1

Transitioning to High Income—or Not

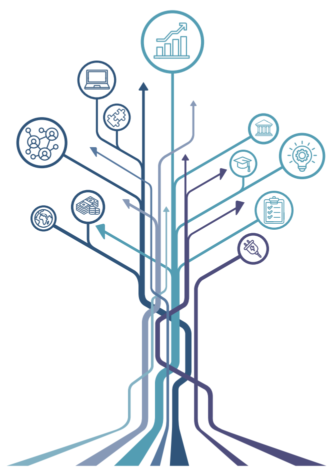
Country Case in Brief: Poland

Poland is one of the world's most impressive successes in sustaining a high rate of economic growth over an extended period. Its per capita gross national income (GNI) is about $20,000, roughly 10 times more than in 1992. Rapid growth helped the country reach high income in 2009, only 20 years after the start of the transition from a planned to a market economy. This represented an income shift from 30 percent of the European Union (EU) average in 1992 to 80 percent in 2022. Throughout the period of rapid growth, income inequality did not widen in Poland. The country thus offers important lessons for other countries seeking a similar growth acceleration.

How did Poland's economy become one of the most rapidly growing in the world? After the big bang reforms of the transition from central planning, the government first got the edifice right, that is, the rule of law, property rights, democratic accountability, and the functioning of basic market institutions. It then used the EU accession process, including membership in 2004, to reinforce the effectiveness of the new institutional structures.

A widely shared vision of a socially responsible market economy helped provide policy consistency and continuity over several decades. Indeed, the medium-term direction of reform was sustained, even as 17 different governments came and went as part of Poland's multiparty democracy.

Similar to other rapidly growing developing economies, Poland became connected to regional and global markets, while opening up to foreign trade and foreign



direct investment. EU accession was essential in this process. Large foreign investment flowed in from other EU member states, and trade with the European market boomed. Domestic market competition promoted appropriate pricing and facilitated effective resource allocation across sectors and firms, producing efficiency gains. Labor productivity rose quickly, and education reforms succeeded in raising quality standards equally quickly. Sound macroeconomic and financial policies provided a solid basis for private investment. Infrastructure investments, supported by generous EU structural funds, complemented these positive steps (Piatkowski 2018; World Bank 2017).

But the agenda is incomplete. Poland aspires not only to converge with the average EU income, but to surpass it. This will not be easy. It has to navigate a formidable energy transition amid overlapping shocks. As it moves closer to the development frontier through a shift to innovation-driven growth, deeper reforms will be needed to boost productivity, strengthen institutions, and improve skills. While past performance is no guarantee of future success, Poland's positive experience of the last three decades leaves the country well placed to continue successfully on its development journey toward high-income status.

Introduction

Economic development in Europe and Central Asia (ECA) has been dominated by the transition from a planned to a market economy that began in the early 1990s. The advance of broad and deep structural reforms, the emergence of private initiative as the main driver of growth, and the much-reduced role of the state have been key components on this development path. In less than three decades, 10 ECA countries have joined the EU. The successful transition of these countries to EU market integration with robust institutions and production structures has elevated them to high-income status. For another 20 countries in the region, however, the transition to high-income status is ongoing.

The pace of economic expansion in the ECA region peaked during the 2000s and has slowed substantially since the 2007–09 global financial crisis. Annual average economic growth weakened from 5.1 percent during 2000–09 to 3.1 percent during 2010–19 and to 2.7 percent during 2020–23 as the region was battered by the aftermath of the global financial crisis, the European debt crisis, the commodity price collapse of 2015, COVID-19, and the impact of the Russian invasion of Ukraine. While the pace of economic expansion also slowed in other developing regions and among advanced economies, economic growth in the ECA region, which had lower growth rates initially, lagged comparators, such as East Asia and the Pacific, which expanded by 4.1 percent a year, and the middle-income countries (MICs), which grew by an average of 3.2 percent a year in 2020–23.

Weaker growth in the ECA region resulted in a slowdown in income convergence with advanced economies and concerns that many countries in the region may be experiencing a middle-income trap. Real gross domestic product (GDP) per capita (in purchasing power parity prices) in the region rose from 22 percent of the US level in 1999 to more than 33 percent in 2009. Following the rapid convergence in 2000–09, the speed of convergence slowed by a factor of almost four in 2010–22. As a result, two decades after the global financial crisis, real GDP per capita in the ECA region reached only 38 percent of the US level in 2022. Although this slowdown mirrors global trends and the ratio to the US level was, on average, higher in the region than elsewhere, the slowdown in the region was much steeper. Indeed, from 2010 to 2022, real GDP per capita in the region grew only about 1 percentage point more quickly than the average growth rate of real GDP per capita in the United States.

Since the term "middle-income trap" was first coined 20 years ago, there has been concern because the shift from the policies needed to enable growth in a low-income country to the policies needed to enable strong growth in an MIC may not be easy (Gill and Kharas 2007). The transition to high-income status in the region will require foundational reform efforts to sustain the structural transformation in MICs (although at diminishing returns), while also pivoting to fresh transformative reform efforts to facilitate more complex economic structures and institutions and the creative destruction needed to propel the transition from a middle-income to high-income country (HIC).

World Development Report 2024 labels this shift as the 3*i* strategy, implying that MICs need to navigate two important and sequential development transitions to succeed at reaching the high-income threshold (World Bank 2024). The first transition is a shift from an investment-based growth strategy (investment = 1*i*) to a strategy that focuses on both investment and infusion (2*i*) and that requires welcoming ideas, practices, expertise, and technologies from abroad and diffusing them domestically. The transition from middle-income status to high-income status then requires a second transition that involves a shift toward greater emphasis on innovation (3*i*) by not only borrowing ideas from abroad, but also by expanding the technology frontier at home.

- *Investment, the first i.* Foundational reforms are necessary to maximize the fundamental drivers of economic growth, including investment in and maximizing the returns associated with scarce physical and human capital.[1] Foundational investments, policies, and institutions facilitate sustainable increases in public and private investment. They also unlock the full potential of human capital in quantity (to ensure full labor force participation) and in quality (education and skills formation). Equally important, they support the efficient allocation and productive use of scarce physical and human capital.

- *Infusion, the second i.* The structural reforms required to enable the transition from 1*i* to 2*i* involve the more complex institutional arrangements needed to sustain Schumpeterian creative destruction in a new and more challenging external environment (Schumpeter 1942). Infusion in its simplest form means that ECA countries must focus not only on sustaining strong investment, but also on facilitating crossborder trade and helping attract new private investment, particularly from abroad, to enable the entry and diffusion of ideas, practices, managerial expertise, and technologies. Across the countries that were or are part of the ECA region and have converged to high income, the bulk of the infusion has been driven by intense links between multinational companies and domestic firms and been greatly facilitated by accession to the EU.
- *Innovation, the third i.* Transformative reforms to enable the transition from 2*i* to 3*i* need to focus on managing the incumbency advantage associated with the behavior of existing elites and firms in the market, while supporting innovative new entrants with high-growth potential. Innovation can also arise from incumbents, and, indeed, in many advanced economies, incumbents provide a substantial share of innovation. Countries seeking to sustain growth beyond the HIC threshold need policies and institutions that allow for growth at the frontier, reducing the risk premium that firms face in investing in innovation.

The experience gained during past high-income transitions in the region points to the importance of higher ambitions and deeper commitments to reform among the current ECA middle-income economies. Based on growth trends, only a handful of ECA MICs can be expected to pass the HIC threshold in the next few years.

The 3*i* strategy is not only about helping countries achieve high-income status, it is helping them sustain this status. The high-income countries face a more demanding environment for growth in output, productivity, and jobs because their enterprises need to innovate regularly to remain relevant. While continuing to infuse foreign technologies, experience, and capital, the ECA HICs need to raise the level of their ambitions in improving the business environment for innovation, boosting the quality of education, especially higher education and postuniversity education, and effecting a dramatic change to more efficiently use energy.

Historical Income Convergence: The Region Has Experienced Both Success and Stagnation

The historical performance of the ECA countries in the high-income transition includes examples of both success and stagnation (refer to box 1.1). Of 26 countries that have transitioned from middle to high income since 1990, 13 are in Europe: 10 (Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, and Slovenia) emerged from centrally planned economies, while 3 (Greece, Malta, and Portugal) did not.[2] In both cases, they represent a laboratory of reform experience, potentially offering lessons for other countries in the region

BOX 1.1 Growing to High Income Is Not Easy

After three decades of transition from a planned to a market economy, the ECA region is solidly middle income, though the region is characterized by ambitions to escape the middle-income trap and converge to high income. Of current World Bank member economies in the region, 20 are middle-income countries (MICs) and three are high-income economies. An additional 7 countries—part of ECA in the 1990s and early 2000s—have become high-income economies. The 20 ECA MICs account for 75 percent of regional economic activity, 85 percent of the region's population, nearly 90 percent of the people living in poverty, and nearly 90 percent of carbon dioxide emissions.

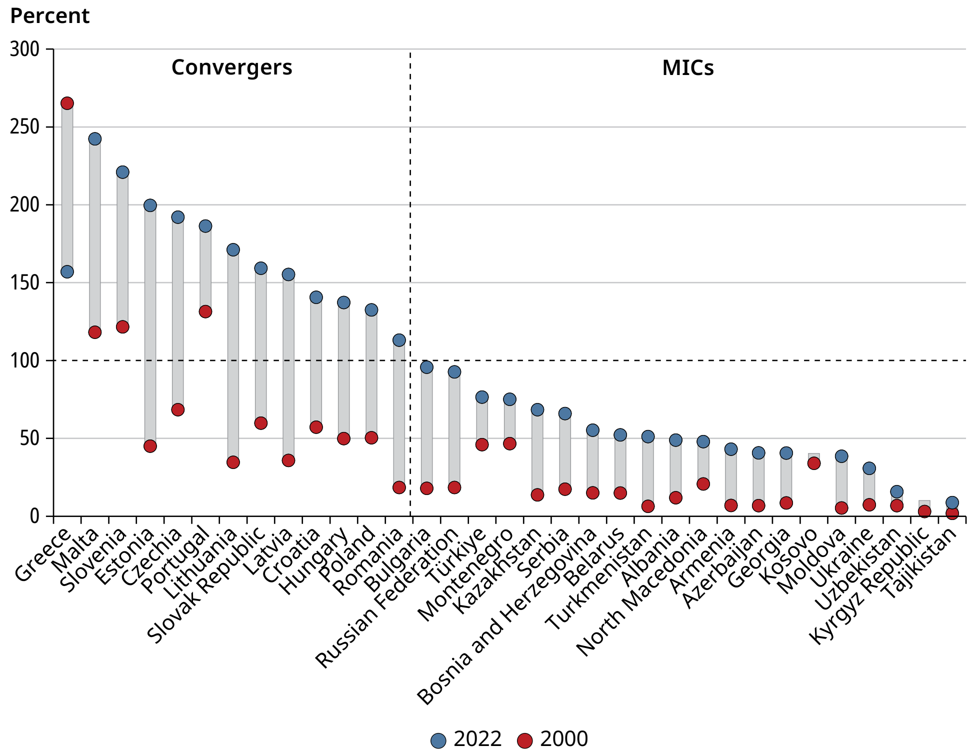
Comparisons with other regions (East Asia and Latin America) and with the performance of countries that successfully transitioned from MIC to high-income country (HIC) status outside the ECA region are presented in spotlights 1.1 and 1.2.

