Bank Capital, Liquid Reserves, and Insolvency Risk*

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Abstract

We develop a dynamic model to assess the effects of liquidity and leverage requirements on banks’ insolvency risk. The model features endogenous capital structure, liquid asset holdings, payout, and default decisions. In the model, banks face taxation, flotation costs of securities, and default costs. They are financed with equity, insured deposits, and risky debt. Using the model, we show that mispriced deposit insurance fuels default risk while depositor preference in default decreases it; liquidity requirements have no long-run effects on default risk but may increase it in the short-run; leverage requirements reduce default risk but may significantly reduce bank value.

Keywords: banks; liquidity buffers; capital structure; insolvency risk; regulation

JEL Classification Numbers: G21, G28, G32, G33.

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