

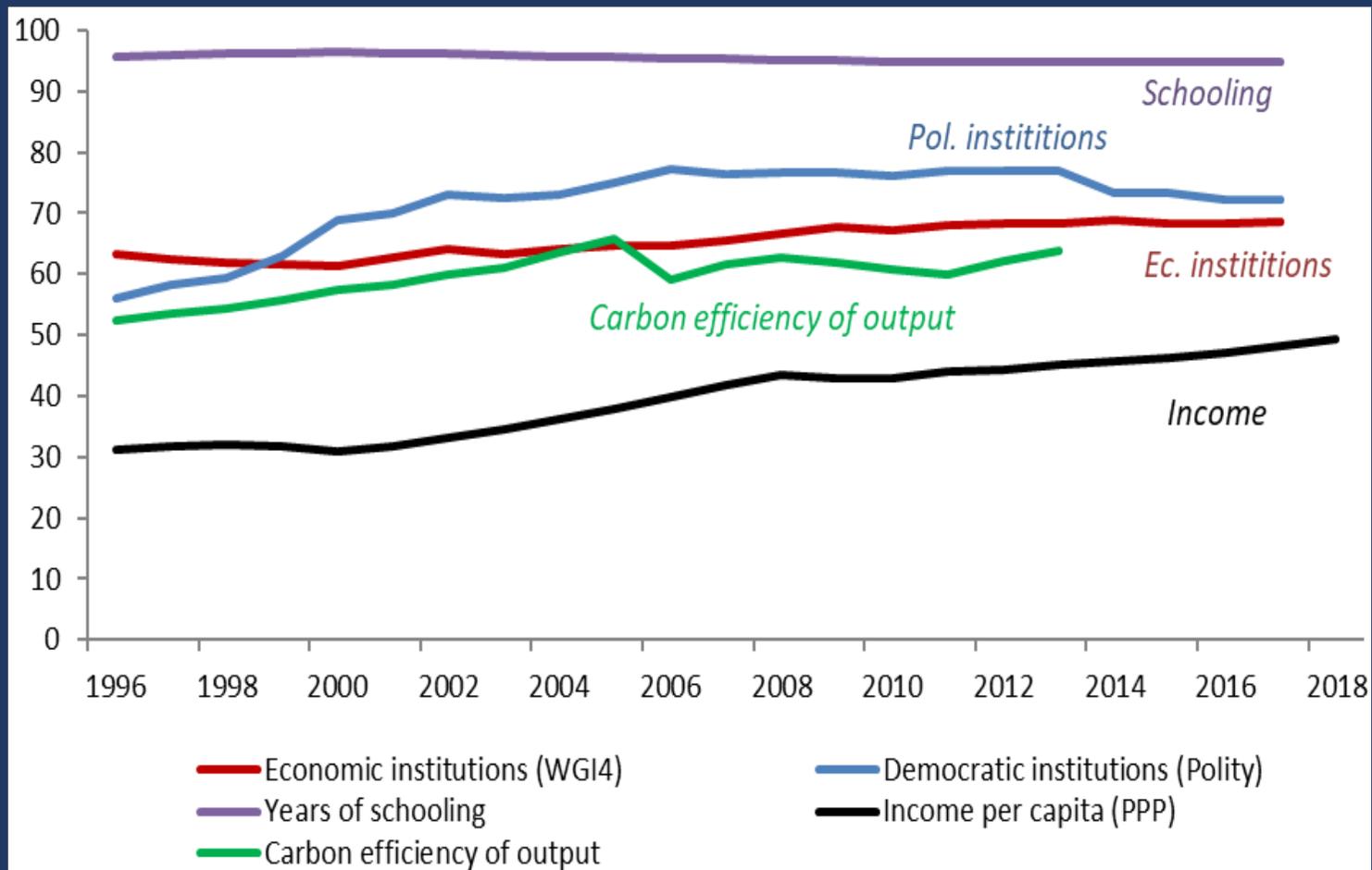
The background is a vibrant blue with a series of curved, flowing lines that create a sense of depth and movement, resembling a tunnel or a dynamic abstract pattern. The lines are darker in the center and lighter towards the edges, giving it a three-dimensional appearance.

The convergence miracle in Emerging Europe: Will it continue?

