<u>Seminario de Microeconomía Aplicada - Labor Market Exposure to AI: Cross-country Differences and Distributional Implications</u>

Seminarios y talleres

El seminario de Microeconomía Aplicada del Banco de la República es un espacio para discutir trabajos en progreso en las diferentes áreas de la microeconomía aplicada como economía laboral, organización industrial, economía de la salud, economía agrícola, economía de la educación, desarrollo económico, crimen, economía pública, medio ambiente, entre otras

Abstract: This paper examines the impact of Artificial Intelligence (AI) on labor markets in both Advanced economies (AEs) and Emerging Markets (EMs). We propose an extension to a standard measure of AI exposure, accounting for AI's potential as either a complement or a substitute for labor, where complementarity reflects lower risks of job displacement. We analyze worker-level microdata from 2 AEs (US and UK) and 4 EMs (Brazil, Colombia, India, and South Africa), revealing substantial variation in unadjusted AI exposure across countries. AEs face higher exposure than EMs due to a higher employment share in professional and managerial occupations. However, when accounting for potential complementarity, differences in exposure across countries are more muted. Within countries, common patterns emerge in AEs and EMs. Women and highly educated workers face greater occupational exposure to AI, at both high and low complementarity. Workers in the upper tail of the earnings distribution are more likely to be in occupations with high exposure but also high potential complementarity.

Autores: Carlo Pizzinelli, Augustus Panton, Marina M. Tavares, Mauro Cazzaniga, Longji Li

**Acerca del Expositor:** Carlo Pizzinelli. He is an economist at International Monetary Fond-IMF, where he currently works in the European Department. Until October 2023 he worked in the Research Department, focusing on issues related to the labor market and structural transformation. His works on

these topics have been featured in both academic journals and flagship IMF publications (such as the Regional Economic Outlook for Latin America and the Caribbean). He obtained his PhD in economics from the University of Oxford in 2018.

Tiempo de Exposición: 1 hora

Idioma de la exposición: inglés

• <u>Imprimir</u>