

Role of human capital inequalities in social cohesion and convergence

Introduction

Human capital – defined as the knowledge, skills and other attributes that enable people to be productive – is a key driver of dynamism and growth in the EU economy. This report assesses the success of the EU in developing and using human capital to support economic and social progress.

The report begins with an examination of differences in human capital among the Member States in terms of its creation, utilisation in the labour market and mobility. Through an analysis of 16 indicators, it investigates whether there is upward convergence among the Member States – in other words, whether performance in the creation and utilisation of human capital is improving and whether dissimilarities between them are reducing. The analysis goes on to quantify the impact of tertiary education on convergence in national income across the Member States. Focusing on human capital mobility, the cost to Member States of emigration of talent is calculated. Finally, lessons for policy development to attract and retain highly skilled graduates are derived from case studies of policies in five Member States.

Policy context

According to a 2023 European Commission communication on harnessing talent in Europe's regions, attracting and retaining talent should be at the forefront of regions' strategies to ensure their prosperity and narrow disparities between them. It highlights the double challenge for regions that face a shrinking population due to demographic change and the consistent outflows of citizens with tertiary education due to poor economic growth prospects in the area.

Intra-EU mobility is an important pillar of the EU single market. However, the continuous outflow of people from a region or a country may hurt the convergence of Member States by leaving some territories ill-equipped to meet labour market demands and the challenges of the twin transition. Understanding these flows and the underlying

reasons could help the EU to reduce disparities across its Member States and improve cohesion while keeping human capital circulation a two-way exchange that favours sharing of knowledge and economic growth.

While the need for economic growth and innovation is a powerful argument for the formation of a workforce with the knowledge and skills to support a major world economy, it is not the only reason to develop human capital. The impact of education goes beyond economic effects, as educated citizens are more likely to actively participate in the social and civic arenas, contributing to the functioning of democratic institutions.

Key findings

- On indicators of human capital creation, Member States are converging upwards. The share of gross domestic product (GDP) dedicated to tertiary education, the percentage of early school-leavers, tertiary education attainment, and participation in on-the-job training all moved towards achieving policy targets.
- There are differences between Member States in the way human capital is utilised, with some better absorbing human capital in the labour market than others. This has translated into an increase in disparities between the Member States in respect of the employment rate of graduates and investment in research and development. On the positive side, the rates of graduates who are not in employment, education or training (NEET) or are overqualified for their jobs have fallen; however, at regional level, especially in Greece, Italy and Spain, the EU averages on both indicators remain high.
- Human capital played a role in EU convergence in respect of national income over 2014–2021. The analysis suggests that highly educated individuals have helped central and eastern European Member States and regions to catch up with their western European counterparts in terms of the GDP per capita.

- Balanced circulation of human capital – also known as brain circulation in the literature – has not yet been achieved across the EU: some countries and regions are ‘star’ attractors of talent, while others struggle to absorb the human capital they invested in. These latter lose their human capital, and the incoming foreign talent does not compensate for this loss. A conservative cost estimate is that for Belgium and Italy (two countries for which a full calculation was possible), this cost may exceed €10 billion over a decade.
 - The Member States that are net receiving countries for graduates – with a net gain of talent with respect to other Member States – may still suffer from brain drain in specific areas or regions and therefore need local initiatives to address it.
 - Policies perceived as successful in attracting human capital generally target a specific type of talent. This implies that tailored policies better meet the needs or expectations of the talented individuals being targeted (degree students, graduates, scientists, researchers and professionals) than broad policies.
 - Salary is the most relevant factor in policies that target foreign talent. Other factors such as the provision of support and an offer of housing are also important, but they are rarely included in policies to attract individuals and, rather, are left to ancillary or local initiatives. However, in the case of nationals who previously emigrated, cultural aspects or personal reasons may also play a role in their decision to return.
 - Brain drain translates into an economic loss deriving from missing returns on educational investment. Solutions aiming to recover such cost from emigrants would only limit talent circulation. Instead, policies that attract talent or encourage talent circulation would balance out the loss of graduates by stimulating an inflow of highly educated individuals (both nationals who emigrated and non-nationals).
 - Ideally, an EU-wide aim would be to incentivise the circulation of human capital around the EU rather than retention of talent in the home country, replacing the current situation where national policies compete with each other.
 - The evidence that human capital has helped drive economic convergence in the EU implies that initiatives to create human capital and attract it should stay on the policy agenda.
 - Monitoring talent stocks and dynamics would provide insights to design policies tailored to attracting specific categories of talent. Granular data at regional level, which EU institutions at various levels have started to collect, are required for this type of analysis.
 - While the EU can benefit from human capital flows that reallocate resources at Member State level, when the outbound flow of tertiary graduates is too high, there is a risk of a negative feedback loop weakening both the education system and the labour market at national and regional levels. If this scenario is not counteracted with policies to stimulate talent circulation, it might cause convergence to slow down or halt.
 - The role of the social partners in maintaining and creating desirable working conditions for highly educated workers should not be underestimated, not just in relation to salary but also in relation to issues ranging from on-the-job training opportunities to the availability of state-of-the-art tools for research and development.
- Policy pointers**
- The implementation of policies to attract and retain talent relies on a wide range of funding options (derived from budget allocations) and fiscal incentives (such as income tax exemptions). Combined approaches can be used to improve the sustainability of such policies over time.

Further information

The report *Role of human capital inequalities in social cohesion and convergence* is available at <https://eurofound.link/ef23033>

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