Wiener Institut für Internationale Wirtschaftsvergleiche

The Vienna Institute for International Economic Studies

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FIW Round Table: Focus Central, Eastern and South Eastern Europe

Potential for the digital economy in the Danube region

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Navigating the digital transformation: possible ways to revamp the economic growth model in Central Europe

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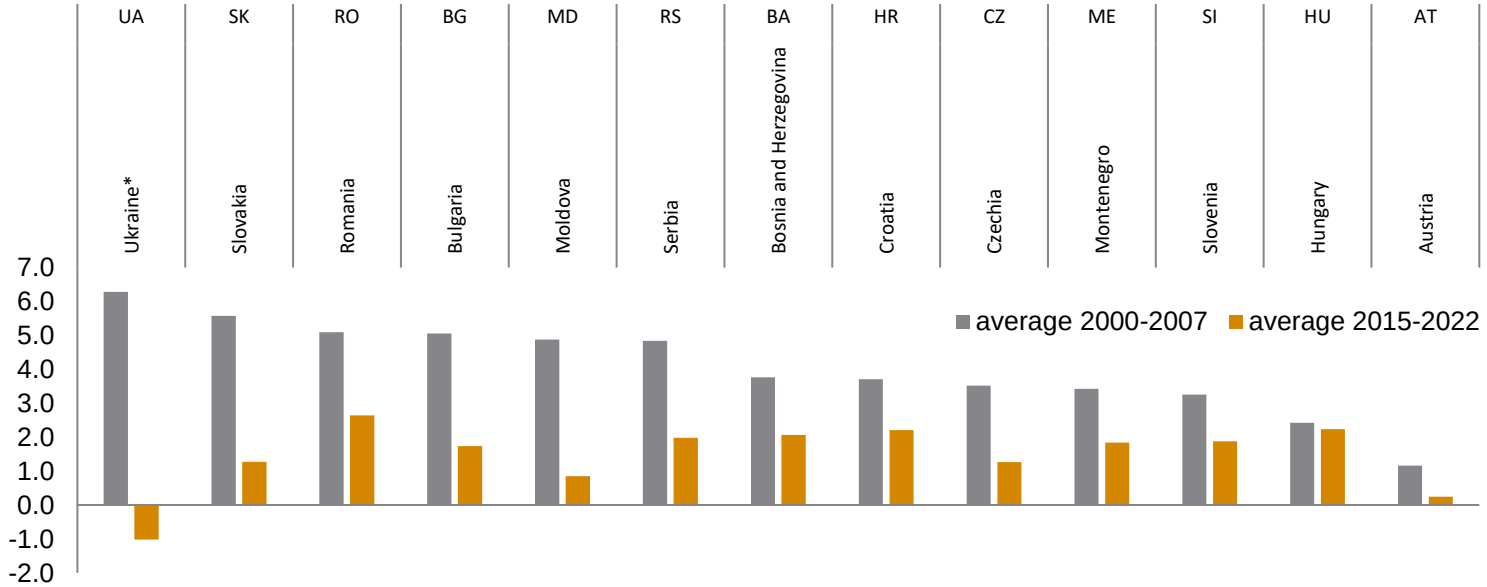
Recent policy-oriented studies

- **Industrial Policy for a New Growth Model: A Toolbox for EU-CEE Countries.** Vienna Institute for International Economic Studies. Friedrich-Ebert-Stiftung, Budapest, May 2023
- **Avoiding a Trap and Embracing the Megatrends: Proposals for a New Growth Model in EU-CEE.** Richard Grieveson et al. wiiw Research Report, No. 458, Vienna, November 2021

