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Thesis Abstract

Essays on Monetary and Financial Economics

Chapter 1: Collateralized Contracts with Search Frictions: Self-Fulfilling Default and Liquidity (Job Market Paper)

A theory of collateralized contracts is developed in which search frictions in the asset market play a crucial role in determining liquidity and default risk. The theory sheds light on the role of collateralized contracts in alleviating the inefficiency of trading assets under search frictions, leading to the endogenous emergence of such contracts. Defaults on collateralized loans can occur in equilibrium, redistributing collateral from investors with high valuations to those with low valuations. This redistribution boosts liquidations in the asset market, reducing the search cost for defaulters to rebuild asset positions. As a result, aggregate default risk mitigates the inefficiency in trading assets and reduces the collateral value of assets, thus limiting the liquidity supported. To alleviate liquidity shortages, a riskier collateralized contract with a higher risk premium may be selected at the optimum. This feedback between aggregate default risk and individual default probability generates multiple equilibria and the possibility of self-fulfilling default. Risk management regulations reduce aggregate default risk, which increases the collateral value of assets, but they also restrict borrowers' ability to leverage favorable asset returns to support loans, thereby shrinking liquidity. The riskier the asset return, the less beneficial such regulations become. Given the limited scope of regulations, risk management imposed on the regulated sector can indirectly discipline default risk in the non-regulated sector by increasing the search cost for potential defaulters.

Chapter 2: Optimal Fiscal and Monetary Policy with Limited Commitment and Imperfect Tax Compliance

A model of money, credit, and banking is constructed in which government liabilities play an important role in transactions, including tax payments. A novel taxation distortion arises as tax payments require liquidity, which crowds out the liquidity demand associated with goods exchange. The model provides a theory of government debt capacity. With transaction frictions, taxation may become ineffective at providing public liquidity when the scarcity of liquidity falls below a certain level. High tax compliance permits a high tax burden, but may weaken the government's willingness to alleviate the scarcity of liquidity in the form of public debt.

Chapter 3: Too Big To Fail: Asset Distribution and Bankruptcy

This paper develops a model of bankruptcy, credit, and banking to analyze the impact of large banks' bankruptcies and to assess the effectiveness of various intervention policies. The model shows that a large bank's collapse can trigger systemic liquidity shortages by forcing the sale of significant asset holdings, which in turn reduces collateral values across the financial system. This decline in collateral value intensifies credit contraction, worsening liquidity shortages in the market. The paper evaluates two intervention policies to address these issues: government bailouts and asset purchase programs. While both policies help alleviate liquidity shortages and stabilize asset markets, the analysis finds that bailouts offer an advantage in reducing public costs.