Working Papers on Economics - Macro-prudential assessment of Colombian financial institutions' systemic importance

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.

AUTHORS AND/OR EDITORS León-Rincón, Carlos Eduardo Machado-Franco, Clara Lía Murcia-Pabón, Andrés Publication Date: Thursday, 26 of December 2013
This document presents an enhanced and condensed version of preceding proposals for identifying systemically important financial institutions in Colombia. Three systemic importance metrics are implemented: (i) money market net exposures network hub centrality; (ii) large-value payment system network hub centrality; and (iii) an adjusted assets measure. Two complementary aggregation methods for those metrics are implemented: fuzzy logic and principal component analysis.

The two resulting indexes concur in several features: (i) the ranking and remoteness of the top-two most systemically important financial institutions; (ii) the preeminence of credit institutions in the indexes; (iii) the appearance of a brokerage firm in the top-six; (iv) the skewed nature of the indexes, which match the skewed (i.e. inhomogeneous) nature of the three metrics and their approximate scale-free distribution.

The indexes are non-redundant and provide a comprehensive relative assessment of each financial institution's systemic importance, in which the choice of metrics pursues the macro-prudential perspective of financial stability. The indexes may serve financial authorities as quantitative tools for focusing their attention and resources where the severity resulting from an institution failing or near-failing is estimated to be the greatest. They may also serve them for enhanced policy and decision-making.

Fuente: https://www.banrep.gov.co/en/publications-research/working-papers-economics/macro-prudential-assessment-colombian-financial