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Sommario/riassunto

Financial network analysis is used to provide firm level bottom-up holistic visualizations of interconnections of financial obligations in global OTC derivatives markets. This helps to identify Systemically Important Financial Intermediaries (SIFIs), analyse the nature of contagion propagation, and also monitor and design ways of increasing robustness in the network. Based on 2009 FDIC and individually collected firm level data covering gross notional, gross positive (negative) fair value and the netted derivatives assets and liabilities for 202 financial firms which includes 20 SIFIs, the bilateral flows are empirically calibrated to reflect data-based constraints. This produces a tiered network with a distinct highly clustered central core of 12 SIFIs that account for 78 percent of all bilateral exposures and a large number of financial intermediaries (FIs) on the periphery. The topology of the network results in the “Too- Interconnected-To-Fail” (TITF) phenomenon in that the failure of any member of the central tier will bring down other members with the contagion coming to an abrupt end when the ‘super-spreaders’ have demised. As these SIFIs account for the bulk of capital in the system, ipso facto no bank among the top tier can be allowed to fail, highlighting the untenable implicit socialized guarantees needed for these markets to operate at their current levels. Systemic risk costs of highly connected SIFIs nodes are not priced into their holding of capital or collateral. An eigenvector centrality based ‘super-spreader’ tax has been designed and tested for its capacity to reduce the potential socialized losses from failure of SIFIs.