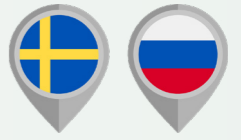




THE CONVERGENCE MIRACLE IN EASTERN EUROPE: WILL IT CONTINUE?



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Professor Erik Berglof is the inaugural Director of the Institute of Global Affairs (IGA) and its newly launched Global Policy Lab at the London School of Economics and Political Science (LSE). He has published widely in top journals on economic and political transition, corporate governance, financial development and EU reform. He is a member of the Secretariat for the High-Level Wise Persons Group on European Development Finance Architecture. Prior to joining LSE, Professor Berglof was the Chief Economist and Special Adviser to the President of the European Bank for Reconstruction and Development (EBRD) and Director of the Stockholm Institute of Transition Economics (SITE) and Professor at the Stockholm School of Economics. He is also a Non-Resident Fellow at the Brookings Institution, a Research Fellow of the Centre for Economic Policy Research (CEPR) and Senior Fellow of the European Council for Foreign Affairs (ECFR). In 2013, he was awarded the Leontief Medal (2013) for his contributions to economic reform.



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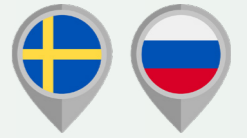
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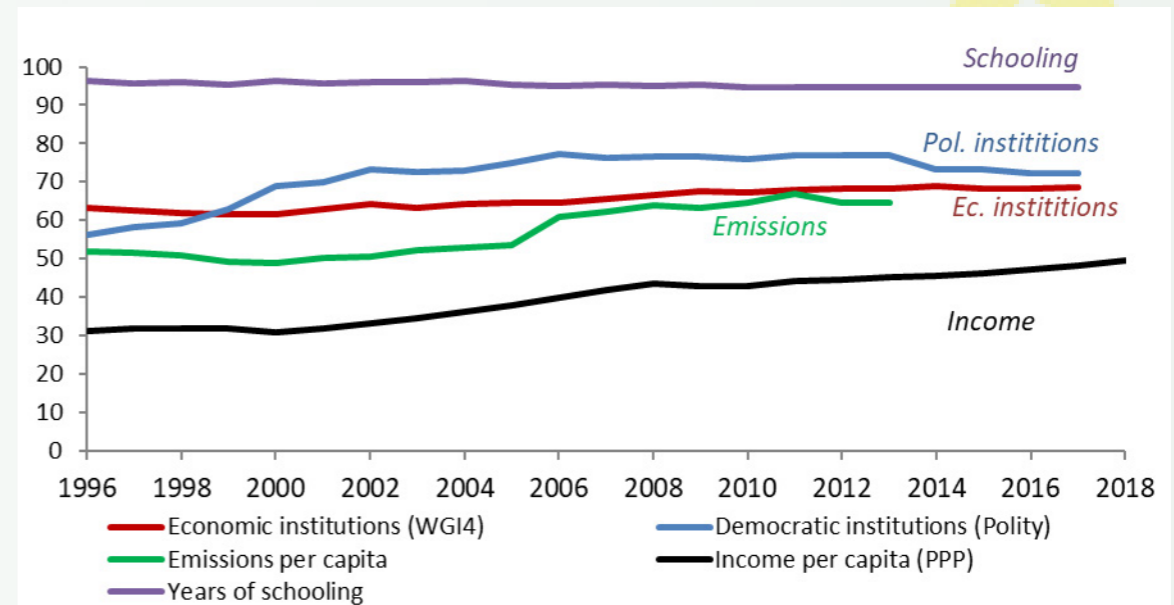
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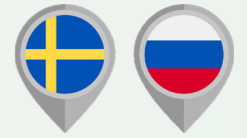
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Economies of Central and South-Eastern Europe have achieved a remarkable degree of convergence since the mid-1990s. Their (unweighted) average income per capita increased from 15 per cent of the G-7 economies average in 1996 to 32 per cent in 2018 (at market exchange rates). In terms of purchasing power, income has converged even further, with the average income reaching 49 per cent of G-7 equivalent in 2018 (see Chart 1). The speed of income convergence was particularly high in the 2000s. While it has slowed down considerably since the 2008-2009 global financial crisis, the region's incomes continues rising in relative terms.

Chart 1. CESEE indicators in per cent of the G-7 average



Source: International Monetary Fund, Penn World Tables 9.0, World Tables 9.0, World Bank, Polity, World Resources Institute and authors' calculations. Note: Income is calculated at purchasing power parity.



