
[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](#)

Publication Date:
Thursday, 15 of September 2011

Defining whether a financial institution is systemically important (or not) is challenging due to (i) the inevitability of combining complex importance criteria such as institutions' size, connectedness and substitutability; (ii) the ambiguity of what an appropriate threshold for those criteria may be; and (iii) the

involvement of expert knowledge as a key input for combining those criteria.

The proposed method, a Fuzzy Logic Inference System, uses four key systemic importance indicators that capture institutions' size, connectedness and substitutability, and a convenient deconstruction of expert knowledge to obtain a Systemic Importance Index.

This method allows for combining dissimilar concepts in a non-linear, consistent and intuitive manner, whilst considering them as continuous –non binary- functions. Results reveal that the method imitates the way experts them-selves think about the decision process regarding what a systemically important financial institution is within the financial system under analysis.

The Index is a comprehensive relative assessment of each financial institution's systemic importance. It may serve financial authorities as a quantitative tool for focusing their attention and resources where the severity resulting from an institution failing or near-failing is estimated to be the greatest. It may also serve for enhanced policy-making (e.g. prudential regulation, oversight and supervision) and decisionmaking (e.g. resolving, restructuring or providing emergency liquidity).

Language English