Convergence to high-income status is not easy. It requires continuous, dramatic changes in policies and institutions. Globally, 27 countries have transitioned from middle- to high-income status since 1990. Of these, 13 are European Union (EU) member states, including 10 countries that were World Bank member economies in the 1990s. The EU convergence machine—through institutional change, trade, investment, and the flow of capital and managerial expertise from richer to poorer countries—has helped all EU members overcome the middle-income trap. The remaining countries include economies with substantial natural resource endowments, economies with a substantial reliance on tourism, and the economies of the Republic of Korea and Uruguay. Countries that do not have large natural resource endowments or that have not implemented significant structural reforms have exhibited a slower pace of convergence to high-income status.

The income per capita in the median ECA MIC is about a third of the income per capita in the United States. The corresponding income ratio of the average MIC worldwide is a fifth. The odds that these latter countries will transition to high-income status have deteriorated because of slower global growth and weaker growth potential, fragmented global value chains, increased geopolitical tensions, and rising populism. Even without these headwinds, MICs face long odds of becoming HICs and escaping the middle-income trap unless their institutions, policies, business environments, education systems, and levels of social mobility become more sophisticated. The need to achieve growth while ensuring climate change mitigation has added challenges to policy making in the MICs today that were much less daunting among the MICs that achieved high-income status in the more distant past.

(refer to figure 1.1). But the pace of convergence toward high income across the region appears to have slowed. Fewer countries have made the transition to HIC status in recent years. And a large gap remains between European countries that transitioned to HIC status in the last 30 years (here labeled "Convergers") and the legacy group of Europe high-income economies (refer to figure 1.2).[3] All 13 of the successful Convergers are members of the EU, raising questions about the growth path among countries that have not acceded to the EU because the process has stalled or has not become an option.

FIGURE 1.1 In Europe, 13 countries have transitioned from middle- to high-income status since 1990



Source: WDI (World Development Indicators) (dashboard), World Bank, Washington, DC, https://datatopics.worldbank.org/world-development-indicators/.

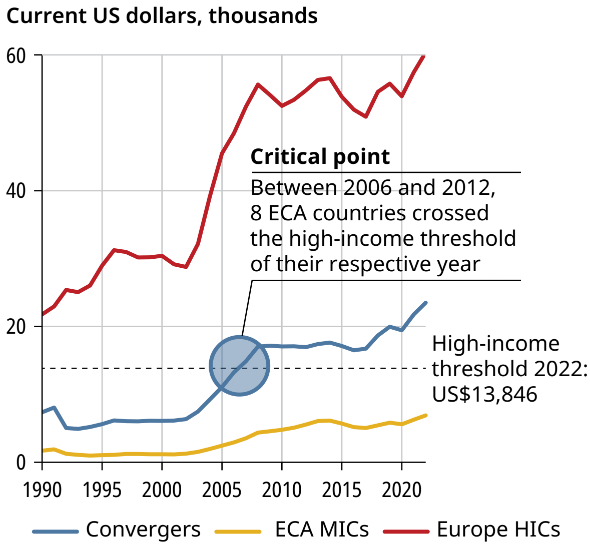
Note: Greece (2006, 2021), Kosovo (2010, 2021), Montenegro (2006, 2021), Turkmenistan (2000, 2019). Country groups do not overlap.

The ECA countries might be more accurately described as converging slowly or crawling toward high-income status, rather than converging quickly or sprinting relative to countries in the region that have previously transitioned to high income. Current growth trends—extrapolating average per capita GNI growth rates for the past 10 and 15 years—suggest that it is unlikely any of the 20 ECA MICs can be expected to pass the HIC threshold of $14,005 in the next few years (refer to table 1.1). First, growth rates have almost universally slowed across the ECA MICs. The average growth rate over the past 15 years is higher than the average growth rate over the past 10 years in every country except Kosovo. Growth in 2024–26 is projected at 2.7 percent a year compared with 4.1 percent in the 2000s. Second, even if the more optimistic 15-year average GNI per capita growth rate is extrapolated, only Montenegro and Serbia may be expected to pass the HIC threshold in the next decade. If the 10-year average GNI per capita growth rate is extrapolated, no countries would pass it in the next decade. Under the same 10-year scenario, it would take more than a hundred years for Azerbaijan, Tajikistan, and Uzbekistan to pass the threshold. Passing the threshold in these countries would take several decades under the 15-year scenario.[4]

Determinants of Growth and Convergence

Strong and durable growth in productivity and output are the foundation for sustainable social and economic development (Acemoglu 2009; Barro and Sala-i-Martin 2004). While economic growth alone may not be sufficient to achieve prosperity, create jobs, and reduce poverty, it is certainly a necessary condition. The Solow-Swan model of the 1950s was a cornerstone of the academic literature on economic growth and convergence, proposing that the long-run growth rate of economies is determined by changes in labor, capital, and technology (Solow 1956;

FIGURE 1.2 There is still a wide income gap between the successful Convergers and their high-income peers



Source: WDI (World Development Indicators) (dashboard), World Bank, Washington, DC, https://datatopics.worldbank.org/world-development-indicators/.

TABLE 1.1 Passing the HIC threshold will be challenging

Country	GNI per capita[a]			Compound annual growth rates[b]		Years to threshold	
	2007	2012	2022	10-year	15-year	Based on 10-year average	Based on 15-year average
Albania	3,460	4,360	6,770	4.5%	4.6%	17	26
Armenia	2,690	3,840	5,960	4.5%	5.4%	19	24
Azerbaijan	2,730	4,820[c]	5,630	1.6%	4.9%	>100	22
Belarus	4,310	6,630	7,240	0.9%	3.5%	75	22
Bosnia and Herzegovina	3,680	4,900	7,660	4.6%	5.0%	14	21
Georgia	2,380	4,150	5,620	3.1%	5.9%	30	21
Kazakhstan	4,980	8,280[d]	9,470	1.4%	4.4%	29	12
Kosovo	3,150[e]	3,390	5,590	5.1%	3.9%	18	37
Kyrgyz Republic	610	1,040	1,410	3.1%	5.7%	75	47
Moldova	1,440	3,140	5,340	5.5%	9.1%	18	17

Continued

TABLE 1.1 Passing the HIC threshold will be challenging *(Continued)*

	GNI per capita[a]			Compound annual growth rates[b]		Years to threshold	
Country	**2007**	**2012**	**2022**	**10-year**	**15-year**	**Based on 10-year average**	**Based on 15-year average**
Montenegro	5,120	7,000	10,400	4.0%	4.8%	8	15
North Macedonia	3,620	4,770	6,640	3.4%	4.1%	23	27
Serbia	4,830	6,080	9,140	4.2%	4.3%	10	20
Tajikistan	570	1,140	1,210	0.6%	5.1%	>100	50
Türkiye	8,840	9,520[c]	10,590	1.1%	1.2%	26	32
Turkmenistan	2,250	5,370	6,970[f]	2.6%	7.8%	27	13
Ukraine	2,590	3,650	4,270	1.6%	3.4%	76	40
Uzbekistan	770	2,160	2,190	0.1%	7.2%	>100	27

Source: World Bank, World Development Indicators.

a. Atlas method (current US$).

b. Calculated between 2022 and 2012 or 2007 for 10-year and 15-year rates, respectively, unless otherwise noted.

c. 2009 values for Azerbaijan and Türkiye are used instead of 2012 because the respective 2012 values are lower than the latest values, resulting in a negative growth rate.

d. 2011 values are used for Kazakhstan because the respective 2012 values are lower than the latest value, resulting in a negative growth rate.

e. The 2010 value is used for Kosovo in 2007.

f. Due to lack of data, the 2019 value is used for Turkmenistan in 2022.

Swan 1956). In addition to the quantity of inputs, the method of allocation and the efficiency of the allocation also determine growth, especially over the longer term. The ability of an economy—often through a process of creative destruction—to foster firm-level innovation, the adoption of modern technologies, and firm upgrading, and to shift to the more efficient allocation of resources across firms and sectors is key. In the early days of modern efforts to analyze economic growth, economists considered technological progress and innovation as developments external to their models. Over time, countries with lower initial levels of capital also tend to experience higher rates of growth, leading to convergence with countries that initially had higher levels of capital.

Decades later, economists introduced technological progress and innovation into their models. This was the initial stage of the literature on endogenous economic growth. Economists recognized—as practitioners had known for a while—that new technologies emerge because of costly research and development efforts by individuals and companies (Grossman and Helpman 1991; Romer 1987, 1990).

And entrepreneurs undertake such efforts to be the first in an industry or a country to gain at least temporary monopoly power. These efforts and market motivations were missing from both the early economic growth models and the endogenous growth models (Akcigit and Van Reenen 2023).

Similarly, investments in human capital play a crucial role in driving economic growth; the positive relationship between educational attainment and economic growth is especially strong (Hanushek and Woessmann 2008). The quantity and quality of investment both matter. Efficiency improvements in public investment have a sizable effect on growth in low-income countries (Devadas and Pennings 2018; Loayza and Pennings 2022). Countries with strong political and economic institutions, efficient legal systems, low corruption, and political stability tend to attract more investment. They also foster entrepreneurship and create environments conducive to risk-taking, innovation, and long-term growth (Acemoglu, Johnson, and Robinson 2001, 2004; Rodrik, Subramanian, and Treddi 2004).

The next stage of evolution in the understanding of economic development involved the formalization of what is now known as Schumpeterian creative destruction, a process that is central to growth in both developed and developing economies (Schumpeter 1942). Earlier work on Schumpeterian creative destruction tended to focus on the importance of the availability of the right institutions, such as patent protection and competition policy (Aghion and Howitt 1992). Researchers tended to view the challenge of late development as primarily associated with catching up or growth through imitation and the adoption of technologies already in use elsewhere (Acemoglu 2009). Only subsequently would a shift to an innovation-based growth model become necessary. However, more recent work has highlighted the risks associated with such an approach. Countries that fail to make the leap to an innovation-based growth model earlier have tended to stop converging (Akcigit and Van Reenen 2023). Thus, policies and institutions need to evolve and incrementally adapt as countries climb the development ladder, and creative destruction processes need to be fostered along the way.

