Bank Overleverage and Macroeconomic Fragility*

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Abstract

This paper develops a dynamic general equilibrium model that explicitly includes a banking sector engaged in a maturity mismatch. We demonstrate that rational competitive banks take on excessive risks systemically, resulting in overleverage and inefficiently high crisis probabilities. The model accounts for the bank’s seemingly over-optimistic outlook about their own solvency and the asset prices, compared to the social optimum. The result calls for policy intervention to reduce the high crisis probabilities. To this end, the government can commit to bailing out banks through public supply of liquidity or a low-interest rate policy. As opposed to the intention of the government, however, expectations of a bailout could incentivize banks to be even more overleveraged, leaving the economy exposed to higher crisis probabilities.

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