | 3.5 | 3.4 | 4.1 | 3.7 |
| Mongolia | 4.6 | 2.4 | 5.0 | 6.3 | 5.2 | 5.3 | 6.5 |
| Myanmar | 6.4 | -2.6 | 1.0 | -1.0 | 1.5 | 1.0 | 1.0 |
| Papua New Guinea | 4.0 | 1.4 | 4.5 | 4.3 | 3.2 | 4.6 | 3.7 |
| Timor-Leste | 5.2 | 0.2 | 4.1 | 3.5 | 3.4 | 3.0 | 3.5 |
| Palau | 1.0 | -4.8 | 9.3 | 8.6 | 3.5 | 12.0 | 11.0 |
| Fiji | 3.1 | 1.4 | 3.8 | 2.6 | 2.9 | 3.1 | 3.3 |
| Solomon Isl. | 3.0 | 1.1 | 2.5 | 2.6 | 2.7 | 2.5 | 2.9 |
| Tuvalu | 6.7 | 0.1 | 3.5 | 2.8 | 2.3 | 3.5 | 3.0 |
| Marshall Isl. | 4.8 | -1.5 | 3.4 | 3.3 | 2.7 | 3.4 | 4.0 |
| Vanuatu | 3.5 | 0.2 | 0.9 | -1.8 | 2.3 | 0.9 | 1.5 |
| Kiribati | 5.8 | 3.8 | 5.2 | 3.9 | 3.0 | 5.8 | 4.1 |
| Tonga | 2.3 | 0.3 | 1.8 | 2.2 | 1.8 | 1.8 | 2.4 |
| Samoa | 3.4 | -1.6 | 9.4 | 5.3 | 2.6 | 10.5 | 5.5 |
| Micronesia | 2.0 | -1.3 | 1.1 | 1.3 | 1.4 | 1.1 | 1.7 |
| Nauru | 1.7 | 2.8 | 1.8 | 1.4 | 1.3 | 1.8 | 2.0 |

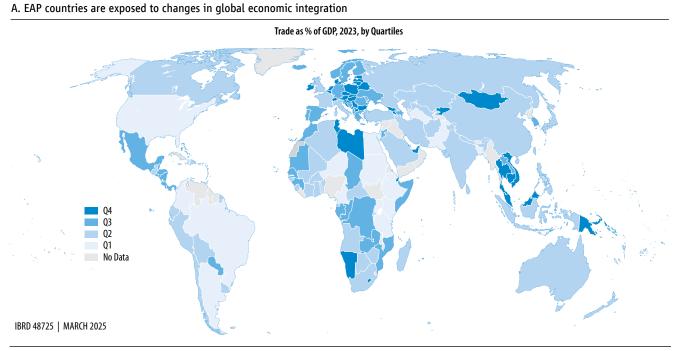
Sources: World Bank.

Note: Percent growth of GDP at market prices. Values for 2024 for the small island economies refer to GDP growth estimates. Values for Timor-Leste represent non-oil GDP. For the following countries, values correspond to the fiscal year: Myanmar (April 1 – March 31), Federal states of Micronesia, Palau, and Republic of the Marshall Islands (October 1 - September 30); Nauru, Samoa, and Tonga (July 1 - June 30).

II. Long-term challenges

Short-term uncertainty should not obscure long-term trends in global economic integration, the environment, and demographics (figure O12.A, B, C) that will affect trade, growth, and jobs in the EAP region. To address these challenges, countries must harness technological change, pursue domestic reforms, and deepen international cooperation (figure O13).

Figure O12. Three long-term challenges for EAP countries



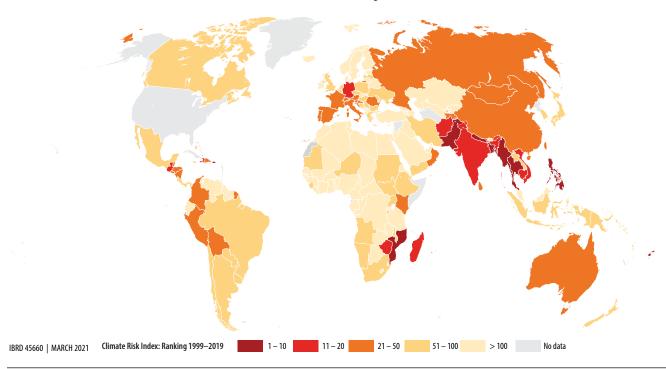
Source: WDI.

Note: Data for 2023 or more recent year available for EAP countries. 2022 for VUT, TON, SLB. 2016 for LAO

(continued)

(Figure O12. continued)

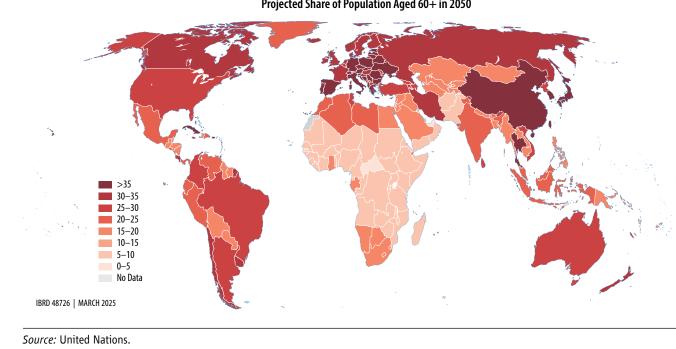
B. EAP countries are particularly exposed to extreme weather events, rising temperatures, and natural disasters



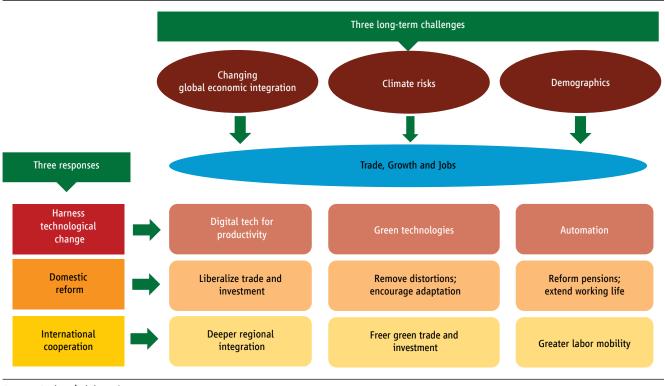
Global Climate Risk Index: Ranking 2000 – 2019

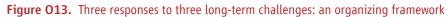
Source: Germanwatch.

C. EAP countries are aging rapidly



Projected Share of Population Aged 60+ in 2050



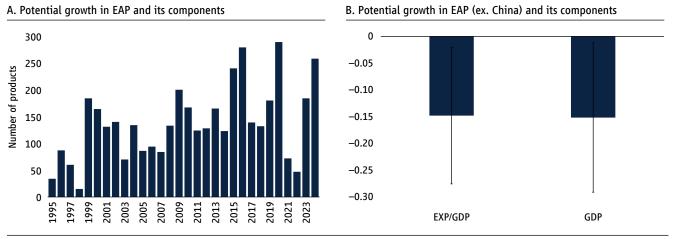


Source: Authors' elaborations.

Changing Global Economic Integration

Exporting to predictably open global markets has been central to EAP's development, and countries in the region are therefore particularly exposed to growing protectionism. New evidence from the Temporary Trade Barriers Database (TTBs) illustrates how increasing protectionism in trading partners can affect exports and output. Doubling the number of products on which foreign trade partners initiate antidumping investigations – which is only one of several instruments of protection - is associated with a reduction of the export share of GDP by 0.14 percentage points and of GDP by 0.15 percentage points (figure 014). The negative effects of protection are not limited to exports and GDP. An increase of 10 percent in trade opportunities is found to generate an increase in employment by between 3 and 4 percentage points. By potentially reducing export opportunities, therefore, foreign protection might also adversely affect job creation.

EAP countries need a multi-layered strategy. First, technology can help not only to boost productivity but also to overcome some of the effects of aging and increased trade protection. In a large sample of developed and developing countries, the adoption of robots is associated with an increase in both the level of exports and the likelihood of developing comparative advantage, especially in computer and electronics, and the automotive sector (figure O15). Second, simulations show that real GDP is higher if countries advance liberalization vis-à-vis all trading partners rather than retaliate or liberalize selectively (figure O16). Beyond goods trade, further opening the regions' relatively closed service sector could spur a new wave of investments, enhance engagement in expanding services trade, and boost productivity.

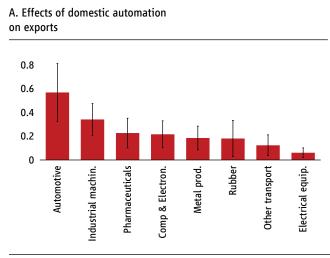




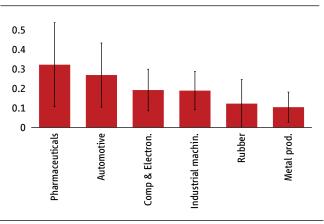
Source: Original analysis for this publication using TTB Database, 2025 and WDI

Note: Left panel: The bars show the numbers of HS-6 Products subject to a new TTB investigation initiated by the partners countries, by year. Right panel: Conditional correlations between the detrended Exports over GDP ratio and the detrended GDP and the exposure to foreign protectionism. Conditional to country fixed effects. Analysis at quarterly frequency. Time period: 2005Q1-2023Q2. Economies included: CHN, IDN, MYS, PHL, THA, VNM.

Figure O15. Automation is associated with both a higher level of exports and a higher likelihood of revealed comparative advantage in specific sectors



B. Effects of domestic automation on the probability of observing comparative advantage



Source: Original analysis for this publication using FIR Database and UN-comtrade.

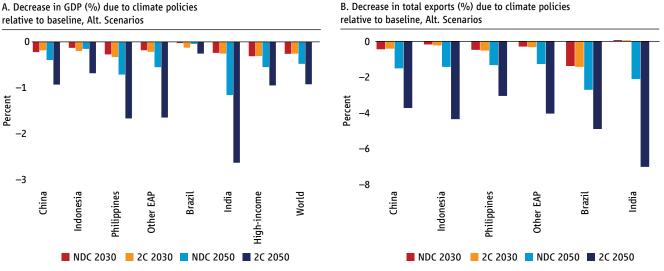
Note: Marginal effects from regressions at country-sector-year level including country, sector and year fixed effects. Sample: 52 developed and developing countries, over 2012-2020, for 19 industrial sectors.

Finally, there are benefits from deeper regional cooperation. The EAP countries' trade and investment links are already growing. Deepening regional trade agreements such as the RCEP and CPTPP, building a regional energy grid, and advancing the ASEAN-level negotiation for the Digital Economy Framework Agreement (DEFA) are two concrete opportunities for fruitful cooperation.

Climate Risks

The East Asia and Pacific (EAP) region is both a significant contributor to increasing emissions and one of the region's most vulnerable to their consequences. A complex interplay between domestic and foreign climate and trade policies is going to shape future opportunities for exports, growth, and job creation. First, simulations show that the adoption of emission reduction policies by all countries could have a significant impact both globally and on certain EAP countries, in terms of a reduction of both exports and economic activity (figure O16). Second, exposure to climate-related trade policy in partners, such as the EU's Carbon Border Adjustment Mechanism CBAM, could affect China, Viet Nam, and Indonesia, while the EU deforestation regulation (EUDR) could affect also the Marshall Islands and Papua New Guinea.





Source: Authors' calculation using ENVISAGE model

Note: simulations using the ENVISAGE model combined with the TIAM world energy system model. NDC Scenario: Translation of unconditional NDCs into regional emission reduction requirements for 2030 relative to the baseline. Carbon pricing assumptions are applied post-2030. 2C scenario: Regional-specific emission reduction targets for 2030 based on NDCs and a ramping up of mitigation ambitions post-2030 with a harmonization of global carbon prices consistent with limiting global warming at 2C.

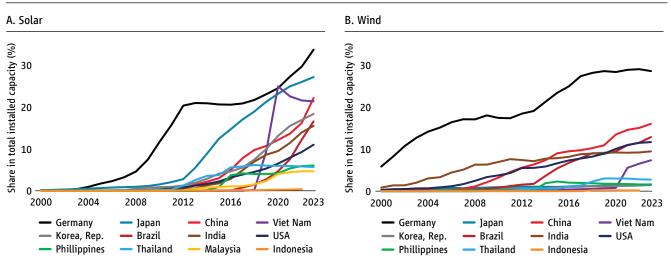
The adoption of green technologies could help EAP countries reduce carbon intensity. Currently viable Solar PV and wind technologies have seen significant but uneven diffusion across countries within the region, as in other parts of the world (figure O17). This variation reveals the important role of domestic policy in driving diffusion apart from differences in endowments. Heterogeneity in explicit and implicit fossil fuel subsidies across EAP countries help explain the variation

in the adoption of green energy technologies. Differences in state support can help explain the contrast between China and the rest of the region in the growth of electronic vehicles. Countries can reap economic and environmental win-wins by addressing the policy and market failures that inhibit the adoption of already viable technologies.

Apart from contributing to mitigation, EAP countries need to adapt to extreme weather events, rising temperatures, and natural disasters. Adaptation delivers a "triple dividend": avoided losses, economic growth, and social-environmental co-benefits. By proactively addressing climate risks, adaptation reduces the direct costs of climate-related damages, such as infrastructure destruction and productivity declines. Additionally, adaptation fosters economic growth by creating jobs in climate-resilient industries, attracting investment in green infrastructure, and enhancing long-term productivity. Finally, adaptation contributes to improved public health, ecosystem preservation, and reduced inequality by protecting vulnerable populations. Empirical studies suggest that each \$1 spent on higher-resilience infrastructure on average delivers \$4 in avoided losses and triple dividends.

International cooperation on mitigation, adaptation and green production too could have high pay-offs. Unilaterally inducing the adoption of non-viable technologies, through carbon taxes or green subsidies, involves incurring an economic cost to secure an environmental benefit. How these interventions affect national welfare depends on what the rest of the world does, in the form of emission cuts, assistance, and technology transfers, and therefore can be undertaken at a pace and on a scale determined by past international commitments and future international cooperation. Similarly, the benefits of some investments in adaptation, say in the managing the waters of regional rivers, are likely to be much greater if there is regional cooperation.

In general, deeper reform of the region's climate, trade, industrial, and innovation policies is likely to foster mutually beneficial international cooperation in each of these areas. For example, some EAP countries still apply relatively high tariffs on green goods (Figure O18) and also impose non-tariff barriers, like the local content requirements on solar panels. Reduction in these barriers could improve access to green goods and reduce the economic cost of the green transition. Such a reduction could also deepen and widen countries' participation in the already strong regional green supply chains. Such coordination would ideally be multilateral but could also beneficially happen within ASEAN or within the RCEP of which most countries in the region are members.





Source: World Bank (forthcoming)

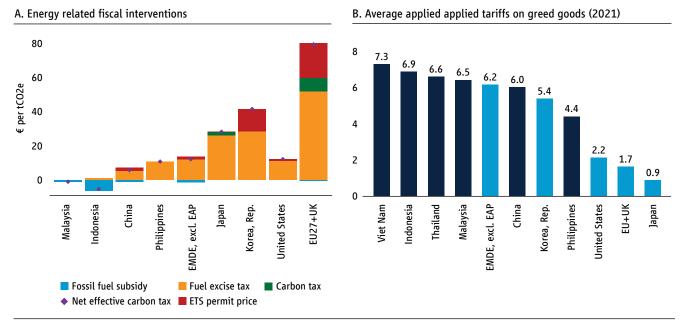


Figure O18. Fiscal interventions and trade policy affect the diffusion of green technologies

Source: LHS panel: OECD Effective Carbon Rates database. RHS panel: COMTRADE TRAINS database. *Note:* Net effective carbon tax corresponds to the effective carbon tax (= fuel excise tax + ETS permit price + carbon tax) minus the fossil fuel subsidies.

Aging

Most countries in the EAP region are aging fast. Evidence from advanced economies suggests that these trends could have long term negative impacts on growth and productivity. Beyond the macroeconomic and fiscal implications of such trends, aging can affect also trade and comparative advantage. Some cognitive skills increase with age and experience (speech and language), while others decrease with time (memory and multitasking). The different mix of skills required by different occupations, combined with the different shares of occupations demanded by each sector, generates patterns of specializations that depend on relative aging across trading partners. Figure O19 contrasts the export structures of Japan and Thailand, two of the oldest economies in East Asia with a median age of 47 and 38, and Cambodia, where the median age is only 25. The countries exhibit opposite export patterns in terms of skill intensities. Thailand's and Japan's exports are more concentrated in industries that rely on age-appreciating skills, whereas these industries account for a smaller share of exports in Cambodia. In contrast, industries that depend on physical and age-depreciating cognitive skills represent a larger share of Cambodia's exports, while Japan and Thailand specialize less in these sectors.

Again, the challenges represented by aging need a multipronged response. The increased resort to automation might augment shrinking workforces and help to protect comparative advantage in industries characterized by a particular intensity in age-depreciating skills (figure O20). Pension reforms could soften the potential future burden of aging on pension systems and fiscal sustainability. Policies are needed also to encourage and enable longer working lives. Training tailored to the needs and strengths of older workers can help them acquire new skills cost-effectively and ensure their continued productive participation in the workforce. Finally, cooperation on international labor mobility could limit the negative effects of aging on economic activity (figure O21).

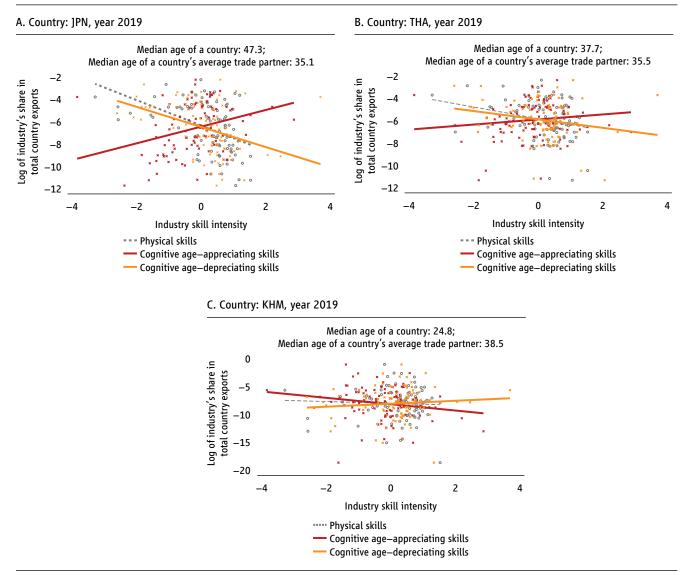


Figure O19. Japan and Thailand (Cambodia) are older (younger) than their average trading partners. They specialize in industries whose production is relatively intensive in cognitive age-appreciating (age-depreciating) skills

Source: Original analysis for this publication using COMTRADE, O*Net and BLS data.

The long-term trends discussed in this Update could hurt potential growth in the EAP region. Potential growth could decline from 4.8 percent to 4.3 percent in the in 2025–2030 period due to these factors. Policies that encourage labor force participation, boost total factor productivity, and support adaptation to increasing climate risks could boost potential GDP growth by more than 1 percentage point (figure O22).

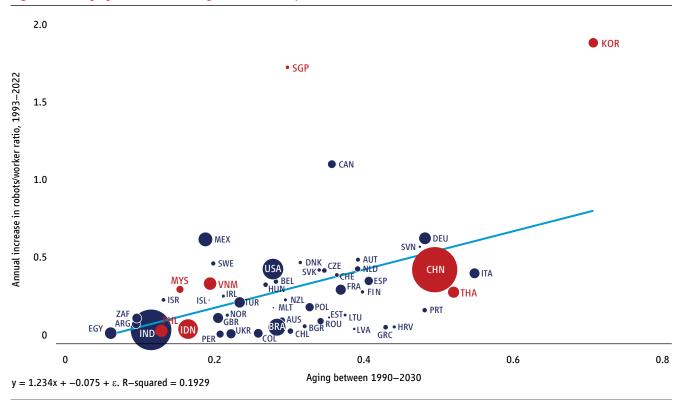


Figure O20. Aging is associated with greater robot adoption across countries, also in EAP countries

How far is responding to the long-run challenges consistent with addressing also short-term difficulties? Regarding global economic integration, countries in the region will have to deal with rising trade barriers elsewhere. For most countries in the region, greater openness to trade and investment in goods and services delivers not only longer-term growth benefits, but possibly also relief in the near-term from new tariffs that may be implemented.

On climate risks, countries in the region need to deal with weakening global cooperation in the near-term and hence increasing longer-term climate risks. On the mitigation front, removing impediments to the adoption of viable green technologies can proceed unilaterally because it is in countries' own interest. Going further to encourage the adoption of technologies that are not yet economically viable can be conditioned on what other countries do. Weakening global cooperation on mitigation increases the urgency of national investments in adapting to increasing climate risks. Since the benefits of these investments are largely reaped within countries or within the region, a combination of unilateral efforts and regional cooperation is needed.

On aging, there is no immediate crisis but an impending long-term problem. But the reforms needed to address the challenge, such as of pension systems, need to begin now to avert future fiscal strains. On international labor mobility, there may be an opportunity to benefit from regional demographic arbitrage. While some of the more advanced countries in the West are tightening immigration regimes, the more advanced aging countries in the East, like Japan, and the Republic of Korea, are now becoming more open to international labor mobility. Both receiving and sending countries can learn from the experience of previously more open countries to ensure that international labor mobility remains politically acceptable.

Source: Authors illustration following and extending Acemoglu & Restrepo (2022) using data from IFR, OECD, UN *Note:* Bubble size shows relative population; x-axis measures change in the ratio of workers above 56 to workers aged 21–55 between 1990 and 2030. The country sample is extended from Acemoglu & Restrepo (2022) to include other EAP and developing countries as well as more recent data.

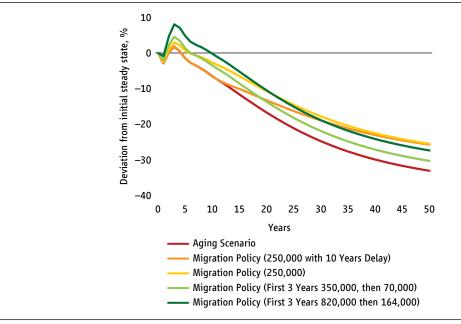


Figure O21. Immigration can alleviate adverse effects on GDP in rapidly aging economies

Source: World Bank, "Migration: Leveraging Human Capital in the East Asia and Pacific Region, Forthcoming. *Note:* The different scenarios assume different levels of annual net migration inflows as well as assumptions about timing (immediate or delayed). The scenario assumes an annual net migration inflow of 250,000. All scenarios are expressed as the percent deviation from the model steady state with no aging effects.

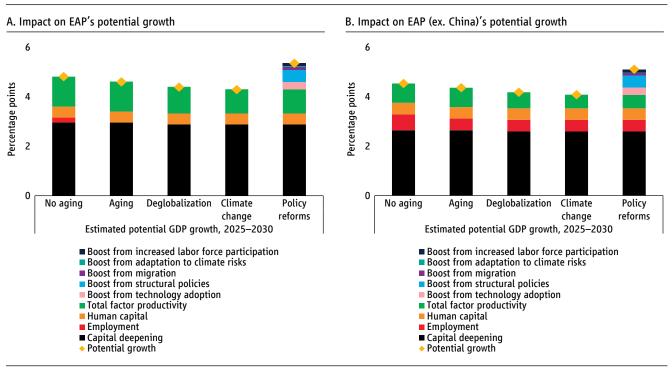


Figure O22. Efficient policies and reforms could offset the negative growth impact of aging, deglobalization and climate risks

Source: World Bank staff's estimates.

I. Recent developments and outlook

I.1. Recent developments

In 2024, developing East Asia and Pacific (EAP) grew faster than the rest of the world but slower than before the pandemic. China's economy grew by 5.0 percent and the rest of the region by 4.9 percent (figure I.1; table I.1), slower than the 6.7 percent and 5.2 percent, respectively, recorded during the 2015-19 period. The Pacific Island Countries, grew by an estimated 3.7 percent in 2024, faster than the 3.1 percent during 2015-19 period, reflecting a delayed rebound from the COVID-19 recession.

In 2025, increasing global economic policy uncertainty, increasing trade restrictions, and slowing growth in advanced economies are likely to reduce investment and external demand. As a result, regional growth is projected to decline to 4.0 percent. Uncertainty around the projections remains high, and growth outcomes will depend on global developments and national policy choices.

Growth in the largest economy, China, is projected to slow to 4.0 percent, in the face of increased trade restrictions, elevated global economic policy uncertainty, slowing global growth and a weak property sector. Growth in the rest of the region is likely to slow to 4.2 percent due to increased policy uncertainty, increased trade restrictions and weaker external demand. Growth in the Pacific Island countries is projected to decline to 2.5 percent in 2025, due to lower external demand and as the post-COVID-19 rebound dissipates.

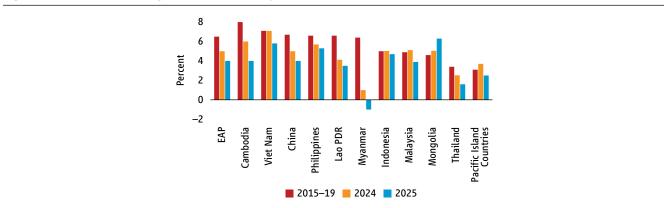


Figure I.1. Growth in the region's economies is expected to decline

Source: World Bank

While output per capita has surpassed pre-pandemic levels in most of the larger EAP economies, recovery has been uneven across the region. Per capita output in China and Viet Nam is now about 20-25 percent higher than in 2019. But by 2024 output remained below 2019 levels in the several Pacific Island countries (PICs) as well as in Myanmar (figure 1.2). The slow recovery in PICs has been exacerbated by natural disasters, including severe cyclones in 2023 and a significant earthquake in 2024 in Vanuatu. Meanwhile, Myanmar's economy continues to be affected by political instability and conflict, while a recent earthquake has had significant human costs and has caused widespread infrastructure damage.