Erik Berglof, Sergei Guriev and Alexander Plekhanov

The convergence miracle in Emerging Europe

Central and South Eastern Europe indicators in per cent of the G-7 average



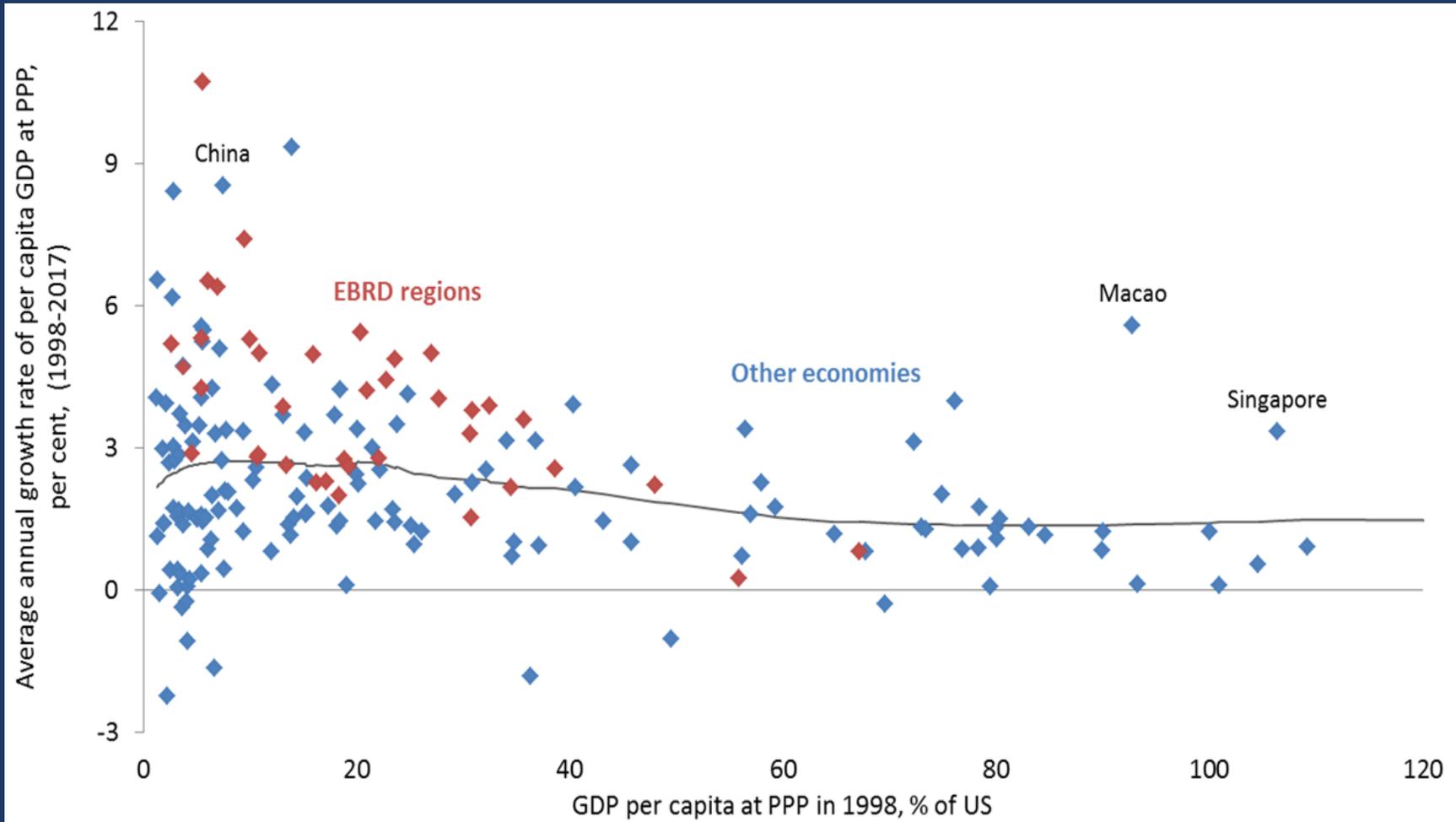
Source: International Monetary Fund, Penn World Tables 9.0, World Bank, Polity, World Resources Institute and authors' calculations

Conditional convergence => Middle Income Trap?

- **Law of conditional convergence** (Barro, 1991): as economies grow richer, raising living standards becomes increasingly harder
- Gerschenkron (1962) “**advantage of backwardness**”: laggards can leapfrog intermediate stages of development
- “**Middle-income trap**” (Gill and Kharas, 2007): upper-middle-income economies likely to experience a convergence slowdown
- Consensus: growth slows down as countries reach middle income, but little evidence that they get stuck at particular level of income
- **Investment-led growth to innovation-led growth** requires fundamental structural transformation (structures and institutions)

