
Jorge A. Muñoz Mendoza1, Carmen L. Veloso Ramos1, Carlos L. Delgado Fuentealba1, Iván E. Araya Gómez1, Sandra M. Sepúlveda Yelpo1, Edinson E. Cornejo Saavedra1

1 Department of Business Management, University of Concepcion, Chile. Corresponding author.
1 Department of Statistics, University of Concepcion, Chile.
1 School of Economics, University of Barcelona, Spain.
1 Department of Business Management, University of Concepcion, Chile.
1 School of Management and Business, University of Concepcion, Chile.
1 Department of Economics, University of Concepcion, Chile.
1 Department of Business Management, University of Bio-Bio Chile.

Abstract

We analyze the connections between 195 banks from 41 countries for the period between January 03, 2005, and March 26, 2021. Using a two-step approach, we first remove the common global factors from banking stock returns, followed by using the LASSO-VAR model to estimate the network for banking stock markets. Our results reveal that banking stock markets are closely integrated around the world, especially between geographically closer markets. The non-idsyncratic components of banking stock returns, related to unobservable common global factors, act as a vehicle that amplifies shocks and creates an upward bias in the incidence of markets and banks in the network. We identify the markets and banks which offer significant advantages to diversifying risk, as well as those that transmit the largest idiosyncratic spillovers to other markets and induce the financial contagion within the banking network. These results have important implications for investment decision-making and policymakers.

Keywords: banking; connectedness; network; spillovers.