Borradores de Economía - Designing an Expert Knowledge-based Systemic Importance Index for Financial Institutions

Descargar (sólo en inglés) Tenga en cuenta
La serie Borradores de Economía, de la Subgerencia de Estudios Económicos del Banco de la República, contribuye a la difusión y promoción de la investigación realizada por los empleados de la institución. Esta serie se encuentra indexada en Research Papers in Economics (RePEc).

En múltiples ocasiones estos trabajos han sido el resultado de la colaboración con personas de otras instituciones nacionales o internacionales. Los trabajos son de carácter provisional, las opiniones y posibles errores son responsabilidad exclusiva del autor y sus contenidos no comprometen al Banco de la República ni a su Junta Directiva.

Autores y/o editores León-Rincón, Carlos Eduardo Machado-Franco, Clara Lía Fecha de publicación Jueves, 15 de septiembre 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).

Fuente: https://www.banrep.gov.co/es/publicaciones-investigaciones/borradores-economia/designing-expert-knowledge-based-systemic