Conditional convergence: raising living standards harder

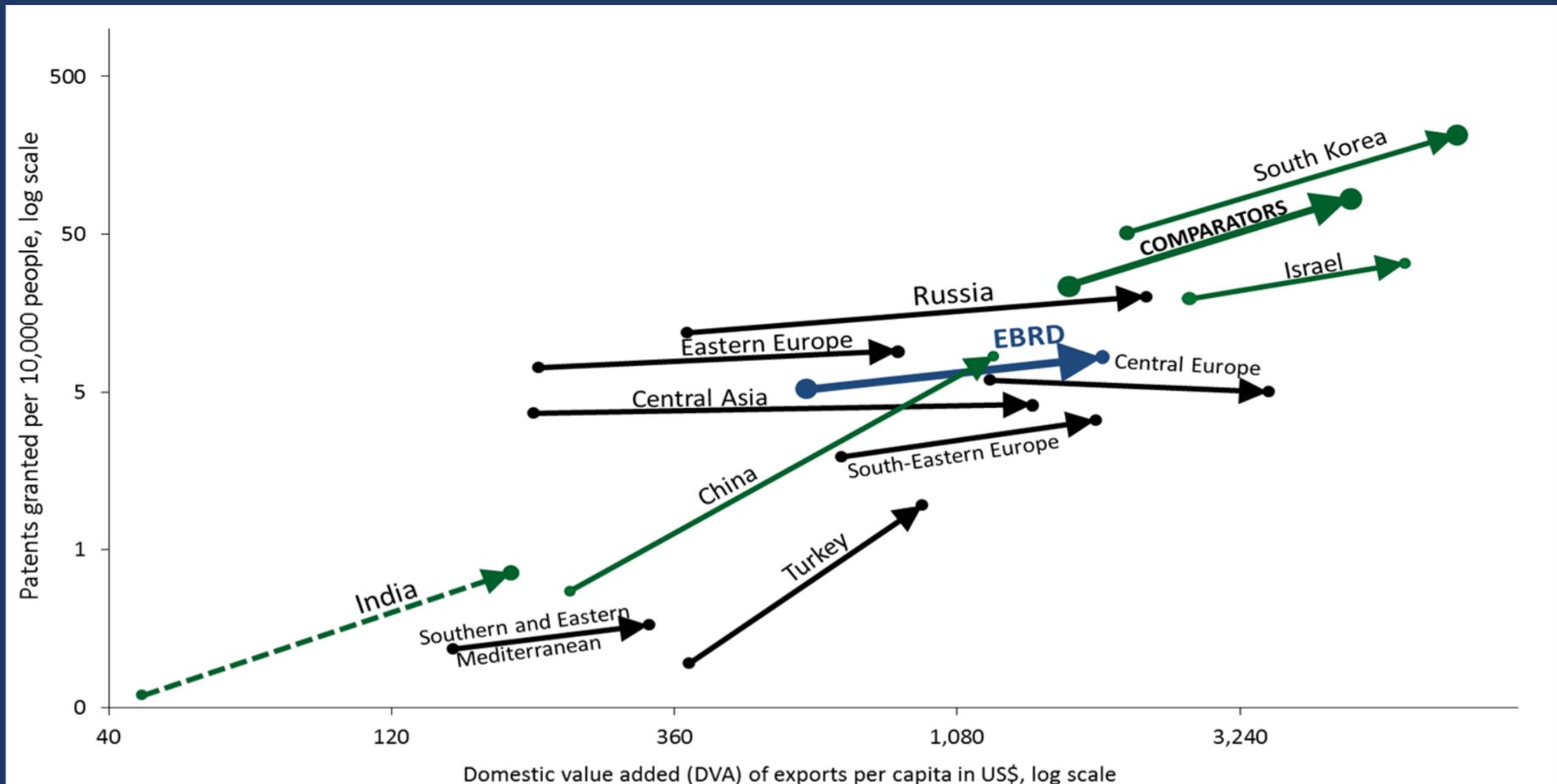
Initial GDP per capita and average growth in GDP per capita: Law of diminishing returns



Source: EBRD (2019) based on International Monetary Fund (IMF) and World Bank. The trend line is based on a lowess non-parametric estimation