Income convergence has been accompanied by convergence in the quality of economic and political institutions, particularly during the years leading up to the individual economies' accession to the European Union. According to the Worldwide governance indicators of control of corruption, rule of law, government effectiveness and regulatory quality, rescaled to vary from 0-5, the average quality of economic institutions in the EBRD regions increased from 63 per cent of the G-7 average in 1996 (when the series starts), to 69 per cent in 2017 (see Kaufmann et al., 2009, for an overview of these indicators). The quality of political institutions measured by the Polity index increased from 56 per cent of the G-7 average in the mid-1990s to 72 per cent in 2017, but after a remarkable start, the region has also contributed to the global deterioration in the quality of political institutions since 2006.

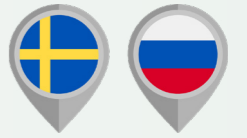
Environmental footprints have also converged. Carbon efficiency of output (GDP per unit of greenhouse gas emissions) in the region increased from 52 per cent of the G-7 average in the mid-1990s to 64 per cent in the mid-2010s, reflecting the shift from polluting industries inherited from the communist times toward services.

Convergence in terms of basic human capital had been completed before the 1990s. The ratio of average years of schooling in

the region to that of the G-7 countries has been stable since 1990s, at 95 per cent, based on Barro and Lee (2013). The region also compares well in terms of quality of education although with apparent weaknesses in information and communication technology-relevant skills.

Will the Convergence Miracle continue?

The law of conditional convergence implies that as economies grow richer, raising living standards becomes increasingly harder (Barro, 1991). Alexander Gerschenkron attributed this 'advantage of backwardness' to laggard countries being able to leapfrog intermediate stages of development. The 'middle-income trap' conjecture – originally formulated by Gill and Kharas (2007) based on the experiences of Asian economies after the 1997 crisis – however, suggests that upper-middle-income economies are especially likely to experience a slowdown in the speed of economic convergence. In recent years, a large number of papers have tried to prove or disprove the existence of such a trap. A consensus is emerging that while growth does slow down as countries reach middle income status, there is little evidence that countries get stuck at particular levels of income – countries that grew faster than other countries at lower levels of income also tend to grow faster at higher levels of income.



Nevertheless, there is no question that economies require fundamental structural transformation encompassing changes in both economic structures and institutions, as they transition from the investment-led growth that led them from low- to middle-income status, to the innovation-led growth that they need to achieve high income levels (see Aghion et al., 2013, and Aghion and Bircan, 2017). This transformation requires a shift in the paradigm of economic development – from efficient application of technologies developed elsewhere (typically, in advanced economies) to innovating and exporting technology.

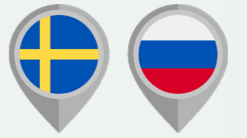
In the early stages, economic development is propelled by application of existing technologies coupled with improvements in the efficiency of production. Advanced economies, by contrast, generally enjoy a comparative advantage in terms of innovation and the creation and management of global value chains. For instance, advanced economies tend to design high-brand apparel using fabrics produced in low-income economies. The same is true for value chains in other products, such as smartphones.

Emerging economies, including those in Central and Eastern Europe, actually face two simultaneous structural transformation challenges: that of catching up with advanced economies at the current world technology frontier, but also that of outpacing

a rapidly moving frontier. Today's emerging economies must do so under increasingly binding environmental constraints. Many of them are also facing political headwinds, with rising inequality, populism and protectionism, mimicking trends in advanced economies.

Joining the rapidly expanding global value chains provides an important pathway towards investment-led growth. As these chains become increasingly specialised, barriers to entry into global markets come down (Baldwin, 2016). Instead of having to produce a whole car, a country can enter a value chain with just one component, say, gear boxes. Information flows are becoming cheaper, allowing for further fragmentation of design and production within global value chains. At the same time, robotisation is rapidly reducing the importance of labour costs when it comes to deciding where to locate production and on-shoring (the relocation of jobs back to advanced economies) becomes more attractive.

However, the real transformation challenge is in services. Manufacturing is becoming increasingly irrelevant as the service sector is rapidly taking over in terms of value of output, both in advanced economies and globally. The share of services in global value added rose from 58 percent in 1995 to 65 percent in 2016. Decreasing costs of working remotely have enabled many



emerging economies to enter global value chains in services, but comparative advantages are eroding in this area as well, as the use of artificial intelligence is becoming more widespread (Baldwin, 2019).

The region has benefited greatly from integration into European and global value chains (GVC) on the back of high flows of foreign direct investment (see Friedrich et al., 2013). The Slovak Republic, for instance, has become the world's top producer of passenger vehicles in per capita terms. However, the focus of GVC firms in Emerging Europe has so far largely been on assembly, with technologies mainly being imported. There has been relatively little research and development activity and productivity growth has been innovation-light. For instance, each 10 per cent rise in GDP per capita in Emerging Europe was accompanied by a mere six per cent rise in patents granted per capita – the corresponding figure for China, South Korea and Israel was close to 20 per cent.