Decomposing the drivers of economic growth across ECA countries provides useful insights on the underlying determinants of growth and convergence. In broad terms, a decomposition of growth drivers shows key differences between the MICs in the ECA region and those countries that have transitioned to HIC status since 1990 (Convergers) as well as the Europe high-income economies that transitioned before 1990. While the pattern is unclear with respect to investment rates, Europe HICs show consistently higher rates of labor force participation, including among women (refer to figures 1.3 and 1.4). However, while there is also a substantial gap between MICs and Europe HICs in total factor productivity, a key measure of the efficiency with which capital and labor are utilized, the gap is being closed because of more rapid total factor productivity growth among MICs (refer to figure 1.5). Emissions intensity per capita has been declining among Europe HICs

FIGURE 1.3 Investment rates in ECA show no clear pattern across the country groupings

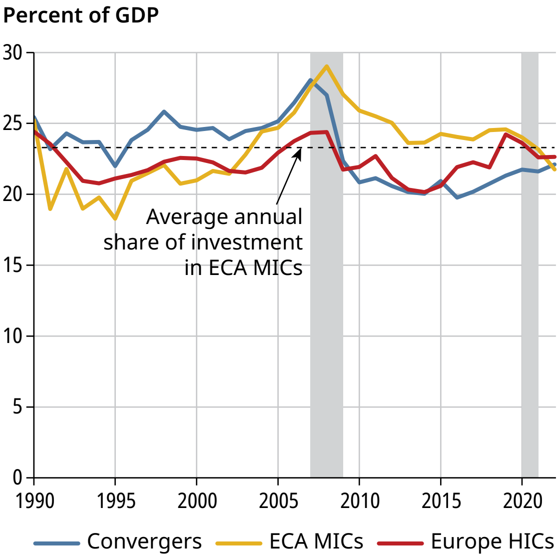
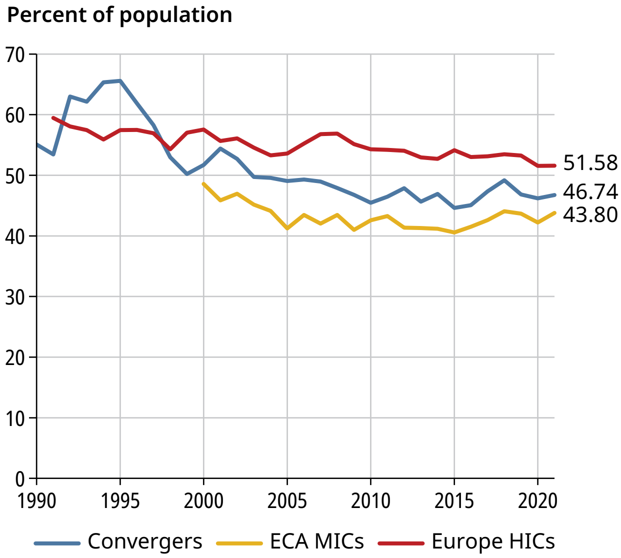


FIGURE 1.4 Labor force participation rates are higher among Convergers and Europe HICs



Source: WDI (World Development Indicators) (dashboard), World Bank, Washington, DC, https://datatopics.worldbank.org/world-development-indicators/.

Note: Country groups do not overlap. Figure 1.3: shaded areas indicate global recessions (2007–09 and 2020). The data are annual averages of growth over the entire reference period.

as countries look toward the green transition, but the pathway is more stable among MICs (refer to figure 1.6). Benefiting from external demand and market integration, Convergers and Europe HICs show much higher rates of trade openness relative to MICs, and their performance is better on measures of government effectiveness (refer to figures 1.7 and 1.8).

Differences in geography and natural resource endowments across the ECA region have implications for growth and convergence pathways. In broad terms, the countries in the region may be grouped into western and eastern segments based on physical location, proximity to large and developed markets, endowments, and growth characteristics. Developing economies in western ECA, including countries in Central Europe, Eastern Europe, and the Western Balkans, have fewer natural resources, but are more tightly integrated into advanced euro-centric manufacturing and services value chains. The ambition or aspiration to join the EU acts as a major incentive for reform and integration among countries in the EU periphery. In contrast, developing economies in the eastern ECA—Central Asia and the South Caucasus—are generally richer in natural resources, but less well integrated into global value chains and do not have such a strong regional integration pathway as that offered by the EU. Economic geography and natural resource endowments result in differing growth outcomes and trajectories in the ECA's west and east.

FIGURE 1.5 ECA MICs are closing the TFP gap with Europe HICs and Convergers

Year 2000 = 100, group averages

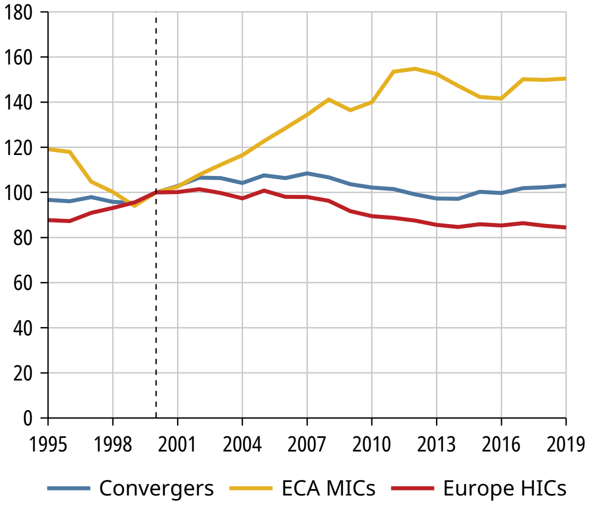
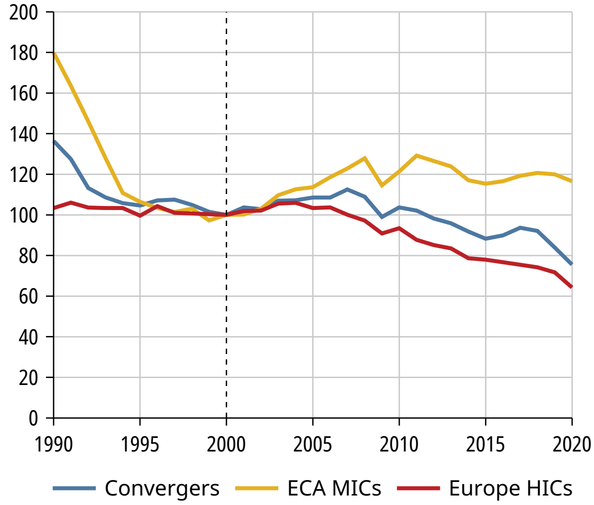


FIGURE 1.6 Europe HICs and Convergers are reducing emissions intensity at a more rapid pace

Year 2000 = 100, group averages



Source: PWT (Penn World Table) (database version 10.1), Groningen Growth and Development Centre, Faculty of Economics and Business, University of Groningen, Groningen, the Netherlands, https://www.rug.nl/ggdc/productivity/pwt/.

Note: Country groups do not overlap. Rebasing is based on year 2000 values. TFP = total factor productivity.

FIGURE 1.7 Convergers and Europe HICs trade more intensely compared with ECA MICs

Percent of GDP

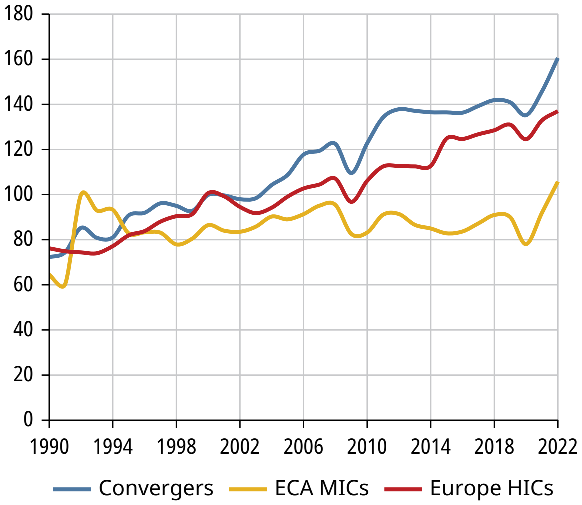
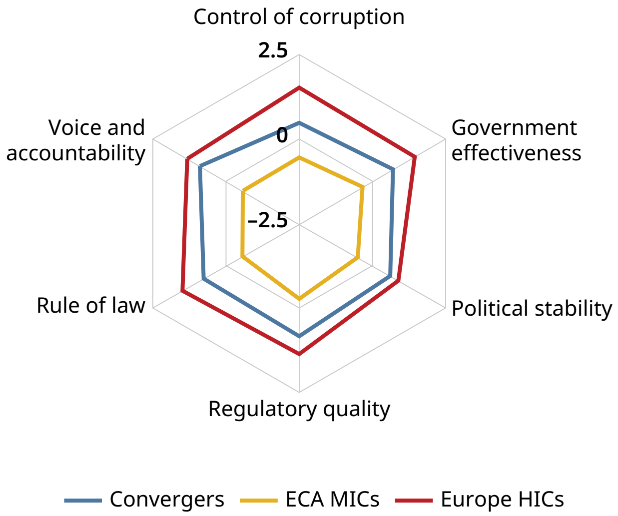


FIGURE 1.8 Convergers and Europe HICs perform better on measures of governance and institutional quality

Range: –2.5 (bad) to 2.5 (good)



Source: WGI (Worldwide Governance Indicators) (dashboard), World Bank, Washington, DC, http://info.worldbank.org/governance/wgi/#home.

Note: Country groups do not overlap.

ECA's west, centered around the EU and candidate countries, has embraced a common approach to economic and social progress (Gill and Raiser 2012). This consists of policies and institutions that govern trade and finance, enterprise and innovation, and labor and government. The integration of trade and financial flows in and around the EU single market has spurred an unprecedented convergence in living standards and is arguably the most successful element of the EU convergence machine. European private enterprises are more socially and environmentally responsible than companies in most other parts of the world. Some European enterprises are technological leaders, benefiting from a world-class ecosystem of public and private research, development, innovation, and tertiary education. Others, especially in southern Europe, are smaller, less productive, less innovative, and held back by cumbersome regulation. Labor is accorded relatively strong protection against employer abuse and enjoys income security after job loss and in old age. European governments are the most decentralized and the most representative of local interests, and Europe has developed effective institutions for regional coordination. For countries in ECA's west, it is easier to exploit markets to undertake infusion (trade and foreign direct investment) and to innovate.

ECA's east has developed by relying on its relatively more abundant endowment of natural resources. Greater integration in the world economy thanks to the surge in commodity prices since the 1990s has led to increasingly concentrated exports and other economic activity, and it has also generated enhanced development outcomes (Gill et al. 2014). Governments in the region need to worry less about the composition of exports and the profile of production and more about national asset portfolios, that is, the blend of natural resources, built capital, and economic institutions. The regional portfolio is heavy on tangible assets, such as natural resources and built capital. It is light in intangibles, such as institutions to manage volatile resource earnings, provide public services, and regulate enterprise. These should be the focus of policy going forward. Among countries in the east, infusion requires taking a step beyond raw material exports and building on comparative advantage. It also needs purposeful efforts to make economies more complex.

Lessons from Europe: The ECA Convergers Offer Insights

The 13 Convergers that have reached HIC status over the last 30 years offer key lessons for the ECA MICs. Among the Convergers, four in Western Europe transitioned to high income in the 1990s, while the remaining nine, in Eastern Europe, transitioned after 2000 (refer to table 1.2). The most rapid period of convergence was in the 2000s when eight European economies became high income (refer to figure 1.9).