Institutional convergence stalled and growth innovation-light

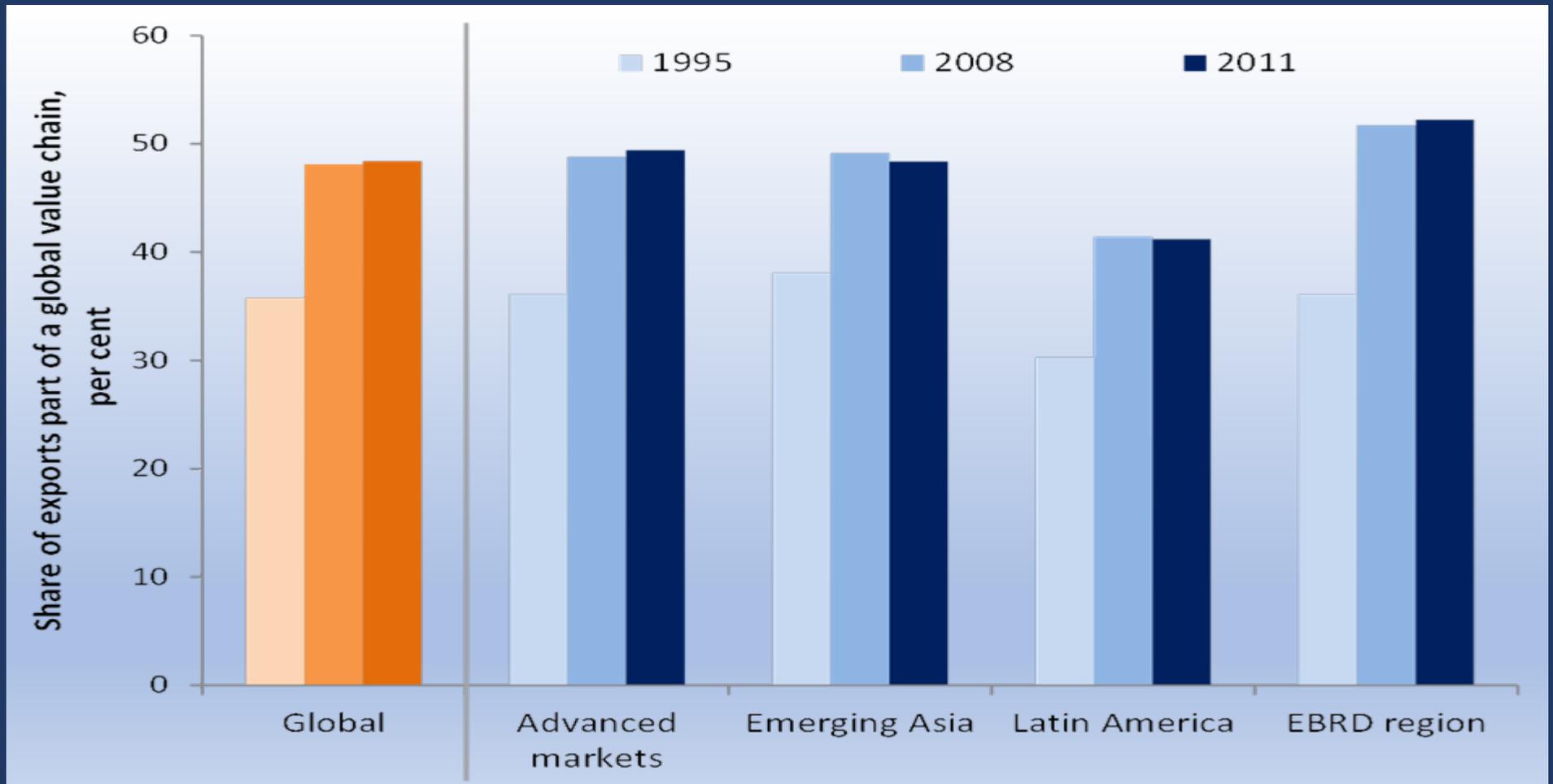
Export growth in Emerging Europe has been relatively “innovation-light”, 2002-15



Source: EBRD (2019) based on Eora Multi-Region Input-Output (MRIO) data, Patstat and IMF. Patents data for India shows total count of Patents in force per 10,000 people in 2004 and 2015 (WIPO).