Slowing convergence requires a new growth model

Real GDP growth, differential to Germany in percentage points

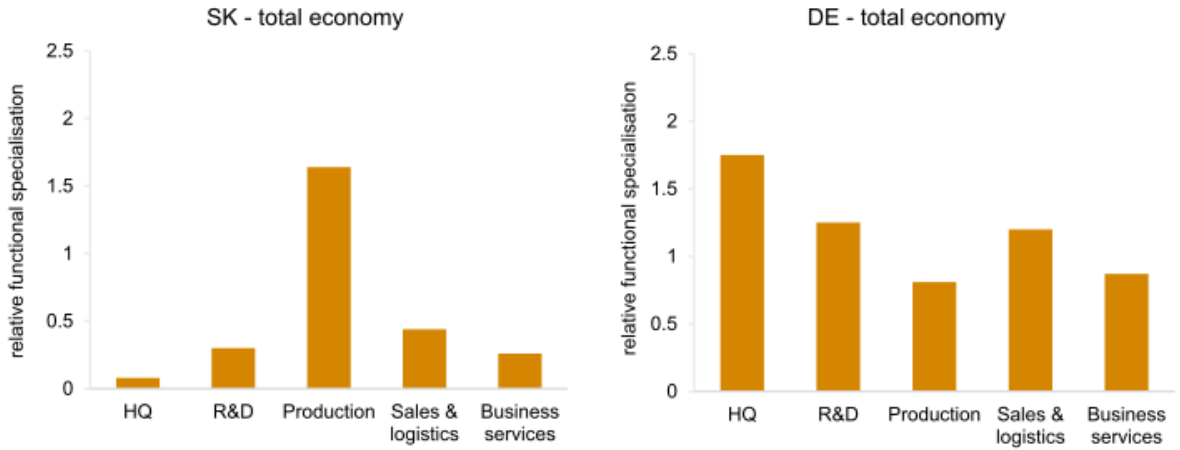


*2015-2021 average. Real GDP growth in Germany averaged 1.3% in 2000-2007 and 1.2% in 2015-2022.

Sources: Eurostat, national statistics, wiiw calculations.

Functional specialisation is turning from a blessing to a trap

Value chain functional profiles of Slovakia and Germany



Note: the functional profile shows the relative specialisation in a value chain function (RFS), which is calculated on the basis of jobs created by FDI projects in the country in that function. An RFS equal to 1 means that the functional share in a particular country is equal to the average share in the EU for that value chain function.

Source: wiiw calculations (Stöllinger, 2021) based on fDi Markets.

Digitalisation has the potential to revive growth via various channels

- Increasing productivity and overcoming labour shortages
- Innovation-driven growth (industry 4.0)
- Leap-frogging to digital services, away from the factory economy trap

But the EU-CEE has yet to catch up in digitalisation

Digital Economy and Society Index

	AT	DE	SI	EU	CZ	HR	HU	SK	BG	RO
	Austria	Germany	Slovenia	EU	Czechia	Croatia	Hungary	Slovakia	Bulgaria	Romania
DESI 2022	54.7	52.9	53.4	52.3	49.1	47.5	43.8	43.4	37.7	30.6
Connectivity	14.1	16.8	15.0	15.0	13.2	12.0	14.4	12.5	12.7	13.8
Digital Public Services	18.0	15.9	17.4	16.8	16.1	13.4	14.4	13.0	13.0	5.3
Human Capital	12.7	11.2	11.1	11.4	11.4	13.0	9.6	11.0	8.1	7.7
Integration of Digital Technology	9.8	9.0	10.0	9.0	8.5	9.2	5.4	7.0	3.9	3.8

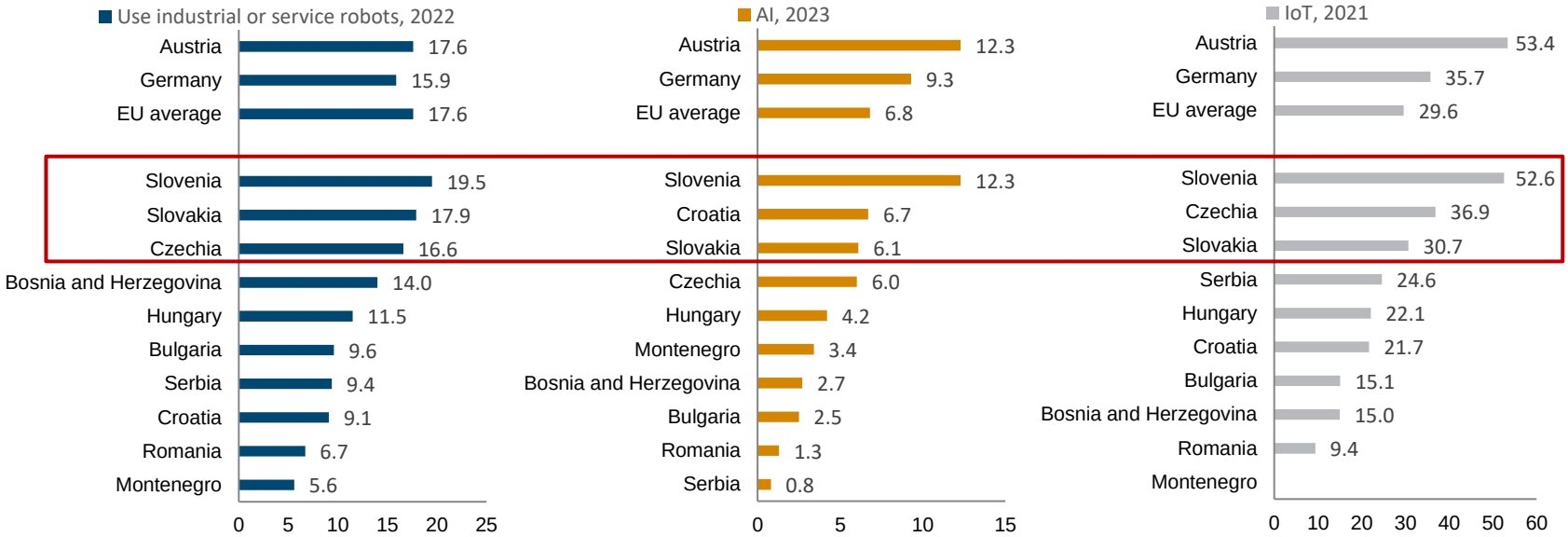
Note: Colour scale variation from the minimum (grey) to the maximum (gold) for each line. DESI is a composite indicator for the EU countries, it is a weighted average of the normalised values of multiple indicators included in four sub-dimensions. DESI 2022 ranges from 69.6 in Finland to 30.6 in Romania.

