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Banking Crises and Financial Integration

Insights from Networks Science

Julian Caballero*

Abstract

This paper explores whether the level of *de facto* financial integration of banks in a country increases the incidence of systemic banking crises. The paper computes a measure of financial integration based on network statistics of banks participating in the global market of inter-bank syndicated loans. The network statistics used are indegree, outdegree, betweenness, clustering coefficients, authority, and hub centrality. The paper fits a count data model in the cross-section for the period 1980-2007, and finds that the level of financial integration of the average bank in a country is a robust determinant of the incidence of banking crises. While borrowing (weighted indegree) is positively associated with a higher incidence of crises, betweenness is associated with a lower incidence. That is, the more important is the average bank of a country to the global bank network, as captured by betweenness, the smaller the number of crises the country experiences.

Keywords: Banking crises; Financial crises; Capital flows; International Banking; Financial Networks
JEL classification: E44, F34, F36, G01, G21

* *E-mail:* julianc@iadb.org. Tel: +1(202)623.3556. 1300 New York Ave. NW, Washington DC, 20577. I would like to thank the Federal Reserve Bank of San Francisco for providing a stimulating environment while I was visiting as a PhD intern in the summer of 2009 and prepared the first draft of this paper. I would especially like to thank Galina Hale, not least for sharing her data. Michael Hutchison, and Andrew Powell made useful comments. All errors, of course, are mine. The findings, interpretations, and conclusions expressed in this article are entirely those of the author. They do not necessarily represent the views of the Inter-American Development Bank, its Executive Directors, or the countries it represents.