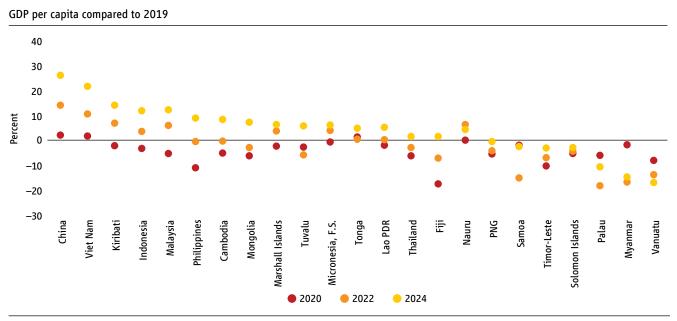
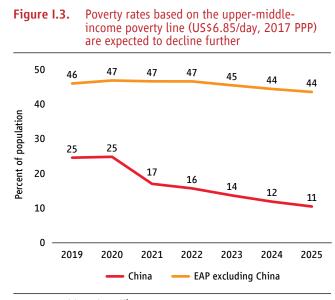


Figure 1.2. While output per capita is well above pre-pandemic levels in most of the larger economies, it remains below those levels in several Pacific Island Countries and Myanmar

Source: World Economic Outlook Database, October 2024, IMF. World Bank staff estimates.

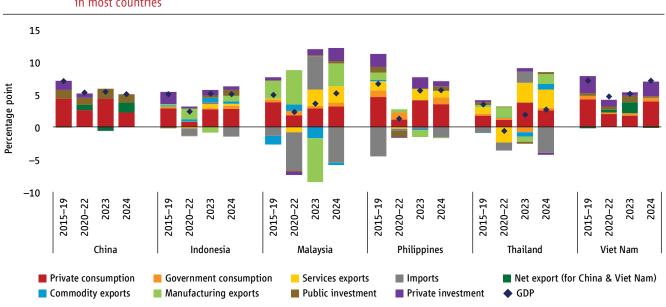
Poverty rates in the region continue to decline (Figure I.3). In China, the pace of poverty reduction slowed in 2024 following an acceleration in 2023, based on the upper-middle-income poverty line (US\$6.85/ day, 2017 PPP). In the rest of the region, the 2024 poverty reduction rate averaged around three-fifths of China's. Rising uncertainty around trade policy has clouded the region's growth outlook for 2025, and the pace of poverty reduction is expected to slow further. Overall, an estimated 24 million people in the region are projected to escape poverty between 2024 and 2025, based on the upper-middle-income poverty line.

Private consumption supported growth in all major economies during 2024, but its contribution has been declining in China, the Philippines and Thailand (figure 1.4). Manufacturing exports have supported growth in Indonesia, Malaysia, and Thailand. Meanwhile, services exports have helped boost growth in Malaysia and Thailand, and to a lesser extent in the Philippines. Public investment has supported growth in China and Indonesia, while private investment has remained weak across much of the region, except in Malaysia and Viet Nam.



Source: World Bank staff's estimation.

Note: Forecasts are based on GDP growth projections. Upper-middleincome poverty line (US\$6.85/day, 2017 PPP). Poverty estimates are based on growth forecasts, population projections, and historical growth elasticities of poverty.



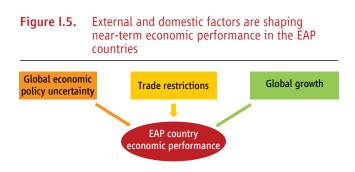


Source: Have Analytics; World Bank staff estimates

Notes: The red bar for China denotes total final consumption and includes household and government consumption. Manufacturing and commodity exports are estimated using trade statistics. Public and private investment are estimated by using fixed assets investment statistics for China where public investment includes SOEs; government statistics for the Philippines (capital outlays on infrastructure, other capital outlays, and capital transfers to Local Government Units as a proxy for public investment); realized investment from the general government budget for Viet Nam; and government finance statistics (physical special allocation fund and general government capital expenditures as a proxy for public investment) for Indonesia. GDP deflator is used to calculate real values, and public investment is subtracted to estimate private investment when necessary.

External developments

Economic performance in the region is being shaped by three external developments (figure I.5): heightened global economic policy uncertainty, increasing trade restrictions, and slowing global growth.



Source: World Bank staff illustration.

Economic policy uncertainty

Economic policy uncertainty, especially regarding trade policy, has increased in recent months amid new trade policy announcements in several large economies. A news-based economic policy uncertainty index reached the highest level in January 2025 since it began tracking data in 1997. A trade policy uncertainty index also reached the highest level in February 2025 since 1960 (figure 1.6).

Elevated economic policy uncertainty dampens private consumption and investment growth. Increased uncertainty about macroeconomic developments, financial markets, and future economic policies abroad can negatively impact a country's economic activity in EAP through multiple channels (Ha, Islamaj, and Mattoo, 2024; figure I.7). These channels often reinforce each other, creating a feedback loop that deepens economic downturns.

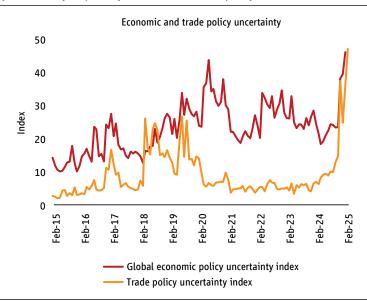


Figure 1.6. Economic policy uncertainty, especially in relation to trade policy has increased in recent months

Source: Baker et al. (2016) and Caldara et al. (2020); World Bank

Note: A. Economic policy uncertainty index and trade policy uncertainty index tracks frequency of uncertainty-related articles in major English language newspapers. Value is divided by 10 from the original value.

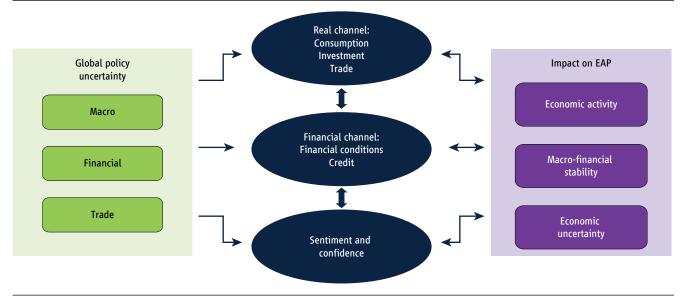


Figure I.7. Increased uncertainty can transmit to the EAP region through both real and financial channels

Source: Authors' illustration

First, heightened uncertainty abroad, especially if global or in major partner countries, can transmit to higher countryspecific uncertainty in individual EAP countries through the confidence channel (Carrière-Swallow and Céspedes 2013; Londono et al. 2021; Miescu 2023; Georgiadis et al. 2024). Domestic economic uncertainty also negatively impacts economic confidence and sentiments in EAP countries (Ha and So 2023).¹

Indeed, uncertainty appears to be synchronized across countries, likely driven by global factors. Novel empirical analysis utilizes harmonized monthly uncertainty measures in 71 countries over the 2008-2024 period – as compiled by Ahir, Bloom, and Furceri (2022) – and investigates co-movement across countries. The first principal component of the cross-country data serves as a measure of global uncertainty, with factor loadings representing the sensitivity of country-specific uncertainty to the global factor. Positive factor loadings indicate that global uncertainty has positive contemporaneous impacts on a country's economic uncertainty (figure 1.8). The factor loadings are positive in around 90 percent of countries, suggesting that a one percentage point increase in global uncertainty is associated with around a 0.3 percentage point increase in domestic uncertainty. The loadings are higher among advanced economies (0.41) compared to EMDEs (0.30). In developing EAP, 60 percent showed positive loadings over the 2008-24 period (average 0.25).

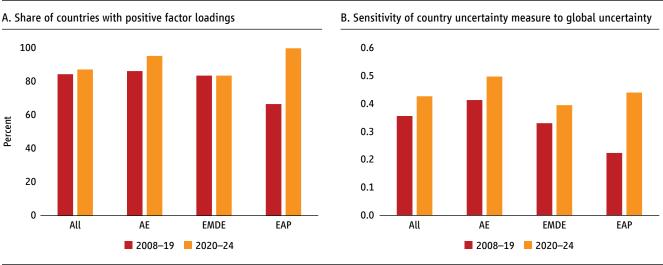


Figure I.8. Uncertainty appears to be synchronized across countries, likely driven by global factors

Sources: World Bank estimates, Ahir, Bloom, and Furceri (2022).

Note: The results are based on the principal component analysis using monthly economic policy uncertainty in 71 economies—22 advanced economies and 29 EMDEs (including 6 EAP)—compiled by Ahir, Bloom, and Furceri (2022). A. Charts show the share of countries with positive factor loadings to the first principal component (in percent). B. Charts show the average magnitude of factor loadings across countries during the sample periods.

Several studies document the transmission of uncertainty shocks for individual EAP countries. Cheng (2017) explores the impact of foreign and domestic uncertainty shocks on South Korea's economy. Fontaine et al. (2018) study the spillover effects of economic policy uncertainty in China. Arbatli et al. (2017) examine policy uncertainty in Japan. Apaitan et al. (2022) provide evidence of uncertainty transmission in Thailand. Shah et al. (2019) investigate the international transmission of uncertainty shocks in Malaysia. Nguyen and Vo (2024) study economic policy uncertainty transmission from Viet Nam. Kuncoro (2024) examines inflation uncertainty for Indonesia and the Philippines.

Second, increased uncertainty about macroeconomic developments abroad can negatively affect economic activity in EAP through real channels. Initially, it would dampen external demand and result in negative spillovers through trade channels in EAP, hurting production and delaying investment. It could also affect a specific country through third country effects, if external demand for multiple countries is negatively affected. These effects can amplify if a country is deeply integrated in value chains, as is the case in trade-dependent EAP economies.

Third, uncertainty abroad can depress asset prices in EAP countries transmitting through the financial channel, eroding wealth and raising credit costs, ultimately hurting consumption and investment. Increased economic policy uncertainty in advanced economies hurts asset prices in source countries and increases financial market volatility both at home and in EMDEs (Glichrist et al., 2014, Caballero et al., 2019; Caggiano et al., 2021, Akinci et al., 2023). This would depress asset prices in the region's economies and amplify the contractionary effects of economic uncertainty. Further, exchange rate depreciation increases import prices, potentially fueling inflation. Higher risk premiums tighten credit conditions, restricting business investment and household spending.

Trade restrictions

New trade restrictions are likely to impact EAP exports. Cambodia and Viet Nam are especially exposed to changes in external demand from the US, followed by Thailand and Malaysia (Figure 1.9). The US is one of their most important destination markets, even though the exposure in terms of value-added exports is much lower than the exposure in terms of gross exports.

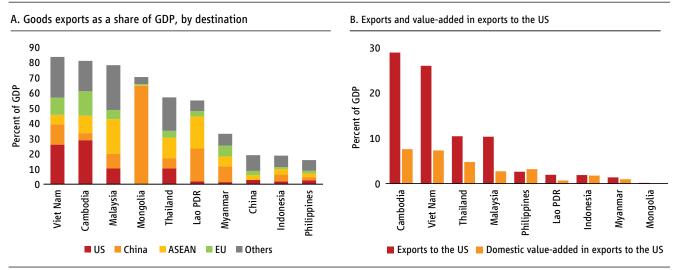


Figure 1.9. Several EAP economies are highly exposed to external demand and therefore to potential increase in trade restrictions

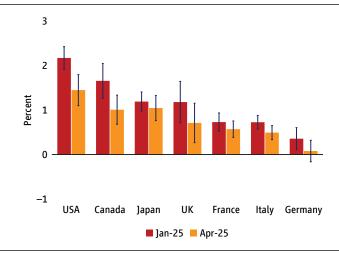
Source: BACI, Haver Analytics, OECD Trade in value added database,

Note: Exports shows 2024 data for China and ASEAN-5 countries, 2023 data for others. Domestic value-added in exports shows 2019 data.

Global growth

The external environment remains challenging for developing EAP economies. Growth forecasts for 2025 from an array of independent forecasters have declined since January 2025 for all G7 economies (figure I.10). At the same time, dispersion in growth forecasts, a measure of uncertainty about macroeconomic developments, has also increased in several economies, including the US, Japan, Germany, UK and Italy.

EAP economies are exposed to developments in large economies through trade and financial linkages. Value added in export to China, EU and the US make up the majority of value added exports in EAP economies, even though intra-ASEAN trade is significant in some economies, including Cambodia, Lao PDR, Malaysia and Thailand (figure I.11). A large part of FDI inflow in most EAP economies is from China, followed by ASEAN and Japan. Most EAP economies are more financially integrated with the major global financial hubs than with each other. The region is most exposed to the US on portfolio flows and to Japan on cross-border lending. Financial volatility in these two countries will affect economic activity in the EAP countries through these linkages.





Source: Consensus forecast

Note: Figure shows Consensus forecast for 2025 GDP growth. Whiskers show 2 standard deviation range across forecasters

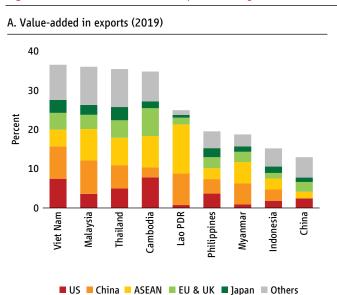
Domestic developments

The external developments described above have affected consumption, investment and exports in the region, and are likely to provoke a shift in macroeconomic policies.

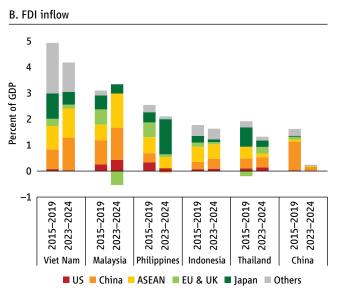
Consumption

Consumption growth has thus far contributed to growth in the region, but the trend growth is lower now than it was before the pandemic. This trend is evident in the slower growth of retail sales compared to the pre-pandemic period (figure I.12). In China, consumer spending has weakened due to sluggish income growth and falling property prices. In the rest of the region, retail sales slowed following a strong recovery in 2022, except in Thailand, where stimulus measures boosted consumption in the latter half of 2024. Going forward, high levels of household debt, especially in Thailand, and increased economic policy uncertainty are likely to hurt consumption growth.

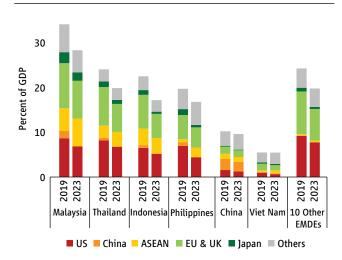
Consumer confidence remains weak and household debt is high in some countries. In China, Thailand, and the Philippines, consumer confidence remains below pre-pandemic levels (figure 1.13). While Thailand's stimulus measures boosted retail sales in 2024, consumer confidence remains below 2019 levels. Measures to curtail the rising household debt in Thailand (above 90% of GDP) are leading to tighter credit conditions, which could further hurt private consumption growth. Household debt remains higher than in other developing economies in China and Malaysia as well. Globally, high levels of household debt are associated with weaker private consumption (World Bank 2024a).

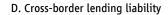


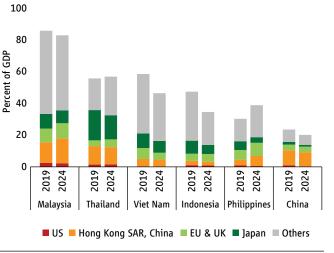






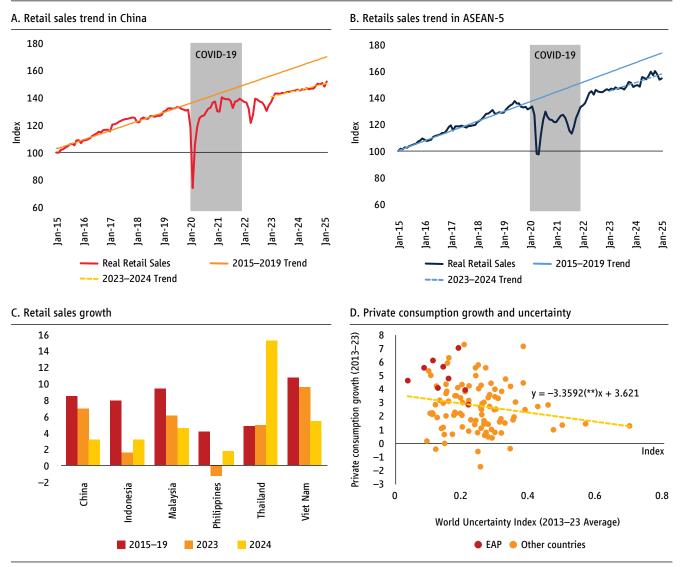






Source: Haver Analytics; BIS; OECE Trade in value-added database: World Bank

Note: B.C. China includes Hong Kong SAR, China. B. China's FDI inflow from China indicates inflow from Hong Kong SAR, China. D. The chart displays banking claims based on BIS data.





Source: Haver Analytics; World Bank staff estimates.

Note: Country-specific trends for ASEAN-5 countries are shown in the Appendix. ASEAN-5 includes Indonesia, Malaysia, the Philippines, Thailand and Viet Nam. For China and Viet Nam, where no real retail sales index is available, nominal retail sales adjusted by the CPI index are used. For the Philippines, due to data limitations, manufacturing sales are used instead. See Appendix for country-specific charts. C. Volume based (or real price based. D. Top/bottom 1% outliers excluded. Red dots represent EAP countries.

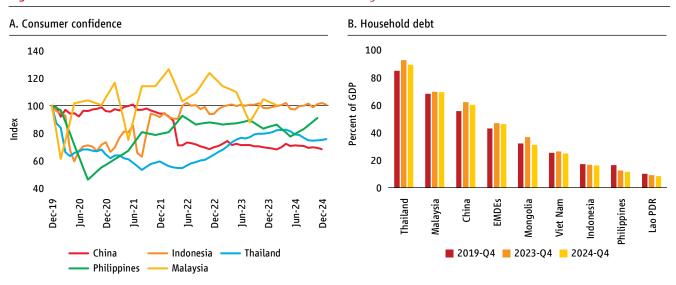


Figure I.13. Consumer confidence remains low and household debt high in some EAP economies

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Source: Haver Analytics; Institute of International Finance Notes: A. 2019 average =100.
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Investment

Industrial production

Industrial production growth has been strong in China, surpassing the growth trend before the pandemic, while it remains weak in the rest of the region (figure I.14). In China, industrial production, especially in manufacturing, was fueled by robust external demand, a reorientation of credit from real estate sector to manufacturing, and government support including subsidies for equipment upgrade. In the rest of the region, the trend of industrial production growth is weaker than before the pandemic.

Private investment under uncertainty

Private investment as a share of GDP remains below pre-pandemic levels in most countries due high debt, tighter financial conditions and elevated policy uncertainty (figure I.15). In 2024, China's private nominal fixed asset investment was virtually unchanged from the previous year, with a double-digit decline in private real estate fixed investment offset by an increase in private manufacturing and infrastructure investments. Thailand saw a decline in private investment amid tightened credit as the government reins in high private debt, whereas Malaysia experienced a surge driven by foreign direct investment (FDI) in ICT and manufacturing, particularly in data center construction. Public investment in China, Indonesia, and the Philippines helped offset the declines in private investment. Looking ahead, high government and corporate debt in some countries and economic policy uncertainty abroad are likely to constrain investment growth.

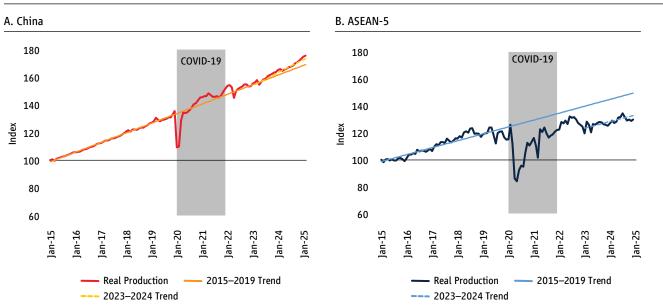


Figure 1.14. Industrial production growth has been strong in China; in the rest of the region, it remains below pre-Covid-19 trends

Source: Haver Analytics; World Bank staff estimates.

Notes: A. B. Country-specific trends are shown in the Appendix. For China, Malaysia, and Vietnam, we use Industrial Production Indexes excluding construction. For Indonesia, Thailand, and the Philippines, we use manufacturing indexes.

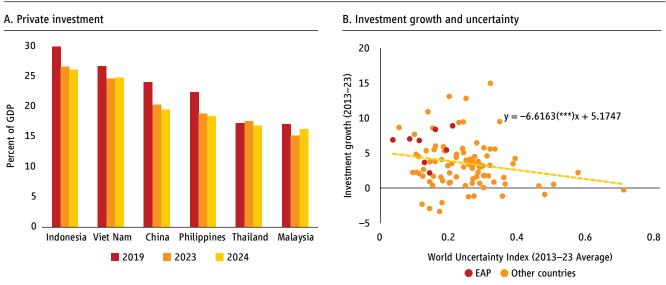


Figure 1.15. Private investment was weaker than in the pandemic period across the region; higher uncertainty is correlated with lower investment growth

Source: Ahir et al. (2022); Haver Analytics; Government Finance Statistics; World Bank staff estimates. Philippines Quarterly Fiscal Program; World Development Indicators; World Bank staff estimates.

Note: A. Other than Thailand and Malaysia, private investment are estimated by using fixed assets investment statistics. B. Top/bottom 1% outliers excluded. Red dots represent EAP countries

FDI inflows from China to developing EAP economies have increased by 67 percent since 2018, particularly in Indonesia, Thailand and Viet Nam (Figure I.16). Inflows from Japan remained consistently high, but decreased in recent years. FDI inflows from the US have remained stagnant or declined in some countries. FDI from the EU decreased during the Covid-19 period but rebounded in 2023, returning to pre-pandemic levels.

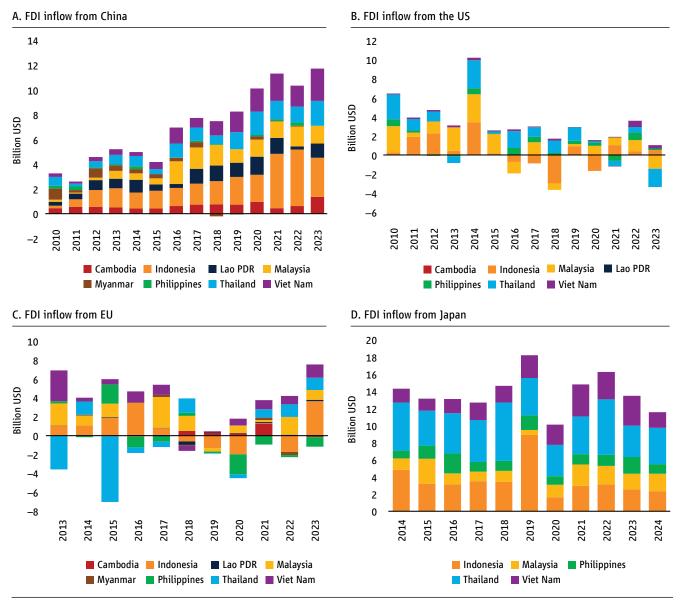
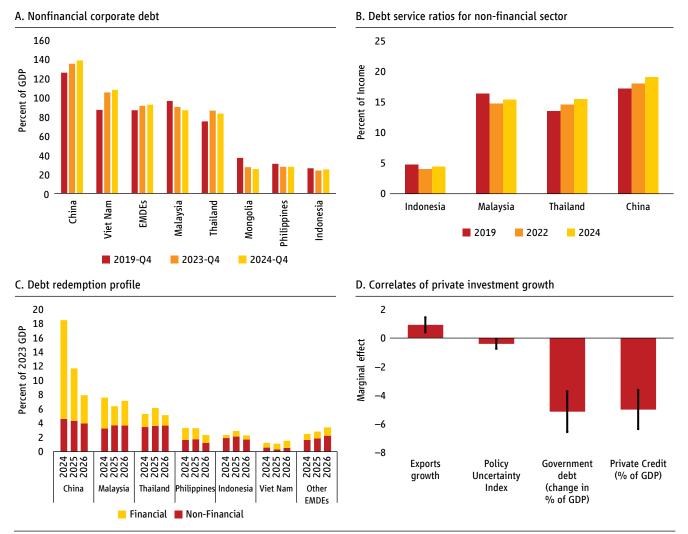


Figure I.16. FDI inflows into developing EAP from China and Japan have been much larger than those from the EU and US

Source: Bureau of Economic Analysis; Haver Analytics; Ministry of Commerce, China; Ministry of Finance, Japan; EUROSTAT. *Notes:* A. Bars show outward direct investment.

Corporate debt is higher than before the pandemic in China, Thailand and Viet Nam (figure I.17). In China and Viet Nam, the property sector has accumulated significant debt over the recent years which has yet to decline despite deleveraging efforts. High level of corporate debt coupled with tighter financial conditions increase interest payments and restrict investment by firms. In fact, debt service payments by the private sector have increased in Indonesia, Malaysia, the Philippines and China compared to 2022. Furthermore, a relatively high share of private sector debt will need to be serviced in 2025 in China, Malaysia, the Philippines and Thailand, albeit at an increased cost. In addition to higher interest rates, high policy uncertainty, high government and corporate debt are correlated with lower growth of private investment.



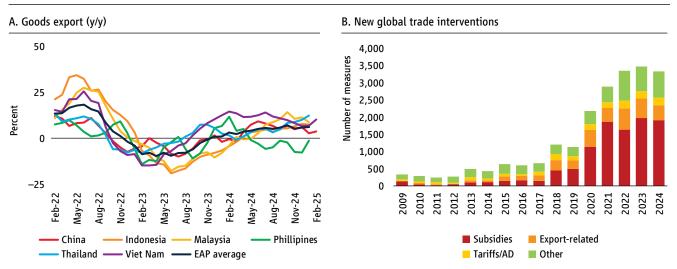


Source: Institute of International Finance. BIS. World Bank staff estimate

Note: B. Debt service ratios reflect the share of income used to service debt for households, non-financial corporations and the total private non-financial sector. D. Bars show marginal effects of each variable in predicting investment growth. Coefficients are standardized by diving by the standard deviation of each variable. Black lines show 90 percent confidence intervals (1.68 x standard errors). Other variables included in the regression are lagged GDP growth, credit growth, FDI growth, lagged government debt as a share of GDP, lagged public investment as a share of GDP and change in private investment as a share of GDP, and a dummy for crisis. The regressions include country and year fixed effects. Sample included 98 emerging markets and developing economies.

