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The Dark Side of Liquidity Creation: Leverage and Systemic Risk

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Abstract

We consider a model in which the threat of bank liquidations by creditors as well as equity-based compensation incentives both discipline bankers, but with different consequences. Greater use of equity leads to lower ex ante bank liquidity, whereas greater use of debt leads to a higher probability of inefficient bank liquidation. The bank's privately-optimal capital structure trades off these two costs. With uncertainty about aggregate risk, bank creditors learn from other banks' liquidation decisions. Such inference can lead to contagious liquidations, some of which are inefficient; this is a negative externality that is ignored in privately-optimal bank capital structures. Thus, under plausible conditions, banks choose excessive leverage relative to the socially optimal level, providing a rationale for bank capital regulation. While a blanket regulatory forbearance policy can eliminate contagion, it also eliminates all market discipline. However, a regulator generating its own information about aggregate risk, rather than relying on market signals, can restore efficiency by intervening selectively.

Keywords: micro-prudential regulation, macro-prudential regulation, market discipline, contagion, lender of last resort, bailout, capital requirements

JEL Classifications: G21, G28, G32, G35, G38

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