



## The disruptive character of automation technologies on employment is typically underestimated by the policymakers

The discussions with the policymakers and stakeholders revealed optimism about impacts of automation technology adoption on the labour market. Despite that few monitoring/evaluation studies, especially systematic ones, have been launched across the selected regions to measure job creation and job displacement effects, such attitude could be attributed to a few factors.

First, it is generally believed that technology adoption is beneficial for the economy and, hence, for the society. As discussed earlier, the case studies confirm strong relationships between the intensity of economic activities, innovation and employment levels.

Second, until now, the examined regions experienced a gradual process of technology adoption that has made the impacts on employment less pronounced. As a result, the labour markets were able to adapt to the impacts caused by automation technologies. Similarly, when the discussion with the policymakers touches on the impact of artificial intelligence (AI) on employability, most of them argue that the mass deployment of AI and other potentially disruptive technologies will take time.

Third, besides the scale and speed of technology adoption, the characteristics of these technologies have generated the labour-replacing effect, predominantly, among the low/middle-skilled individuals. Given that the low-skilled are a typical vulnerable group across various dimensions, the policymakers argue that efforts should be directed at their upskilling/reskilling rather at sacrificing technological and economic progress. The general sentiment among the policymakers is the following: if technologies lead to economic growth it will allow the public sector to ensure well-being of vulnerable population groups. The only exception to this is if the vulnerable group will expand, putting strain on the budget.

Fourth, due to demographic challenges, migration and a lack of skilled labour, particularly in less developed regions of the EU, the main challenge that the policymakers see is the labour shortages. Many interviewed policymakers argue that automation technologies will be able to address labour shortages. Thus, even if technological transformation will be accompanied by increasing job displacement it does not compare to the challenge of labour shortages.

Overall, there is a strong belief among the policymakers that technologies are beneficial for the labour market, and the market forces will always balance the supply and demand of labour, creating incentives for continuous upskilling/reskilling.



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It is important to note that the regions/countries that have started to systematically analyse the impacts of automation technologies on the labour market and developed forecasting models took immediate and, at times, radical steps in transformation of their education/training systems and ALMP. To illustrate, in 2016, the Ministry of Internal Affairs and Communications in the Czech Republic conducted the study which assessed the challenges of Industry 4.0, the impacts of digitisation on the labour market and on society, in general. The recognition of the job displacement effect and the analysis of the future of work led the policymakers to review the entire education/training system. Based on the study, the Action Plan ‘Work 4.0’ has been developed. It concentrates on vocational training and digital skills, integration of vulnerable groups, labour mobility, modernisation of labour market services and more effective targeting of the ALMP.