• Exports

Goods exports had recovered in 2024 after contracting in 2023, but growth momentum has slowed (figure I.18). China's (nominal) goods exports grew by 5.9 percent, driven by higher external demand, while Viet Nam saw a 14 percent surge, led by strong electronics exports. In contrast, the Philippines experienced a decline in goods exports due to weaker semiconductor exports, especially to China. Meanwhile, subsidies, export restrictions, tariffs and other trade restrictions especially in the G-20 economies, have significantly increased since the pre-pandemic period.

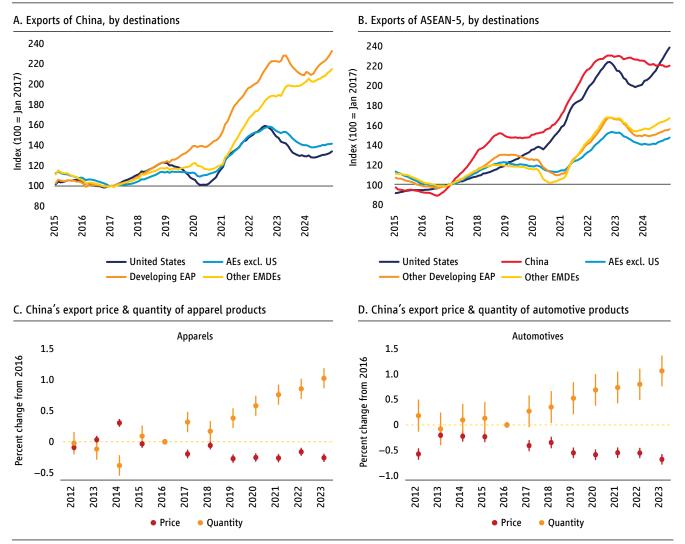


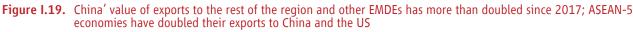


Since 2017, China's exports to the developing EAP region and other EMDEs have more than doubled in nominal terms, while exports to the U.S. and other advanced economies grew by only 40 percent (figure 1.19). ASEAN-5 economies doubled their exports to China and the U.S., with exports to other developing EAP economies rising by around 50 percent. These trends reflect strengthening intra-regional trade ties in intermediate and final goods, alongside increasingly competitive pricing from Chinese exporters.

Growth of services exports other than travel (or tourism) have been strong across the region (Figure 1.20; World Bank 2024a). Meanwhile, tourist arrivals and travel-related service exports have reached pre-pandemic levels in some countries but have peaked below the pre-pandemic levels in others. Cambodia, Fiji, Malaysia, and Viet Nam have seen tourist arrivals return to or surpass pre-pandemic numbers, while in the rest of the EAP region, arrivals have plateaued below those levels, partly due to the slow recovery of China's outbound tourism. Additionally, discretionary spending by tourists remains below pre-pandemic levels in countries such as Thailand and Cambodia, reducing their overall contribution to the domestic economy.

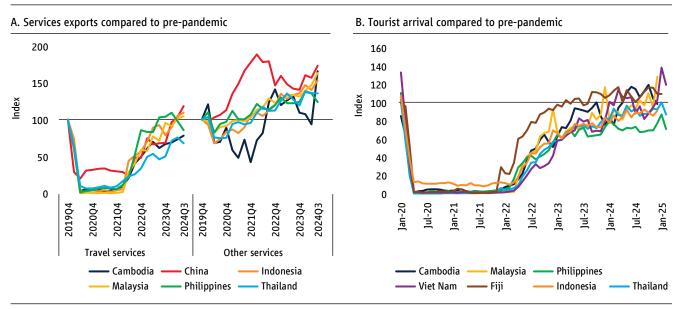
Source: Haver Analytics; Global Trade Alert; Trade in Value-Added database, OECD *Note:* A. 3-month moving average

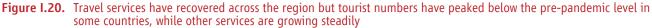




Source: Haver Analytics; BACI; World Bank

Note: A-B. 12 month moving average indexed to 2017 January. C-D. fixed effect estimation where log export price and quantity at HS 6 digit level is dependent variable and independent variables include product fixed effect, year fixed effect, exporter country and importer country fixed effect, and the interaction term between China dummy and year dummy (plotted in the figure; base year is 2016). Whiskers show 95% confidence intervals. Apparels include HS code 61 - 63. Automotives include HS code 87.





Source: Haver Analytics; World Bank staff estimates.

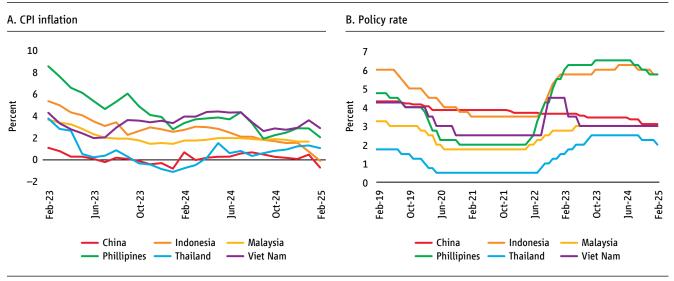
Note: indexed to the corresponding month/quarter in 2019. Cambodia's Other services exclude transport services.

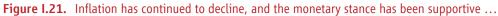
Macroeconomic policy

Monetary policy

Inflation is largely contained and within central bank targets in major economies and monetary stance has been supportive (Figure I.21). However, inflation remains high in Lao PDR and Myanmar, driven by significant currency depreciations and, in Myanmar's case, supply disruptions caused by conflict and trade restrictions. In China, weak domestic demand and supply-demand imbalances in some sectors continue to generate downward consumer and producer price pressures. As inflation eased, central banks in the region began loosening monetary policy. In China, recent policy measures—including cuts to policy rates and the reserve requirement ratio, along with support for the property sector and stock market—are expected to ease financial conditions. However, their impact on growth will be limited by weak credit demand and a sluggish housing market. In Viet Nam, the central bank intervened by selling dollars to counter exchange rate pressures stemming from interest rate differentials with the US.

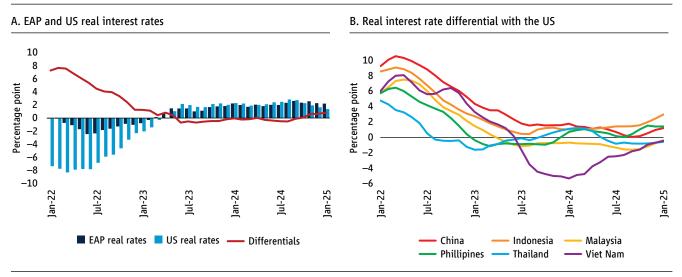
However, rising interest rates in the US and fears of capital outflows reduced the monetary space for deeper rate cuts starting in 2023. Nominal interest rates are higher in Indonesia and in the Philippines than in other ASEAN-5 countries and China. As inflation declined, real interest rates increased starting in 2023 (Figure 1.22), which could inhibit private investment. At the same time, real interest rate differential with the advanced economies has decreased reflecting higher interest rates in the latter. The decreased in interest rate differentials could negatively affect capital inflows to the region.





Source: Haver Analytics

Figure I.22. ... but real interest differentials with advanced economies have vanished



Source: Haver Analytics; CME Fed watch

Note: A. EAP shows simple average of China and ASEAN-5 countries. B. 3-month moving average.

Policy rate expectations in the United States have edged up recently (figure I.28), further limiting monetary policy space of EAP countries. Higher-than-expected interest rates in industrial economies could lead to capital outflows and exchange rate depreciation in developing EAP. In Indonesia, authorities tightened capital control measures in March 2025 to strengthen the rupiah and restrict capital outflows.

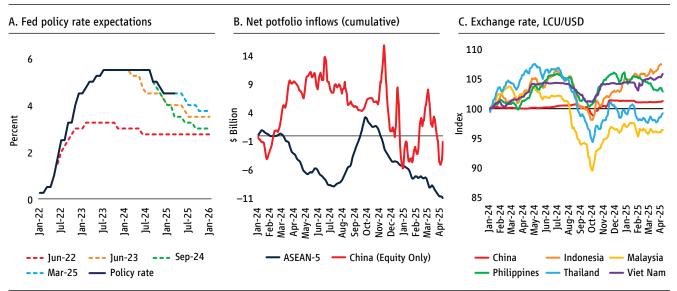


Figure 1.23. Higher-than-expected interest rates abroad are leading to capital outflows, and exchange rate depreciation pressures

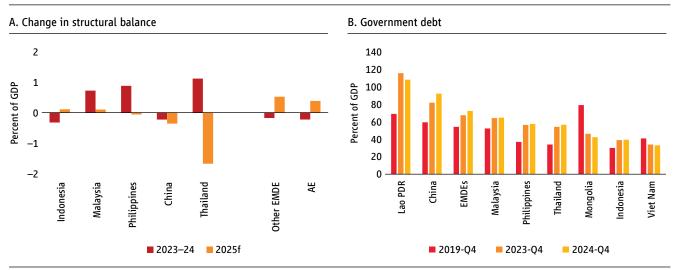
Source: Haver Analytics; Institute of International Finance; CME Fed watch.

Notes: A. Fed: Federal Reserve Board. B. Cumulative flows since January 1, 2024, are calculated using a 7-day moving average for each day. For Indonesia, Malaysia, and Thailand, the sum of equity and debt flows is used, while for China, Viet Nam, and the Philippines, only equity flows are available. C. A 7-day moving average is applied.

Fiscal Policy

The fiscal consolidation effort continued in Malaysia, the Philippines, and Viet Nam (figure I.24). Tax revenue increased in Malaysia while non-tax revenue from mandatory dividend remittances of government owned and controlled corporations increased in the Philippines. In Thailand, the Digital Wallet program was launched and THB 140 billion were disbursed to lower income Social Welfare Card (SWC) holders in FY24. The government has earmarked a further THB 300 billion (about 1.7 percent of GDP) in FY2025 to be disbursed to other beneficiaries, completing the universal coverage of the Digital Wallet. The impact on aggregate consumption is likely to be limited given that better-off recipients tend to have a lower marginal propensity to consume. In Lao PDR, fiscal consolidation has been driven by spending restrictions, including in key sectors, faced with the significant and unsustainable government debt.

In China, the government increased policy support in the latter part of 2024, with a moderate impact on growth. Growth accelerated to 1.6 percent (q/q) in the last quarter of 2024 from 1.3 percent in the third quarter. A RMB 150 billion (0.1 percent of GDP) subsidy for a consumer trade-in program contributed to expanded sales of household appliances, furniture, and automobiles, while a parallel RMB 150 billion equipment upgrade program for firms supported manufacturing investment. Following intensified easing measures, such as lower mortgage rates and downpayment ratios, state-financed purchase of idle land and housing inventories, and liquidity support to viable developers, the property sector in top-tier cities saw some improvement, but less so in lower-tier cities where the housing supply-demand imbalance is more pronounced.





Source: World Economic Outlook Database, October 2024; Institute of International Finance; World Bank

Note: A. Structural balance refers to the general government cyclically adjusted balance adjusted for nonstructural elements beyond the economic cycle.

China's policy support is expected to mitigate domestic and external headwinds to growth. Monetary and property sector policies have been eased further in recent months. The authorities have announced a significant fiscal expansion in 2025 which is composed of higher infrastructure investment, consumer goods and business equipment subsidies, and increased social spending. These measures are expected to provide a fiscal impulse of about 1.4 percentage points of GDP (*). Additional policies to swap local government off-budget debt with lower-cost on-budget financing and to replenish capital in large state-owned banks will reduce financial risk. Even with these measures in place, there are significant downside risks to the outlook from rising uncertainty and escalation in trade tensions. Furthermore, a sustained boost to confidence in the economy would require short-term stimulus to be complemented by longer-term measures to restructure property developer and local government debt, deepen business environment reforms to stimulate private investment, and further strengthen social protection to encourage households to save less and spend more.

In Indonesia, fiscal policy was slightly expansionary in 2024 with rising social spending and public investment and declining commodity revenues. Recent developments include budget adjustments aimed at reallocating resources toward new priorities—most notably, the Nutritious Meals Program and Danantara, a newly established sovereign wealth fund that is tasked to invest in strategic sectors like energy and food. While the overall fiscal stance remains stable, effective implementation and stronger revenue collection will be key to maintaining market confidence. It will also be important to ensure clear governance arrangements for Danantara and sustained, robust financial oversight of State Owned Enterprises (SOEs), given the shift in oversight responsibility from the Ministry of Finance to the Ministry of SOEs.

^(*) World Bank estimates based on the consolidated budget which includes (i) the Public Finance Budget which covers tax and non-tax revenues, current expenditures, and some capital expenditures (net of withdrawals from the stabilization fund); (ii) the Government Fund Budget which reflects mainly local land-lease revenues and infrastructure spending; (iii) the Social Security Fund Budget; and (iv) the state-owned assets operation budget.

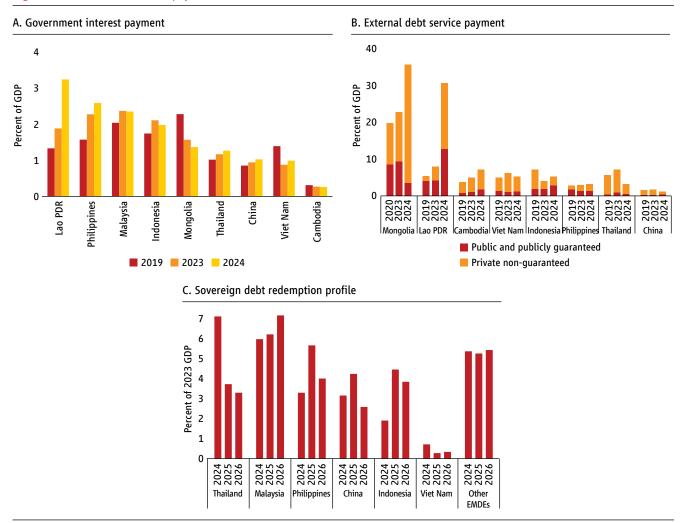


Figure 1.25. ... while interest payments have increased in most countries

Source: World Bank International Debt Statistics; WEO Database; IIF

Faced with higher borrowing costs, governments' interest payments increased in most economies in 2024 (figure 1.25). More than two percent of GDP was spent to pay interest in Lao PDR, Malaysia and the Philippines. At the same time, debt service payments on external debt significantly increased in countries such as Lao PDR and Mongolia. In Lao PDR, which has been assessed to be in debt distress, debt service deferrals accumulated since 2020 amounted to about \$2 billion by the end of 2023 (nearly 16 percent of GDP). While the deferral provides temporary relief, the repayment profile remains uncertain and subject to the conclusion of debt negotiations.

Amid rising uncertainty, EAP policymakers should strengthen prudential regulations, enhance transparency and boost credibility through clear communication and consistent actions, and deepen regional integration. Previous work has shown that the negative effects of uncertainty on consumption and investment are larger in countries with more vulnerable financial sectors. Safeguarding financial stability requires stress testing, foreign reserve buffers, and managing exchange rate volatility. Clear monetary policy communication and central bank independence can help anchor inflation expectations. Expanding regional trade agreements, continuing trade diversification, boosting domestic demand, and improving competitiveness through technology and lower trade barriers can help mitigate trade risks.

I.2. Economic outlook

Outlook

In 2025, regional growth is projected to be 4.0 percent. Growth in the largest economy, China, is projected to be 4.0 percent, in the face of rising trade restrictions, elevated global economic policy uncertainty, slowing global growth and a weak property sector. Government subsidies, such as trade-in programs, are anticipated to support private consumption, while increased infrastructure investment is projected to partially offset the moderation in manufacturing investment growth due to reduced profitability and increased uncertainty. Policy support for the property sector is expected to provide a modest boost to housing demand, narrowing the contraction in real estate investment.

Growth in the rest of the region is likely to be 4.2 percent due to increased global economic policy uncertainty, increased trade restrictions and weaker external demand. Cambodia, Malaysia, Thailand and Viet Nam are especially exposed to changes in external demand. Social spending programs and public investment in Indonesia are expected to support domestic demand, helping offset weaker net exports. An increase in the minimum wage as well as realization of already approved investment projects in Malaysia will continue to support demand. In the Philippines, private consumption is expected to contribute to growth due to easing inflation and monetary policy. Public infrastructure investment is expected to support growth in Thailand. Meanwhile, the Digital Wallet program is expected to partially offset the impact of financing tightening to deal with elevated household debt.

Most countries in the region are expecting a slowdown in exports due to increased trade protection and policy uncertainty. Tourism recovery in Cambodia and copper exports in Mongolia are expected to support growth. In the Pacific Island countries, growth will be supported by remittances, tourism, fisheries, infrastructure development, and reconstruction (Box I.1).

Growth in the region is projected to be 4.1 percent in 2026, with growth in China projected to be 4.0 percent as structural constraints, such as slowing productivity growth, an aging population, high debt levels, and diminishing returns to capital, continue. Growth in the rest of the region is expected to be 4.5 percent in 2026 as some of the uncertainty around global developments subsides.

Inflation in most of the EAP region is expected to rise slightly in 2025, mainly driven by growing input costs from potential exchange rate depreciation. However, in most economies, inflation is projected to remain within central banks' target bands, as lower global commodity prices and favorable weather conditions such as "La Niña stabilize agriculture prices. Meanwhile, inflation in Lao PDR and Myanmar is projected to remain elevated at double-digit levels, reflecting persistent exchange rate depreciation that pushes up the cost of imports and production inputs.

Table O1. GDP growth forecast

| | 2015-19 | 2020-23 | 2024 | Apr 2025 forecast | | Oct 2024 forecast | |
|---------------------------------------|---------|---------|------|-------------------|------|-------------------|------|
| | 2013-19 | 2020-23 | 2024 | 2025 | 2026 | 2024 | 2025 |
| East Asia & Pacific | 6.5 | 4.4 | 5.0 | 4.0 | 4.1 | 4.8 | 4.4 |
| East Asia & Pacific (excluding China) | 5.2 | 2.3 | 4.9 | 4.2 | 4.5 | 4.7 | 4.9 |
| Pacific Island Countries | 3.1 | 0.4 | 3.7 | 2.5 | 2.7 | 3.5 | 3.4 |
| | | | | | | | |
| China | 6.7 | 4.8 | 5.0 | 4.0 | 4.0 | 4.8 | 4.3 |
| Indonesia | 5.0 | 3.0 | 5.0 | 4.7 | 4.8 | 5.0 | 5.1 |
| Malaysia | 4.9 | 2.6 | 5.1 | 3.9 | 4.3 | 4.9 | 4.5 |
| Philippines | 6.6 | 2.3 | 5.7 | 5.3 | 5.4 | 6.0 | 6.1 |
| Thailand | 3.4 | 0.0 | 2.5 | 1.6 | 1.8 | 2.4 | 3.0 |
| Viet Nam | 7.1 | 4.8 | 7.1 | 5.8 | 6.1 | 6.1 | 6.5 |
| Cambodia | 8.0 | 2.4 | 6.0 | 4.0 | 4.5 | 5.3 | 5.5 |
| Lao PDR | 6.6 | 2.4 | 4.1 | 3.5 | 3.4 | 4.1 | 3.7 |
| Mongolia | 4.6 | 2.4 | 5.0 | 6.3 | 5.2 | 5.3 | 6.5 |
| Myanmar | 6.4 | -2.6 | 1.0 | -1.0 | 1.5 | 1.0 | 1.0 |
| Papua New Guinea | 4.0 | 1.4 | 4.5 | 4.3 | 3.2 | 4.6 | 3.7 |
| Timor-Leste | 5.2 | 0.2 | 4.1 | 3.5 | 3.4 | 3.0 | 3.5 |
| Palau | 1.0 | -4.8 | 9.3 | 8.6 | 3.5 | 12.0 | 11.0 |
| Fiji | 3.1 | 1.4 | 3.8 | 2.6 | 2.9 | 3.1 | 3.3 |
| Solomon Isl. | 3.0 | 1.1 | 2.5 | 2.6 | 2.7 | 2.5 | 2.9 |
| Tuvalu | 6.7 | 0.1 | 3.5 | 2.8 | 2.3 | 3.5 | 3.0 |
| Marshall Isl. | 4.8 | -1.5 | 3.4 | 3.3 | 2.7 | 3.4 | 4.0 |
| Vanuatu | 3.5 | 0.2 | 0.9 | -1.8 | 2.3 | 0.9 | 1.5 |
| Kiribati | 5.8 | 3.8 | 5.2 | 3.9 | 3.0 | 5.8 | 4.1 |
| Tonga | 2.3 | 0.3 | 1.8 | 2.2 | 1.8 | 1.8 | 2.4 |
| Samoa | 3.4 | -1.6 | 9.4 | 5.3 | 2.6 | 10.5 | 5.5 |
| Micronesia | 2.0 | -1.3 | 1.1 | 1.3 | 1.4 | 1.1 | 1.7 |
| Nauru | 1.7 | 2.8 | 1.8 | 1.4 | 1.3 | 1.8 | 2.0 |

Sources: World Bank.

Note: Percent growth of GDP at market prices. Values for 2024 for the small island economies refer to GDP growth estimates. Values for Timor-Leste represent non-oil GDP. For the following countries, values correspond to the fiscal year: Myanmar (April 1 – March 31), Federal states of Micronesia, Palau, and Republic of the Marshall Islands (October 1 - September 30); Nauru, Samoa, and Tonga (July 1 - June 30).

Box 1.1. Economic recovery and outlook in the Pacific Island Countries²

For the third year since the pandemic dip, almost all PIC-11 countries recorded growth for three consecutive years (2022, 2023, and 2024), except for Vanuatu (Figure B1.1A). The recovery of remittances has been significant, providing crucial support to household incomes and overall economic stability, particularly benefiting Samoa and Tonga. Tourism has rebounded, revitalizing local businesses especially in countries dependent on tourists from Australia, New Zealand, and North America (Fiji, Samoa). Investment growth remains weak. However, the resumption of transport critical for bringing in imports needed for construction is expected to help support infrastructure investment. Vanuatu bucked the trend due to cascading shocks, including cyclones, the fallout from the liquidation of Air Vanuatu in May 2024, which significantly affected tourism and the fiscal outlooks, political instability, and the impact of an earthquake in December 2024 (Figure B1.1B).

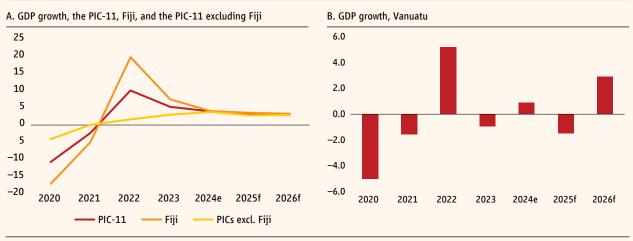


Figure B1.1. GDP growth

Sources: Haver Analytics; World Bank.

Note: e = estimate; p = projection. All data in the report is presented on a calendar year basis for consistency and comparability. For countries with fiscal year different to the calendar year period, data in a calendar year basis are computed based on fiscal year's estimates. The data presented, corresponding to fiscal years, is explicitly indicated as such.

Growth in Pacific Island countries is forecast to decline from 3.7 percent in 2024 to 2.5 percent in 2025. Remittances, tourism, fisheries, infrastructure development, and reconstruction will continue to support economic activity. However, the projections reflect the uncertainty about global demand as trade restrictions rise. Growth in Fiji, the largest Pacific Island country, is expected to ease due to fiscal policy tightening.

The Pacific Islands comprise 11 countries, with Fiji being the most populous and economically significant, followed by Solomon Islands. The 9 other economies are categorized into two main groups. The first group relies heavily on tourism and remittances (Palau, Samoa, Tonga, Vanuatu). The second group depends on natural resources, non-tax revenue, and development aid (FSM, Kiribati, Nauru, RMI, Tuvalu) (World Bank, 2024g). The economies of the former group are vulnerable to global economic shifts and travel conditions, while the latter's stability is tied to commodity prices, fishing and non-tax revenue, and donor funding. Tourism and remittances-led countries experienced more severe contractions due to the travel restrictions during the COVID-19 shocks and have been enjoying a delayed recovery.

(continued)

(Box I.2. continued)

The short-term outlook in PICs is subject to several downside risks. Heightened policy uncertainty and adverse shifts in global economic conditions, including adverse trade, investment, and aid policy shifts, represent key downside risks to the PICs' economic prospects (Figure B1.2). A slowdown in major economies could weaken global demand and incomes, potentially reducing tourism and impacting commodity exports, especially for countries like Solomon Islands.

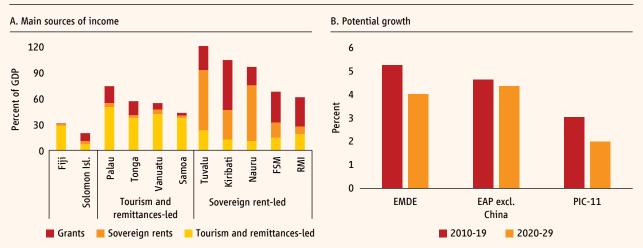


Figure B1.2. Income sources and potential growth

Sources: Haver Analytics; International Monetary Fund; Kose and Ohnsorge 2024; World Bank.

A. 2009-19 averages for most countries, or average data for available years when some data points are missing. Sovereign rents include fishing revenue and other non-tax revenue.

B. EMDE = emerging market and developing economies. For EMDE and EAP excluding China, the figure panel shows GDP-weighted averages of production function-based potential growth estimates for 53 EMDEs and four EAP countries (Kose and Ohnsorge 2024). Data for 2024-30 are forecasts. For PIC-11, the panel shows unweighted averages of the five-year ahead growth projection from the IMF's World Economic Outlook.

