Optimal deposit insurance in a macroeconomic model with runs*

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Abstract

This paper examines the effects of deposit insurance in a quantitative macroeconomic model that incorporates the risk of deposit runs faced by banks. During systemic sunspot panic episodes, uninsured depositors tend to withdraw their funds from banks they perceive as vulnerable. While deposit insurance reduces banks' susceptibility to such runs, it may also weaken their risk management incentives, resulting in a U-shaped relationship between insurance coverage and the risk of bank failure. The model suggests that the welfare-maximizing level of deposit insurance coverage for the U.S. in 2008 aligns closely with the observed level. Technological and demographic factors that heighten depositors' alertness may warrant a moderate rise in this coverage.

Keywords: Deposit insurance, bank runs, moral hazard
JEL Classification: E61, G01, G21, G28, G32

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