All 13 Convergers are members of the EU, and their convergence to high-income status was strongly associated with their accession to and membership in the EU. Negotiations to join the EU and subsequent EU membership provide a mix of external drivers of institutional reform to meet the accession criteria, as well as significant capital flows in public resource transfers and private capital inflows associated with

TABLE 1.2 ECA Convergers offer lessons for ECA MICs that look to their own HIC transition

No.	Country	Year when they became high income
1	Croatia	2008
2	Czech Republic	2006
3	Estonia	2006
4	Greece	1996
5	Hungary	2007
6	Latvia	2009
7	Lithuania	2012
8	Malta	1998
9	Poland	2009
10	Portugal	1994
11	Romania	2019
12	Slovak Republic	2007
13	Slovenia	1997

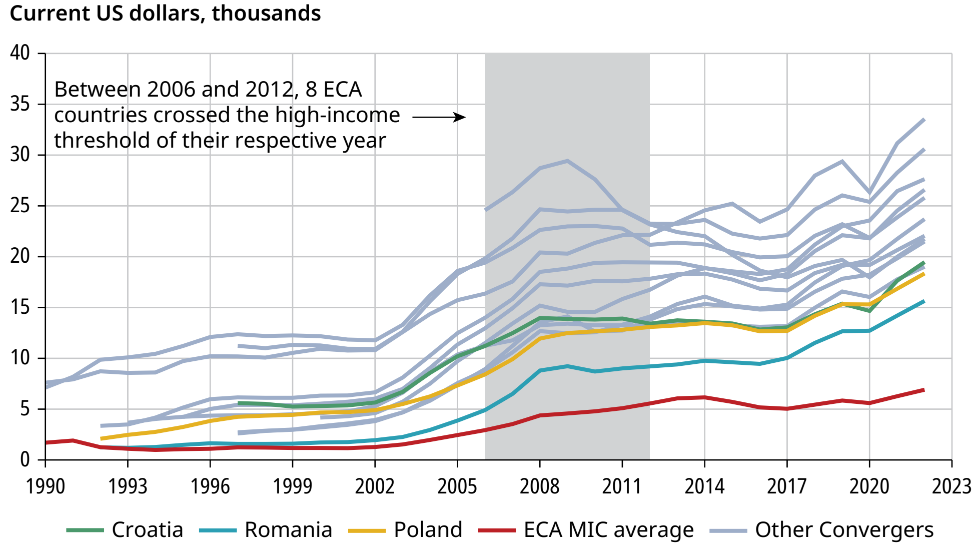
Source: WDI (World Development Indicators) (dashboard), World Bank, Washington, DC, https://datatopics.worldbank.org/world-development-indicators/.

Note: The ECA MIC group excludes countries that have already converged to high-income status, including Bulgaria and the Russian Federation, both of which passed the high-income threshold in July 2024.

anticipated or actual access to the single market. Access to EU structural funds after joining also played a role in supporting high rates of public investment in economic infrastructure. This suggests that the EU remains a convergence machine. Nonetheless, after passing the HIC threshold, some Convergers continued to grow rapidly, while others exhibited a marked growth deceleration (refer to box 1.2).

It is unclear whether the EU convergence machine will continue to work for the next generation of prospective EU members. The pace of accession has slowed significantly among EU candidate countries in the Western Balkans over the last two decades. It is not certain that EU members are willing to accommodate further enlargement, though geopolitical tensions have catalyzed a possible acceleration in at least some countries. The EU's New Growth Plan for the Western Balkans also provides resources and new opportunities for early access to selected aspects of the EU single market. After decades of negotiation, Türkiye became an EU candidate in 1999, but has achieved only limited progress toward accession since then. Among the ECA MICs that are more distant from the EU, there is an open question about what determines international integration with China, Europe, the Russian Federation, or global markets more generally. There is also a question whether the same drivers of institutional reform can sustain growth after the EU accession process is complete. Portugal offers an example of a country experiencing a significant growth slowdown following accession.

FIGURE 1.9 The most rapid convergence was in the late 2000s, when 8 MICs passed the HIC threshold



Source: WDI (World Development Indicators) (dashboard), World Bank, Washington, DC, https://datatopics.worldbank.org/world-development-indicators/.

BOX 1.2 Income Convergence with Advanced Economies

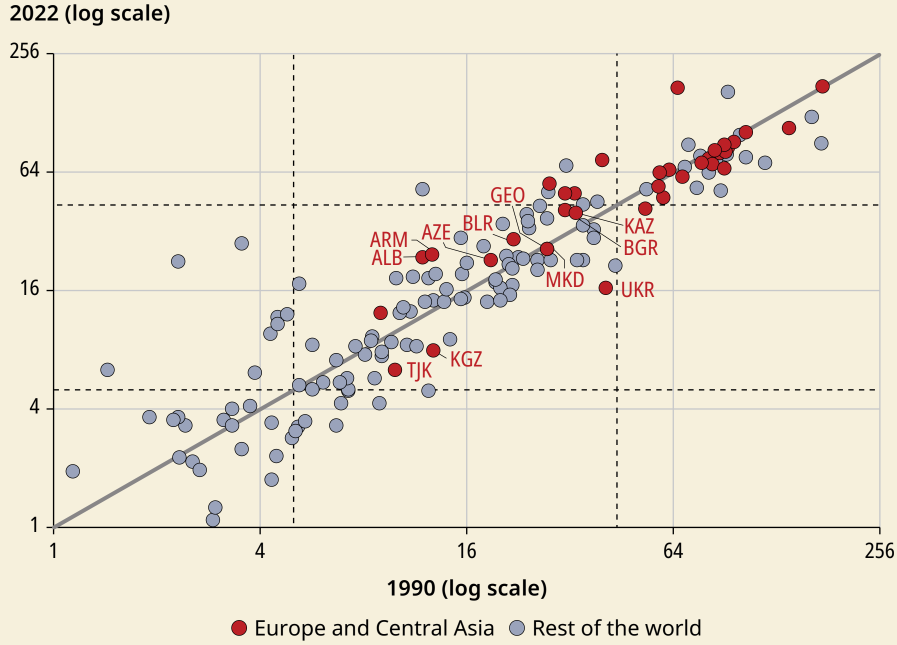
For ECA middle-income countries (MICs) to converge with the high-income country (HIC) threshold, they must reach a gross national income per capita of $14,005 (2024 data). But development does not stop once a country is reclassified from middle-income to high-income status based solely on the threshold. While the HIC threshold has increased incrementally at the pace of the gross domestic product deflators in Special Drawing Rights, it is essentially a static threshold. However, economic convergence is defined in the literature in dynamic terms, usually with respect to a country's per capita income as a share of the income in advanced economies, such as the European Union or the United States.

By this metric, progress among the ECA MICs has been limited. Between 1990 and 2021, most ECA countries remained at a similar per capita income relative to the United States (refer to figure B1.2.1).

Continued

BOX 1.2 Income Convergence with Advanced Economies *(Continued)*

FIGURE B1.2.1 Few ECA MICs have achieved relative convergence with the US



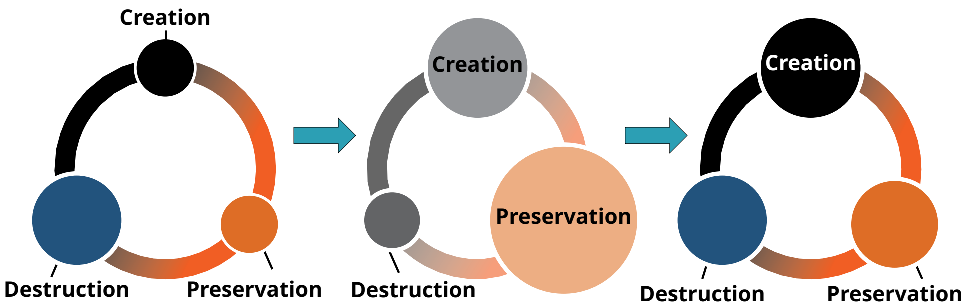
Source: WDI (World Development Indicators) (dashboard), World Bank, Washington, DC, https://datatopics.worldbank.org/world-development-indicators/.

Note: Dashed lines indicate the 5 percent and 44 percent thresholds relative to US per capita GDP: low-income countries < 5 percent of US per capita GDP; MICs = 5 percent to 44 percent; HICs > 44 percent.

Lessons from Europe: Assessing Convergence Through a Schumpeterian Lens

A key feature of *World Development Report 2024* on the middle-income trap is the adoption of a Schumpeterian lens on development and an emphasis on the extent to which institutions encourage (or discourage) creative destruction (World Bank 2024). Modern Schumpeterian growth theory has generated useful insights on the role of creative destruction in driving economic growth (Aghion, Akcigit, and Howitt 2013). A principal stylized fact of this theory is that technological progress must be maintained through innovation. But innovation does not take place in a vacuum. Individuals and firms incur costs and take risks to innovate.

FIGURE 1.10 MICs have to balance creation, preservation, and destruction



Source: Adapted from World Bank 2024.

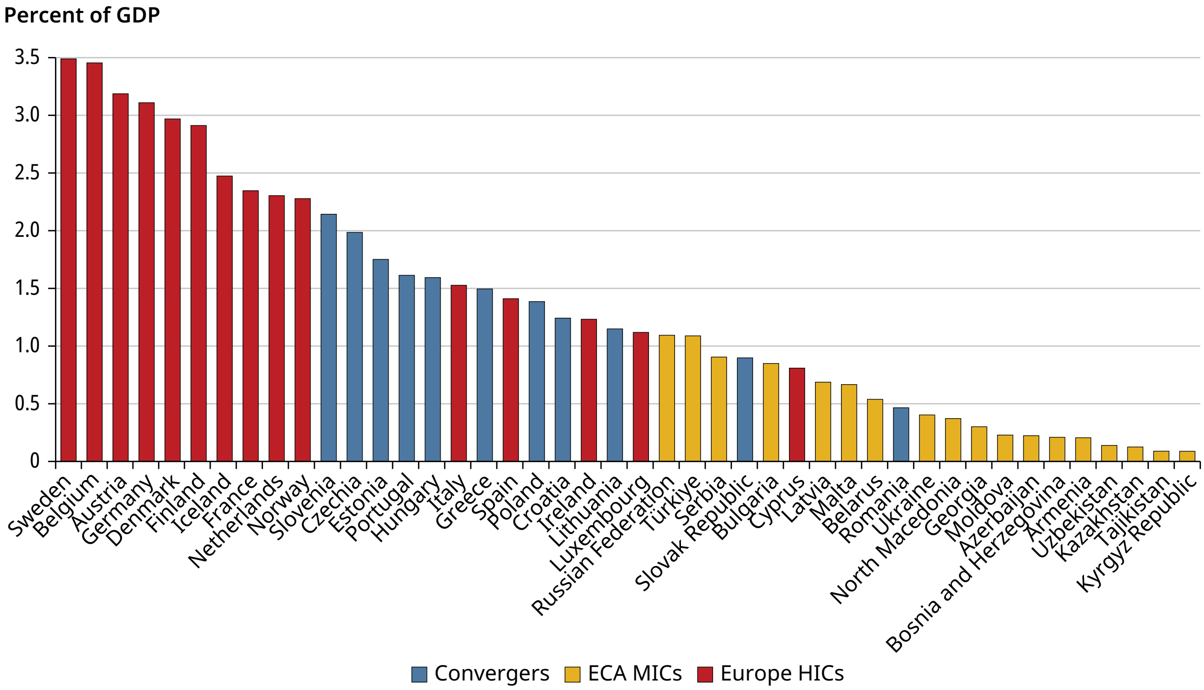
To understand fully the underlying drivers of economic development, it is therefore necessary to connect the macroeconomic structure of growth with microeconomic determinants, such as the incentives, policies, and organizations that interact with the growth process, including how winners, losers, and rents associated with innovation are allocated and awarded (Akcigit and Van Reenen 2023).