Despite a commendable recent rebound, medium-term growth projections for the PIC-11 remain mixed, with many facing subdued expectations. Medium-term growth prospects for the PIC-11 have declined from 3.1 percent per year in 2000-19 to 2.7 percent in 2020-29 (Figure B1.2). This decline is attributed to the diminishing impact of underlying growth drivers since 2000, particularly investment, and the escalating frequency and severity of natural disasters. Investment growth in the Pacific Islands is projected to slow from an average of 3.1 percent annually during 2000-19 to around 1 percent annually from 2020-29. The per capita income of the PIC-11, which once approached 25 percent of the average advanced-economy level, is now projected to stagnate at around 20–22 percent by 2030 (World Bank Pacific Economic Update October 2024).

Risks

The projection for the region is subject to several downside risks, including adverse trade policy shift, a potential sharp slowdown in the global economy, tighter-than-expected global financial conditions, and escalation in global geoeconomic and geopolitical tensions. Natural disasters could further compound these risks.

Growth in the EAP region's key trading partners is subject to downside risks (World Bank 2025a: Global Economic Prospects, January 2025). In the US, a weaker labor market and trade policy shifts could slow consumption and growth. In China, escalating trade tension, a prolonged property sector downturn and tightening local government finances may erode confidence, dampen household consumption, and curb industrial demand. A sharper-than-projected slowdown in either economy would weaken external demand for many export-oriented countries in the region (Cambodia, Malaysia, Philippines, Thailand and Viet Nam and Lao PDR), while lower commodity prices could hurt exporters such as Indonesia, Malaysia, Mongolia, Myanmar, and Lao PDR.

External volatility, policy uncertainty, and slow revenue mobilization remain key risks to the economic outlook in Indonesia. Market sentiment has weakened since late 2024, with equity outflows, a depreciating Rupiah, and rising bond yields reflecting investor caution. There has been an increase in policy uncertainty – with the World Policy Uncertainty Index for Indonesia reaching the highest level in more than a decade – which could affect private investment decisions. These add to emerging structural challenges, including a declining share of middle-class jobs and employment losses in sectors like textiles.

The region's economic outlook remains sensitive to external financial conditions. Prolonged high interest rates in advanced economies could restrict capital inflows, limit monetary policy space, hinder debt refinancing, and intensify depreciation pressures. Smaller economies, such as Timor-Leste, Cambodia, and Lao PDR face heightened risks due to reliance on external financing. Some Pacific Island Countries, which rely heavily on foreign assistance for various development projects and essential services, are also exposed to uncertainty in foreign aid policies (figure I.26). Larger economies, including Philippines, Thailand, and Malaysia, also face risks as capital outflows could adversely impact domestic financial markets (Box I.2).

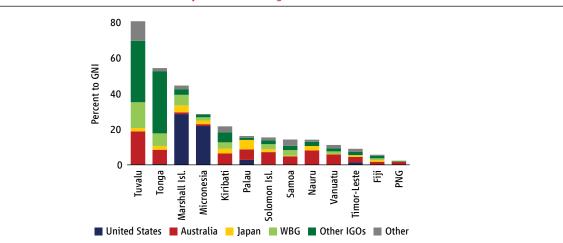


Figure 1.26. Some Pacific Island Countries are heavily reliant on foreign assistance

Source: The Organisation for Economic Co-operation and Development (OECD); World Bank staff calculations. *Note:* Inflow of official development assistance, 2022-23 average. WBG. World Bank Group. IGO. Inter-governmental organizations.

Box 1.2. Financial sector risks and policies in EAP

Financial sectors in most of the region's economies remain stable and liquid, with healthy asset quality, ample market liquidity and sufficient buffers to withstand potential adverse shocks (Table B2.1). But pockets of vulnerabilities remain. First, some countries, including Cambodia, China, Myanmar, Thailand and Viet Nam, have reintroduced forbearance measures. Second, high private debt in some countries can increase risks in the banking sector. Finally, increasing public debt intensifies risks of banking sector exposure to sovereign debt.

| | Financial | | | | | | | | | | | |
|------------------|--|--------|---|-----------------------------|-------------------------------------|--------|-------------------------|----------|---------------------------------|---|------|--------|
| | Credit Expansion Capital Adequacy | | асу | Asset Quality Profitability | | | 1 | Solvency | | Liquidity | | |
| | Domestic credit to private sector (% of GDP) |) | Regulatory Capital to Risk- Weighted Assets (%) | | NPLs to Total Gross Loans (%) | | Return on equity (%) | | Deposit to loan ratio (%) | Liquid asset (% short-term liability) | | |
| | 2023 | change | 2024 | change | | change | | change | 2024 | change | 2024 | change |
| China | 225 | 28 | 16 | | 0 2 | 0 | | 0 | | 4 | 75 | 10 |
| Indonesia | 40 | 0 | 25 | | 0 2 | C | | 2 | | -3 | 20 | -5 |
| Malaysia | 159 | 2 | 18 | - | | 0 | 9.8 | 0 | 120 | 0 | 21 | 0 |
| Philippines | 48 | 0 | 16 | | 0 3 | C | 12.8 | -1 | . 125 | -7 | 42 | -2 |
| Thailand | 178 | 0 | 19 | | 0 3 | C | 9.7 | 1 | . 94 | 1 | 34 | 0 |
| Viet Nam | 126 | 0 | 11 | | 0 5 | 2 | | -2 | 93 | -12 | 23 | 0 |
| Cambodia | 128 | -5 | 22 | | 0 8 | 5 | i 1.2 | -7 | 87 | 15 | 23 | 1 |
| Lao PDR | 57 | | 19 | | 0 2 | 0 | 21.1 | 5 | 154 | | 36 | 0 |
| Mongolia | 39 | -1 | | | 8 | -1 | 13.5 | 0 | 130 | 7 | 50 | 0 |
| Myanmar | | | | | | | 3.0 | 0 | 203 | 3 | 64 | 0 |
| Timor-Leste | 21 | 4 | | | 2 | 0 | 11.1 | 0 | 224 | -50 | 94 | 0 |
| Fiji | 75 | -2 | 21 | | 0 8 | | 17.5 | 0 | 105 | -2 | 206 | 0 |
| Solomon Islands | 32 | 0 | 35 | | 3 9 | -1 | 5.7 | -21 | 158 | 5 | 70 | 2 |
| Papua New Guinea | 14 | 1 | 40 | | 5 5 | 0 | 24.3 | -2 | 176 | -4 | 25 | -2 |
| Samoa | 45 | -4 | 29 | - | 2 5 | -1 | 18.3 | 8 | 139 | 14 | 55 | 11 |
| Vanuatu | 55 | -1 | 24 | | 1 20 | 2 | 2 | | 149 | 7 | | |
| Tonga | 41 | -1 | 32 | | 1 11 | 1 | 9.5 | -2 | 147 | 4 | 60 | -9 |

Table B2.1. Financial sector vulnerability in EAP

Source: IMF, WB, Haver Analytics

Note: Color scale represents country quartile across EMDEs. Change denotes percentage point/level change compared to 2022-23 average. Credit to private sector includes claims on corporate and household sectors.

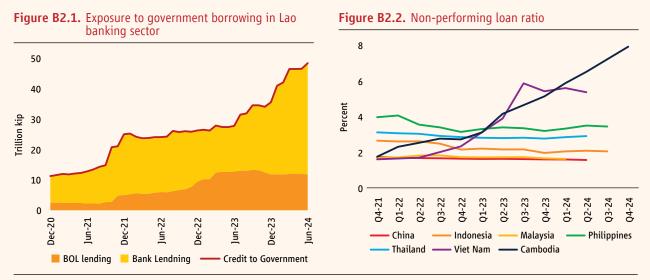
Forbearance measures provide short-term but can mask underlying vulnerabilities when applied over an extended period. Cambodia introduced new restructuring, while Thailand launched a broad debt relief initiative to help lower interest payments on household debt. China has extended SME loan terms, Myanmar eased prudential regulations for banks, and Viet Nam continued loan restructurings under forbearance to mitigate asset quality issues.

Thailand continues efforts to tackle high household debt. Household debt stood at 89 percent of GDP in Q4 2024, with a significant share on uncollateralized consumer loans. Short-term relief measures, such as interest suspensions and reduced payments, have helped borrowers but tightened bank lending, with credit to the private sector declining (-0.3 percent in September 2024). To address long-term risks, the Bank of Thailand is promoting responsible lending, curbing excessive informal loan pricing, and strengthening macroprudential policies.

(continued)

(Box I.3. continued)

The financial sector in Lao PDR and Cambodia remains fragile. Lao PDR is grappling with rapid inflation-driven credit growth and public debt risks (figure B2.1A). Domestic credit in kip terms grew rapidly due to inflation, currency depreciation and increased financing demand from the government and private sector. Risks of exposure to public debt have grown given the weak fiscal position and debt sustainability challenges. Despite overall improvements in financial soundness indicators, vulnerabilities remain within certain institutions, notably reflected in the low capital adequacy ratios of some major banks. Cambodia faces decelerating credit demand and escalating non-performing loan (NPL) rates (figure B2.2). Credit growth slowed to 3.7 percent year-on-year in mid-2024, following over a decade of double-digit growth. NPL level continued to rise, reaching a new peak of 7.9 percent by the end of 2024, amid low post-pandemic growth. Although bank profitability has declined, the system maintains high capital adequacy ratios and meets regulatory liquidity requirements.



Source: World Bank Lao Economic Monitor October 2024; Haver Analytics

The pace of credit growth differs markedly in the region: while credit growth rates in Indonesia, the Philippines, Malaysia and Viet Nam has been healthy, providing strong support to the economy, they have been somewhat lackluster in Thailand. Vietnamese banks are issuing bonds to increase capital adequacy given high credit demand. The largest Chinese banks are bolstering their capital base and enhancing loss-absorbing capacities by more than US\$ 200 billion through the issuance of equity and total loss-absorbing capacity (TLAC) bonds. This measure is presumably aimed at meeting future credit demand while strengthening institutional resilience in the context of a slowing growth. Meanwhile, the banking sector in Myanmar continues to confront significant challenges, including high non-performing loans (NPL) ratios, a scarcity of foreign currencies, disruptions to international payment systems and remittance flows, as well as pervasive economic uncertainty. The financial sector in Cambodia and Lao PDR also faces pressures due to significant macroeconomic and external sector stress. NPLs are expected to grow in Vanuatu's banking sector due to the December earthquake and the collapse of its national airline.

(continued)

(Box I.3. continued)

Governments are turning to domestic institutions for financing public debt due to challenging external financing conditions, higher cost of borrowing, and increased fiscal needs since the pandemic. In some EAP countries, such as Malaysia, Thailand, Philippines, and Papua New Guinea, a growing portion of government debt is being funded by domestic investors, with local commercial banks increasingly stepping in as key financiers. Although sovereign debt—including central, state and local governments, and public nonfinancial corporations—comprises less 20 percent of banks' assets in majority of EAP countries, the share of sovereign debt in domestic banks' assets has risen to 40 percent in Papua New Guinea and over 20 percent in Philippines.

This trend of turning to domestic channels for financing public debt underscores the importance of stable and well capitalized banking sectors in supporting government finances amidst challenging economic environments. It also highlights the necessity for prudent fiscal and regulatory policies to ensure sustainability of public debt financing and to mitigate potential risks to financial stability.

Increased exposure of banks to sovereign debt may have potential adverse impact on the domestic financial stability and growth in the region, especially when capital positions are not adequate. Government debt has risen in many EAP countries in recent years, potentially leading to higher sovereign distress risk. Meanwhile, government bond yields rise across the region, which in turn may diminish the market value of government debt held by banks. These factors may result in increased financial risks for domestic banks, elevate funding costs and impose liquidity constraints, hampering banks' capacity to lend, and hence exacerbating the crowding out of private sector borrowing. The extent of this impact would largely depend on the loss-absorption capacity of the banking sector. In some EAP countries, such as Indonesia, banks are reluctant to target riskier segments of the economy, such as underserved households and affecting financial inclusion and the growth of the private sector.

Going forward, financial sector policy in the region should prioritize several areas. First, countries should continue strengthening regulatory and supervisory frameworks to address emerging vulnerabilities and ensure the resilience of their financial systems, including through strict application of prudential standards and enhancement of crisis management framework and financial safety nets. In cases where forbearance measures are called for, they should be temporary and targeted, avoiding the erosion of regulatory standards. Second, banks and financial institutions need to enhance their risk management practices mitigating the impact of rising NPLs and other financial challenges. Efforts should also be made to improve corporate governance practices and further enhance data transparency. Finally, EAP economies should strive to strengthening regional cooperation. Collaboration between EAP countries can help to share information and best practices, address cross-border financial risks, and promote financial stability in the region.

Escalating global conflicts, especially in the Middle East and the war in Ukraine, could also present a downside risk to EAP economies by disrupting commodity supplies including oil and natural gas. An increase in commodity prices could increase domestic inflation, reducing household real incomes and consumption. Within the region, intensification of conflict in Myanmar poses risks to the outlook.

Natural disasters pose significant risks to the region's growth. Studies show that the EAP region faces more frequent and severe disasters than other developing regions, with Pacific Island nations particularly vulnerable due to their geographic exposure (World Bank, 2024a). Larger economies also face risk of disruptions to supply chains, infrastructure damage, fiscal pressures, and financial stability. In 2024, typhoon Yagi caused major flooding and landslides in China, Thailand, Philippines, Myanmar and Viet Nam—with estimated damages in Viet Nam alone reaching 0.7 percent of GDP. An earthquake in Vanuatu led to loss of life and economic hardship.

II. Long-term challenges

Short-term uncertainty should not obscure long-term trends in global economic integration, climate, and demographics that will affect trade, growth, and jobs in the EAP region. To address these challenges, countries must harness technological change, pursue domestic reforms, and deepen international cooperation (Table II.1).

In this chapter, we analyze these three challenges, as well as the potential responses, organizing the material around three questions: i) what is happening? ii) Why are these developments important? iii) And what could be done?

Three long-term challenges Changing Climate risks Demographics global economic integration Trade, Growth and Jobs Three responses Harness Digital tech for technological Green technologies productivity change Domestic Liberalize trade and Remove distortions; Reform pensions; reform extend working life investment encourage adaptation International Deeper regional Freer green trade and Greater labor mobility cooperation integration investment

Table II.1. Three policy responses to three long-term challenges: an organizing framework

Source: Authors' elaborations

II.1 Changing global economic integration

What is happening to trade and trade policy?

The share of trade in global GDP increased from less than 40 percent in 1990 to 60 percent just before the financial crisis of 2008 but has stayed flat ever since then (Figure II.1). Developing EAP countries witnessed an even faster increase, followed by a decline. Patterns are heterogeneous across the region: China, Indonesia and Malaysia drive the regional inverted-U shape trend; Viet Nam, Cambodia and Lao PDR continue to see a rising trade share in their output; and Thailand resembles to global flattening. However, regardless of recent trends, the EAP countries are still among the most trade-dependent economies in the world (Figure II.2), and therefore particularly vulnerable to international trade tensions.

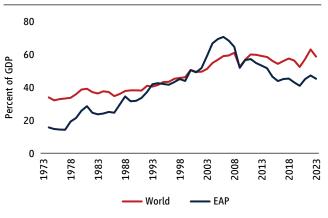


Figure II.1. The share of trade in GDP has flattened since the Great Financial Crisis

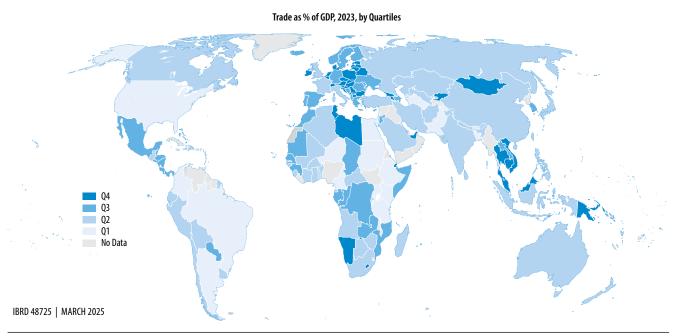
Source: WDI

Note: Trade as % of GDP defined as the sum of world exports and world imports divided by World GDP. EAP average is a GDP weighted average (weights in 2021) of all developing EAP countries.

Between 2017 and 2023, the share of several developing EAP countries in global exports witnessed both increases and shifts (Figure II.3). China, Viet Nam, Cambodia, and Indonesia expanded their shares, while Japan and the Republic of Korea saw declines. China's share increased across multiple sectors, including electrical equipment and metals, but decreased in computers and electronics, as well as textiles. Viet Nam gained a share in computers and electronics, while Cambodia saw growth in textiles.

China's expanding share in global trade is driven by increased exports to other developing regions, particularly East Asia, even as its exports to the US declined (Figure II.4). Mongolia and Indonesia primarily increased their exports to China, while Viet Nam expanded its exports to both China and the US.

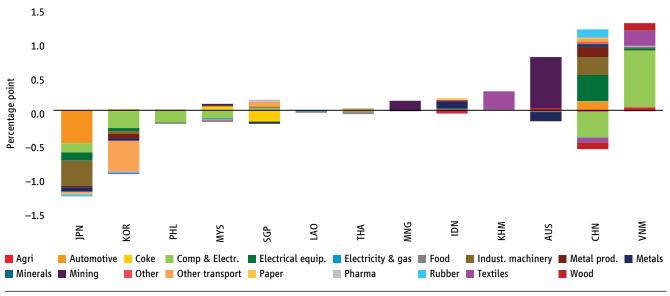
Figure II.2. EAP countries are particularly exposed to changes in global economic integration



Source: WDI

Note: Data for 2023 or more recent year available for EAP countries. 2022 for VUT, TON, SLB. 2016 for LAO

A LONGER VIEW





Source: UN-Comtrade downloaded through BACI

Note: The bars show the change in share of a country exports over world exports from 2017 to 2023, by sectors

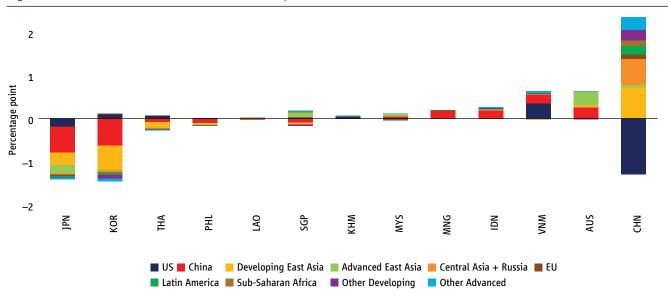


Figure II.4. China has increased its share in world exports

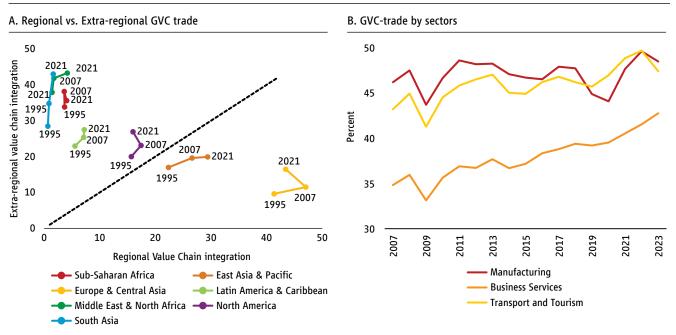
Source: UN-Comtrade downloaded through BACI

Note: The bars show the change in share of a country's exports over world exports from 2017 to 2023, by partners countries.

Figure II.5, which traces the evolution of GVC-related trade, highlights the increasing regionalization of EAP and the global dynamism in services. First, EAP is the only region where intra-regional exceeds extra-regional GVC-trade, with this ratio rising over the past two decades (Figure II.5.A). Second, while GVC-trade in manufacturing and transport has remained relatively stable, the past decade has seen a notable expansion in GVC-trade in services (Figure II.5.B).

On the trade policy front, apart from the recent trade-tensions described in Part I, EAP countries are also suffering a particular form of trade protection and source of trade policy uncertainty: antidumping measures. A recent update of the World Bank temporary trade barriers database (TTB database) reveals that large economies use antidumping much more than smaller EAP countries (Figure II.6).³ Furthermore, the European Union and the US are not very exposed to foreign antidumping measures, while EAP countries such as China, Thailand, Indonesia, and more recently, Viet Nam, have been historically more exposed to foreign antidumping (Figure II.7).

Figure II.5. The EAP region saw a greater increase in the intra-regional than the extra-regional content of its GVC trade, 1995-2021. Services display a rise in the share of GVC-trade in recent years



Source: Mancini, Mattoo, Taglioni and Winkler, 2023 (left-hand side chart); and WITS GVC Module (right-hand side chart) using ADB ICIO Data and following methodology in Borin, Mancini, and Taglioni (2021).

Note: the right panel is based on Inter-Country Input-Output (ICIO) tables, with a focus on value-added trade that crosses at least two borders, a standard definition introduced by Hummels et al. (2001). The framework ensures a consistent separation between forward and backward participation. It accounts for countries that supply inputs for re-export (forward participation) and those that use imported inputs in their exports (backward participation). GVC-related trade is defined as the sum of forward and backward linkages, ensuring that only trade flows involved in multi-stage international production processes are captured. GVC participation in Business Services has expanded continuously, possibly due to the increasing role of digital services, outsourcing, and professional services in global trade.

For each investigation, in fact, the database traces both the countries against which the investigation is launched, and which products are covered. This information is collected directly looking at the official documents and therefore is more reliable than data sources collected through policy announcements. Figure II.6 shows the numbers of products on which a new antidumping investigation was started, by year, in several countries.

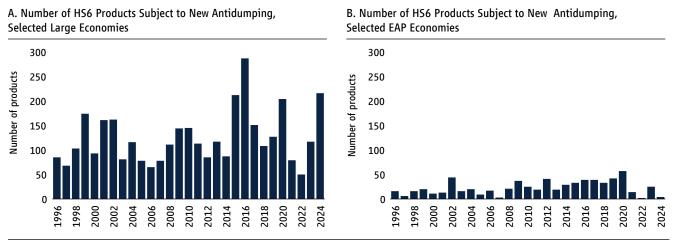
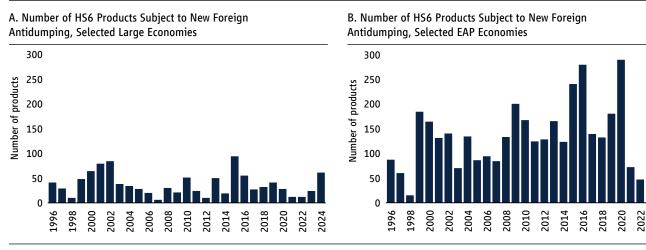


Figure II.6. In more recent years, large economies have been more prone to protectionism than the EAP countries, as reflected in antidumping actions

Source: Original analysis for this publication using TTB Database, 2025

Note: The bars show the numbers of HS-6 Products subject to a new TTB investigation initiated by the reporting country, by year. Large economies include the US, the European Union and India. EAP economies include: CHN, IDN, MYS, PHL, THA, VNM.

Figure II.7. And EAP countries have been more exposed to foreign protection in the form of antidumping



Source: Original analysis for this publication using TTB Database, 2025

Note: The bars show the numbers of HS-6 Products subject to a new TTB investigation initiated by the partners countries, by year. Large economies include the US, the European Union and India. EAP economies include: CHN, IDN, MYS, PHL, THA, VNM.

2024

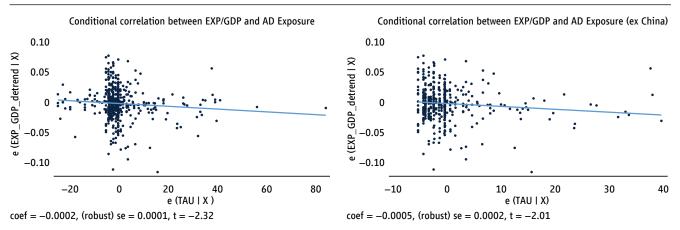
Why do these developments matter?

EAP countries have both implemented protectionist measures and have become increasingly exposed to foreign protectionism. Domestic protection distorts resource allocation, reducing productivity and consumer welfare. Moreover, it has been shown that such measures can negatively impact employment due to the presence of input-output linkages (see Barattieri and Cacciatore, 2023; Flaaen and Pierce, 2024; Bown et al., 2024). The study of the impact of foreign protection, instead, has been mostly limited to model simulations, which highlight the negative effects on export opportunities and economic activity of foreign protectionism (see Imura, 2023; Bergin and Corsetti, 2023). In the following subsection, we contribute to this body of evidence by exploring the impact on the GDP of EAP countries of foreign protectionism through the lenses of a computable general equilibrium model.

The TTB database, however, allows us to directly explore the effects of foreign protectionism on domestic outcomes. Figure II.8 reports a negative association of foreign protection with the cyclical component of the export-to-GDP ratio for a sample of six EAP countries over the period 2005-2023, using quarterly data. Panel A reports the results for all six countries, while in panel B China is excluded. The estimates imply that doubling the number of products on which foreign partners initiate antidumping investigations – which is only one of several instruments of protection - is associated with a reduction of the export to GDP ratio by 0.14 to 0.30 percentage points.

In Figure II.9 the same exercise is repeated on the detrended GDP, with similar results. Doubling the exposure to foreign antidumping is associated with a reduction in GDP by between 0.15 and 0.24 percentage points, albeit the effects in this case are less precisely estimated.

The potential negative effects of foreign protectionism on economic activity goes beyond exports and GDP. As shown by Maliszewska and Winkler (2024), increased trade opportunities have positive effects on employment and earnings. In a large sample of developed and emerging countries, using an instrumental variable approach, an increase of 10 percent in trade is found to generate an increase in employment by between 3 and 4 percentage points (Winkler et al, 2023). By potentially reducing export opportunities, therefore, foreign protectionism might also affect job creation.





Source: Original analysis for this publication using TTB Database, 2025 and WDI

Note: Conditional correlations between the detrended Exports over GDP ratio and the exposure to foreign TTBs, as measured in figure II.7 Conditional to country fixed effects. Time period: 2005Q1-2023Q2. Countries included: CHN, IDN, MYS, PHL, THA, VNM.