Source: European Commission.

- Bridging the gap to digital frontrunners is likely to be a long process
- Acknowledgement of differences across the EU-CEE in various aspects of the digitalisation requires different policies, but can serve as a basis for mutual learning

Some countries on a par with Germany could benefit from industry 4.0

Share of firms using advanced digital production technologies in manufacturing, in %

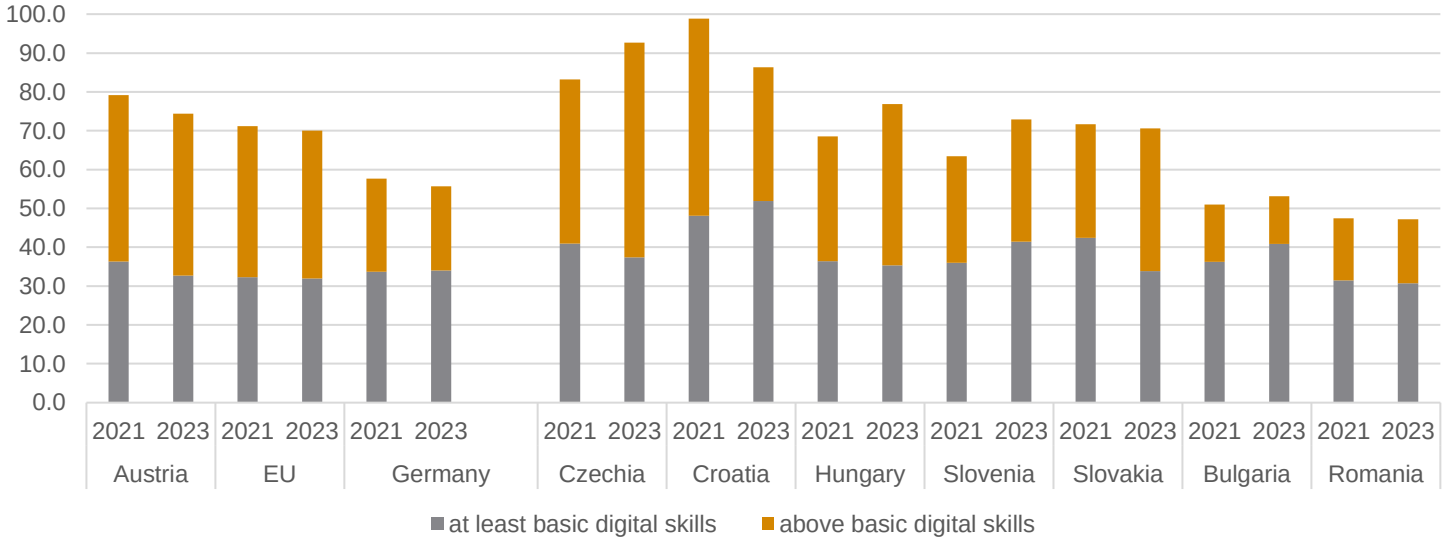


Note: AI - artificial intelligence, IoT - internet of things.

Source: Eurostat.

