

Introduction to the Issue on

European Labor Markets: How Can We Effectively Manage Technological and Structural Change?

Oliver Falck

A science worth following must lead. We saw during the covid pandemic what dire consequences the relegation of science to the sidelines can have. With the labor market it is no different. If there is a disconnect between science and policymaking, the ultimate cost will be borne by the economy in general and, much more critically, by many, many individuals.

This is what Pillars is about. Brought to life as part of the European Commission's Horizon 2020 projects, it aims to secure the existence of inclusive labor markets by helping policymakers anticipate disruptive changes, providing them with research-based findings on a timely basis. Pillars' modus operandi is two-pronged. On the one hand, pushing the labor-market science's boundaries. On the other, functioning as a bridge to policymaking.

The science part is tackled by a cadre of mostly young talents hailing from a dozen countries and based in a dozen more, who are not only outstanding in their respective academic disciplines, but happen to speak fluent digital, in any of its many dialects: artificial intelligence, foundational models, machine learning, big data, robotics, automation and much more. When these youngsters have their heads in the cloud, they are not exactly daydreaming.

The bridging part is done through such activities as the pivotal conference held in Brussels this July, which first subjected the research carried out so far by Pillars to a stringent critical analysis, and then discussed findings and strategies with European Commission officials from the labor market policymaking arena.

The other bridging element is this special edition of the EconPol Forum, which devotes its Policy Debate of the Hour section to making Pillars' research findings accessible to policymakers and interested parties in general.

One big area of focus is skills. In the digital era, human skill sets are being challenged by similarly or better-skilled cyber versions. But not all threaten human-performed jobs. As Maria Savona points out, while robots are designed more to substitute workers than to complement them, data-intensive technologies are more complementary to humans. Christina Langer and colleagues explore the skills gaps in European labor markets. They find that while manual workers show skill supply shortages, cognitive work-

ers have skill supply surpluses, and that this has consequences in terms of automation risks.

In this respect, it pays to shore up the working population's digital skills. But, as Oliver Falck and colleagues plead, do not be leave the elderly behind in this endeavor. Fortunately, as they point out, digital skills can be acquired at all ages.

Yvonne Giesing and Britta Rude look at the issue from a somewhat different angle, focusing on the inequality-raising effects of technology between native and immigrant populations: industrial robots and artificial intelligence have beneficial labor market effects on natives, but not migrants.

Tommaso Ciarli and his group of researchers find that high-tech industries adjust employment to ICT penetration faster than do low-tech industries but that, surprisingly, technological penetration of robots is related to higher employment within the industry in low-tech regions—at least in the short run.

Ron Boschma finds that, regionally speaking, smart growth does not always equate inclusive growth. He provides useful pointers for how to bring them closer to each other.

Casting a more global view, Lisandra Flach and her group of colleagues evaluate the effects of robot adoption in OECD countries on exports from Latin America to the OECD along the value chain, to highlight the importance of assessing all supply chain linkages when devising policy.

Maria Savona, this time with a different group, takes a global view of the effects of the recent wave of nearshoring as opposed to those of *farsharing*, a novel but very solid concept that will surely make it into the terminology pantheon. Check it out.

To wrap up this well-rounded Policy Debate section, Zhong Zhao and a colleague give us the Chinese perspective on jobs and migration: a sort of brain drain from Europe to China could start to happen, since in this day and age Europeans can work for Chinese companies without moving from their European homes.

We hope you enjoy this Policy Debate of the Hour section as much as we did preparing it.