

Abstract

Contagion Analysis in the Banking Sector

This paper analyses how an external adverse shock will impact the financial situations of banks and insurance companies and how it will diffuse among these companies. In particular we explain how to disentangle the direct and indirect (contagion) effects of such a shock, how to exhibit the contagion network and how to detect the "superspreaders", i.e. the most important firms involved in the contagion process. This method is applied to a network of 8 large European banks in order to analyze whether the revealed interconnections within these banks differ depending on the underlying measure of banks' financial positions, namely their market capitalization, the price of the CDS contract written on their default and their book value.

Keywords: Contagion, Systemic Risk, Default Dependence, Credit Default Swaps, Canonical Correlation.

EFM Classification codes: 510, 520.