
[Download](#)

Keep in mind

The series Working Papers on Economics is published by the Office for Economic Studies at the *Banco de la República* (Central Bank of *Colombia*). It contributes to the dissemination and promotion of the work by researchers from the institution. This series is indexed at Research Papers in Economics (RePEc).

On multiple occasions, these works have been the result of collaborative work with individuals from other national or international institutions. The works published are provisional, and their authors are fully responsible for the opinions expressed in them, as well as for possible mistakes. The opinions expressed herein are those of the authors and do not necessarily reflect the views of Banco de la República or its Board of Directors.

AUTHOR OR EDITOR

Bonilla-Mejía, Leonardo

Flórez, Luz Adriana

Hermida, Didier

Lasso-Valderrama, Francisco Javier

Morales, Leonardo Fabio

Ospina-Tejeiro, Juan Jose

The series [Borradores de Economía \(Working Papers on Economics\)](#) contributes to the dissemination and promotion of the work by researchers from the institution. On multiple occasions, these works have been the result of collaborative work with individuals from other national or international institutions. This series is indexed at Research Papers in Economics (RePEc). The opinions contained in this document are the sole responsibility of the author and do not commit Banco de la República or its Board of Directors.

Publication Date:

Tuesday, 04 October 2022

Abstract

This paper assesses whether the Covid-19 pandemic accelerated automation in developing countries. We studied the case of Colombia, a country with low R&D and productivity and with high labor informality and unemployment. We estimated event-study models to assess the differential effect of the pandemic on job openings and salaried employment by the potential degree of automation of each occupation. Our results suggest that both vacancies and salaried employment fell more in highly automatable occupations during the pandemic and have since experienced a slower recovery. The effect of the pandemic on automation is mostly driven by sectors that were affected by mobility restrictions. We also found heterogeneous effects by age and gender. The acceleration of automation is mainly affecting the labor market for females and individuals over the age of 40. Finally, we explored the differential effect on occupations with wages around the minimum wage. We found that occupations with wages close to the minimum wage exhibit the highest effect, especially at the onset of the pandemic.