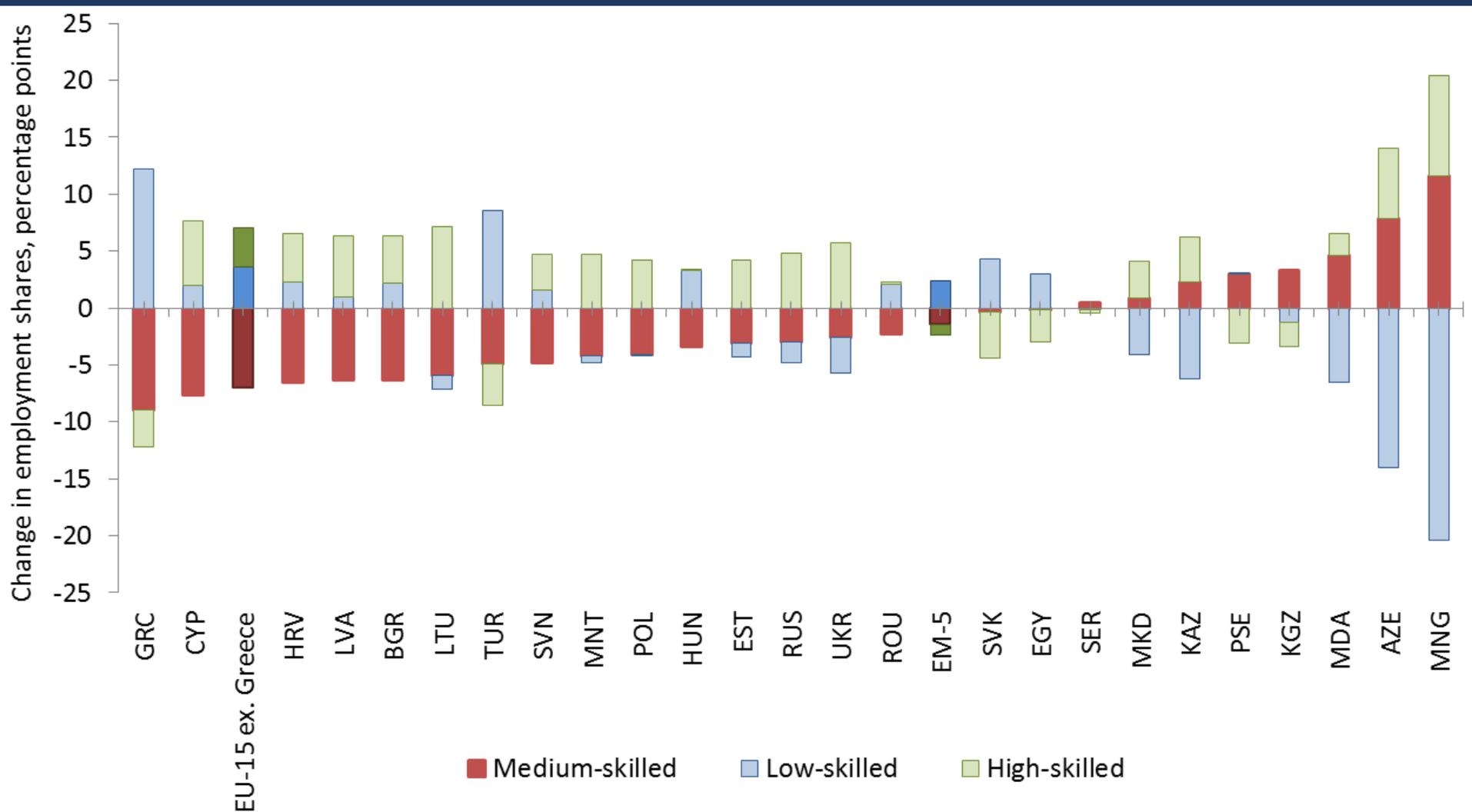
Benefited greatly from integration into global value chains

Economies in Emerging Europe tend to be very strongly integrated into global value chains



Medium-skilled jobs declined in most emerging markets

Change in share of different occupations by skills over the period 2006-16



Source: EBRD (2018) based on ILO, OECD (2017) and ISCO-88. EM-5 = Argentina, Brazil, Malaysia, South Africa, Thailand. Medium-skilled = clerks, craft and related trades, plant and machine operators, assemblers.

New challenges

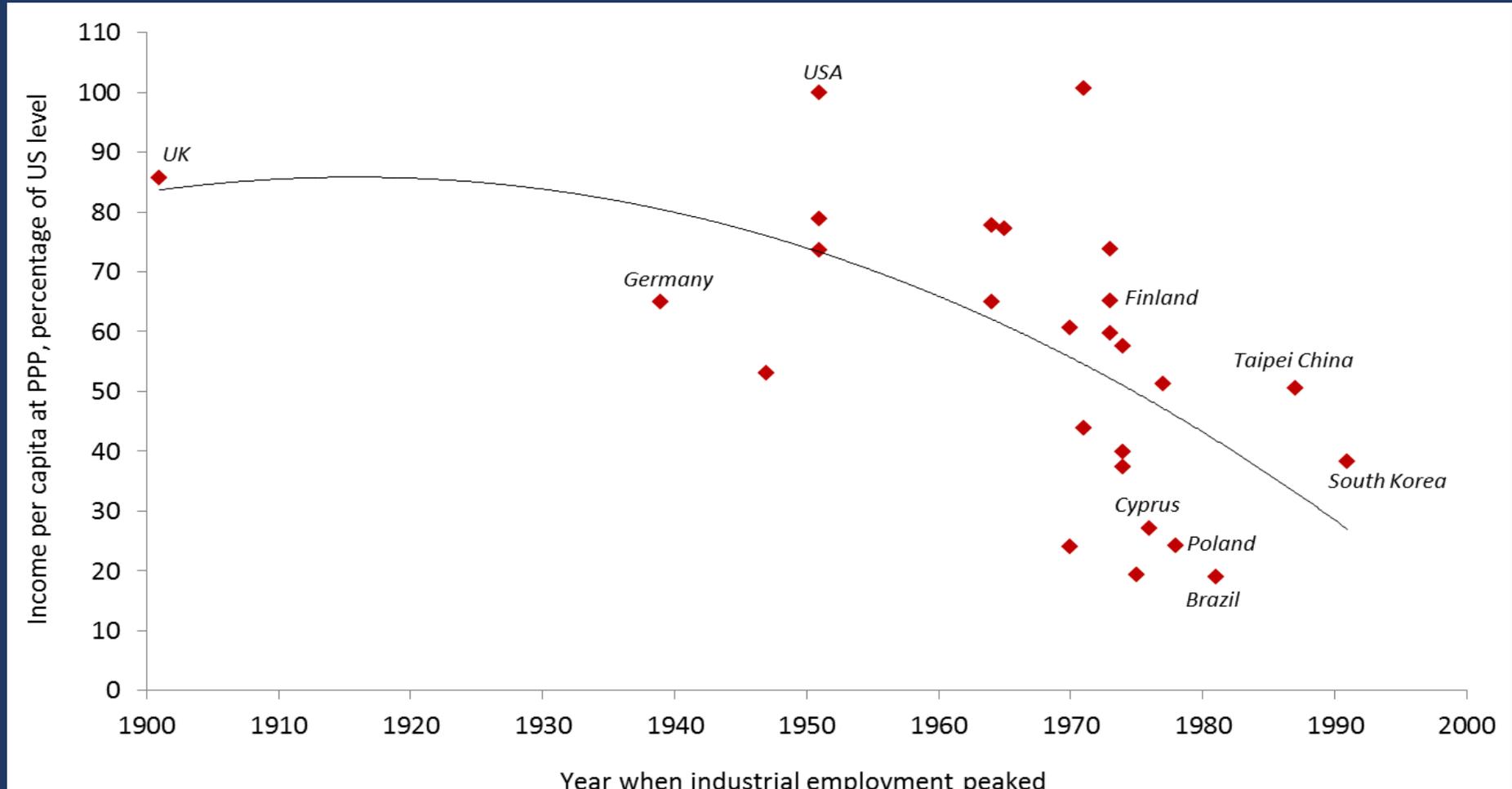
- Rapidly changing technology
- Social equity + rising populism
- Environment + sustainability