The Schumpeterian process of creative destruction can be viewed through three overlapping dimensions, as follows (refer to figure 1.10):

- *Creation*. The key issue here is the extent to which governments facilitate or blunt the natural force of creation involved in the entry of new businesses, innovations, and innovative ideas at home and from abroad.
- *Preservation*. The issue is the extent to which governments allow the preservation of existing players to function as a blocking force either by protecting incumbents or by allowing incumbents to impede market competition.
- *Destruction*. This is the necessary process that allows scarce resources to be reallocated to the most efficient uses. It often takes place the most frequently during economic crises. Yet, for myriad reasons, governments often limit the extent to which they allow the process of destruction to actually occur.

Empirical work on the economics of creative destruction has highlighted the economy-wide risks associated with a lack of institutions that support the Schumpeterian process of creative destruction. The risks include increased market concentration, higher markups and profit margins, lower labor shares in output, a large productivity gap between industry leaders and other competitors, declining firm entry rates, the weak survival of young firms, low innovation and technology adoption, and weakening job reallocation and churning (Akcigit and Ates 2021). This risk critique seems particularly relevant for ECA MICs that appear to be stagnant in economic performance or exhibit slowing convergence. Hence, the fear arises of a middle-income trap in the ECA region amid a struggle to make the leap effectively to an innovation-based growth model (Akcigit and Van Reenen 2023).

FIGURE 1.11 Europe HICs spend much more on R&D



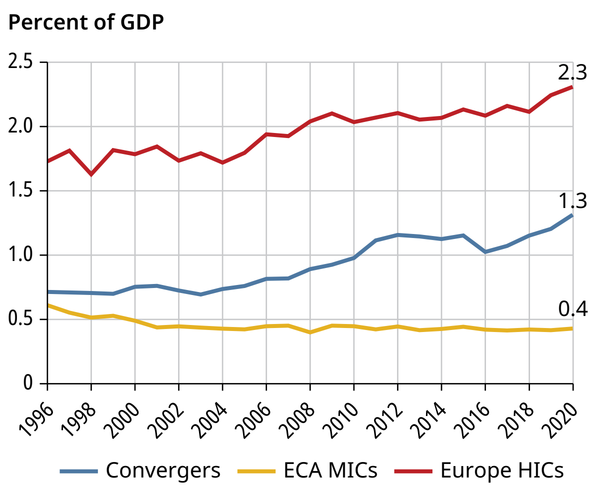
Source: GERD (Gross Domestic Expenditure on Research and Development), Institute for Statistics, United Nations Educational, Scientific and Cultural Organization, Montreal, https://data.uis.unesco.org/index.aspx?queryid=74.

Note: Country groups do not overlap.

Comparative analysis of the 20 ECA MICs with the 13 ECA Convergers and the 26 Europe HICs shows differences in the extent to which Schumpeterian forces can occur. For example, at the macrolevel, gross spending on research and development is significantly higher among the latter than among the MICs (refer to figures 1.11 and 1.12).

Other indicators associated with the creation phase of Schumpeterian growth across the three types of economies in the region show a more mixed pattern. The differences between Europe HICs, MICs, and Convergers are relatively small on indicators, such as the adoption of modern management practices and the use of international quality certifications (refer to figure 1.13). For the number of patents granted per unit of population, the gap between Europe HICs and Convergers and MICs is wide, though beginning to narrow (refer to figure 1.14).

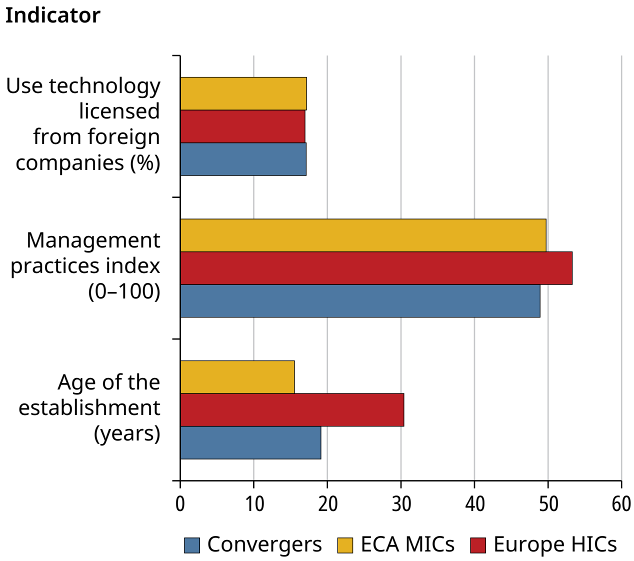
FIGURE 1.12 R&D spending: flat among ECA MICs, but rising steadily among Europe HICs and Convergers



Source: GERD (Gross Domestic Expenditure on Research and Development), Institute for Statistics, United Nations Educational, Scientific and Cultural Organization, Montreal, https://data.uis.unesco.org/index.aspx?queryid=74.

Note: Country groups do not overlap.

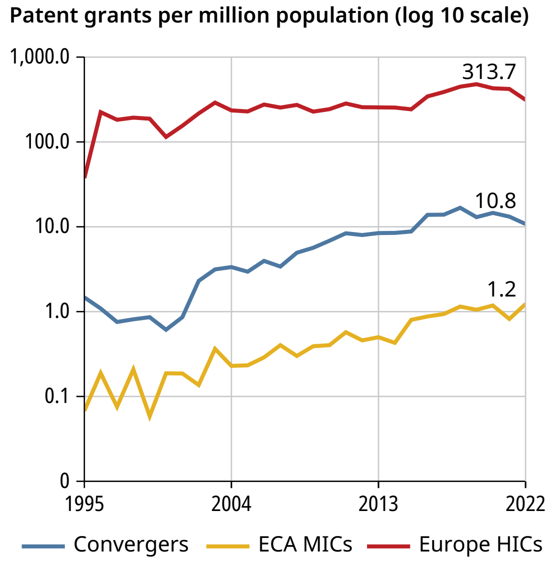
FIGURE 1.13 Differences in technology licensing and management practices are relatively small



Source: WBES (World Bank Enterprise Surveys) (dashboard), World Bank, Washington, DC, https://www.enterprisesurveys.org/en/enterprisesurveys.

Note: Country groups do not overlap. Latest survey results for each country.

FIGURE 1.14 A sizable gap in patent applications remains between Europe HICs versus Convergers and ECA MICs



Source: IP Statistics (Intellectual Property Statistics) (dashboard), WIPO IP Statistics Data Center, World Intellectual Property Organization, Geneva, https://www.wipo.int/en/web/ip-statistics.

Note: Country groups do not overlap.

The enduring presence of state-owned enterprises (SOEs) dulls the impact of market competition on creative destruction in the ECA region. If a broader definition of businesses of the state is used (that is, counting businesses with at least a 10 percent government ownership share rather than the usual 50 percent), the presence of the state is revealed to be significantly larger than the results based on a traditional definition of a state-owned enterprise (refer to figure 1.15). If the SOEs are more prominent, the economy-wide impacts are broader in terms of reduced business entry and exit, investment, and job creation and destruction. There is a clear correlation in ECA countries in which product market regulations are more conducive to competition and higher levels of economic complexity in the export basket (refer to figure 1.16).

Measures of the extent to which product market regulations impede market competition show a clear gap favoring more competitive markets in Europe HICs and Convergers relative to markets in ECA MICs. Data on product market regulation suggest that the barriers to business entry are greater among ECA MICs (refer to figure 1.17). Patterns are similar at the sectoral level, although the extent to which regulations impede competition are greater in network sectors (such as energy and telecommunications) than in service sectors (such as professional services and retail trade) (refer to figure 1.18).

FIGURE 1.15 The state plays a significant role in business in ECA MICs

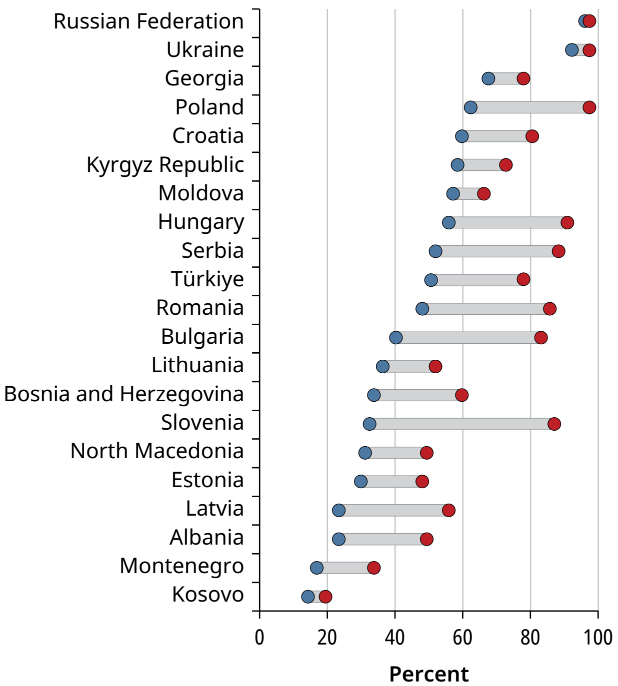
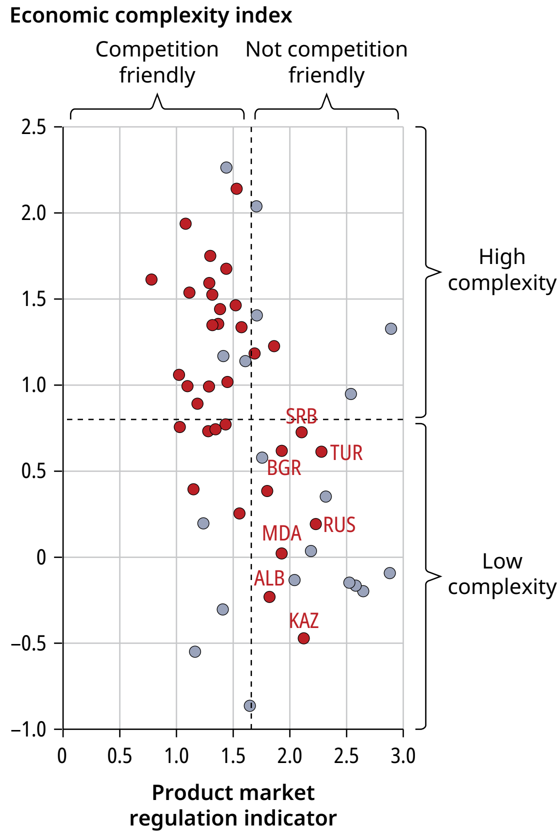


FIGURE 1.16 Fewer regulatory barriers are correlated with greater economic complexity



Traditional SOE (majority, direct, central) BOS Europe and Central Asia Rest of the world

Sources: Atlas of Economic Complexity (dashboard), Growth Lab, Center for International Development, Harvard University, Cambridge, MA, https://atlas.hks.harvard.edu/; Global BOS database (Global Businesses of the State database) (internal database), World Bank, Washington, DC; PMR Database (OECD-WBG Product Market Regulation Database) (dashboard), World Bank, Washington, DC, https://prosperitydata360.worldbank.org/en/dataset/OECDWBG+PMR.

Note: ECA countries are in red. The threshold for a country classifiction as competition friendly is based on the average of the indicators of product market regulation across the relevant countries. Countries scoring less than the average are classified as low regulation. Countries socring above the average are classified as high regulation. The same approach is applied in the case of economic complexity. For more on the Global BOS database, refer to Dall'Olio et al. (2022); Licetti, Sánchez Navarro, and Patiño Peña (2023). BOS = businesses of the state; SOE = state-owned enterprises.