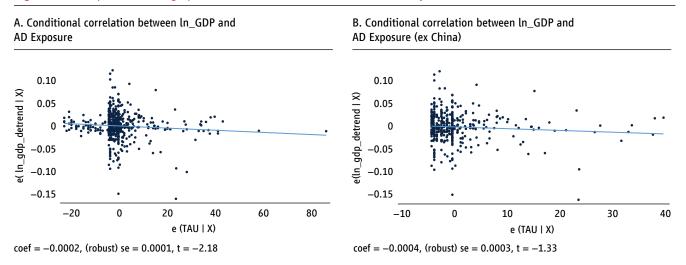


Figure II.9. Exposure to foreign protection can result in lower economic activity

Source: Original analysis for this publication using TTB Database, 2025 and WDI

Note: Conditional correlations between the detrended GDP (in logs) and the exposure to foreign TTBs, as measured in Figure II.7. Conditional to country fixed effects. Time period: 2005Q1-2023Q2. Countries included: CHN, IDN, MYS, PHL, THA, VNM.

• What can be done?

The EAP countries can respond to the challenge of foreign protection by harnessing technological change, pursuing domestic reforms, and deepening international and regional cooperation.

Harness technological change

A first response to the challenges posed by changing global economic integration and increasing foreign protectionism is potentially represented by technology adoption. Industrial robots can perform a wide range of repetitive tasks in many sectors and induce significant reduction in production costs. As wages for low-skill workers rise, or price of robots decrease, or alternatively productivity of robots increases due to technological innovations, automation will become a viable option for many producers. (Artuc, Bastos, Copestake and Rijkers, 2023). While this process is often beneficial for growth due to productivity gains, it can also lead to a decrease in labor demand and cause unemployment for low-skill workers who often perform repetitive tasks that can potentially be automated.

While robotization started in early 2000s in high income OECD countries, it spread rapidly to many economies in the East Asia and Pacific region. As discussed in our previous EAP Economic Update (World Bank, 2024a), there is a wide variation in terms of both the timeline and industry specialization of robot adoption across the large developing EAP countries (Figure II.10).

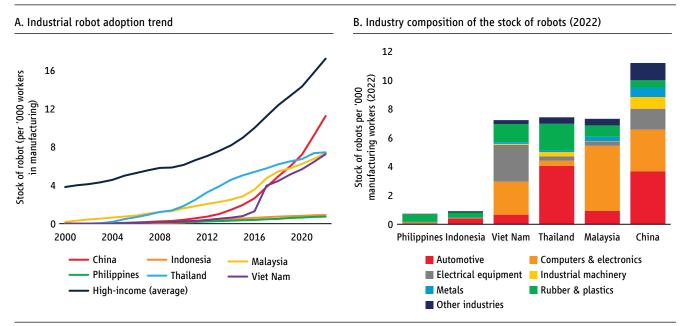


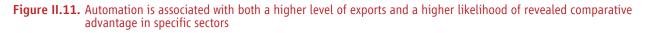
Figure II.10. Robot adoption has increased not only in automotive and computer and electronics sectors but also in others such as rubber and plastics

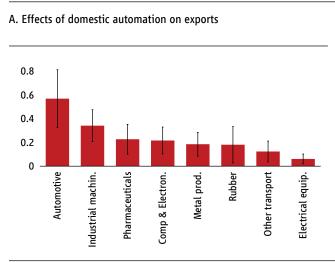
Source: World Bank (2024a), using International Federation of Robotics (IFR) and OECD Employment Statistics. *Note:* A. Evolution of the stock of robots per thousand workers in manufacturing in China, Malaysia, Thailand, Viet Nam, Indonesia, Philippines, and the average across high-income countries (HIC), middle-income countries (MIC), and all countries with complete information in the IFR and OECD datasets (World), between 2000 and 2022. The number of workers is fixed in a baseline year (2000). B. Industry composition of the stock of robots in the most recent year (2022).

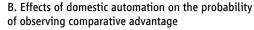
Matching data on robots' adoptions with international trade statistics allows us to investigate the impact of technology diffusion on export performance. Preliminary evidence suggests a relationship between robot adoption and both the level of exports and the likelihood of observing comparative advantage.⁴ Figure II.11 reports the results of an analysis conducted on a sample of 52 developed and emerging economies for the period 2012-2020. While the average effects of robots' adoption on both the level of exports and the probability of observing comparative advantage is in general positive, this average result is driven by some specific industries: automotive, industrial machineries, computer and electronics etc. Figure II.11 reports the results following a potential doubling of the number of robots (per '000 workers). This increase is associated with an increase in exports between 7 and 55 percent. And with an increase in the probability of displaying comparative advantage between 10 and 32 percent. These effects can be driven by an increase in productivity, which can arise from more efficient production or improved quality of the exported products (DeStefano and Timmis, 2024).

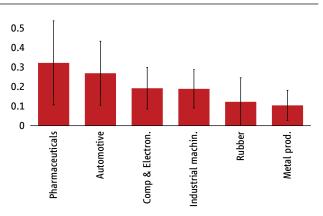
⁴ We measure comparative advantage with a measure of Revealed Comparative Advantage (RCA), defined as the ratio between the export share of a given country in a given sector in a given year to the world export share in the same sector in the same year. For instance, if the share of exports of wood in a given country is 20% and the world as a whole records an export share of wood of 10%, the RCA measure would be 2. We define the probability of observing comparative advantage as the probability of observing an RCA larger than one.

Empirical analysis conducted in World Bank (2024a) also suggests that the productivity gains from robotization helped to create jobs for high-skill workers engaged in non-routine manual and cognitive tasks in Indonesia, Malaysia, the Philippines, Thailand, and Viet Nam. However, robots have also displaced low-skill workers from formal employment.









Source: Original analysis for this publication using FIR Database and UN-comtrade *Note:* Marginal effects from regressions at country-sector-year level including country, sector and year fixed effects. Sample: 52 developed and developing countries, over 2012-2020, for 19 industrial sectors.

The analysis presented here is a partial equilibrium analysis. A more sophisticated analysis based on simulations from a general equilibrium model is presented in Box II.1. This more sophisticated analysis confirms the fact that technology adoption can represent a source of increase in export opportunities, even in scenarios where the first technology adopters are more developed trading partners. The key mechanism if the increase in demand for intermediate products that is spurred in trading partners by the increase in efficiency made possible by technology.

Box II.1. Can Robots Create New Opportunities for the East Asia and Pacific Region? Model-based analysis

To shed light on the impact of robotization on growth and trade patterns, we present an exercise based on a recent quantitative trade model estimated with data from developing and developed countries (Artuc, Bastos and Rijkers, 2023).

The model used in the quantitative exercise allows a representation of global value chains with multi-stage production, where high income countries rely on intermediate inputs from developing economies. Robotization is possible for both intermediate inputs and final goods, and in both high-income and developing economies.

(continued)

(Box II.1. continued)

But robotization levels will differ significantly across countries due to differences in labor costs and composition of sectors. Producers decide whether to use labor or robots based on the number of automatable tasks in a sector, labor costs, prices of robots, and the productivity of robots relative to workers. These decisions impact production costs and thus reshape global comparative advantage patterns. Total employment is fixed in the model, and automation affects real wages but not total jobs.

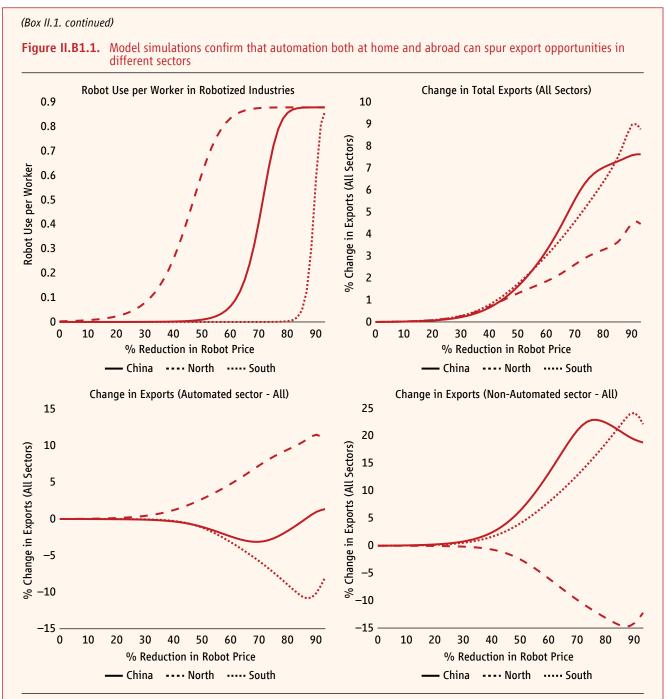
The model is calibrated using data for China, high-income OECD countries (North) and developing countries (South) to represent three major groups of economies in the simulations. The industries are clustered into two groups: automatable sector (such as textiles) and non-automatable sector (such as automotives). The simulation in Figure II.B1.1 shows the impact of a gradual long-term reduction in robot prices (or equivalently an increase in productivity of robots) on global trade patterns. When relative productivity of robots increases, as has been the case since early 2000s, replacing workers with robots reduces the production costs. This process starts in the high-income OECD countries as they face the highest labor costs. Robotization increases productivity in the North but only in sectors with a high concentration of automatable tasks. This process has two distinct impacts: First, it has a replacement effect reducing the demand for goods from other countries. Second, it has a scale effect increasing the import demand for goods from other countries due to higher productivity and income in the North. It is important to note some subtle mechanisms: The negative replacement effect only impacts automatable sector goods while the positive scale effect impacts mainly non-automatable sector goods from other countries. Since automatable sectors in the North rely on inputs from China and South, the replacement effect can be quite small, while the scale effect is always large.

As robot prices continue to decline, automation becomes feasible in China and eventually most automatable tasks become fully automated in the North. Thus, North automation gets close to its peak and its growth slows down. After this important turning point, relative comparative advantage of China in automatable sectors start to become very prominent. This leads to an increase in exports by China in all sectors.

Meanwhile in developing countries (labeled as South), exports continue to increase as the scale effect is always larger than the replacement effect. However, the exports shift from automatable sectors to non-automatable sectors, which indicate a significant change in global trade patterns. Eventually, if robot prices continue to decrease further, automation becomes feasible globally including the South. However, the comparative advantage patterns do not revert to the initial equilibrium, and the share of North and China's exports in the automatable sector remain permanently higher than the South.

This exercise shows that robotization will indeed change comparative advantage patterns and have a significant impact on world trade. It is likely to induce growth and promote trade globally. However, it could impact low-skill workers negatively and potentially increase income inequality within and across countries

(continued)



Source: Team's calculations based on replication code and data from Artuc, Bastos, Rijkers (2023).

Note: A model with multistage production, tasks and international trade that allows robotization on the nature of performed tasks. Model calibrated using data for China, high-income OECD countries (North) and developing countries (South). Robotization is determined by (1) wages in a country relative to the price of robots (2) productivity of labor relative to robots (3) the number of tasks that can be performed by robots. Figures show the impact of the reduction of industrial robots' price on the number of deployed robots, change in total exports (top two panels), and the change in export in automatable and non-automatable sectors (bottom panel).

Domestic reforms

A second dimension of response to the increase in foreign protection is domestic reform. From a purely GDP perspective, reforms are preferable to retaliation as a response to foreign protection. Simulations show that retaliation worsens the negative effects of protection on GDP. The increase in GDP from lowering tariffs on all trading partners would be greater than from selective liberalization.

Beyond tariff reform, the EAP countries could benefit from further liberalizing competition and entry in their services sectors (*Services Unbound*, World Bank, 2024b). EAP countries are still relatively closed in services compared to other countries (left panel of Figure II.12), as measured by the services trade restrictiveness index (STRI). Liberalization in services trade could spur a significant increase in foreign direct investments (right panel of Figure II.12). Greater FDI, as well as greater competition, could boost productivity of services firms and for the manufacturing firms using services as intermediate inputs.

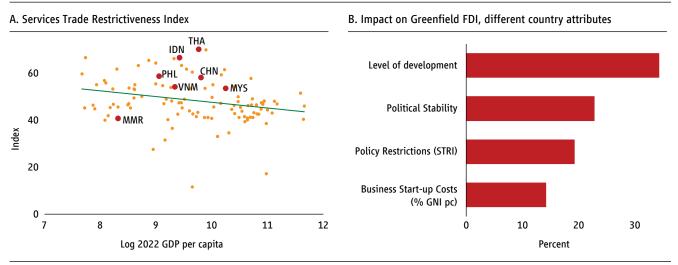


Figure II.12. EAP countries are still relatively closed in services. Liberalization could spur a significant increase in FDI

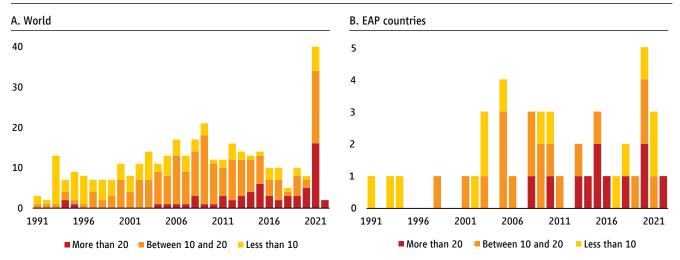
Source: Left panel: World Bank (2024b). Right panel: Barattieri, Li, and Ying (2025)

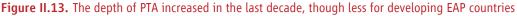
Note: Left panel: the STRI index against log GDP per capita. The STRI is a restrictiveness indicator varying from 0 to 100, with 0 signaling maximum liberalization and 100 maximum restrictiveness. Right panel: a gravity analysis on greenfield FDI announcements highlights how a change equal to the interquartile range in several country attributes could spur the foreign investments in the services sectors (in % relative to sample mean).

International cooperation

Despite the trend of increasing trade restrictions, many countries continue to pursue deeper trade integration and international cooperation. Several countries are implementing "deep" trade agreements that affect domestic policy areas beyond trade, such as international flows of investment and labor, the protection of intellectual property rights and the environment. Such agreements have been shown to increase trade not only between participating countries but also *vis a vis* third country.

The depth of PTAs has increased significantly in the last few years (left panel of Figure II.13). Developing EAP countries were also active in the negotiation of PTAs, but the level of depth of their agreements has generally been lower (right panel of Figure II.13, only 4 out of 12 PTAs signed by developing EAP countries are covering more than 20 policy areas). Of the agreements to which at least some regional economies belong, the RCEP is an example of a relatively shallow agreement and the CPTPP of a relatively deep agreement. Several new trade agreements are currently under negotiations between the EU and different EAP countries (Philippines, Thailand, Malaysia, and Indonesia).

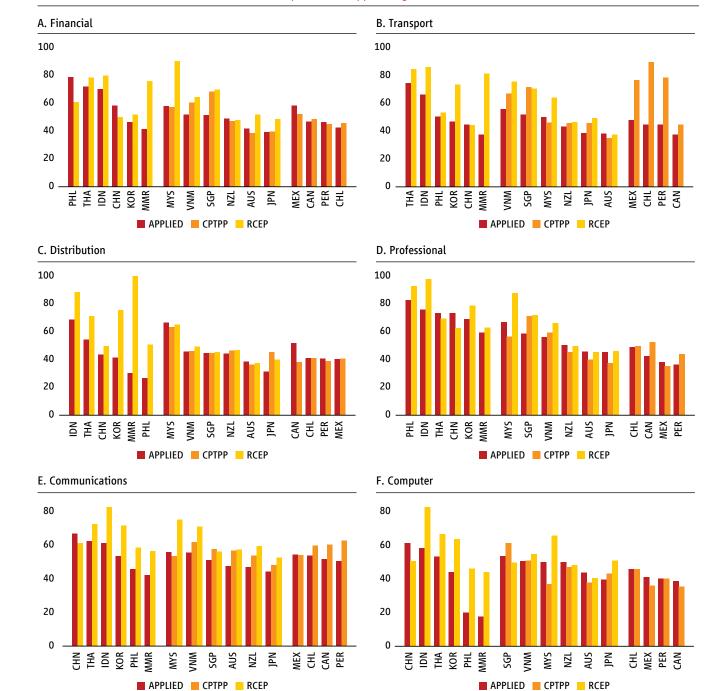


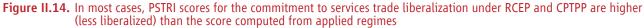


Source: Original analysis for this publication using the Deep Trade Agreements Database, World Bank. *Note:* Number of Agreements signed by number of policy areas covered out of a possible maximum of 52

As mentioned in the previous subsection, services trade liberalization is an area where EAP countries have lagged (World Bank, 2024b). Their reluctance to open services markets extends also to the recent large regional trade agreements, the CPTPP and the RCEP. The Preferential Services Trade Restrictiveness Index (PSTRI), developed by the World Bank and the WTO, is an index resembling the STRI that measures restrictiveness of commitments in preferential trade agreements. This new computation enables a comparison between the restrictiveness of the currently applied regime and the liberalization promised under these new agreements.

In most cases, the PSTRI values derived from the RCEP and CPTPP texts are higher than the STRI scores of the applied measures. Figure II.14 presents the results for six service sectors. Figure II.15 reveals that these recent significant preferential agreements will not substantially liberalize trade in services.





Source: World Bank and WTO estimates based on World Bank–World Trade Organization Preferential Services Trade Restrictiveness Index methodology.

Note: CPTPP = Comprehensive and Progressive Agreement for Trans-Pacific Partnership; PSTRI = Preferential Services Trade Restrictiveness Index; RCEP = Regional Comprehensive Economic Partnership.

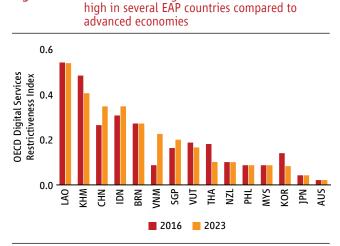


Figure II.15. Restrictions on digital services trade are still

Another specific area where regional cooperation could significantly improve on outcomes for the EAP countries relates to digital trade. As Figure II.15 shows, several EAP countries put in place relatively restrictive regimes for digital services trade, as measured by the OECD digital service trade restrictiveness. An important regional initiative that could help in this area is represented by the ASEAN Digital Economy Framework Agreement (DEFA), which is discussed in Box II.2.

Source: OECD

Note: the OECD Digital Services Trade Restrictiveness Index varies from 0 to 1. 0 indicates max liberalization and 1 max restrictiveness.

Box II.2. The ASEAN Digital Economy Framework Agreement (DEFA)

Overview

The ASEAN Digital Economy Framework Agreement (DEFA), launched in September 2023, aims to modernize Southeast Asia's digital economy by creating a unified, interoperable, and legally binding framework. DEFA seeks to address key challenges such as fragmented digital regulations and varying levels of digital readiness across member states. For instance, the lack of a common approach to cross-border data flows and data localization creates difficulties for businesses operating in multiple jurisdictions. Similarly, the absence of regional standards for digital identities hinders cross-border transactions despite progress in developing national systems. DEFA negotiations are targeted for substantial conclusion by the end of 2025.

A useful comparator is the European Union's Digital Single Market (DSM). Both initiatives share common goals of reducing trade barriers, promoting digital infrastructure development, and fostering innovation. However, they differ in their level of integration and legal frameworks. The DSM, operating within the EU's supranational structure, represents deeper integration and direct enforcement of regulations. DEFA, as an agreement between sovereign ASEAN nations, relies on cooperation and coordination. Furthermore, DEFA prioritizes capacity building and addressing the digital divide within ASEAN, while the DSM operates within a more developed and homogenous digital landscape.

(continued)

(Box II.2. continued)

Structure of DEFA

According to the "Framework for Negotiating DEFA" endorsed by ASEAN member states in 2023, DEFA is structured around nine pillars, with the intention to be modular and adaptable, recognizing the diversity of digital development across ASEAN member states. The pillars are:

- **Digital Trade:** Creating seamless cross-border transactions by digitizing permits, documents, and trade procedures.
- **Cross-border E-commerce:** Facilitating an efficient marketplace for digital goods and services.
- **Payments and E-Invoicing:** Promoting interoperability in digital payment systems and streamlining electronic invoicing.
- **Digital ID and Authentication:** Establishing mutually recognizable digital identity frameworks to build trust and ensure secure interactions.
- **Cross-border Data Flows and Data Protection:** Harmonizing data privacy standards and regulatory frameworks to support free data movement while safeguarding sensitive information.
- **Online Safety and Cybersecurity:** Enhancing security measures and fostering cooperation to protect digital transactions.
- **Cooperation on Emerging Topics:** Creating regulatory sandboxes and mechanisms to address fast-evolving technologies (e.g., artificial intelligence and blockchain).
- **Talent Mobility and Cooperation**: Facilitating the movement of skilled digital talent and promoting joint capacity-building initiatives.
- **Competition Policy**: Ensuring a level playing field for all digital market participants, from large tech companies to local MSMEs.

Potential Impact

By leveraging the combined strength of ASEAN's economies and opening new opportunities for trade and investment, DEFA is positioned to catalyze significant growth in the digital economy, with one projection by the Boston Consulting Group suggesting that the region's digital economy could double in value to reach up to US\$2 trillion by 2030 (Boston Consulting Group & Aus4ASEAN Futures (ECON), 2023).

• Economic Growth and Trade Efficiency: The current ASEAN digital economy – valued at around US\$300 billion – could experience significant growth with DEFA's full implementation. By reducing regulatory barriers and streamlining digital trade processes, DEFA is expected to facilitate increased cross-border e-commerce, boost market access, and attract intra- and inter-regional investment. DEFA will streamline customs procedures and digital documentation, making it easier, for example, for a small business in Viet Nam to sell its products to consumers in Indonesia.

(continued)

(Box II.2. continued)

- **Regional Economic Integration:** By standardizing digital regulations across diverse national frameworks, DEFA will help create a unified digital market in Southeast Asia. For example, ASEAN harmonization of data protection regimes will be a key enabler for cross-border digital transactions. By promoting interoperability and reducing transaction costs, DEFA will facilitate the growth of regional supply chains, boosting productivity and competitiveness. This harmonization, across topics, not only enhances interoperability but also supports broader regional integration. A more connected digital ecosystem can accelerate innovation, promote competition, and ensure that the benefits of digital growth are equitably distributed across both advanced and emerging member states.
- Inclusive and Sustainable Development: DEFA's structure ensures that growth is inclusive. By focusing on capacity-building—particularly for lower-middle-income countries—DEFA aims to mitigate existing disparities in digital readiness. Enhanced digital infrastructure and skills development can empower MSMEs and rural communities, thus contributing to broader socio-economic resilience.
- **Catalyst for Broader Reforms:** The long-term and modular design of DEFA enables it to serve as a platform for continuous innovation and adaptation. As digital technologies evolve rapidly, the framework's capacity to integrate emerging trends (e.g., generative AI and blockchain) positions ASEAN to not only keep pace with global digital developments but also to lead in regulatory and technological innovation.

While DEFA offers significant opportunities, potential risks include increased cybersecurity threats and the potential for widening the digital divide if implementation is not carefully managed. Addressing these challenges will require robust regional cooperation and targeted interventions to support less digitally developed countries.

II.2. Climate risks

What is happening?

The East Asia and Pacific (EAP) region is both a significant contributor to increasing emissions and one of the region's most vulnerable to their consequences. China accounts for 24.8 percent and Indonesia for 3.6 percent of global emissions, while the remaining 26 developing nations in the region collectively contribute for 4.2 percent.

The EAP region faces substantial climate risks (Figure II.16), including rising sea levels, extreme weather events, and increasing heat stress, all of which pose severe threats to economic stability, infrastructure, and human well-being. The region experiences more frequent and intense climate-related disasters than many other parts of the world. Between 2000 and 2020, the EAP region accounted for over 57% of global economic losses from natural disasters, with typhoons, floods, and droughts causing more than \$700 billion in damages (UNESCAP, 2021). The Philippines, for instance, faces annual damages exceeding \$3 billion due to typhoons, while Indonesia's floods have caused economic losses averaging 1.5% of GDP annually.

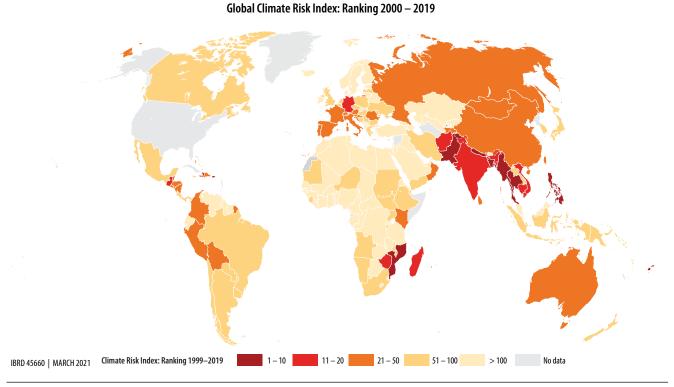
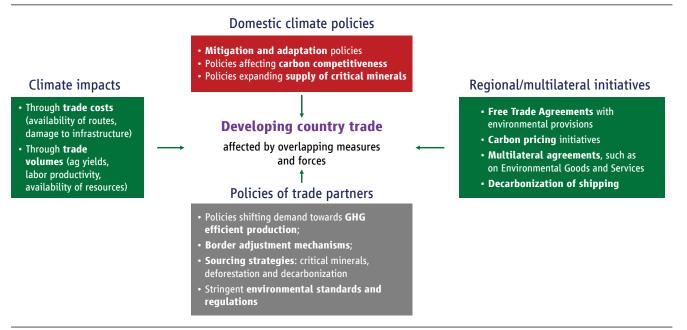


Figure II.16. EAP countries are particularly exposed to extreme weather events, rising temperatures, and natural disasters

Source: Germanwatch.

The interaction between climate adaptation, mitigation efforts, and sustainable trade is complex. Domestic policies, such as green transition strategies, influence exporters' competitiveness. Trading partners policies and environmental regulations affect market access. Private sector initiatives and compliance with environmental standards add complexity. Additionally, bilateral, regional, and global initiatives, like free trade agreements with environmental provisions and decarbonization of shipping, impact technology access and market opportunities for sustainable exports (see Figure II.17).

Figure II.17. EAP trade will be affected by extreme weather events as well as climate policies, both their own and those of their trading partners



Source: Adapted from Maliszewska et.al. (2025, forthcoming)

Why do these developments matter?

