

Efficiency and Stability of a Financial Architecture with Too-Interconnected-to-Fail Institutions

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Abstract

How to regulate large interconnected financial institutions has become a key policy question. To make the financial architecture more stable regulators have proposed to limit the size and connections of these institutions. I calibrate a network-based model of an over-the-counter market and infer the hidden financial architecture based on bilateral trades in the Federal funds market. A comparison of the calibrated architecture to nine counterfactual architectures reveals that that efficiency of liquidity allocation decreases and the risk of endogenous contagion increases non-monotonically as banks face limits on the number of trading partners. I also find that in a less concentrated architecture more banks trigger a large cascade of failures, and it is more difficult to identify these banks ex-ante. Overall, my results suggest it is not optimal to restrict the number of connections of too-interconnected-to-fail banks because it can result in a financial architecture that is less efficient, more fragile, and harder to monitor.

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