Contributed session P: Labour markets/households/inequality

14:00 - 15:30 Thursday, 22nd May, 2025
Courtyard BH (S) 2.03
Paolo Brunori

---

102 Unslicing the Pie: AI Innovation and the Labor Share in European Regions

Francesco Venturini
University of Urbino, Urbino, Italy. NIESR, London, United Kingdom

Abstract

This paper studies how the development of Artificial Intelligence (AI) affects the distribution of income between capital and labor, and how these shifts may contribute to geographic income inequality. To investigate this issue, we first develop a theoretical framework and then analyze data from European regions dating back to 2000. We find that for every doubling of regional AI innovation, the labor share declines by 0.7% to 1.6%, potentially reducing it by 0.20 to 0.46 percentage points from an average of 52%, solely due to AI. This new technology is particularly detrimental to high- and medium-skill labor, primarily through wage compression, while for low-skill workers, employment expansion partially offsets the associated wage decline. The effect of AI is not driven by other factors affecting regional development in Europe or by the concentration of the AI market.

97 New measures of demand for digital technical skills: An analysis across UK regions

Mary O'Mahony[1], Patrick Serberis[2]
[1]KIng's College London, London, United Kingdom. [2]King's College London, London, United Kingdom

Abstract

This paper employs data from firms' hiring on job platforms to distinguish three types of digital technical skills, developer, user and basic. Developers are skills that involve knowledge of programming language, artificial intelligence or data science. Users are those that involve employing software packages in business processes and basic are those that required for a broad range of tasks. We find differences in the regional patterns of skill demands across the three types. Developers fit the much cited pattern of high demand in the 'golden triangle' broadly covering London and its surrounding areas, Cambridge and Oxford, and are mostly graduates. In contrast, those with user or basic digital technical skills are more spread out across the country and are more likely to be non-graduates.

31 Polarization of opportunity

Pedro Salas-Rojo[1], Vanesa Jordá[2], Paolo Brunori[1,3]
[1]LSE, London, United Kingdom. [2]University of Cantabria, Santander, Spain. [3]Università di Firenze, Florence, Italy

Abstract

This paper introduces the concept of polarization of opportunities (POp) to examine how different sets of circumstances influence unfair inequalities. While traditional measures of inequality of opportunity (IOp) capture outcome disparities based on factors like race or gender, they fail to identify how these circumstances cluster individuals into homogeneous groups. POp addresses this gap by considering both the impact of circumstances and their role in forming distinct groups. Our analysis, using U.S. data, reveals that while income polarization and IOp have

increased over time, POp has declined. This finding provides new insights into the inequality of opportunity debate, highlighting the need to understand how exogenous factors shape the distribution of predicted outcomes.