Tuttalafinanza.it
by Valerio Carnovale

H.S. Scott Connectedness and Contagion

Connectedness occurs when financial institutions are directly overexposed to one another, resulting in a chain reaction of failures. It occurs when the failure of one bank will cause the failure of others through balance sheet links (asset or liability). Asset connectedness concerns the failure of one financial institution that will provoke a chain reaction of failure of other financial institutions with direct credit exposures to the first institution. Liability connectedness refers to the connection between the providers and recipient of short term funding, when the failure of the funding institution determines the failure of the dependent recipient. Network theory is a powerful tool to analyze how asset and liability connectedness influence the propagation of shocks. However, it makes unrealistic assumptions about bank behavior or assumes implausibility of large idiosyncratic shocks. Contagion is an indiscriminate run by short-term creditors of financial institutions that can render otherwise solvent institutions insolvent due to fire sale of assets and the resulting decline in asset prices. Run behaviors involve fears of widespread financial collapse that lead to withdrawal of funding reducing the aggregate amount of funding available to the financial system and in turn to the economy. Contagion run tends to propagate indiscriminately, apart from connectedness, and afflicts healthy markets and solvent institutions. Financial institutions are vulnerable to contagion due to their dependence on short-term borrowing to fund long-term investment activity. Runs may be rational or irrational because investors possess insufficient information to differentiate their own risks. Contagion is a structural feature of financial system that is endogenous to the economics of maturity transformation and is not likely to be resolved through better risk management or improved prudential oversight. Shift in creditor expectations can depend on almost every thing; contagion is a liquidity-driven phenomenon. Incentives are distorted: even though all creditors would collectively be better served by remaining invested, each individually has a strong incentive to be the first to exit; run can be a self-fulfilling prophecy. Correlation is the failure of multiple institutions due to a collapse in asset prices due to an exogenous event. There may be important relationships and some degree of overlap between connectedness and contagion.

The recent crisis had little to do with asset connectedness. Contagion was the major problem.

The strategy deployed to make the financial system safer (two wings and a prayer approach), that comprehends capital requirements, private bank liquidity requirements and resolutions procedures, are internally flawed because do not work well enough to stop contagion. To stop contagion it needs to sharply reducing the amount of short-term funding: short-term deposits are insensitive to the bank capital requirements and leverage; the internal models grant banks a large amount of discretion; complex risk weighting system may be less optimal than simple one. Runs are fundamentally liquidity driven but the liquidity requirements apply only to depository institutions; the stock of high-quality assets is limited by nature; holding liquidity assets costs to financial institutions and to economy, since they are unavailable to financial lending borrowers; are less efficient than the use of central bank lender of last resort. Shortcoming in the design of the resolution procedures (legal uncertainty) do not provide assurances that creditors of an institution that may go into resolution must believe they have no risk of losing their money: an institution perceived as distressed encourage a run. Only with designing a financial system that is not critically dependent on short-term funding, the possibility of contagion would be greatly diminished. The matter deserve further study.

Five criticism of government bailout: taxpayer can suffer losses, bailout may not work, creates moral hazard, government decisions may be political and ad hoc, bailout may fail to boost lending activity. Bailout is not an answer to contagion, but under dire circumstances may be the only tenable solution.

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