

NEW REPORT: The expansion of broadband infrastructure has a negative employment effect for low-skilled workers

Broadband infrastructure has positive economic growth effects, but only small employment effects, finds a new IZA World of Labor report. This is due to a mixture of positive effects among high-skilled and negative effects among low-skilled workers

The ongoing processes of digitalization in economies have important implications, not only for economic growth, but also for the future of the labor market. The diffusion of broadband infrastructure plays a crucial role in economic and labor market developments. Oliver Falck of the Institute for Economic Research, Munich, looks at the actual effects of broadband accessibility.

According to a number of studies, broadband infrastructure leads to economic growth because it fosters the diffusion of information and the development and adoption of innovation in society and the economy alike. A study on the OECD countries for example found that a 10-percentage-point increase in the broadband penetration rate increases annual growth of GDP per capita by at least 0.9 percentage points. Given its impact on the economy, investment in broadband infrastructure is of great political interest. But while economic growth is substantial, employment effects are small.

An Italian study found that broadband availability is associated with a significant increase in annual sales turnover, but not with an increase in employment. Similarly, other studies seem to point to an overall small employment and wage effect of broadband infrastructure due to underlying countervailing effects. On the one hand, positive employment effects seem to arise from new internet-based business models or new products and services that build on the internet. On the other hand, internet technology may make some jobs obsolete leading to negative employment and wage effects for parts of the labor market. Broadband adoption in firms complements skilled workers in executing non-routine abstract tasks, and substitutes for unskilled workers in performing routine tasks.

The changing nature of the internet toward the "internet of things" makes it likely that even more tasks that are currently carried out by humans will be done by machines in the near future. Falck asks that future labor market institutions should be designed in a way that ensures they support workers in adjusting to the rapidly changing work environment in an increasingly digital world.

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Notes for editors:

IZA World of Labor (http://wol.iza.org) is a global, freely available online resource that provides policy makers, academics, journalists, and researchers, with clear, concise and evidence-based knowledge on labor economics issues worldwide.

The site offers relevant and succinct information on topics including diversity, migration, minimum wage, youth unemployment, employment protection, development, education, gender balance, labor mobility and flexibility among others.

Established in 1998, the Institute of Labor Economics (www.iza.org) is an independent economic research institute focused on the analysis of global labour markets. Based in Bonn, it operates an international network of about 1,300 economists and researchers spanning more than 45 countries.