
[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

Javier Guillermo Gómez-Pineda

Julián Roa-Rozo

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:

Thursday, 20 April 2023

Abstract

The business cycle is the cycle in the output gap and also in a stationary measure of trend output. Both the output gap and trend output are driven by joint trend-cycle shocks. The model is a univariate trend-cycle decomposition with hysteresis in trend output that enables the estimation of the output gap and trend output in 81 economies in quarterly frequency, since 1995Q1; and 184 economies in yearly frequency, in several cases since 1950, and in a few cases since 1820. Volatility and dispersion, as well as the frequency of large joint trend-cycle shocks, were low during the Gilded Age period; high during the interwar period, even more so in advanced (AD) economies compared to emerging market and developing economies (EMDE); and low in AD economies and high in EMDE economies in the post WWII period. In contrast with other existing estimates of trend output, those from the trend-cycle decomposition with hysteresis do not evolve smoothly, do not result in an artificial boom before recessions and are less sensitive to new data.