The relatively successful cultivation of digital skills is a promising springboard for the digital transformation

Share of population aged 16-24 with basic or above basic digital skills, in %

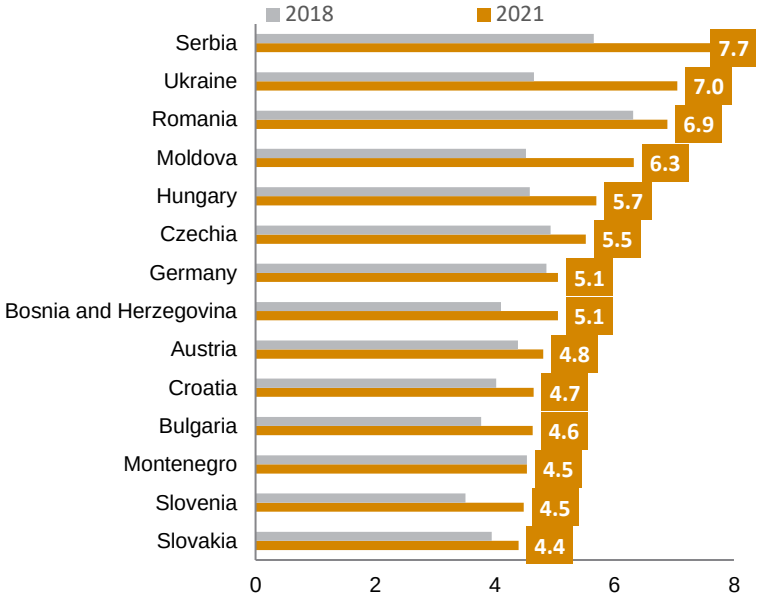


Note: The Digital Skills Indicator is a composite indicator, based on selected activities in five specific areas (Information and data literacy, Communication and collaboration, Digital content creation, Safety, and Problem solving).

Source: Eurostat.

Focus on ICT specialists is promising to digital services leap-frogging

Share of ICT graduates, in %

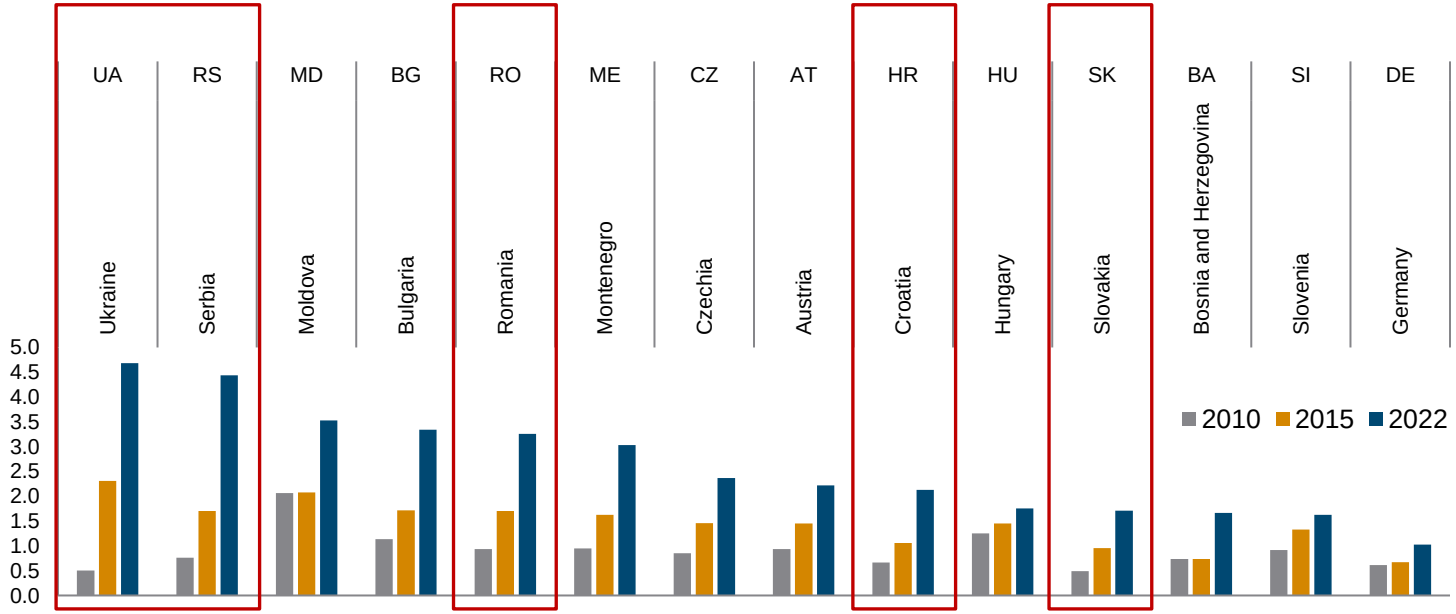


Note: 2021 or last available year.