Rapidly changing technology

- Innovating and exporting technology + emphasising entrepreneurship and ecosystem of small enterprises (rather than national champions)
- Global value chains (GVCs) becoming increasingly specialised, barriers to entry coming down – produce gear boxes, not whole car
- Transferring information increasingly cheaper => further fragmentation of design and production within GVCs
- Robotisation reducing importance of labour costs => on-shoring
- Services key (65 % in 2016) - working remotely enabled emerging economies to enter GVCs, but artificial intelligence changing all that?

Real transformation challenge in services as manufacturing less relevant

Industrial employment is peaking at ever-lower levels of income per capita at PPP, as % of US



Social equity challenge + rising populism

- Accelerating technological change => more changes in employers, careers and occupations
- Sharp rise in inequality => income convergence unevenly distributed
- Workers demanded in advanced economies (mitigates aging impact) => compound demographic trends (cities vs. rural areas)
- Medium-skilled jobs disappearing as fast in emerging economies - polarization of jobs increases inequality => feeds populism
=> causing reform reversals and jeopardising investment

Common response:

Protecting individuals rather than jobs

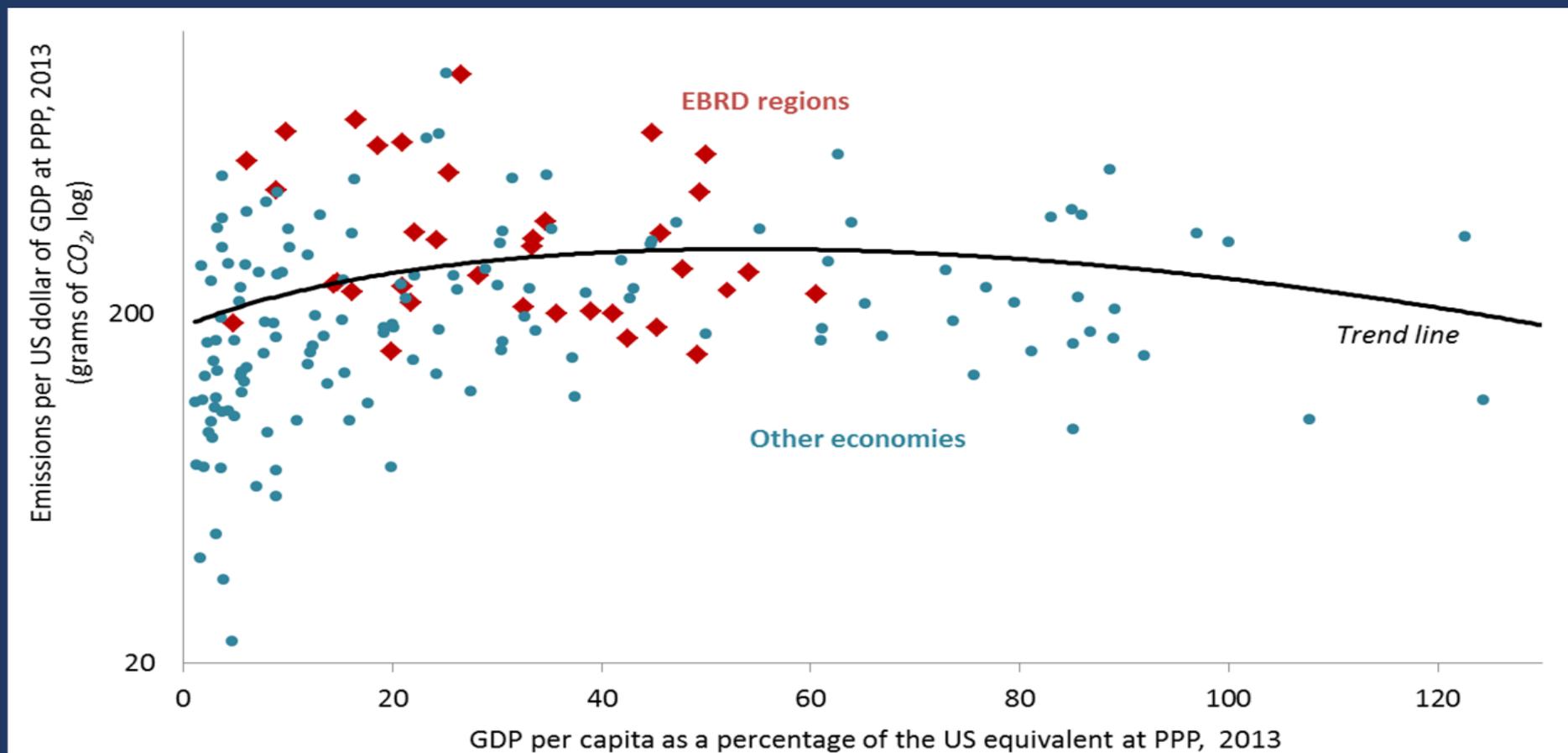
- providing unemployment benefits
- offering fully portable pension schemes
- access to public goods + richer mid-career training
 - => *mitigating the impact of technological change on middle-skilled jobs can yield sizable growth dividends in the longer term*
 - => *but will they have sufficient fiscal resources?*

Environmental challenge

- rising pollution, climate change and threats to the biosphere much more urgent today
- industrialise before strengthening comparative advantages in knowledge-intensive services and other low-polluting sectors - environmental “Kuznets curve”
- strengthen incentives for individual firms to become energy efficient - well-managed firms respond best to incentives (i.e., energy subsidies)

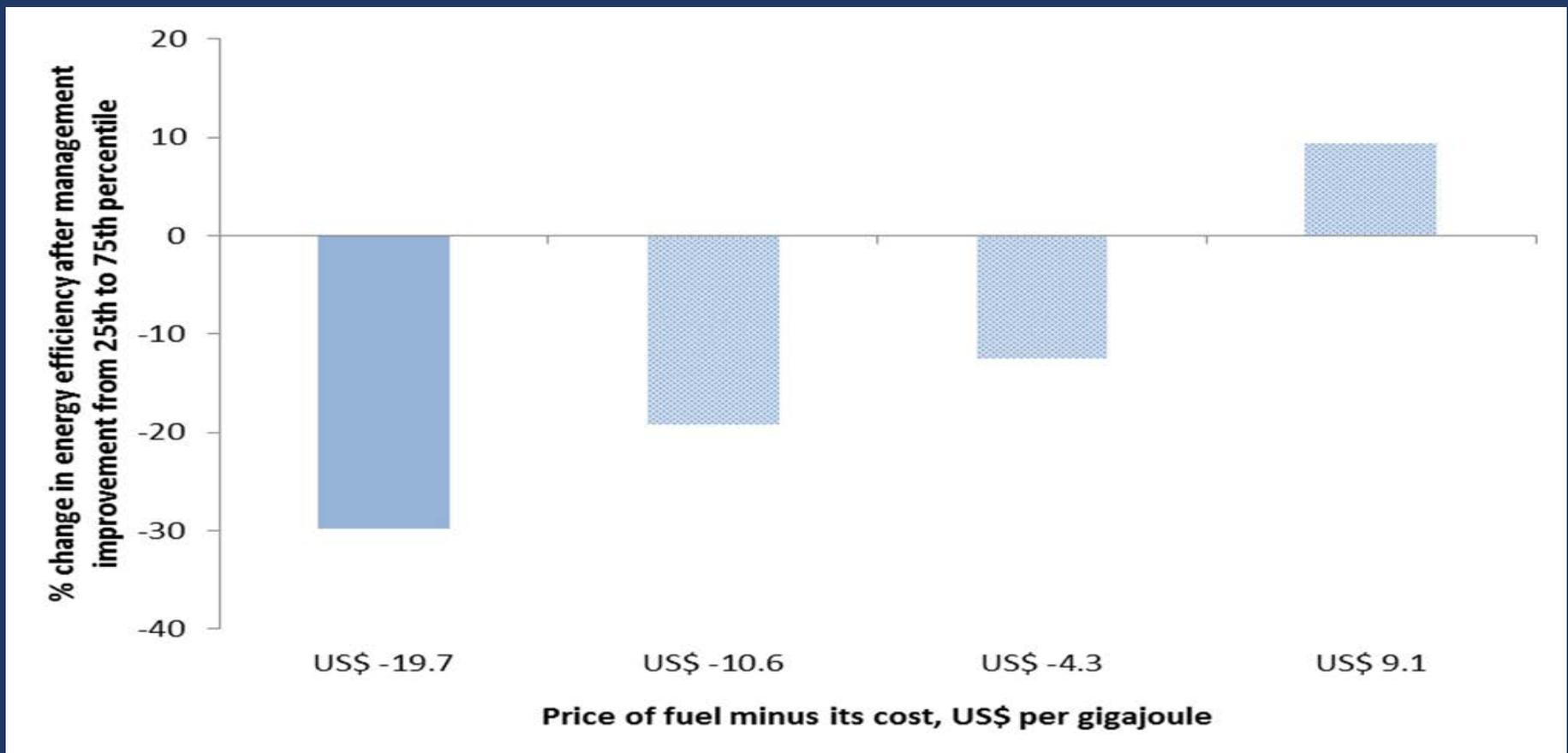
“Environmental Kuznets curve”: Middle-income economies the highest polluters

