



# The Interdependence between Credit and Real Business Cycles in Latin American Economies

Working Paper No. 768 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.

AUTHORS AND/OR EDITORS Gómez-González, José Eduardo Ojeda-Joya, Jair Tenjo-Galarza, Fernando Zárate-Solano, Héctor M. Publication Date: Tuesday, 4 of June 2013

In this document we estimate credit and GDP cycles for three Latin-American economies and study their relation in the time and frequency domains. Cycles are estimated in order to analyze their medium and short-term frequencies. We find that short-term cycles are usually more volatile than medium-term cycles for credit and GDP in Chile, Colombia and Peru. We also find that credit-cycle peaks in the middle 1990s and middle 2000s precede notable GDP recessions 2 or 3 years later in these countries. Additionally, credit cycles in Latin-American economies tend to cause later movements in economic activity. This effect can be decomposed into two components: first, a negative effect in the case of business-cycle frequencies, and a positive effect in the case of medium-term GDP fluctuations.