Broader indicators measuring the competitiveness of the investment climate and the environment for innovation show a sustained gap between ECA MICs and Europe HICs, while Convergers generally fall between the two. The business environment gap is widest in institutional quality, business dynamism, and technology adoption (refer to figure 1.19). The pattern is similar for measures that drive social mobility, such as relative mobility in education across generations (refer to figure 1.20). Measures associated with greater innovation capacity, such as business and market sophistication, creative outputs, and human capital for research,

FIGURE 1.17 ECA MICs exercise greater restrictions on product and market competition

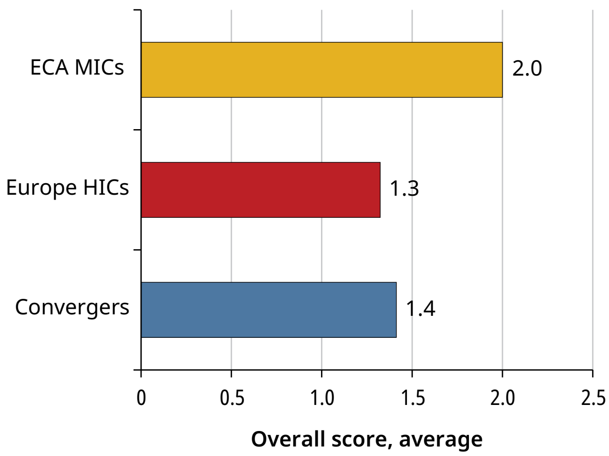
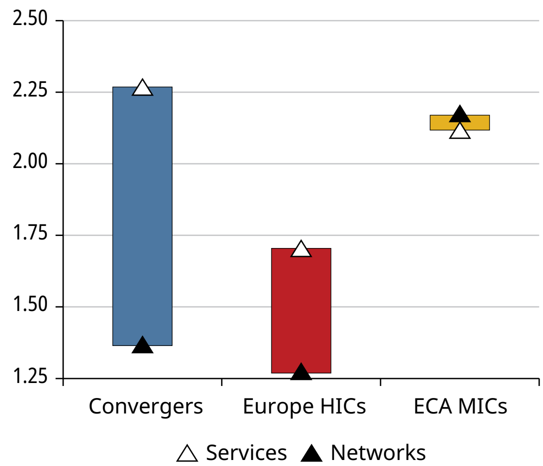


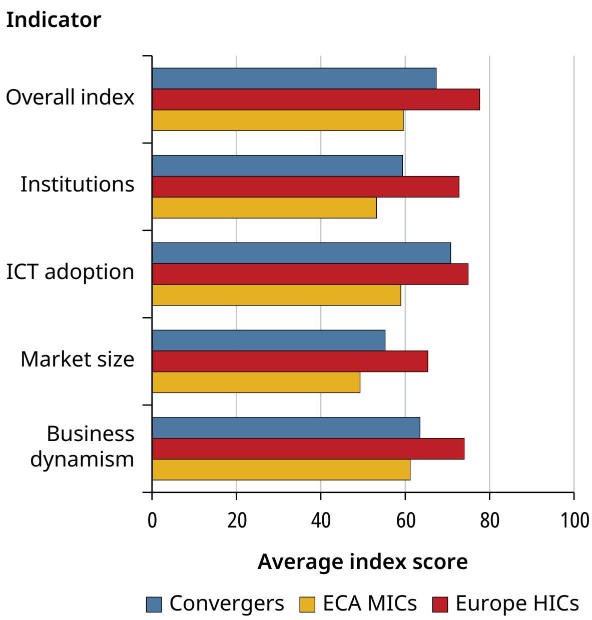
FIGURE 1.18 Barriers in ECA MICs are higher in network sectors than in service sectors



Source: PMR Database (OECD-WBG Product Market Regulation Database) (dashboard), World Bank, Washington, DC, https://prosperitydata360.worldbank.org/en/dataset/OECDWBG+PMR.

Note: Product market regulation indicators are numerical scores ranging from 0 to 6, where 0 means that a country is close to regulatory international best practice and 6 that it is quite far. Country groups do not overlap. The latest survey results are shown for each country group. Networks: transport, energy, e-communications. Services: professional services, retail.

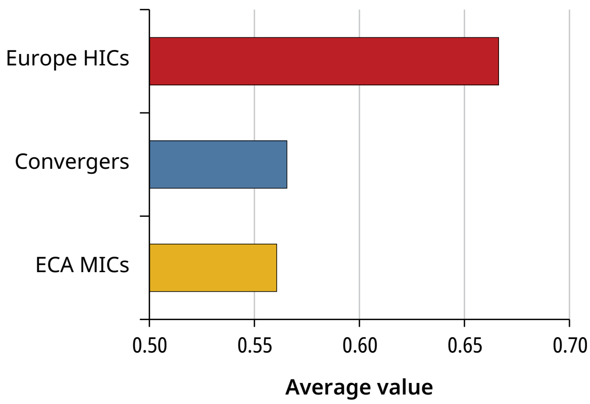
FIGURE 1.19 There is a persistent gap in business environment indicators between Europe HICs and ECA MICs



Source: Schwab 2019.

Note: The index ranges from 0 (low) to 100 (high). ICT = information and communication technology.

FIGURE 1.20 Europe HICs clearly lead Convergers and ECA MICs on measures of social mobility



Source: GDIM (Global Database on Intergenerational Mobility) (dashboard), Data Catalog, World Bank, Washington, DC, https://datacatalog.worldbank.org/search/dataset/0050771/global-database-on-intergenerational-mobility.

Note: Country groups do not overlap. Relative mobility is measured as 1.0, minus the correlation coefficient between the years of schooling of children and of their mothers. A higher value indicates greater mobility.

show a similar pattern (refer to figure 1.21). There is a clear cross-country correlation between such composite measures of the forces underpinning innovation and the levels of per capita income (refer to figure 1.22).

Establishing institutions to support creative destruction and convergence to high income is more daunting in today's context of changing climate. Energy intensity has been declining over the last 20 years (refer to figure 1.23). However, there is still a large gap between ECA MICs and Europe HICs and significant dispersion across the MIC grouping. For the most part, countries with higher incomes tend to exhibit lower energy intensity per unit of output, though there are several outliers (refer to figure 1.24).

An analysis of ECA countries based on income per capita and emissions reveals that MICs experience the highest greenhouse gas emissions, followed closely by Europe HICs, while Convergers emit much less (refer to table 1.3). Though Europe HICs have high emissions overall, most countries are low emitters (eight countries), collectively emitting less than the MICs in the same emissions bracket (two countries). Meanwhile, most high emitters are MICs (seven countries), suggesting there is potential for a reduction in emissions as these countries progress to high income.

FIGURE 1.21 Innovation indicators show a consistent gap between ECA MICs and Europe HICs

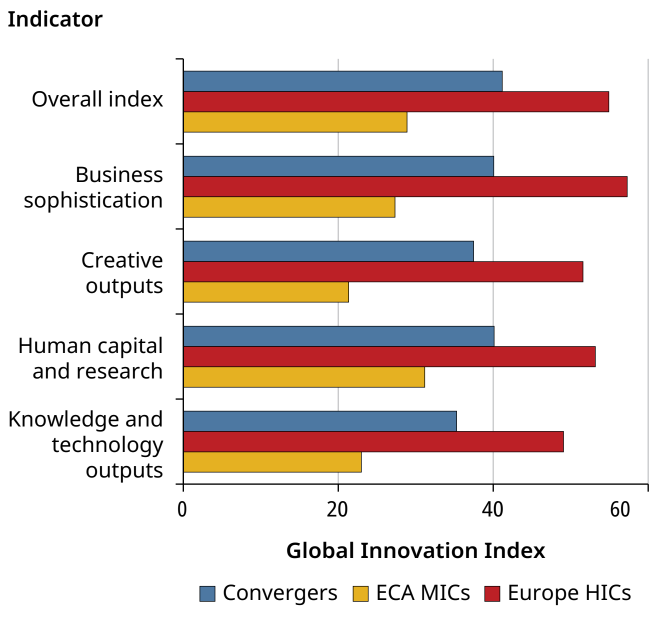
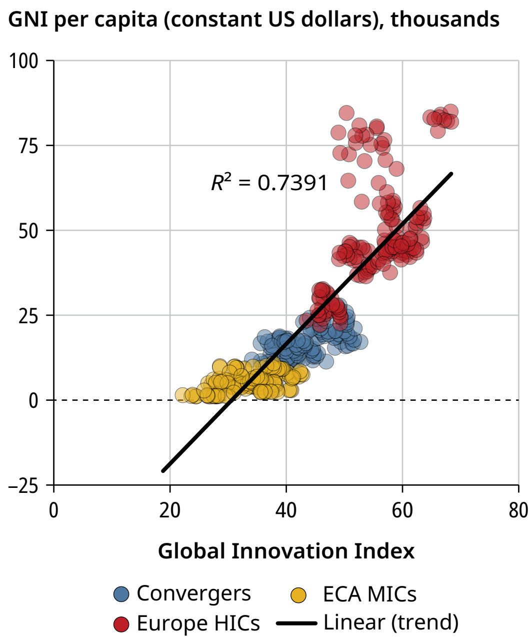


FIGURE 1.22 There is a strong correlation between innovation and GNI per capita



Sources: WDI (World Development Indicators) (dashboard), World Bank, Washington, DC, https://datatopics.worldbank.org/world-development-indicators/; World Intellectual Property Organization.

Note: Country groups do not overlap. The index ranges from 0 (low) to 100 (high). GNI = gross national income.

FIGURE 1.23 Energy intensity among ECA MICs has fallen in recent years

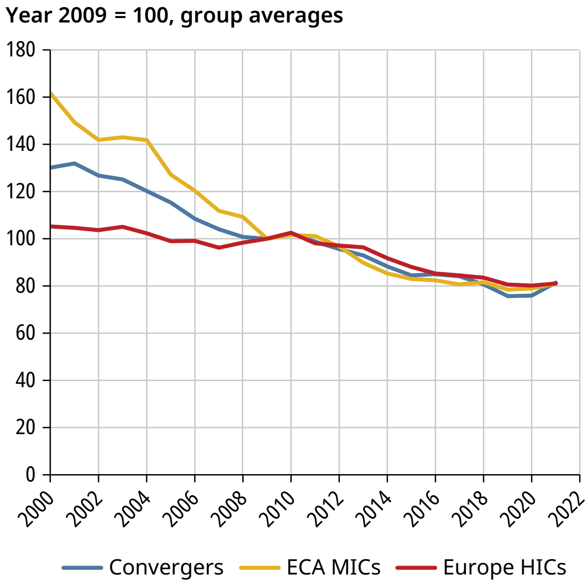
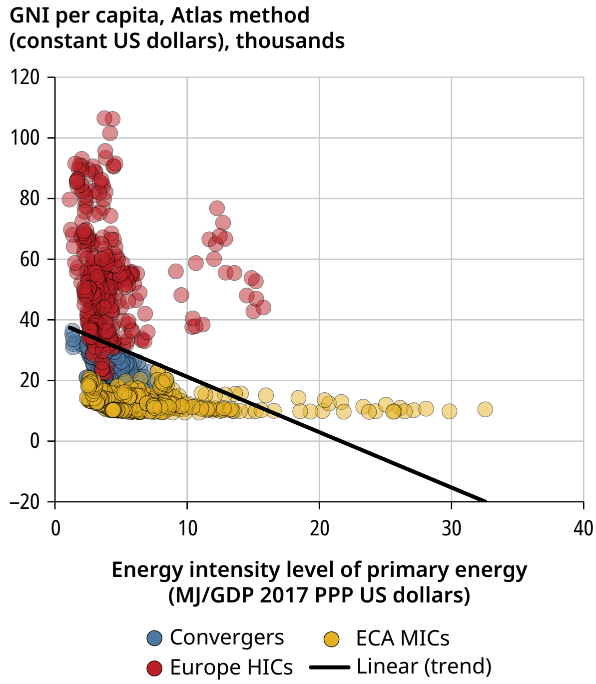


FIGURE 1.24 Europe HICs exhibit lower energy intensity than ECA MICs



Source: WDI (World Development Indicators) (dashboard), World Bank, Washington, DC, https://datatopics.worldbank.org/world-development-indicators/.