- Industrialise before competitive in low-polluting sectors



Strengthen firm incentives to become energy efficient

- High energy subsidies => better firms more energy intensive
- No subsidies => better firms less energy intensive



New challenges require industrial policy

- Economic integration + building state capacity
- State capacity – essential part of accession process
- Next phase requires active industrial policy
- Feasibility of industrial policy depends on state capacity

Explaining Central Europe's rapid convergence: Economic integration + building state capacity

- Initial reforms brought total factor productivity from very low levels to levels in line with other EMs
- Economic openness, external anchors played key roles
- Dual integration: *top-down* (EU) – *bottom up* (FDI)
- But reform agenda remains incomplete (governance)
- Growing pushback: too much top-down?

Next phase requires active industrial policy

- Neo-Schumpeterian approach \Rightarrow growth = productivity
- Range of industrial policies \Leftrightarrow type of innovation
- State capacity key to determining which policies work

Neo-Schumpeterian industrial policy

- Productivity improvements determines long-term growth; productivity driven by innovation, which is driven by entrepreneurial rents
 - Competition drives down rents – not always desirable
- Distance to frontier: (i) average across industries; (ii) average within industries; (iii) individual firms
- Heterogeneity within industries particularly important in emerging economies – long and fat tails and distorted firm dynamics
- Industrial policy:
 - Compressing firm distributions by upgrading/phasing out laggards
 - Abandoning uncompetitive industries
 - Upgrading leader firms (from imitation/adaptation to innovation)

Types of industrial policies

- **Horizontal policies** – across whole economy; technology neutral
- **Vertical policies** – support/protect specific industries and firms
 - “**Entrepreneurial State**” – the state as a venture capitalist
- **Sector-oriented horizontal policies:**
 - **Education and training** targeting a specific sector
 - **Financing** schemes targeting a sector
 - **Sector-based innovation**
 - “**Smart specialization**” - high-tech in traditional sector
 - **Connecting** individual firms/sectors to **global value chains**

Industrial Policies and State Capacity

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- Entrepreneurial State
 - Vertical policies
 - Sector-based horizontal policies
 - Horizontal policies

“Paradox of (vertical) industrial policy”

- Where most desirable, institutions the weakest
- Institutional reform must precede industrial policy
- EU accession process + FDI brought massive change, but institutional progress much slower once members
- Most CEEs can handle industrial policies, at least sector-based horizontal policies

Convergence goes beyond rising incomes

- Economic, as well as social and environmental convergence, underpinned by strong economic and political institutions
- Multi-dimensional convergence challenge
 - catching up with a rapidly changing world technology frontier
 - fostering increasingly green innovation
 - building comprehensive social safety nets
 - anticipate mounting political constraints challenging foundations of economic integration
- Add demographic patterns and we get a sense of the magnitude of the task facing Central and Eastern Europe over the next decade

Implications for industrial policy

- **Industrial policy paradox – building state capacity essential**
- **Focusing solely on competition may be counterproductive**
- **Firm-specific vertical policies risk capture and uncertainty**
- **Sector-specific policies less demanding on institutions, but still vulnerable to uncertainty**
- **Successful examples combining sector support, global value chain connection, ITC upgrades, outside anchor**
- **Industrial policy needed for de-carbonisation and sustainability**