Climate risks, domestic climate policies, and trading partner's climate policies will have potentially important effects on the economies of the EAP countries.

Recent cross-country research further underscores the long-term macroeconomic consequences of climate risks. A crosscountry analysis indicates that a 1°C increase in global temperature could reduce annual per capita GDP growth by 0.05 to 0.08 percentage points globally, with greater effects on countries in tropical regions, including many EAP nations (Kahn et al., 2021). The study finds that lower-income countries experience significantly larger economic losses due to their limited adaptive capacity. Projections suggest that without mitigation efforts, GDP per capita in the most affected economies could be 10% lower by 2100 compared to a scenario without increase in extreme weather events. Heat stress could decrease labor productivity by 5 percentage points by 2050. In the countries where labor-intensive industries such as agriculture and manufacturing are highly vulnerable, climate-related productivity losses could reduce employment and increase income inequality. In Box II.3 we summarize the results reported in recent World Bank Country Climate and Development Reports (CCDR), where the potential economic costs of climate risks are estimated to be even higher for several EAP countries.

Looking at domestic climate policies, despite the recent increased uncertainty about the stance of advanced economies with respect to climate policies, the implementation of Paris commitments has the potential to impact economic growth and reshape trade patterns. Modeling helps assess export challenges and opportunities that countries could face amid climate mitigation policies (Maliszewska et.al., 2025 forthcoming). The "no-action" scenario predicts a temperature rise exceeding 2°C by 2050. Mitigation scenarios contrast with this baseline, aiming for lower temperature increases through ambitious mitigation efforts. The model assumes a carbon tax on all emitters, including households, to meet emission reduction targets¹

Box II.3. Economic consequences of climate risks in the EAP region are severe and multifaceted

World Bank's Country Climate and Development Reports (CCDRs) provide insights into the projected economic impacts of increasing climate risks on EAP countries:

- Viet Nam: Without effective adaptation, climate risks could reduce GDP by 12–14.5% by 2050, with cumulative losses of \$400–\$523 billion. The biggest threats include infrastructure damage (42% of total losses), declining fisheries (20%), and lower labor productivity (13%). Extreme weather events like typhoons already cause \$2.4 billion in damages annually (0.8% of GDP), with a 40% probability of exceeding 2.4% of GDP each year over the next 50 years (World Bank, 2022b).
- Pacific Atoll Nations: Climate-related events already cause economic losses of 3–4% of GDP in RMI and Kiribati and nearly 7% in Tuvalu. By 2050, a 1-in-20-year climatic event could lead to damage worth 25-50% of GDP in these nations. Beyond 2050, all impacts could be expected to increase as temperatures rise further and the rate of sea-level rise accelerates (World Bank, 2024d).
- Philippines: Without adaptation, GDP losses could reach 7.6% by 2030 and 13.6% by 2040, driven by stronger typhoons, reduced agricultural output, and declining labor productivity. Agricultural production losses are projected at 2% by 2030 and 6% by 2040 (World Bank, 2022a).
- China: Climate risks such as rising sea level and extreme heat waves could result in GDP losses of between 0.5 and 2.3 percent, as early as 2030. In the most severe climate scenario, these impacts will disproportionately affect the bottom 40 percent of the income distribution, leading to losses of up to 4.7 percent of their income by 2030 (World Bank, 2022c).
- Cambodia: Without action, GDP could decline by 3% to 9% by 2050, primarily due to flood-related asset losses, making climate adaptation crucial (World Bank, 2023a).
- Indonesia: Climate risks could reduce GDP by 1.4% by 2030, with infrastructure failures and business disruptions due to flooding, sea-level rise, and extreme heat affecting millions. Over 4.2 million people could face permanent flooding by 2100 without adaptation (World Bank, 2023b).
- Mongolia: Climate risks could result in GDP losses of up to 20% (including economic loss of reduction in coal exports) over three years, with extreme weather events like dzuds (harsh winters) and flooding posing significant threats. Economic shocks could lead to over 14% unemployment and rising poverty (World Bank, 2024c).
- Malaysia: GDP losses could reach 8.4% by 2030, with floods accounting for up to 4.1% of the impact. The manufacturing and services sectors, comprising 82% of total output losses, are particularly vulnerable (World Bank, 2024e).

As mitigation scenarios are implemented, the demand for fossil fuels decreases, leading to higher production costs due to increased energy and energy-intensive input prices. This results in a contraction of output and exports, more pronounced in more ambitious mitigation scenarios. Trade declines more rapidly than GDP as renewable energy is less tradeable, income elasticities of non-tradables are higher than tradables so lower demand results in a faster fall of demand for tradables. Most countries which used to export carbon intensive products are assumed to undergo a depreciation of

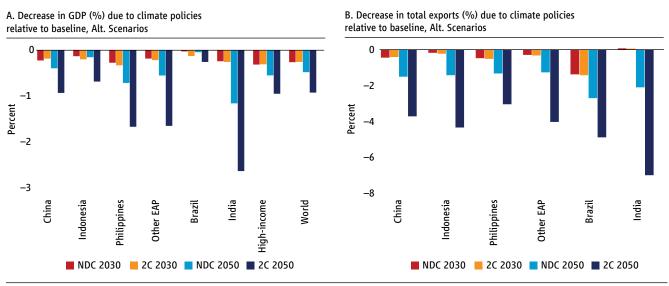
their real exchange rate to maintain their capital account. This means lower imports. County impacts are determined by the compositions of country's exports, and those countries that rely more on trade in emission-intensive sectors will be impacted more.

As shown in Figure II.18, contraction in total exports ranges between 4-7 percent, with biggest impacts on Indonesia, while GDP declines are expected to be between 1 and 2.7 percent in the most ambitious mitigation scenarios. Impacts on Indonesia are the highest as it relies most on fossil fuel exports.

Lastly, climate policies of key trading partners would impact competitiveness in hard to abate sectors. Consider two such examples: The EU Emission Trading System (ETS), and the EU Deforestation Regulation (EUDR).

The EU Emission Trading System (ETS), introduced in 2005, is the EU's primary tool for reducing CO2 emissions by pricing carbon. To prevent carbon leakage through imported emissions and to establish a level playing field for domestic producers and imports, the EU developed the Carbon Border Adjustment Mechanism (CBAM). Starting in 2026, unless recent events generate policy shifts, companies importing covered goods into the EU will need to report and pay for the emissions generated during their production by purchasing 'CBAM certificates' priced according to the EU ETS rates. These financial obligations will be adjusted based on the priced carbon in exporting countries. Initially, CBAM will apply to a select group of high carbon-emission industrial products: cement, electricity, fertilizers, aluminum, iron and steel, and hydrogen. As CBAM phases in, the free ETS allowances for EU producers in these sectors will be gradually phased out (see the description in Figure II.A.1 in the appendix).





Source: Authors' calculation using ENVISAGE model

Note: simulations using the ENVISAGE model combined with the TIAM world energy system model. NDC Scenario: Translation of unconditional NDCs into regional emission reduction requirements for 2030 relative to the baseline. Carbon pricing assumptions are applied post-2030. 2C scenario: Regional-specific emission reduction targets for 2030 based on NDCs and a ramping up of mitigation ambitions post-2030 with a harmonization of global carbon prices consistent with limiting global warming at 2C.

The introduction of CBAM could affect exporters' competitiveness on EU markets (Maliszewska et.al., 2025 forthcoming). The broad macroeconomic impacts of CBAM will vary based on the share of CBAM-covered products in a country's GDP and will be conditioned by the ability to measure and certify carbon emissions (WTO, 2024)². Several EAP countries export non-negligible volumes of CBAM products to the EU. For instance, Viet Nam's exports of CBAM goods to the EU exceeds USD 3 billion and represents more than 20 percent of total exports of CBAM goods to the world or around 0.7 percent of the country's GDP (see Figure II.19). The CBAM Exposure Index assesses the cost burden of CBAM certificates relative to a country's exports to the EU or its GDP (see CBAM Exposure Index dashboard).

Another example of foreign climate policy potentially affecting the export opportunities of the EAP region is represented by the EU Deforestation Regulation (EUDR), which mandates that importers prove their products were not cultivated or produced on lands deforested or degraded after 2020, even if no local laws were violated. This regulation focuses on products such as soy, cattle, palm oil, wood, cocoa, rubber, and coffee, as well as derived products like leather, chocolate, and furniture. Both EU importers and domestic sellers must provide geographic coordinates for the production sites of these commodities and use satellite data to monitor for any forest loss in these areas (see Figure II.A.2 in the appendix).

The EU's deforestation regulation is expected to reduce deforestation and forest degradation, thereby helping to preserve biodiversity and combat climate risks, but this regulation poses significant concerns for developing countries that heavily rely on agricultural exports (Maliszewska et.al., 2025 forthcoming). Large countries in the East Asia and Pacific region, such as China, Indonesia and Malaysia show the highest exports of EUDR products to the EU in absolute terms, but it is the Pacific Island countries, which are most exposed to the EUDR in relative terms (Figure II.20). For example, exports of EUDR products to the EU represent around 2 percent of Papua New Guinea's GDP, and around 28 percent of total EUDR exports to the world.

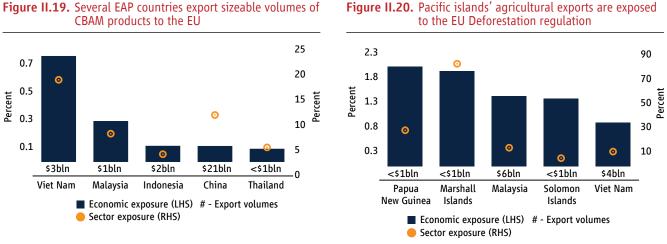


Figure II.19. Several EAP countries export sizeable volumes of

Source: Authors' calculation and World Bank's WITS mirror data in 2022 (based on Aldaz-Carroll et.al., 2024)

Note: Top 5 countries by economic exposure are selected for visualization. The value at the bottom of the bar represents the export value of products to the EU, measured in billions of USD. Economic exposure is a share of products' exports to the markets of interest in GDP; Sector exposure is defined as a share of products' exports to the markets of interest in total exports of these products.

What can be done?

Harness (green) technological change

To face the challenge represented by climate risks, EAP countries must facilitate the adoption of green technology, as explored in a recent report (World Bank, forthcoming).

Technologies currently viable, such as solar PV and wind, have seen significant diffusion, as in other parts of the world. But the pace has differed significantly across countries within the region (see Figure II.21). This variation reveals the important role of the domestic policy environment in driving diffusion above and beyond differences in endowment. Heterogeneity in explicit and implicit fossil fuel subsidies across EAP countries help explain the variation in the adoption of green energy technologies.

The green transition could represent also an economic opportunity for the EAP countries. Legislative initiatives around the globe frequently establish targets and offer incentives for renewable energy, energy efficiency, and electromobility. These incentives significantly increase the demand for critical minerals, renewable energy technologies, and electric vehicle (EV) components. Established exporters are strategically positioned to expand production in response to this growing demand. China, Indonesia, Viet Nam, Thailand, and Malaysia are already key suppliers of renewables and EV components (Figure II.22).

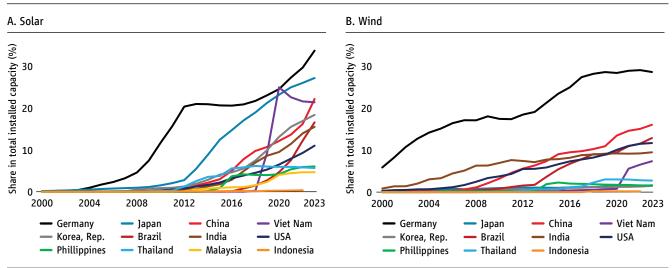
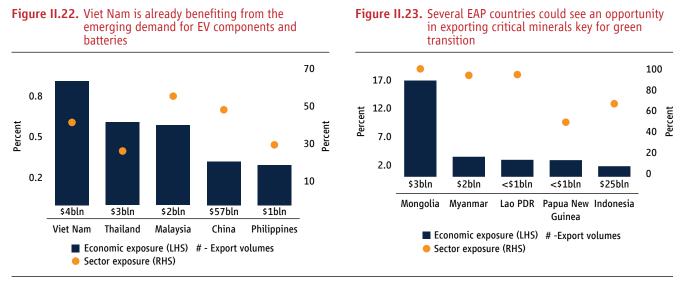


Figure II.21. Solar PV and wind have seen uneven growth in EAP countries

The increasing demand for critical minerals presents additional opportunities for countries in the region. Indonesia has a high volume of exports in this area, and although Mongolia and Myanmar's exports are relatively small in absolute terms, expanding these exports could have a significant impact on their economies: Mongolia's exports of critical minerals to the EU, US, and China represent more than 15% of its Gross Domestic Product (GDP), and more than three-quarters of critical minerals exports from Mongolia and Myanmar are destined for these three markets (Figure II.23). A similar argument applies to renewable components (Figure II.24).

Source: World Bank (forthcoming)



Source: Authors' calculation and World Bank's WITS mirror data in 2022 (based on Aldaz-Carroll et.al., 2024)

Note: Top 5 countries by economic exposure are selected for visualization. The value at the bottom of the bar represents the export value of products to China, the EU and the US, measured in billions of USD. Economic exposure is a share of products' exports to the markets of interest in GDP; Sector exposure is defined as a share of products' exports to the markets of interest in total exports of these products.

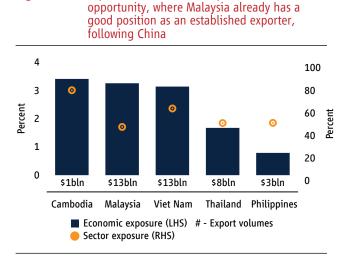


Figure II.24. Exports of renewable components is another

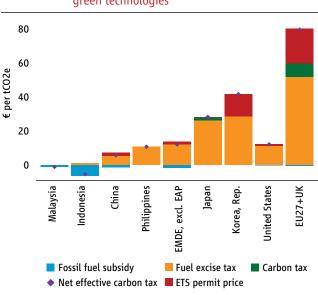
Source: Authors' calculation and World Bank's WITS mirror data in 2022 (based on Aldaz-Carroll et.al., 2024)

Note: Top 5 countries by economic exposure are selected for visualization. The value at the bottom of the bar represents the export value of products to China, the EU and the US, measured in billions of USD. Economic exposure is a share of products' exports to the markets of interest in GDP; Sector exposure is defined as a share of products' exports to the markets of interest in total exports of these products.

Domestic Reforms

Even as the EAP region contributes to the emergence and global spread of green technologies, many developing EAP countries persist with policies, like subsidies for fossil fuels, that inhibit the domestic deployment of cleaner technologies (Figure II.25). And most have been reluctant, like much of the rest of the world, to implement proactive measures like significant carbon taxes to encourage the adoption of green technologies that are not yet viable (World Bank, forthcoming).

While facilitating the adoption of green technologies would allow EAP countries to contribute to climate mitigation, adaptation strategies are crucial to diminishing the adverse effects of climate risks. Adaptation measures include investments in resilient infrastructure, improved urban planning, and the development of early warning systems. The Global Commission on Adaptation (2019) emphasizes that proactive adaptation not only reduces future economic losses but also offers a significant return on investment. For example, in Samoa, an additional 2% of GDP investment in adaptation could prevent 4.5% of GDP losses (International Monetary Fund, 2022). Investing in adaptation not only prevents economic losses but also strengthens long-term resilience. The Triple Dividends Approach highlights three key benefits of adaptation: avoided losses, economic growth, and social-environmental cobenefits. By proactively addressing climate risks, adaptation reduces the direct costs of climate-related damages, such as infrastructure destruction and productivity declines. Additionally, adaptation fosters economic growth by creating jobs in climate-resilient industries, attracting investment in green infrastructure, and enhancing long-term productivity.





Note: Net effective carbon tax corresponds to the effective carbon tax (= fuel excise tax + ETS permit price + carbon tax) minus the fossil fuel subsidies.

Beyond financial gains, adaptation delivers social and environmental benefits, including improved public health, ecosystem preservation, and reduced inequality by protecting vulnerable populations. Empirical studies show that adaptation investments often yield high benefit-cost ratios (BCRs), exceeding 30:1 in sectors like urban flooding and coastal resilience, underscoring the far-reaching advantages of adaptation beyond just damage prevention. In general, each \$1 spent on higherresilience infrastructure on average delivers \$4 in avoided losses and triple dividends.

Despite the clear benefits, there is a notable underinvestment in adaptation efforts within the EAP region. The United Nation Adaptation Gap Report estimates a gap of 0.6 percent to 1.0 percent of GDP for all developing countries. Among all regions, the highest adaptation finance needs are for East Asia and Pacific, amounting to 170 billion US dollars per year up to 2030 (UNEP, 2024). Despite these needs, adaptation financing remains insufficient. Public-private partnerships, concessional financing, and international climate funds are essential to bridging this gap.

Lastly, the climate challenge reaffirms the need to develop systems of adaptive social protection (ASP). These systems make it possible to scale up interventions during shocks, relying upon dynamic delivery systems for registration, eligibility assessment, program enrolment, benefit distribution, and beneficiary management. Robust systems allow for reassessment of eligibility and compliance with conditions. For instance, Disaster Risk Management (DRM) data could identify areas needing further support during climate shocks. Some countries in the region have made progress in establishing ASP systems. Thailand has made significant progress in registration, enrolment, payments, and beneficiary management. Malaysia, with its universal national ID system, extensive mobile phone coverage, and high financial inclusion, successfully executed a large-scale cash transfer during COVID-19, reaching over 10 million beneficiaries (one-third of the population). In contrast, many Pacific Island countries have underdeveloped social protection systems and need flexible coverage that can adapt and scale up in response to large shocks.

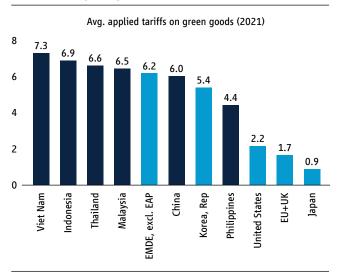
Source: World Bank (forthcoming)

International Cooperation

Three forms of international cooperation would have high payoffs, on mitigation, adaptation and green production. The first is cooperation to reduce emissions. Countries can, of course, unilaterally encourage the adoption of already viable technologies by eliminating distortionary policies, like fossil fuel subsidies, and addressing market failures, like inadequate coordination of investment in green infrastructure. Going further towards inducing the adoption of non-viable technologies, through carbon taxes or green subsidies, involves incurring an economic cost to secure an environmental benefit. How far EAP countries are willing to deploy such fiscal instruments depends on the international commitments they have already made, as well as the benefits the receive in return, through emission cuts, assistance, and technology transfers by the rest of the world. Eliminating distortions and remedying market failures unambiguously increases national welfare and can be undertaken unilaterally. How carbon taxes and green subsidies affect national welfare depends on what the rest of the world does, and therefore can be undertaken at a pace and on a scale determined by past international commitments and future international cooperation. Similarly, while the costs and benefits of some investments in adaptation are primarily local, the benefits of others, say in managing the waters of regional rivers, are much greater if there is regional cooperation.

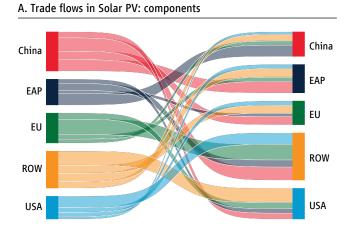
In general, deeper reform of the region's climate, trade, industrial, and innovation policies is likely to foster mutually beneficial international cooperation in each of these areas. For example, the EAP countries still apply relatively high tariffs on green goods (Figure II.26). These tariffs and non-tariff barriers segment the regional market and deprive countries of access to the green products already being produced through regional supply chains (Figure II.27). Reduction in these barriers, like the local content requirements on solar panels in Indonesia, could improve access to these goods and reduce the economic cost of the green transition. Such a reduction could also deepen the region's participation in green supply chains and draw more regional countries into these already strong supply chains. Such coordination would ideally be multilateral, but could also beneficially happen within ASEAN or within the RCEP of which most countries in the region are members.





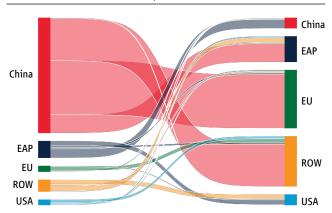
Source: World Bank (forthcoming)



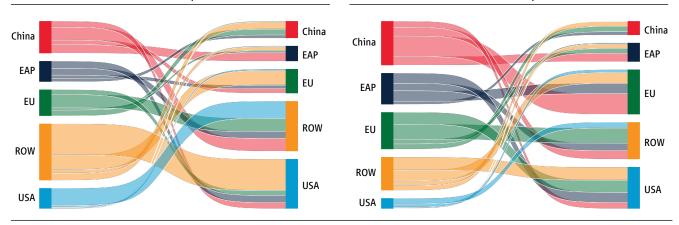


B. Trade flows in Solar PV: end products

D. Trade flows in electric vehicles: end products



C. Trade flows in electric vehicles: components



Source: World Bank (forthcoming): calculations using CEPII bilateral trade data and classification from Mealy and Rosenow (2022) *Note:* China is in blue, Rest of EAP in orange, ROW in red, EU in green, and USA in purple.

II.3. Aging

What is happening?

In emerging EAP, the share of older people is rapidly increasing (Figure II.28). By 2060, the population share of those aged 65+ will more than double, growing from over 250 million to 585 million. The 80+ age group will quadruple from 1% to 4% of the total population. There is regional variation in demographic transitions: some countries like China and Thailand are experiencing rapid aging and a declining working-age population, while others like Viet Nam and Indonesia are at the turning point. Meanwhile, countries such as Mongolia and the Philippines will see stable or increasing working-age populations.

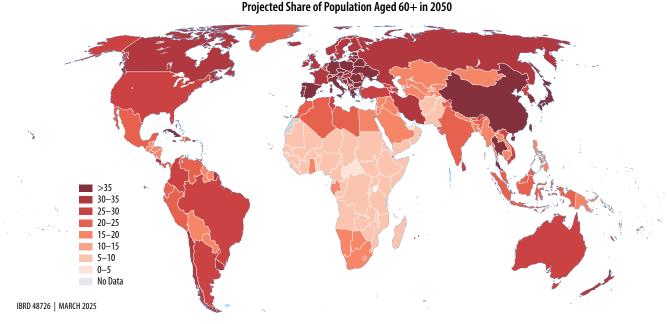


Figure II.28. EAP's older population will continue to rise sharply in coming years

Source: UN population projections 2002, medium variant.

Why do these developments matter?

Aging can affect several outcomes, including labor productivity, growth, fiscal sustainability, and comparative advantage. As the workforce ages, shifts in physical and cognitive abilities may impact labor productivity. For instance, a 5% decline in the share of workers aged 40–49 over a decade is estimated to result in an annual productivity decline of 1%–2% (Feyrer, 2007). More recent studies suggest that the impact of aging on labor productivity may be even larger in EMDEs, likely due to lower levels of automation. Gravina and Lanzafame (2024), find that a 1% increase in the population share of those aged 60+ is associated with a 1.4% decline in labor productivity in EMDEs and a 0.6% decline in AEs in the long run. In a study exploiting cross-state heterogeneous aging in the US, Maestas et al (2023) find that each 10 percent increase in the fraction of the population age 60+ decreased per capita GDP by 5.5 percent. One-third of the reduction arose from slower employment growth; two-thirds due to slower labor productivity growth.

Population aging is also expected to place significant pressure on public finances, as rising pension spending will drive higher government spending, potentially leading to significantly large fiscal deficits. One way to estimate the likely trajectory of pension spending in EAP countries is to assume that all the countries will eventually converge to levels consistent with the international experience. Figure II.29 shows how spending would have to grow between 2025 and 2045 in each country to reach that benchmark. The growth arises from continued demographic aging in the mature schemes (China, Philippines, and Viet Nam) and a combination of aging and maturation in the other countries.⁵

⁵ The timing of the introduction of a contribution-based pension system determines its degree of 'maturation'. A pension scheme is mature when the retiring cohorts have spent their entire working lives contributing to the system. Until then, the pensions that they can expect will be lower than what the scheme is designed to produce.

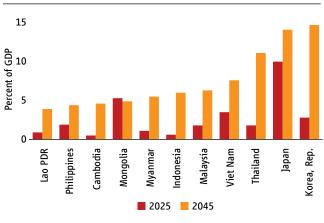


Figure II.29. The implications for fiscal policy and pension

systems are projected to be significant

Source: Palacios et al., forthcoming. *Note:* Estimates assume that all the countries will eventually converge to levels consistent with the international experience.

Additionally, population aging could result in higher government expenditures not only on pensions but also on healthcare, as aging populations typically require more medical services and long-term care. Finally, a shrinking working-age population may lead to lower revenue from Personal Income Tax (PIT) due to a narrower tax base, further straining public finances and potentially requiring adjustments in tax policies or spending priorities to maintain fiscal sustainability.

While these potential transmission channels are relatively well understood, a less known potential mechanism through which aging can affect the future economic performance of the EAP countries is by affecting their comparative advantage. We delve into the topic through new research on the impact of aging on comparative advantage, updating the analysis by Cai and Stoyanov (2016). The key insight is that as workers age, their skill sets evolve, influencing their productivity and suitability for different types of jobs. Some skills improve or

remain stable over time, while others deteriorate. These age-related changes have important implications for industry performance and for competitiveness in the global market.

Skills that tend to improve with age, often referred to as age-appreciating skills, include social interaction, communication, and persuasion, are more important for occupations where interaction with other people is important. Industries that require those skills from their workers -- such as finance, legal services, research, and management -- benefit from an experienced workforce capable of making informed decisions and handling complex tasks. In contrast, age-depreciating skills, such as physical strength, hand dexterity, memory, and spatial orientation, tend to decline with age. Sectors that depend on occupations which require these abilities, including manufacturing, construction, and assembly-line production, typically rely more on a younger workforce.

