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Thesis Abstract

Essays on Monetary and Financial Economics

Chapter 1: The Choice of Collateralized Contracts with Endogenous Asset Liquidity (Job Market Paper)

A model of collateralized contracts and asset liquidity is developed in which asset liquidity interacts with the optimal contract using assets to acquire funding. The theory sheds light on the role of collateralized contracts in alleviating the inefficiency in trading illiquid assets for liquidity purposes, leading to the endogenous emergence of such contracts. More importantly, the choice of bilateral collateralized contracts can influence asset distribution and trading activity in the asset market, thereby impacting asset liquidity. This feedback loop can result in multiple equilibria, where the formulation of contracts using assets to make transactions and asset liquidity are self-fulfilling. Defaults on collateralized loans can occur in equilibrium, allowing for the study of aggregate default risk. Haircut restrictions can reduce default risk and enhance collateral value, while limiting borrowers' leverage. Haircut regulations can indirectly discipline default risk in the non-regulated sector by impacting the asset market. Unanticipated strict haircut restrictions on risky assets may lead to a temporary default crisis.

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.