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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