Note: Country groups do not overlap. GNI = gross national income; MJ = megajoules (10^6 joules); PPP = purchasing power parity.

TABLE 1.3 Classifying emission intensity, ECA countries, 2021

Emissions group	ECA MICs[a]	Convergers	Europe HICs	Total emissions
Low emission countries[b]	3.04 (2 countries)	0.40 (1 country)	0.53 (8 countries)	3.97
Medium emission countries[c]	0.09 (10 countries)	0.002 (10 countries)	0.04 (7 countries)	0.13
High emission countries[d]	1.24 (7 countries)	0.49 (2 countries)	2.40 (4 countries)	4.13
Total emissions per capita[e]	*4.37*	*0.89*	*2.97*	*8.23*

Sources: Calculations based on data from CO_2 and Greenhouse Gas Emissions (dashboard), Our World in Data, Global Change Data Lab and Oxford Martin Program on Global Development, University of Oxford, Oxford, UK, https://ourworldindata.org/co2-and-greenhouse-gas-emissions#explore-data-on-co2-and-greenhouse-gas-emissions; GCP (Global Carbon Project), Future Earth, Montreal, https://www.globalcarbonproject.org/.

Note: There is no overlap within the country or emissions groups. Colors refer to the total amount emitted by each emitter group, ranging from low (light blue) to high (dark blue).

a. The ECA MIC group excludes countries that have already converged to high-income status.
b. Countries emitting less than 5 tons.
c. Countries emitting between 5 tons and 10 tons.
d. Countries emitting more than 10 tons.
e. Average emissions, multiplied by the number of countries in the group.

Conclusions and Introduction to the Rest of the Report

Cross-country evidence presented in this chapter suggests that ECA MICs will need to sustain both foundational and transformative reforms to enable them to transition to high-income status. Foundational reforms that boost investment should evolve into efforts to support the impact and diffusion of knowledge (progressing from a 1*i* strategy to a 2*i* strategy) and then blossom into a strategy that helps firms advance to frontier innovation (a 3*i* strategy). Reform efforts to enable ECA MICs to escape the middle-income trap and thrive beyond the HIC threshold would have to support investment, infusion, and innovation. According to this classification:

- The countries of Central Asia are MICs generally at the initial stages of transition to high income. They should focus primarily on a 1*i* strategy and accelerate private investment in physical and human capital. Their efforts would also have to focus on reducing the role of the state in the economy and helping to create or complete markets.
- As MICs approaching the HIC threshold, EU candidate countries, including countries in the South Caucasus and the Western Balkans and Moldova, Türkiye, and Ukraine should focus on a 2*i* strategy that combines policies to boost investment with policies to facilitate greater openness to foreign trade and investment. This would enable the infusion of foreign capital, modern technologies, practices, expertise, and ideas. Stepped-up efforts are also needed to improve secondary and tertiary education quality to nurture talent and reduce the misallocation of talent.
- As HICs looking to sustain growth beyond the transition, EU members need to focus on a 3*i* strategy to manage the incumbency advantage and enable frontier innovation, support high growth companies and new entrants, and ensure dramatically higher quality in university and postuniversity education.

Notes

1. Economic growth is ultimately driven by the accumulation of physical and human capital and by improvements in productivity. This accumulation and improvements are recognized as fundamental drivers of growth.
2. Among the 13 success stories, Malta was the only economy in the ECA region highlighted by the Commission on Growth and Development in their 2008 report (refer to Commission on Growth and Development 2008).
3. Although Bulgaria and the Russian Federation have surpassed the high-income threshold, they are excluded from the Convergers in this analysis. Their recent transition to high-income status suggests a positive trajectory toward convergence, similar to other countries in the ECA region, but it may be too early to be more confident about the future of this trajectory.

4. GNI per capita is measured using the Atlas method, current US dollars. The growth rates in these two countries have been volatile, resulting in starkly different averages depending on the period of reference. While steady growth was observed in 2007–12, the trend has narrowed sharply in more recent years. As a result, the differences between the 15-year and 10-year compound averages are large in these countries. See World Bank Atlas Method: Detailed Methodology (Data Help Desk), Data, World Bank, Washington, DC, https://datahelpdesk.worldbank.org/knowledgebase/articles/378832-what-is-the-world-bank-atlas-method.

References

Acemoglu, Daron. 2009. *Introduction to Modern Economic Growth*. Princeton, NJ: Princeton University Press.

Acemoglu, Daron, Simon Johnson, and James A. Robinson. 2001. "The Colonial Origins of Comparative Development: An Empirical Investigation." *American Economic Review* 91 (5): 1369–1401.

Acemoglu, Daron, Simon Johnson, and James A. Robinson. 2004. "Institutions as the Fundamental Cause of Long-Run Growth." NBER Working Paper 10481 (May), National Bureau of Economic Research, Cambridge, MA.

Aghion, Philippe, Ufuk Akcigit, and Peter Howitt. 2013. "What Do We Learn from Schumpeterian Growth Theory?" NBER Working Paper 18824 (February), National Bureau of Economic Research, Cambridge, MA.

Aghion, Philippe, and Peter Howitt. 1992. "A Model of Growth Through Creative Destruction." *Econometrica* 60 (2): 323–51.

Akcigit, Ufuk, and Sina T. Ates. 2021 "Ten Facts on Declining Business Dynamism and Lessons from Endogenous Growth Theory." *American Economic Journal: Macroeconomics* 13 (1): 257–98.

Akcigit, Ufuk, and John Michael Van Reenen. 2023. *The Economics of Creative Destruction: New Research on Themes from Aghion and Howitt*. Cambridge, MA: Harvard University Press.

Barro, Robert J., and Xavier Sala-i-Martin. 2004. *Economic Growth*, 2nd ed. Cambridge, MA: MIT Press.

Commission on Growth and Development. 2008. *The Growth Report: Strategies for Sustained Growth and Inclusive Development*. Washington, DC: World Bank. https://openknowledge.worldbank.org/handle/10986/6507.

Dall'Olio, Andrea Mario, Tanja K. Goodwin, Martha Martínez Licetti, Jan Orlowski, Fausto Andres Patiño Peña, Francis Ralambotsiferana Ratsimbazafy, and Dennis Sanchez-Navarro. 2022. "Using ORBIS to Build a Global Database of Firms with State Participation." Policy Research Working Paper 10261, World Bank, Washington, DC.

Devadas, Sharmila, and Steven Michael Pennings. 2018. "Assessing the Effect of Public Capital on Growth: An Extension of the World Bank Long-Term Growth Model." Policy Research Working Paper 8604, World Bank, Washington, DC.

Gill, Indermit Singh, Ivailo Izvorski, Willem van Eeghen, and Donato De Rosa. 2014. *Diversified Development: Making the Most of Natural Resources in Eurasia*. With Mariana Iootty De Paiva Dias, Naoko Kojo, Kazi M. Matin, Vilas Pathikonda, and Naotaka Sugawara. Washington, DC: World Bank.

Gill, Indermit Singh, and Homi Kharas. 2007. *An East Asian Renaissance: Ideas for Economic Growth*. With Deepak Bhattasali, Milan Brahmbhatt, Gaurav Datt, Mona Haddad, Edward Mountfield, Radu Tatucu, and Ekaterina Vostroknutova. Washington, DC: World Bank.

Gill, Indermit Singh, and Martin Raiser. 2012. *Golden Growth: Restoring the Lustre of the European Economic Model*. With Andrea Mario Dall'Olio, Truman Packard, Kaspar Richter, Naotaka Sugawara, Reinhilde Veugelers, and Juan Zalduendo. Washington, DC: World Bank.

Grossman, Gene M., and Elhanan Helpman. 1991. "Quality Ladders in the Theory of Growth." *Review of Economic Studies* 58 (1): 43–61.

Hanushek, Eric Alan, and Ludger Woessmann. 2008. "The Role of Cognitive Skills in Economic Development." *Journal of Economic Literature* 46 (3): 607–68.

Licetti, Martha Martínez, Dennis Sánchez Navarro, and Fausto Andres Patiño Peña. 2023. "Unveiling the True Extent of the Businesses of the State (BOS) in the Economy." *Let's Talk Development* (blog), November 28, 2023. https://blogs.worldbank.org/en/developmenttalk/unveiling-true-extent-businesses-state-bos-economy.

Loayza, Norman V., and Steven Michael Pennings, eds. 2022. *The Long Term Growth Model: Fundamentals, Extensions, and Applications*. Washington, DC: World Bank.

Piatkowski, Marcin. 2018. *Europe's Growth Champion: Insights from the Economic Rise of Poland*. New York: Oxford University Press.

Rodrik, Dani, Arvind Subramanian, and Francesco Treddi. 2004. "Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development." *Journal of Economic Growth* 9 (2): 131–65.

Romer, Paul Michael. 1987. "Growth Based on Increasing Returns Due to Specialization." *American Economic Review* 77 (2): 56–62.

Romer, Paul Michael. 1990. "Endogenous Technological Change." *Journal of Political Economy* 98 (5, Part 2): S71–S102.

Schumpeter, Joseph Alois. 1942. *Capitalism, Socialism, and Democracy*. New York: Harper and Brothers.

Schwab, Klaus, ed. 2019. *Insight Report: The Global Competitiveness Report 2019*. Geneva: World Economic Forum. http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf.

Solow, Robert M. 1956. "A Contribution to the Theory of Economic Growth." *Quarterly Journal of Economics* 70 (1): 65–94.

Swan, Trevor W. 1956. "Economic Growth and Capital Accumulation." *Economic Record* 32 (2): 334–61.

World Bank. 2017. *Lessons from Poland, Insights for Poland: A Sustainable and Inclusive Transition to High-Income Status*. Washington, DC: World Bank.

World Bank. 2024. *World Development Report 2024: The Middle-Income Trap*. Washington, DC: World Bank.

SPOTLIGHT 1.1

The Lessons of High-Income Transitions in East Asia and in Latin America

East Asia and the Pacific has been the world's most rapidly growing region over the last five decades. Economic growth has averaged 4.8 percent annually since 1980, compared with 1.9 percent among ECA countries over the same period. Such impressive growth has occurred despite (or perhaps because of) the limited natural resources of East Asia and the Pacific.

