Incomplete Information in Financial Networks

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February 15, 2014

Abstract

This paper studies the effect of incomplete information within a banking network. Banks are arranged in a network of claims. Claims are held either by other banks in the network or outside depositors. Within this framework, we analyze how incomplete information about the viability of bank assets affects the fragility of the banking system. In particular, we show that fluctuations in expectations and higher-order beliefs can be amplified and lead to systemic risk. Fragility depends both on the topology of the network as well as the structure of higher-order beliefs. Our results have implications for banking policy as well as the social value of stress tests.

JEL codes:
Keywords: Financial Networks, Interbank lending, Incomplete Information, Higher-order Beliefs, Strategic Completementarity, Network Games.