

Bilateral Exposures and Systemic Solvency Risk

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By introducing a structure of the balance sheets of the banks, which takes into account their bilateral exposures in terms of stocks or lendings, we get a structural model for default analysis. This model allows to distinguish the exogenous and endogenous default dependence. We prove the existence and uniqueness of the liquidation equilibrium, we study the consequences of exogenous shocks on the banking system and we measure contagion phenomena. This approach is illustrated by an application to the French banking system.