Box 1: Adjusting long-term growth forecasting models to address Colombia’s demographic shifts - Monetary Policy Report, July 2025

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One of the central inputs for *Banco de la República’s* macroeconomic forecasting models is the long-term rate of growth of the economy. In technical terms, this is known as steady-state growth, defned as the growth rate of the economy in the absence of new shocks, also understood as the reference convergence in terms of growth of gross domestic product (GDP) in the long run. Occasionally, dependent on the shocks that affected the economy, this convergence may occur beyond the forecast horizon.

The two models currently used by the technical staff—Patacon and 4GM (reference Gonzalez et al., 2011, and Gonzalez et al., 2020, respectively) —adjust this parameter at 3.3%, a fgure aligned with the average annual growth rate of the Colombian economy over the last three decades (Graph B1.1). However, the country’s new demographic outlook, marked by a longer-lasting decline in the national birth rate and a more rapid aging of the population than foreseen a decade ago, suggests a structural slowdown in the buildup of effective labor, one of the main drivers of economic growth.

This phenomenon, which transcends the Colombian case and mirrorsa global trend, forces us to reconsider the steady-state growth value, not only for the forecasting models currently in place but also for the new generation of models under construction (Avila-Montealegre et al., 2025; Grajales-Olarte et al., 2025; Ramos-Veloza et al., 2025).

This Box presents the conceptual framework and quantitative estimates that support updating the long-term growth value to 2.65% annually. This quantifcation is part of a broader study on the macroeconomic effects of demographic shifts to be published by *Banco de la República* in 2026 within the journal “Ensayos de Política Económica” (Jaramillo et al., 2026).