As a country's population ages, the relative supply of skills shifts. The availability of workers with age-appreciating skills increases, while the supply of workers with age-depreciating skills declines. This demographic shift affects industries asymmetrically. Sectors that rely on age-appreciating cognitive skills gain access to a larger pool of available workers, reinforcing the country's comparative advantage in those industries. Meanwhile, industries that require physical abilities and age-depreciating cognitive skills face shortages of qualified workers, making it more difficult to remain competitive internationally. Over time, these labor market dynamics influence the composition of a country's exports, shifting trade patterns toward industries that align with the evolving skill profile of its workforce.

Using data from O*Net it is possible to map the age-appreciating and age-depreciating skills into occupations, and though the matrix provided by Bureau of Labor Statistics (BLS) it is possible to map employment between occupations and industries, thus determining which industries are intensive in age-appreciating, age-depreciating, and physical skills (See Box II.4 for details).

Box II.4. Skill Intensity of Occupations and Industries

Determining which industries are more intensive in age-appreciating, age-depreciating, and physical skills require a two-step approach. First, we use the level of different age-related abilities utilized by workers in every occupation from O*net data to measure the sensitivity of each occupation's productivity to worker's age. For example, *intensity*_{os} is the level of skills used in occupation o minus the level of inductive reasoning, which is age-neutral. Among the ability levels provided by O*net, we take Oral Comprehension, Oral Expression, Written Comprehension and Written Expression as proxies for language skills and use principal factor analysis to produce a weighted average of the four skill intensities at occupation level as the single indicator of age-appreciating language skills requirement at the occupation level. Similarly, we include Memorization, Perceptual Speed, Speed of Closure, and Time Sharing as the group of age-depreciating skills and use principal factor analysis to construct a single index of age-depreciating skill intensity at the occupation level. Finally, we adopt the group of skills related to physical abilities in principal factor analysis, Dynamic Flexibility, Trunk Strength, Explosive Strength, Extent Flexibility, Body Coordination, Body Equilibrium, Stamina, Static Strength, and Trunk Strength, to construct the physical skill intensity at the occupation level. We find that writers and teaching related occupations require the highest level of age-appreciating language skills; food and beverage services, transport and construction occupations are among the most demanding in age-depreciating skills, such as reaction speed; Fire-fighters, law enforcement, and construction workers use physical skills most intensively.

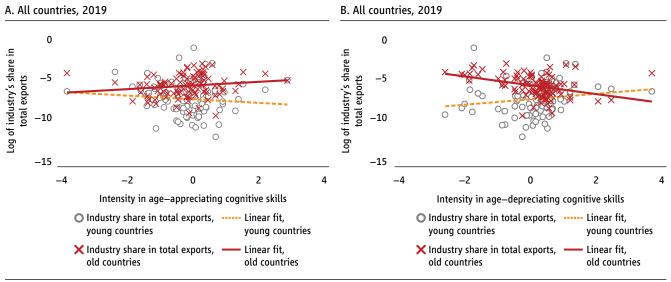
Second, the national employment matrix provided by Bureau of Labor Statistics (BLS) maps employment between occupations and industries. The (i,o) element of the matrix is the number of employees hired by industry i in occupation o, we can use the national employment matrix to calculate the share of occupation o's employees among total employment in industry i, eshare_io. Then use the employment share eshare_io, as well as the skill intensity at occupation level from O*net data, *intensity*_{os}, to derive the weighted skill s' intensity in industry i using the following equation.

$$intensity_{is} = \sum_{o \in O} intensity_{os} eshare_{io}$$

In Appendix we show the list of traded industries with their top-20 rankings in age-appreciating and agedepreciating skills. Occupations that are intensive in age-appreciating skills — such as managers, financial analysts, legal professionals, consultants, and postsecondary educators — are disproportionately employed in industries like finance, legal services, consulting, education, and insurance. Industries with a large share of employment in advertising and marketing departments, such as those producing beverages and cleaning products, also rank high in terms of age-appreciating skills. These sectors benefit from workers whose decisionmaking abilities, accumulated expertise, and interpersonal skills improve with experience and age. Conversely, industries that depend on age-depreciating skills tend to employ workers in occupations that require physical dexterity, reaction speed, and memory, such as machine operators, assembly-line workers, construction labors, and textile workers. These occupations are concentrated in industries like construction, food processing, and textile production, where productivity is closely tied to manual precision, physical endurance, and cognitive processing speed -- all of which decline with age. Next, we can investigate the relation between skill intensity and patterns of trade. Figure II.30 illustrates the relationship between demographic composition and the structure of foreign trade across countries. The left panel of Figure II.30 demonstrates that younger countries exhibit lower export shares in industries that are intensive in age-appreciating cognitive skills, whereas for older countries, the relationship is slightly positive. In contrast, the right panel reveals the opposite pattern for industries that rely on age-depreciating skills. Specifically, younger countries tend to specialize in industries that are highly dependent on age-depreciating skills, while older countries exhibit lower export shares in these sectors.

These findings suggest that demographic structure plays a significant role in shaping comparative advantage, with younger economies specializing in industries that rely on skills that decline with age, while older economies shift towards industries that benefit from accumulated experience and cognitive maturity.





Source: Original analysis for this publication using COMTRADE, O*Net and BLS data.

Note: "young" countries are those where the median age is below 20 years (accounting for approximately 25% of all countries in 2019), and "old" countries, where the median age exceeds 35 years (also representing around 25% of all countries). The figure presents a scatter plot of the logarithm of export shares across industries against their respective intensities in age-dependent skills for both groups of countries.

Figures II.31 and II.32 examine the relationship between industry export shares and age-dependent skill intensities for specific countries in East Asia. Figure II.31 focuses on two advanced economies, Japan and the Republic of Korea, who experienced the most pronounced aging dynamics in East Asia in recent decades. The results indicate a negative relationship between export shares and industries that rely heavily on age-depreciating cognitive and physical skills. In other words, sectors requiring occupations where these skills are critical tend to account for a smaller share of exports in these countries. This aligns with the broader argument that in aging economies, the supply of skills that deteriorate with age is relatively lower, placing industries that depend on these skills at a comparative disadvantage in global markets. Conversely, industries that require age-appreciating skills tend to have a higher export share in Japan and the Republic of Korea.

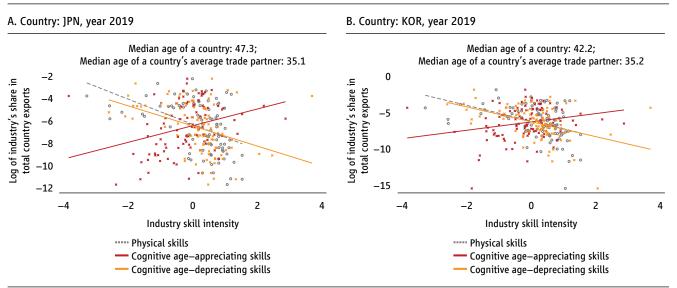
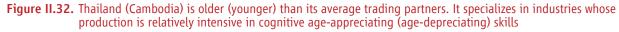
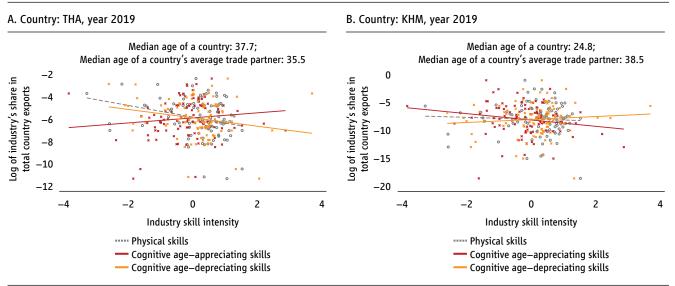


Figure II.31. Japan and the Republic of Korea are older than their average trading partners. They both specialize in industries whose production is relatively intensive in cognitive age-appreciating skills

Source: Original analysis for this publication using COMTRADE, O*Net and BLS data.

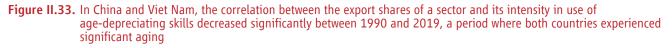
Figure II.32 contrasts the export structures of Thailand, one of the oldest economies in East Asia with a median age of nearly 38, and Cambodia, where the median age is only 24.8. The two countries exhibit opposite export patterns in terms of skill intensities. Thailand's exports are more concentrated in industries that rely on age-appreciating skills, whereas these industries account for a smaller share of exports in Cambodia. In contrast, industries that depend on physical and age-depreciating cognitive skills represent a larger share of Cambodia's exports, while Thailand specializes less in these sectors.

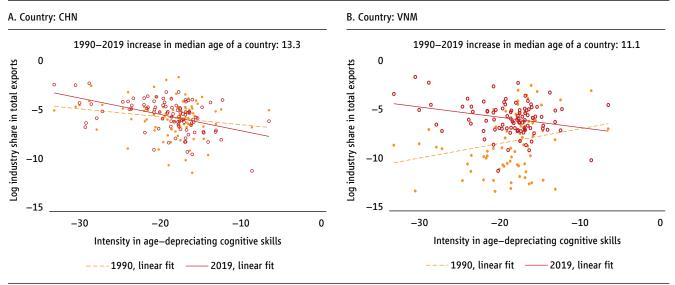




Source: Original analysis for this publication using COMTRADE, O*Net and BLS data.

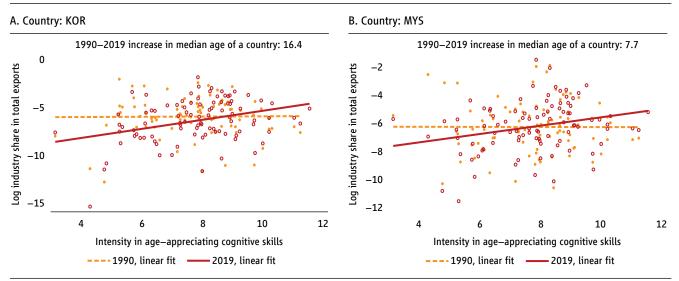
Lastly, Figures II.33 and II.34 examine the impact of demographic shifts on trade composition within selected countries, focusing on changes in median age between 1990 and 2019. The underlying hypothesis is that as a country's population ages, it gradually loses comparative advantage in industries that rely on age-depreciating skills, while industries that depend on age-appreciating skills become more prominent in its export structure. Figure II.33 illustrates this dynamic for China and Viet Nam. As both countries have undergone significant demographic aging, the positive relationship between export share and industry intensity in age-appreciating skills has strengthened over time, as indicated by the counterclockwise rotation of the trend line in 2019 relative to 1990. In contrast, for age-depreciating skills, the pattern is reversed.





Source: Original analysis for this publication using COMTRADE, O*Net and BLS data.





Source: Original analysis for this publication using COMTRADE, O*Net and BLS data.

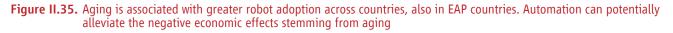
Figure II.34 shows this for the Republic of Korea and Malaysia: as the labor force ages, these economies experience a decline in competitiveness in industries that rely on such skills, leading to a stronger negative relationship between export share and skill intensity (also reflected in a counterclockwise rotation of the trend line).

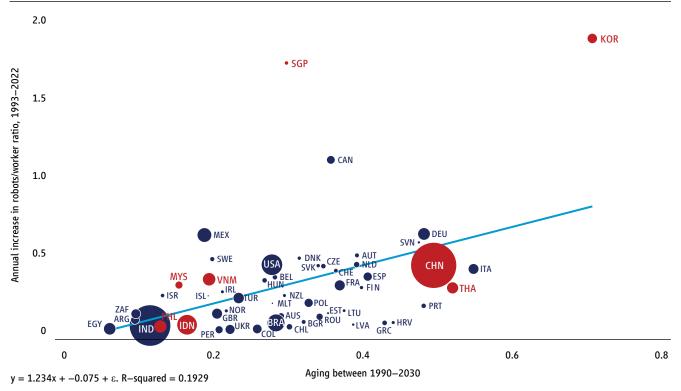
This analysis highlights the importance of recognizing how long-term trends in population aging could present challenges, but also opportunities for the EAP countries. The concentration of age-appreciating intensive industries in the services sector, for instance, reinforce the call to pursue further liberalizations in the services sectors, as mentioned above in Section 1.

What can be done?

Harness technological change

Intensity of robot adoption is higher in countries where population is aging faster. A cross-country panel analysis shows that aging led to greater adoption of robots in manufacturing between 1993-2014, and that population aging alone accounts for 35 percent of the variation in robot adoption across countries (Acemoglu and Restrepo, 2022). These findings are consistent with robot adoption offsetting the labor shortages induced by population aging. In World Bank (2024a) we showed that in EAP, two advanced countries—Republic of Korea and Singapore—stand out as adopting robots much more intensively than predicted by their population aging. This is also true for Viet Nam and Malaysia but to a much lesser extent. Other EAP countries like Thailand, China, the Philippines, and Indonesia have adoption rates somewhat below what their population aging predicts (figure II.35).





Source: Authors illustration following and extending Acemoglu & Restrepo (2022) using data from IFR, OECD, UN.

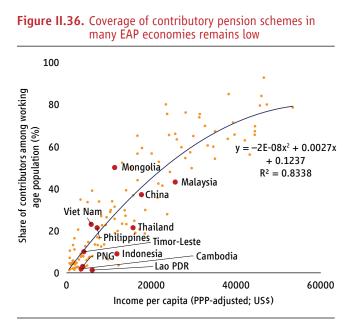
Note: Bubble size shows relative population; x-axis measures change in the ratio of workers above 56 to workers aged 21–55 between 1990 and 2030. The country sample is extended from Acemoglu & Restrepo (2022) to include other EAP and developing countries as well as more recent data.

The increased resort to automation could not only boost productivity but also augment shrinking workforces in a way that enhances comparative advantage in specific industries.

Domestic Reforms

While multiple domestic reforms are needed to face the challenge of aging, we explore here three relevant ones: reforming pensions systems, enabling longer working lives, and fostering female labor force participation.

Pension systems play a critical role in promoting the economic security of older populations in Asia. However, the structure of pension systems varies significantly across EAP countries. While many economies in the region have noncontributory social pensions, several do not.⁶ Among those with social pensions, the scope and targeting methods vary. Noncontributory benefits are universal in Timor-Leste and some Pacific Island countries. In contrast, coverage may be narrowly targeted, as in Malaysia and Mongolia, or more inclusive through means testing, as seen in Fiji, the Philippines, and the Republic of Korea, or through pension testing, as in Thailand. Indonesia and Myanmar restrict eligibility by setting a very old qualifying age. The Philippines, however, provides a social floor by offering benefits to those who also participate in contributory programs. Overall, the coverage of contributory pension schemes in many East Asia and Pacific (EAP) economies remains limited (Figure II.36).



Source: Palacios et al., forthcoming.

Adjusting pension parameters, such as retirement age, contribution rates, replacement rates, and the indexation of initial pensions, can contribute to fiscal sustainability. The defined benefit schemes in the region can be broadly categorized into three groups. The first group includes China, the Philippines, and Viet Nam, which have high contribution rates and offer relatively generous benefits. In these countries, there is little room to increase payroll taxes beyond their already high levels. The second group consists of the unfunded civil service pension schemes in Cambodia, Indonesia, Malaysia, Myanmar, and Thailand. These schemes represent the largest source of pension spending in each of these countries, and in all cases, the share of GDP they consume is projected to rise unless parametric reforms are implemented. The third group includes the less mature schemes in Cambodia (2023), Indonesia (2015), Lao PDR (2013), and Thailand (2001). These schemes have relatively low contributions and modest replacement rate targets. Table 2 outlines potential parametric reforms for each country, with many of these recommendations informed by previous countryspecific analyses.

⁶ Countries without social pensions include Cambodia, the Federated States of Micronesia, Laos, the Marshall Islands, Papua New Guinea, Solomon Islands, and Vanuatu.

| Country/scheme | Retirement age increase | Reduce target replacement rate** | Change pension indexation | Increased contribution rate |
|------------------------------|----------------------------|-------------------------------------|------------------------------|-----------------------------|
| China | Х* | | х | |
| Cambodia (civil service) | Х | Х | Х | Х |
| Cambodia (private sector) | Х | | | Х |
| Indonesia (civil service) | Х | Х | | |
| Indonesia (private sector) | | | | Х |
| Lao PDR | Х | Х | Х | Х |
| Myanmar (civil servants) | Х | | Х | Х |
| Philippines (civil servants) | | | | |
| Philippines (private sector) | Х | X | Х | Х |
| Thailand (civil servants) | Х | Х | Х | Х |
| Thailand (private sector) | Х | | Х | X |
| Viet Nam | Х | Х | Х | |

Table II.2. Parametric reforms by country

Notes: * China announced that it would raise its retirement age in 2024. ** may also require expanding the pensionable wage to maintain the effective replacement rate.

In addition to parametric reforms, integration of civil service schemes into the national scheme can increase labor market mobility, equity and reduce future pension spending. Good international practice and the recent trend in the OECD is to integrate civil service schemes with the main national scheme that covers private sector workers. Out of 27 OECD countries, only 4 currently maintain parallel systems, down from 16 a few decades ago.⁷ Integration allows for better labor mobility between public and private sector and tends to be more equitable. Lao and Viet Nam, for example, have integrated pension systems, although there is a long transition in Viet Nam during which public sector workers will receive higher replacement rates. Both Cambodia and Indonesia have announced reforms to integrate civil servants into their young, national DB schemes. However, the details of the transition have not been determined. In particular, it is not clear whether only new hires or civil servants already covered in the old system will be included in the integration. There is currently no discussion on integration in Philippines or Thailand.

Policies are needed also to encourage and enable longer working lives. Pension reforms to increase the retirement age can be accompanied by measures to reduce disincentives to work and allow more flexible work options for older workers. Studies show that options for partial retirement coupled with part-time work can offer older workers more choice and control over their labor market participation and lead to better health and wellbeing (Graham 2014; OECD 2019, van Solinge et al 2022). However, partial retirement options need to be carefully designed to avoid negative effects on hiring of older workers (Busch et al. 2025). Providing information on future pension income can also lead to delayed retirement and more incentives to work.⁸

Effective training policies for older adults are crucial for ensuring their continued productive participation in the workforce. Training programs tailored to the needs and strengths of older workers can help them acquire new skills cost-effectively (Knowland and Thomas 2014; Picchio 2021). Countries like Austria, Denmark, and Germany have established

⁷ The United States was one of the first to incorporate federal civil servants into the social security program in 1986.

⁸ For instance, a study in the U.S found that low-cost interventions (a mailed brochure combined with an invitation to participate in a 15-minute online tutorial) to inform older workers about expected pension benefits increased their labor force participation one year later by 4 percentage points relative to a control group (Liebman and Luttmer 2015).

programs that offer vocational training and re-skilling opportunities for older workers through self-paced learning, micro-credential approaches and the acquisition of basic digital skills and socio-emotional skills that remain malleable during adulthood (e.g., communication, planning, and teamworking). Evaluations of training programs in Austria and Denmark have found that training for mid-career and older workers displaced by automation helped them transition to less routine work with skills geared to the task demands of new technologies (Humlum et al. 2023; Schmidpeter and Winter-Ebner, 2021; Bürgisser, 2023).

In East Asia, countries like Japan, Singapore and Korea, Rep. have also established policies to support lifelong learning for older workers. Singapore's Skills Future program offers Singaporeans aged 25 and above a credit of \$500 that can be used to fund a wide range of approved courses and training programs, and recently those aged 40 years or older receive a \$4,000 top-up to pursue upskilling training. In addition, the program recently introduced a mid-career training allowance to support workers in their continuous skills development and career progression in the face of a rapidly evolving labor market.

Lastly, boosting women's labor force participation (LFP) can help offset the impacts of aging on the workforce (World Bank 2016). Though rates of women's LFP vary across countries in the region, they are lower than men's rates in all countries. Addressing both supply and demand side constraints can be more effective, and policies need to consider contextual factors, including social norms. Increasing access to affordable, quality childcare has increased women's labor force participation across various lower- and middle-income countries, though the hours of operation, distance to homes or workplaces, and coordination of services across age groups can mediate the impacts of childcare (Halim, Perova, and Reynolds 2023).⁹ Other effective supply-side measures include providing information to young women on labor market opportunities and intentions of their peers, boosting women's financial inclusion and control over resources, developing women's socioemotional skills, and multi-faceted cash+ and graduation interventions that address the multiple barriers to productive inclusion (Halim, O'Sullivan, and Sahay 2023). On the demand side, interventions that enable women to signal their skills and boost their credibility with employers, provide students with quality work-study opportunities, and public works programs are effective in boosting women's LFP (Halim, O'Sullivan, and Sahay 2023).

International Cooperation

The East Asia and Pacific (EAP) region is experiencing rapid aging, but there is a significant demographic imbalance across its countries. International labor mobility presents a win-win outcome for both origin and destination countries, helping to correct these demographic imbalances. Aging countries are typically a destination country (Figure II.37A), while younger countries are typically an origin country (Figure II.37B). For aging economies, opening borders to international workers can mitigate the negative growth effects of aging (Figure II.38A). For younger economies, sending workers abroad can boost incomes, even when the migration is predominantly low-skilled.

Aging economies also have a crucial need for old-age care workers. With the rapidly increasing old-age dependency ratio, there are fewer adults per aging individual, leading to a greater unmet need for care workers that domestic supply alone cannot fill. Trained care workers from labor-abundant EAP countries could fill this gap, creating employment opportunities for the origin (young) countries and resulting in more affordable eldercare services in the destination (aged and aging) countries (Figure II.38B). Alternatively, young countries, such as Philippine, investing in retirement villages to attract migrant retirees, for example, from Japan, could boost their economy, while also stabilizing the eldercare system in the aging country (World Bank, forthcoming).

⁹ For more details on concrete policy actions to increase access to affordable, quality childcare, see Devercelli and Beaton-Day (2020).

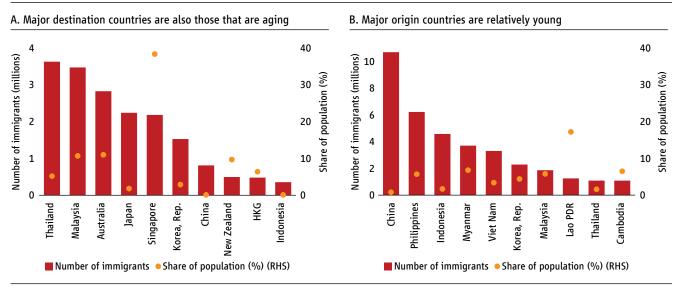


Figure II.37. International labor mobility can help correcting demographic imbalances

Source: World Bank, "Migration: Leveraging Human Capital in the East Asia and Pacific Region", 2025.

Data source: World Bank, World Development Report 2023 Migration Database.

Note: Panel A: The number of immigrants is based on the number of foreign nationals. "Share of population" refers to the number of immigrants as a share of the population. Panel B: The number of emigrants is based on the number of the foreign-born population. "Share of population" refers to the number of emigrants as a share of the population.

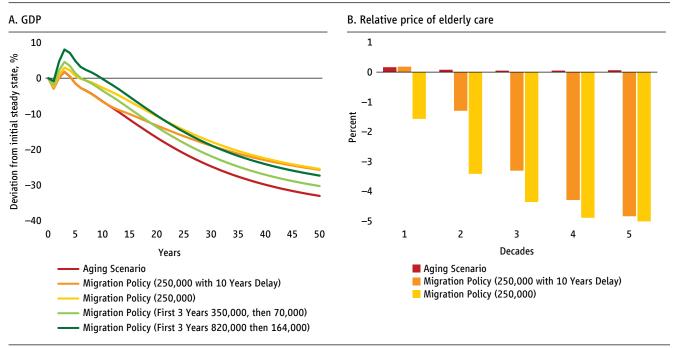


Figure II.38. Immigration can alleviate adverse effects on GDP in rapidly aging economies and reduce the cost of elderly care

Source: World Bank, "Migration: Leveraging Human Capital in the East Asia and Pacific Region", 2025.

Note: The different scenarios assume different levels of annual net migration inflows as well as assumptions about timing (immediate or delayed). The scenario assumes an annual net migration inflow of 250,000. All scenarios are expressed as the percent deviation from the model steady-state with no aging effects.

II.4. Implications for potential growth

We explore here the macroeconomic implications of the three trends discussed in this report: changing global economic integration, climate, and demographics. We illustrate how the proposed triad of responses—harnessing technological change, deepening domestic reforms, and pursuing international cooperation—could offset the potential negative growth effects of these challenges on the growth of the region.

The rate of potential growth in EAP has decreased in the past decade (2011–2024) to 5.9 percent, compared to rate in the previous decade (2000–10) of 7.7 percent (figure II.39, Kose and Ohnsorge 2024). Looking ahead, until the end of the decade (2025–30), potential growth in EAP is expected to decelerate further, and could be as low as 4.6 percent. The primary driver of this slowdown is the slower potential growth in China, but potential growth in the rest of the EAP region is also projected to decline slightly by 0.1 percentage point to 4.4 percent. The slowdown in capital accumulation accounts for just over half of the decline, while deceleration in productivity and the decline in demographic dividends due to aging, would also contribute significantly.

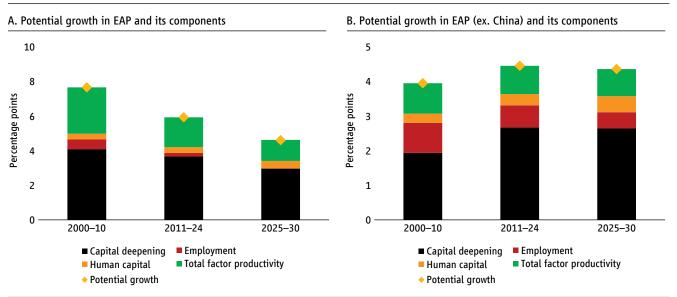


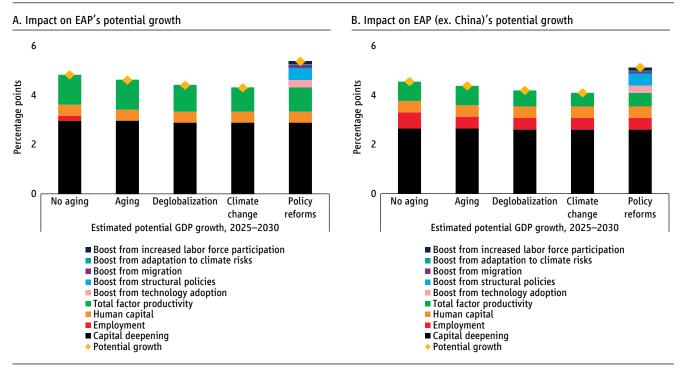
Figure II.39. Potential growth in the EAP is expected to decline

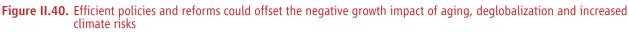
Source: World Bank staff's estimates.

