

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

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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.