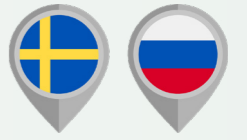
The shift from an investment-based to an innovation-led growth model is not automatic, as the two models rely on different industrial structures, skill sets and institutions. The latter also tends to feature greater entrepreneurship and a dynamic ecosystem of small enterprises – as opposed to national champions that can optimise transfer of technology and economies of scale. As

a result, growth tends to become more governance-intensive as income per capita rises. In other words, advanced economies tend to have stronger economic and political institutions – institutions that support and encourage innovation – than a linear relationship between the logarithm of per capita income and the quality of institutions would predict.

New challenges

In addition to this quintessential need for institutional transformation, today's middle-income economies face new challenges. In the past, economies could pursue successful convergence strategies with relatively weak social safety nets (as in the case of a number of Asian economies), strengthening social protection only upon reaching high levels of per capita income. Today, working careers in emerging markets are likely to be much longer – with retirement ages extending by five to 20 years as populations age and labour forces start shrinking. This could mean greater bargaining power for workers, but will definitely imply more changes in employers, careers and occupations. Therefore workers need assistance to retain and update their skills throughout their working lives.

The issues are particularly pertinent in Central and South-Eastern Europe, where economies find themselves only five to



10 years behind advanced European economies in terms of population aging. These economies will be the first to get old before getting rich. In addition, decompression of wages in the early years of transition contributed to a sharp rise in inequality in these economies, which means that the distribution of gains from income convergence has been highly uneven.

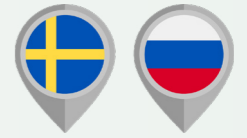
In addition, while the region enjoys a high level of skills, at par with that in advanced economies according to the OECD's Programme for the International Assessment of Adult Competencies (PIAAC) survey, this also means high demand for the regions' workers in Europe's advanced economies. The resulting emigration has compounded demographic trends, in stark contrast with advanced economies where skilled immigration typically mitigates the impact of population aging on the economy.

A study by the EBRD finds that within Central and South-Eastern Europe, firms located in sectors and countries more exposed to the opening of labour markets in the advanced EU economies experienced slower growth in total factor productivity (TFP) than less-exposed firms. The differentials reach 20 percentage points. Foreign-owned firms generally have been better able to cope with shortages of labour than locally-owned firms, by paying higher wages and/or providing more training in a high-turnover environment.

The impact of technology is also different for today's emerging economies. There is increasing evidence that medium-skilled jobs are disappearing in emerging markets as fast as they are in advanced economies (see Goos and Manning, 2007, IDB et al., 2018, and EBRD 2018). The consequent polarization of jobs into highly-paid and poorly-paid ones increases inequality. This in turn feeds populism resulting in reform reversals and jeopardising investment in middle-income countries – the key ingredient of fast economic convergence (see Plekhanov and Stostad (2018) for latest evidence).

The response should be the same as in advanced economies: protecting individuals rather than jobs. This means increased provision of unemployment benefits, fully portable pension schemes (also available to self-employed and gig-economy workers) as well as richer mid-career training opportunities. Well-designed social safety nets that mitigate the impact of technological change on middle-skilled jobs can yield sizable growth dividends in the longer term.

Another challenge faced by middle-income economies, that of rising pollution, climate change and threats to the biosphere, is arguably much more urgent today. Countries tend to industrialise before strengthening their comparative advantages in knowledge-intensive services and other low-polluting sectors.



The result is the environmental “Kuznets curve”, whereby middle-income economies become more polluting per unit of GDP than both low-income and high-income countries (the original Kuznets (1955) curve establishes a similar result for inequality that tended to peak at middle levels of per capita income – declining as developed countries start strengthening social safety nets).

The main recipe for greening is to strengthen incentives for individual firms to become energy efficient. Indeed, well-managed firms tend to be significantly less polluting in markets where energy prices reflect full costs (see Schweiger and Stepanov, 2018). In many middle-income economies, however, explicit and implicit energy subsidies remain high, estimated at close to eight per cent of GDP using a broad definition of social cost of energy sources (Coady et al., 2017). In these settings, better-managed firms are actually up to 30 per cent more polluting than less well-managed firms as they respond to incentives to use cheap energy as a production input.

In sum, the notion of convergence that residents of Emerging Europe strive to achieve in the 21st century goes beyond the traditional view of rising per capita incomes. It encompasses economic, as well as social and environmental convergence, underpinned by strong economic and political institutions. This

is, in fact, a multi-dimensional convergence challenge of catching up with a rapidly changing world technology frontier, fostering increasingly green innovation while building comprehensive social safety nets to anticipate mounting political constraints challenging the foundations of economic integration. Add to this the demographic patterns and we get a sense of the magnitude of the task facing Central and Eastern Europe over the next decade. Yet, if the evidence suggesting that countries that grew faster than others at lower levels of income tend to grow more quickly at higher levels of income is true, the Convergence Miracle may well continue.