Note: B. Bars show GDP-weighted averages.

Potential GDP growth in the region could be further dampened by the changing nature of global economic integration and climate risks. In a hypothetical downside scenario, where trade tensions increase and lead to a 10-percentagepoint reduction in trade as a share of GDP, investment growth could slow down by 1.5 percentage points per year. This investment slowdown would ultimately reduce the growth of the capital stock and total factor productivity growth, resulting in an average annual decrease of 0.21 percentage point in potential GDP growth over the next 5 years. In a climate risks scenario, which assumes that the frequency of destructive climate events for each country rises at the same pace as during 1980–2020, an additional 0.1 percentage points could be shaved of total factor productivity growth (Dieppe, 2021). Policies that help increase labor force participation, boost total factor productivity through the adoption of new technologies, and enable countries to adapt their economies to increased climate risks could help boost potential GDP growth. Furthermore, comprehensive structural reform packages that improve macroeconomic stability and the quality of institutions and facilitate regional trade integration and capital flows have often preceded investment accelerations, i.e. periods of sustained and relatively rapid investment growth (Stamm and Yu 2024). In an aspirational best-case scenario, these policies together could boost potential output growth in 2025-30 by 1 percentage point to 5.4 percent per year in EAP, almost the average potential growth rate the region experienced from 2011-24 (figure II.40).

Boosting female labor force participation and encouraging well-managed migration can have a positive impact on potential GDP growth through the labor component. Simulation results show that if female labor force participation in EAP countries were to increase at the rate observed in Malaysia between 1990 and 2020 (from 41.6 percent to 48 percent), potential GDP growth could rise by 0.1 percentage points per year over the next 5 years. Similarly, labor force growth in EAP is expected to be 0.4 percentage point lower in 2025-30 compared to the 2010s. In fact, according to the UN population projections, the working-age population in EAP is expected to stagnate between 2025-30 and then decrease by 14 percent between 2025-2050 (United Nations 2024). All other regions (except ECA) will continue to see growing working-age populations. For example, in SAR, 82 million individuals will join the working-age population between 2025-30. In a scenario in which well-managed migration reduces the slowdown in labor force growth to 0.2 percentage point per year, potential GDP growth would increase by a further 0.1 percentage point per year in 2025-30.





Source: World Bank staff's estimates.

Leveraging digital tools and developing digital infrastructure can boost potential output growth through the TFP component. Key areas with significant potential to enhance productivity growth include developing digital capabilities, improving connectivity, and advancing artificial intelligence (AI). Between 2018 and 2022, 1.5 billion new users gained internet access (World Bank 2024b). Generative AI is expected to drive productivity growth through various channels, such as task automation, worker support, enhanced organizational efficiency, and product innovation (D. Acemoglu 2024; Chui et al. 2023; T. Babina et al. 2024; Czarnitzki, Fernández, and Rammer 2023). Chui et al. (2023) estimate that generative AI could contribute up to 0.6 percentage points to productivity growth between 2020 and 2040. In a conservative scenario that assumes additional TFP growth of 0.3 percentage point due to the digital transition and the productivity benefits of AI, potential growth would increase by 0.3 percentage point per year in 2025-30.

Boosting potential growth through structural reforms and climate adaptation would result in higher potential GDP growth through stronger investment and faster productivity growth. For example, during accelerations, investment growth jumped more than threefold, from around 3 percent per year to over 10 percent. Between 1950 and 2022, 192 such investment accelerations occurred in a sample of 104 economies (Stamm and Yu 2024). The likelihood of sparking an acceleration increases with improvements in fiscal and monetary policy frameworks and with structural reforms to expand cross-border trade and financial flows. Such reforms are more effective when combined with well-functioning institutions. In an aspirational scenario in which all EAP economies implement such comprehensive reform packages and spark new investment accelerations by achieving an investment growth rate of 10 percent in 2025 through 2030, potential growth could increase by 0.5 percentage point per year. Furthermore, adapting to increased climate risks could dampen the adverse impacts of climate-related disasters on total factor productivity growth and add another 0.1 percentage point per year to potential GDP growth over the next five years.

One final question: how far is responding to the long-run challenges and boosting potential growth consistent with addressing also short-term difficulties and sustaining near-term growth? Regarding global economic integration, countries in the region will have to deal with rising trade barriers elsewhere. For most countries in the region, greater openness to trade and investment in goods and services delivers not only longer-term growth benefits, but also insurance in the near-term from new tariffs that may be implemented.

On climate risks, countries in the region need to deal with weakening global cooperation in the near-term and hence increasing longer-term climate risks. On the mitigation front, removing impediments to the adoption of viable green technologies can proceed unilaterally because it is in countries' own interest. Going further to encourage the adoption of technologies that are not yet economically viable can be conditioned on what other countries do. Weakening global cooperation on mitigation increases the urgency of national investments in adapting to increased climate risks. Since the benefits of these investments are largely reaped within countries or within the region, a combination of unilateral efforts and regional cooperation is needed.

On aging, there is no immediate crisis but an impending long-term problem. But the reforms needed to address the challenge, such as of pension systems, need to begin now to avert future fiscal strains. On migration, there may be an opportunity to benefit from regional demographic arbitrage. While some of the more advanced countries in the West are tightening immigration regimes, the more advanced aging countries in the East, like Japan, and the Republic of Korea, are now becoming more open to migration. Both receiving and sending countries can learn from the experience of previously more open countries to ensure that migration remains politically acceptable.

References

- Acemoglu, D. (2024). *The Simple Macroeconomics of Ai* (SSRN Scholarly Paper No. 4843046). Social Science Research Network. https://papers.ssrn.com/abstract=4843046
- Acemoglu, D., & Restrepo, P. (2022). Tasks, Automation, and the Rise in U.S. Wage Inequality. *Econometrica*, 90(5), 1973–2016. https://doi.org/10.3982/ECTA19815
- Ahir, H., Bloom, N., & Furceri, D. (2022). *The World Uncertainty Index* (Working Paper No. 29763). National Bureau of Economic Research. https://doi.org/10.3386/w29763
- Aldaz-Carroll, E., Jung, E., Maliszewska, M., & Sikora, I. (2024). Global Ripple Effects: Knock-on Effects of EU, US, and China Climate Policies on Developing Countries' Trade. *Policy Research Working Paper Series*, Article 10988. https://ideas.repec.org//p/wbk/wbrwps/10988.html
- Artuc, E., Bastos, P., & Rijkers, B. (2023). Robots, tasks, and trade. *Journal of International Economics*, 145, 103828. https://doi.org/10.1016/j.jinteco.2023.103828
- Artuc, E., Bastos, P., Copestake, A., & Rijkers, B. (2023). Robots and trade: Implications for developing countries. In L. Yang & G. Grossman (Eds.), Robots and AI: A new economic era (pp. 232–275). Routledge.
- Babina, T., Fedyk, A., He, A., & Hodson, J. (2024). Artificial intelligence, firm growth, and product innovation. *Journal of Financial Economics*, 151, 103745. https://doi.org/10.1016/j.jfineco.2023.103745
- Baker, S. R., Bloom, N., & Davis, S. J. (2016). Measuring Economic Policy Uncertainty. *The Quarterly Journal of Economics*, 131(4), 1593–1636. https://doi.org/10.1093/qje/qjw024
- Barattieri, A., & Cacciatore, M. (2023). Self-Harming Trade Policy? Protectionism and Production Networks. *American Economic Journal: Macroeconomics*, 15(2), 97–128. https://doi.org/10.1257/mac.20190445
- Barattieri, A., Li, N., & Lin, Q. (2024). *Policy Restrictions: Another Brick in the Wall for Greenfield FDI in Services* (SSRN Scholarly Paper No. 5031407). Social Science Research Network. https://doi.org/10.2139/ssrn.5031407
- Borin, A., Mancini, M., & Taglioni, D. (2021). Economic Consequences of Trade and Global Value Chain Integration: A Measurement Perspective. *Policy Research Working Paper Series*, Article 9785. https://ideas.repec.org//p/wbk/ wbrwps/9785.html
- Bown, C. P., Conconi, P., Erbahar, A., & Trimarchi, L. (2020). Trade Protection Along Supply Chains. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3765310
- Bürgisser, R. (2023). Policy Responses to Technological Change in the Workplace. JRC Working Papers Series on Social Classes in the Digital Age, 4, Article 4. https://doi.org/10.5167/uzh-235657
- Busch, F., Fenge, R., & Ochsen, C. (2025). The hiring of older workers: Evidence from Germany. *Empirical Economics*, 68(1), 139–163. https://doi.org/10.1007/s00181-024-02637-5
- Cai, J., & Stoyanov, A. (2016). Population aging and comparative advantage. *Journal of International Economics*, 102, 1–21. https://doi.org/10.1016/j.jinteco.2016.04.006
- Caldara, D., Iacoviello, M., Molligo, P., Prestipino, A., & Raffo, A. (2020). The economic effects of trade policy uncertainty. *Journal of Monetary Economics*, 109, 38–59. https://doi.org/10.1016/j.jmoneco.2019.11.002
- Chui, M., Hazan, E., Roberts, R., Singla, A., Smaje, K., Sukharevsky, A., Yee, L., & Zemmel, R. (2023). The economic potential of generative AI. McKinsey & Company.
- Corsetti, G., & Bergin, P. R. (2020). The macroeconomic stabilization of tariff shocks: What is the optimal monetary response?. *Journal of International Econom*ics.
- Czarnitzki, D., Fernández, G. P., & Rammer, C. (2023). Artificial intelligence and firm-level productivity. *Journal of Economic Behavior & Organization*, 211, 188–205. https://doi.org/10.1016/j.jebo.2023.05.008
- DeStefano, T., & Timmis, J. (2024). Robots and export quality. *Journal of Development Economics*, 168, 103248. https://doi.org/10.1016/j.jdeveco.2023.103248
- Devercelli, A. E., & Beaton-Day, F. (2020). *Better Jobs and Brighter Futures: Investing in Childcare to Build Human Capital*. World Bank. https://doi.org/10.1596/35062

Dieppe, A. (2021). *Global Productivity: Trends, Drivers, and Policies*. World Bank Publications.

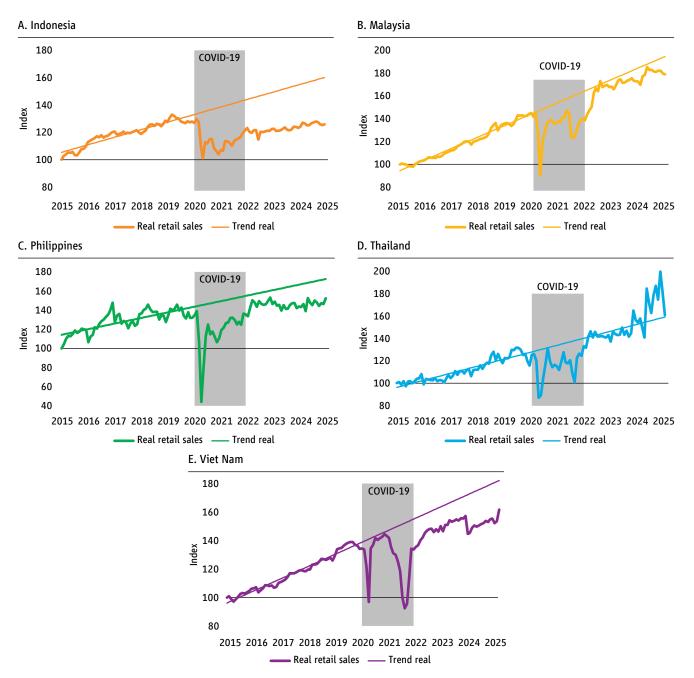
- Feyrer, J. (2007). Demographics and Productivity. *The Review of Economics and Statistics*, 89(1), 100–109. https://doi.org/10.1162/rest.89.1.100
- Flaaen, A., & Pierce, J. R. (2019). Disentangling the Effects of the 2018-2019 Tariffs on a Globally Connected U.S. Manufacturing Sector (SSRN Scholarly Paper No. 3879412). Social Science Research Network. https://doi. org/10.17016/FEDS.2019.086
- Gilchrist, S., Sim, J. W., & Zakrajšek, E. (2014). *Uncertainty, Financial Frictions, and Investment Dynamics* (Working Paper No. 20038). National Bureau of Economic Research. https://doi.org/10.3386/w20038
- Global Commission on Adaptation. (2019). Adapt now: A global call for leadership on climate resilience. https://gca.org/ reports/adapt-now-a-global-call-for-leadership-on-climate-resilience/
- Graetz, G., & Michaels, G. (2018). Robots at Work. *The Review of Economics and Statistics*, 100(5), 753–768. https://doi.org/10.1162/rest_a_00754
- Graham, C. (2014). Late-life work and well-being. *IZA World of Labor*. https://doi.org/10.15185/izawol.107
- Ha, J., Islamaj, E., & Mattoo, A. (2024). *Implications of Heightened Global Uncertainty for the East Asia and Pacific Region*. Washington, DC: World Bank. https://doi.org/10.1596/42090
- Halim, D., O'Sullivan, M. B., & Sahay, A. (n.d.). INCREASING FEMALE LABOR FORCE PARTICIPATION.
- Halim, D., Perova, E., & Reynolds, S. (2023). Childcare and Mothers' Labor Market Outcomes in Lower- and Middle-Income Countries. *The World Bank Research Observer*, *38*(1), 73–114. https://doi.org/10.1093/wbro/lkac003
- Heid, B., Meyer, M., & Sahgal, V. (2023). *The ASEAN free-trade advantage: How the region can power ahead*. Boston: Boston Consulting Group. https://www.bcg.com/publications/2023/asean-free-trade-advantage-to-power-ahead
- Humlum, A., Munch, J. R., & Rasmussen, M. (2023). *What Works for the Unemployed? Evidence from Quasi-Random Caseworker Assignments*. IZA Institute of Labor Economics. https://www.jstor.org/stable/resrep66360
- Hummels, D., Ishii, J., & Yi, K.-M. (2001). The nature and growth of vertical specialization in world trade. *Journal of International Economics*, 54(1), 75–96. https://doi.org/10.1016/S0022-1996(00)00093-3
- Imura, Y. (2023). Reassessing trade barriers with global production networks. *Review of Economic Dynamics*, *51*, 77–116. https://doi.org/10.1016/j.red.2022.12.001
- International Monetary Fund. (2022). Samoa: Technical assistance report—Climate Macroeconomic Assessment Program. https://www.imf.org/en/Publications/CR/Issues/2022/03/21/Samoa-Technical-Assistance-Report-Climate-Macroeconomic-Assessment-Program-515505
- Kahn, M. E., Mohaddes, K., Ng, R. N. C., Pesaran, M. H., Raissi, M., & Yang, J.-C. (2021). Long-term macroeconomic effects of climate change: A cross-country analysis. *Energy Economics*, 104, 105624. https://doi.org/10.1016/j. eneco.2021.105624
- Knowland, V. C. P., & Thomas, M. S. C. (2014). Educating the adult brain: How the neuroscience of learning can inform educational policy. *International Review of Education*, 60(1), 99–122. https://doi.org/10.1007/s11159-014-9412-6
- Kose, M. A., & Ohnsorge, F. (2024). *Falling Long-Term Growth Prospects: Trends, Expectations, and Policies*. World Bank Publications.
- Lanzafame, M. (2021). Demography, growth and robots in advanced and emerging economies. *Fondazione Eni Enrico Mattei Working Papers*. https://services.bepress.com/feem/paper1349
- Liebman, J. B., & Luttmer, E. F. P. (2015). Would People Behave Differently If They Better Understood Social Security? Evidence from a Field Experiment. *American Economic Journal: Economic Policy*, 7(1), 275–299. https://doi. org/10.1257/pol.20120081
- Maestas, N., Mullen, K. J., & Powell, D. (2023). The Effect of Population Aging on Economic Growth, the Labor Force, and Productivity. American Economic Journal: Macroeconomics, 15(2), 306–332. https://doi.org/10.1257/ mac.20190196
- Maliszewska, M., Paul Brenton, Vicky Chemutai, Maksym Chepeliev, and Iryna Sikora (2025, forthcoming) "Climate Policies and Their Impact On Developing Countries' Trade". World Bank.

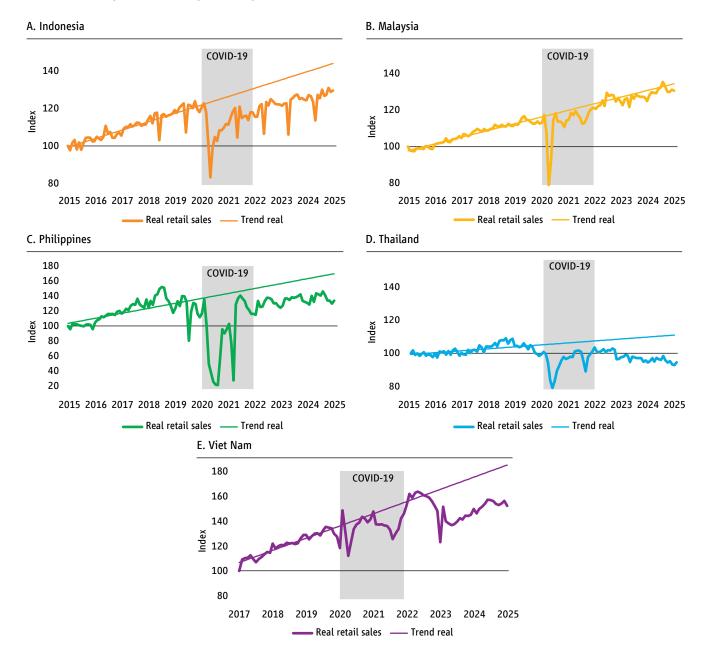
- Maliszewska, M., & Winkler, D. E. (2024). *Leveraging trade for more and better jobs* (Prosperity Insight Series). World Bank Group. http://documents.worldbank.org/curated/en/099082824074054627
- Mancini, M., Mattoo, A., Taglioni, D., & Winkler, D. (2023). Sub-Saharan Africa's participation in global value chains: 1995–2021. *The World Economy*, 46(11), 3192–3207. https://doi.org/10.1111/twec.13497
- OECD (2019), Working Better with Age, Ageing and Employment Policies, OECD Publishing, Paris, https://doi.org/10.1787/ c4d4f66a-en
- Palacios, R. forthcoming. "Rethinking Public Pension Provision in Asia." World Bank, Washington, D.C.
- Picchio, M. (2021). Is training effective for older workers? *IZA World of Labor*. https://doi.org/10.15185/izawol.121
- Rosenow, S. K., & Mealy, P. A. (2024). Turning Risks into Rewards: Diversifying the Global Value Chains of Decarbonization Technologies. *Policy Research Working Paper Series*, Article 10696. https://ideas.repec.org//p/wbk/wbrwps/10696. html
- Schmidpeter, B., & Winter-Ebmer, R. (2021). Automation, unemployment, and the role of labor market training. *European Economic Review*, 137, 103808. https://doi.org/10.1016/j.euroecorev.2021.103808
- Stamm, K., & Yu, S. (2024). The magic of investment accelerations. In Global economic prospects (January). World Bank.
- United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). (2021). *The economics of climate disasters in East Asia and the Pacific*. https://www.unescap.org/sites/default/files/The%20Economics%20of%20 Climate%20Change%20%20in%20the%20Asia-Pacific%20region.pdf
- United Nations Environment Programme (UNEP). (2024). Adaptation gap report 2024. https://www.unep.org/resources/ adaptation-gap-report-2024
- van Solinge, H., Vanajan ,Anushiya, & and Henkens, K. (2023). Does Phased Retirement Increase Vitality in Older Workers? Findings from a 3-Year Follow-Up Panel Study. *Journal of Aging & Social Policy*, 35(2), 221–240. https://doi.org/10.1080/08959420.2022.2029270
- Winkler, D., Kruse, H., Aguilar Luna, L., & Maliszewska, M. (2023). *Linking Trade to Jobs, Incomes, and Activities: New Stylized Facts for Low- and Middle-Income Countries.* The World Bank. https://doi.org/10.1596/1813-9450-10635
- World Bank. (2016). *Live long and prosper: Aging in East Asia and Pacific*. World Bank. https://doi.org/10.1596/978-1-4648-0469-4 (*Licensed under Creative Commons Attribution CC BY 3.0 IGO*)
- World Bank. (2022a). Philippines country climate and development report (CCDR).
- World Bank. (2022b). Vietnam country climate and development report (CCDR).
- World Bank. (2023a). Cambodia country climate and development report (CCDR).
- World Bank. (2023b). Indonesia country climate and development report (CCDR).
- World Bank. (2024a). Jobs and technology: East Asia and Pacific economic update, October 2024.
- World Bank. (2024b). Services unbound: Digital technologies and policy reform.
- World Bank. (2024c). Mongolia country climate and development report (CCDR).
- World Bank. (2024d). The Pacific Atoll Countries country climate and development report (CCDR).
- World Bank. (2024e). Managing flood risks: Leveraging finance for business resilience in Malaysia.
- World Bank. (2024f). *Pacific economic update, March 2024: Back on track? The imperative of investing in education*. World Bank. https://hdl.handle.net/10986/41160
- World Bank. (2025a). Global economic prospects: January 2025. World Bank. https://hdl.handle.net/10986/42452
- World Bank. (2025b). *Migration: Leveraging human capital in the East Asia and Pacific region*. World Bank. https://hdl. handle.net/10986/42813
- World Bank. (forthcoming). Green technologies: Decarbonizing development in East Asia and the Pacific.
- World Trade Organization (WTO), Organisation for Economic Co-operation and Development (OECD), United Nations, & World Bank. (2024). *Working together for better climate action: Carbon pricing, policy spillovers, and global climate goals*. WTO. https://www.wto.org/english/res_e/booksp_e/climate_action_e.pdf

Appendices

Appendix for part I

1. Retail sales by country

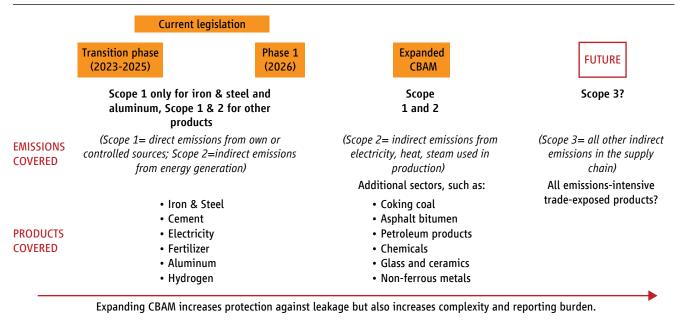




2. Industrial production by country

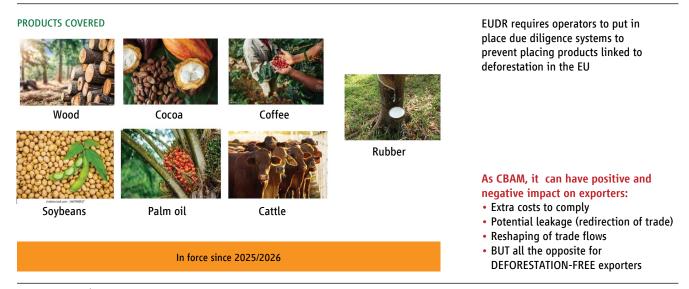
Appendix for part II

EU CBAM affects unpriced carbon emissions associated to imports to the EU



Source: Authors' elaboration

EU Deforestation Regulation (EUDR) targets job-rich sectors



Source: Authors' elaboration.

Industries most intensive in age-appreciating skills

| Rank | naics4_description |
|------|--|
| 1 | Insurance services |
| 2 | Financial services |
| 3 | Telecommunication services |
| 4 | Beverage Manufacturing |
| 5 | Paint, Coating, and Adhesive Manufacturing |
| 6 | Soap, Cleaning Compound, and Toilet Preparation Manufacturing |
| 7 | Other Chemical Product and Preparation Manufacturing |
| 8 | Printing and Related Support Activities |
| 9 | Animal Food Manufacturing |
| 10 | Commercial and Service Industry Machinery Manufacturing |
| 11 | Manufacturing and Reproducing Magnetic and Optical Media |
| 12 | Tobacco Manufacturing |
| 13 | Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing |
| 14 | Travel services |
| 15 | Medical Equipment and Supplies Manufacturing |
| 16 | Cement and Concrete Product Manufacturing |
| 17 | Bakeries and Tortilla Manufacturing |
| 18 | Other Transportation Equipment Manufacturing |
| 19 | Transportation services |
| 20 | Other Miscellaneous Manufacturing |

Industries most intensive in age-depreciating skills

| Rank | naics4_description |
|------|---|
| 1 | Fiber, Yarn, and Thread Mills |
| 2 | Logging |
| 3 | Transportation services |
| 4 | Coal Mining |
| 5 | Cement and Concrete Product Manufacturing |
| 6 | Nonmetallic Mineral Mining and Quarrying |
| 7 | Travel services |
| 8 | Dairy Product Manufacturing |
| 9 | Animal Food Manufacturing |
| 10 | Beverage Manufacturing |
| 11 | Textile Furnishings Mills |
| 12 | Other Food Manufacturing |
| 13 | Fruit and Vegetable Preserving and Specialty Food Manufacturing |
| 14 | Sugar and Confectionery Product Manufacturing |
| 15 | Veneer, Plywood, and Engineered Wood Product Manufacturing |
| 16 | Other Wood Product Manufacturing |
| 17 | Plastics Product Manufacturing |
| 18 | Lime and Gypsum Product Manufacturing |
| 19 | Grain and Oilseed Milling |
| 20 | Steel Product Manufacturing from Purchased Steel |