Source: UNESCO.

ICT services are becoming increasingly competitive

Exports of ICT services as a share of GDP, in %

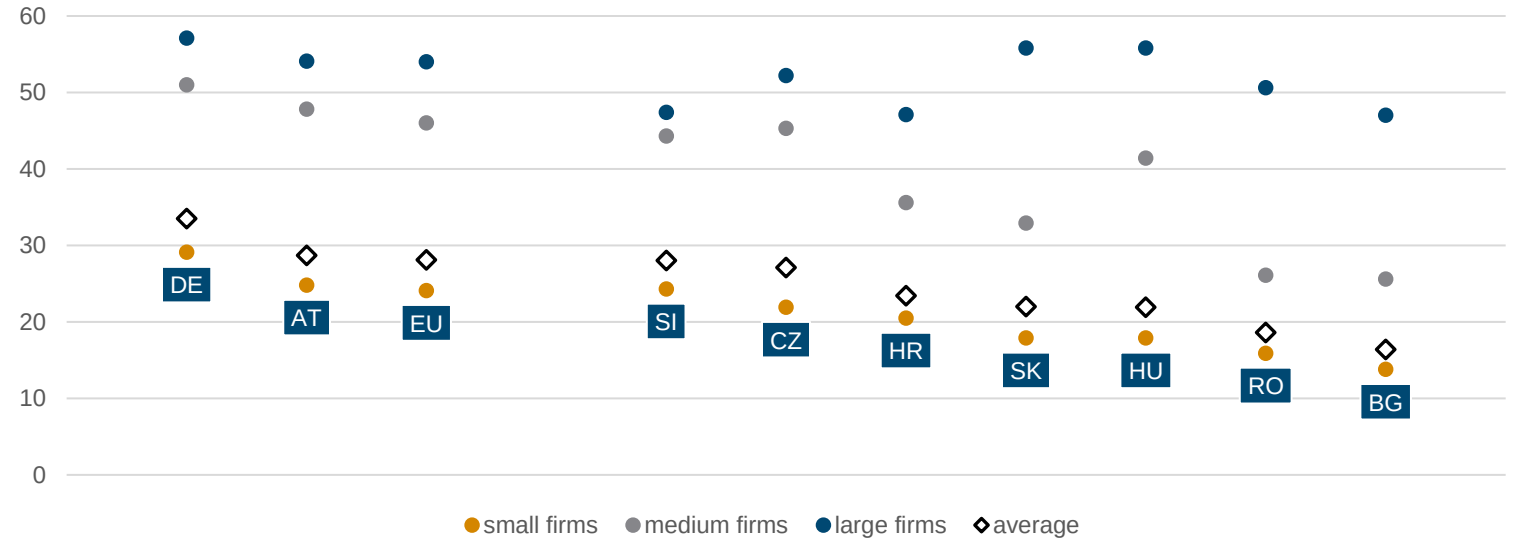


Note: ICT exports according to balance of payments methodology.

Sources: WDI World Bank, wiiw calculations.

A digital intensity gap is more pronounced for small firms

Share of enterprises with high Digital Intensity Index, in % of total in the respective group



Note: Digital Intensity Index is a composite indicator by Eurostat capturing the use of twelve digital technologies.

Source: Eurostat.

Digitalisation may also harbour risks for the future growth model

- ‘digital factory economies’ trap - upgrading into innovative sectors without moving up the value chain into more sophisticated activities
- digital divide, especially between SMEs and large firms, the development of a favourable ecosystem for domestic linkages and start-ups is essential

One-size-fits-all new growth model is unsuitable

Countries	Czechia, Slovenia	Hungary, Slovakia	Bulgaria, Croatia, Romania
Group	richest and/or most industrialised	industrialised	rather falling behind the technological frontier
Policy priority	switch from imitation to innovation-driven growth, National Innovation System, wider participation in common EU projects, human capital upgrade	build on the presence of MNEs, focus on spillover generation and linkage creation with the domestic economy, strategic diversification of sectors and functions	import of knowledge, identify opportunities in a strategic way, leap-frogging into digital services

Thank you for your attention!

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