The region has experienced several waves of development. The first four Asian tigers—Hong Kong SAR, China; the Republic of Korea; Singapore; and Taiwan, China—passed the HIC threshold during the 1980s, and Korea a second time in the 1990s.[a] Following quickly on that success was the next set of tiger economies, Indonesia, Malaysia, the Philippines, and Thailand, which enjoyed high rates of growth through the 1990s. The southeast Asian economies of Cambodia, the Lao People's Democratic Republic, and Viet Nam experienced similar accelerations in the 2000s. Once home to half the world's population living in poverty, these countries today have barely 1 percent of the population in the region living below the international poverty line.

However, the region's growth pathway has not been free of challenges. The Asian financial crisis of 1997–98 dented confidence. Critics suggested that East Asian growth was driven more by perspiration than innovation and that countries were caught up in crony capitalism. While growth has remained strong, trend rates since the 1997–98 crisis have weakened, as productivity growth faltered. Despite impressive progress, no country in East Asia and the Pacific has passed the high-income country (HIC) threshold since Korea's transition more than 20 years ago, although China ($12,850) and Malaysia ($11,780) are on the cusp of passing the HIC per capita threshold.

Broadbased evidence points to the following key success factors in East Asia's growth trajectory:

- The maintenance of macroeconomic stability, particularly low inflation, and steady (often undervalued) exchange rates, together with high rates of savings and investment.
- Foundational investments in human capital, coupled with favorable demographics, which have allowed for rapid structural transformation from agriculture into manufacturing.
- Openness to foreign trade and investment, especially in manufacturing, at a time when globalization was at an apex.

Gaps in addressing broader standards of governance have begun to weigh on growth, however. The evidence is mixed on the role of the state in this outcome. There are examples of industrial policy interventions that support growth and others that sap growth. Similarly, not all countries have been successful in developing advanced human capital or in shifting to the next stage of innovation-led development. East Asia's demographic changes are starting to shift from supporting growth to weighing down growth. The region must face the major decarbonization challenge in the years ahead.

Latin America and the Caribbean has been lagging other regions for decades. Its economic growth has averaged only 2.4 percent annually since 1980. As a result, the region is unable to converge toward high income. Average per capita gross domestic product (GDP) has been stuck at around one-third of the US level for more than a century. In the last two decades, most Latin American countries have been successful at macroeconomic stabilization and have made progress with structural reforms in factor and product markets. Yet, these efforts remain insufficient to propel the region to high-income status.

Investment in physical and human capital substantially lags high-income countries, but also other, more successful regions. Gross fixed capital formation has averaged 20 percent of GDP, compared with 22 percent in the ECA and 32 percent in East Asia and the Pacific. The level of human capital, measured by the human capital index, also lags, reaching 0.56 in Latin America and the Caribbean compared with 0.70 in ECA and 0.61 in East Asia and the Pacific.[b] Economic efficiency (total factor productivity [TFP]) remains stubbornly low because of limited innovation, widespread barriers to competition, and a turbulent social context that renders reform consensus difficult.

On the upside, firms in the region are relatively more innovative. According to the World Bank Enterprise Surveys, an average of 53.0 percent of firms in the region have introduced new or improved products, compared with 36.6 percent in the ECA and 27.2 percent in East Asia and the Pacific.[c] However, the quality of technology is part of the reason Latin America has largely failed to integrate into global value chains. The exception is Mexico, with its clusters in automobiles, car parts, and machinery. Countries in Latin America and the Caribbean display widespread barriers to competition, as measured, for instance, by indicators on product market regulation and a regulatory environment that stifles creative destruction and reduces productivity.

Only two countries in Latin America and the Caribbean have been successful in the transition to high income. Chile, with an income per capita of $14,358, crossed the high-income threshold in 2012. Its success rests on sound institutions that foster social consensus, macroeconomic stability, and the ability to take advantage of its natural resource wealth. (Chile is the world's largest producer of copper.) Uruguay, with an income per capita of $18,215, also became a high-income country in 2012. It stands out in Latin America because its society is viewed as egalitarian. The share of the middle class in the population, at more than 60 percent, is the largest in the Americas. Sound macroeconomic management and favorable external conditions have supported an economic expansion that has lasted two decades. However, to maintain their high-income status, both Chile and Uruguay will need to implement second-generation reforms supporting innovation.

a. Korea initially transitioned to HIC status in 1995. However, the impact of the 1997–98 Asian financial crisis pushed the country back into MIC status. Korea passed the HIC threshold for the second time in 2001.

b. HCI (Human Capital Index) (dashboard), World Bank, Washington, DC, https://datacatalog.worldbank.org/search/dataset/0038030.

c. WBES (World Bank Enterprise Surveys) (dashboard), World Bank, Washington, DC, https://www.enterprisesurveys.org/en/enterprisesurveys.

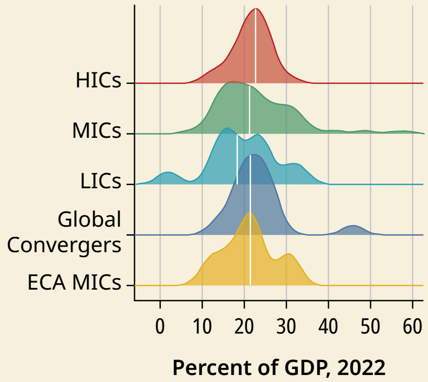
SPOTLIGHT 1.2

Assessing ECA MICs Relative to Global Convergers

Throughout this chapter, the performance of ECA MICs is benchmarked against the 13 ECA Convergers, countries that have successfully transitioned from MIC to HIC status in the past 30 years. ECA MICs are benchmarked here against the larger group of 31 Global Convergers (excluding Bulgaria, Palau, and the Russian Federation).

There is no significant difference in investment rates between ECA MICs and Global Convergers (refer to figure S1.2.1). However, there is a noticeable gap in labor utilization, where ECA MICs appear to lag (refer to figure S1.2.2).

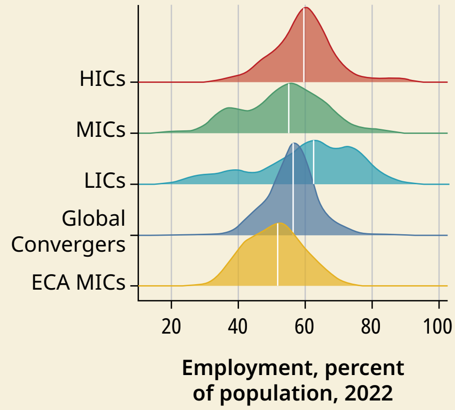
FIGURE S1.2.1 In investment, ECA MICs and Global Convergers perform at a similar level



Source: 2023 data from WDI (World Development Indicators) (dashboard), World Bank, Washington, DC, https://datatopics.worldbank.org/world-development-indicators/.

Note: Country groups do not overlap. Shaded areas are density plots. The lines represent medians.

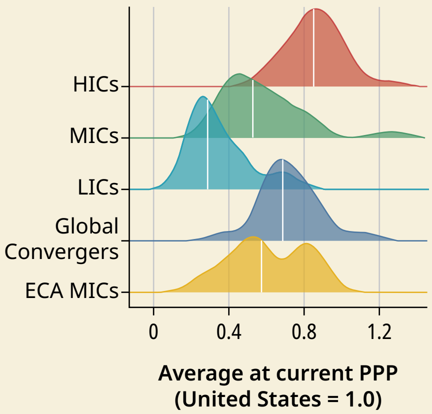
FIGURE S1.2.2 ECA MICs lag Global Convergers, notably in labor utilization



Source: International Labor Organization, ILOSTAT, 2023.

Note: Country groups do not overlap. Shaded areas are density plots. The lines represent medians.

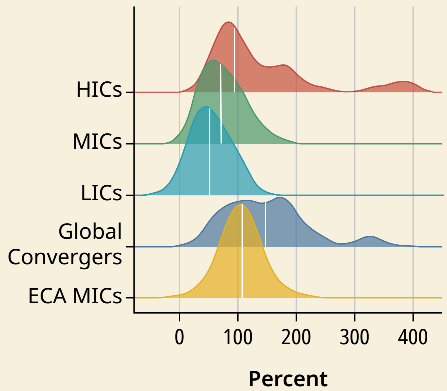
FIGURE S1.2.3 ECA MICs lag Global Convergers in productivity



Source: PWT (Penn World Table) (database version 10.1), Groningen Growth and Development Centre, Faculty of Economics and Business, University of Groningen, Groningen, the Netherlands, https://www.rug.nl/ggdc/productivity/pwt/.

Note: Country groups do not overlap. Shaded areas are density plots. The lines represent medians. PPP = purchasing power parity.

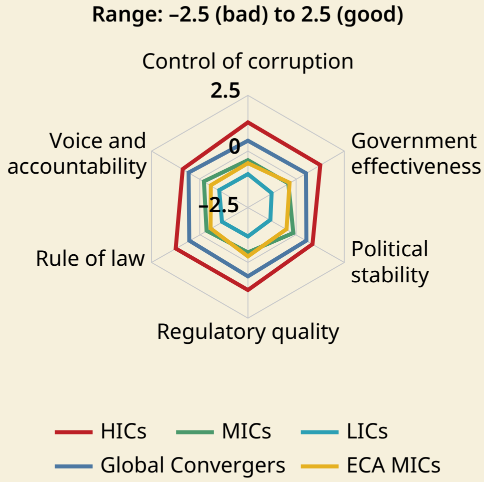
FIGURE S1.2.4 ECA MICs lag Global Convergers in trade openness



Source: 2023 data from WDI (World Development Indicators) (dashboard), World Bank, Washington, DC, https://datatopics.worldbank.org/world-development-indicators/.

Note: Country groups do not overlap. Shaded areas are density plots. The lines represent medians.

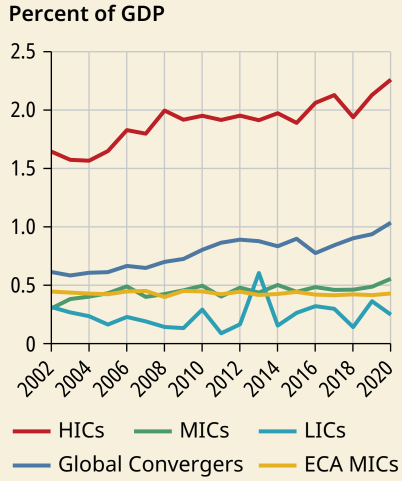
FIGURE S1.2.5 Institutional performance indicators are better in Global Convergers than in ECA MICs



Source: 2023 data from WDI (World Development Indicators) (dashboard), World Bank, Washington, DC, https://datatopics.worldbank.org/world-development-indicators/.

Note: Country groups do not overlap.

FIGURE S1.2.6 The gap in R&D spending between Global Convergers and ECA MICs is widening



Source: GERD (Gross Domestic Expenditure on Research and Development), Institute for Statistics, United Nations Educational, Scientific and Cultural Organization, Montreal, https://data.uis.unesco.org/index.aspx?queryid=74.

Note: Country groups do not overlap.

Similarly, performance gaps are evident in measures of total factor productivity and openness to trade, where ECA MICs lag Global Convergers (refer to figures S1.2.3 and S1.2.4).

The most significant performance gaps between ECA MICs and Global Convergers occurs in institutional performance and research and development expenditures, suggesting that, in these two areas, policy reforms will be needed to accelerate growth and convergence in ECA MICs (refer to figures S1.2.5 and S1.2.6).