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*). 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

Arias-Rodríguez, Fernando

Parra-Polanía, Julián Andrés

The series <u>Borradores de Economía (Working Papers on Economics)</u> 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, 21 September 2021

Abstract

We analyze the effects of population aging in the next decades on the Colombian pension system and on several macroeconomic variables. We also consider the impact of several reforms that are gradually implemented in the economy (increasing the retirement age, reducing the replacement rate, and increasing the number of years considered in calculating pensions in the Pay-As-You-Go regime (PAYG)). A diminishing population growth rate would considerably affect the real returns of the PAYG; therefore, in maintaining the current pension conditions under such a regime, significant increases on taxes would be required. Conversely, with the implementation of the parametric reforms considered, the subsidies granted under PAYG regime would slowly be reduced. The resulting lower tax rates and greater savings in the economy, hence a greater capital stock, would increase the labor productivity as well as the real salary. It would also decrease the real interest rate. The welfare gap between pension regimes could shrink because of the reforms and their effects. In the long run, the welfare of all individuals, irrespective of their pension regime choice, would increase.