Dynamic Prudential Regulation*

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Abstract

This paper investigates regulations for a bank that is covered by deposit insurance in a dynamic setting where bankruptcy entails social costs. Regulatory policy operates through rules governing the bank's capital structure and asset allocation that may be adjusted each period. Throughout, the regulator must take into account that the bank is better informed about the inherent risks of its assets (adverse selection) and may forgo unobservable and costly actions to improve asset quality (moral hazard). I solve the resulting dynamic contracting problem by extending the approach of Athey, Atkeson, and Kehoe (2005). The model implies a stationary optimal regulatory policy under which banks face risk-adjusted capital requirements but also hard-caps on size (by assets) as well as leverage. In addition, the optimal policy counteracts procyclical bank behaviour through the use of capital buffers. Overall, the optimal policy broadly supports major elements of the proposed Basel III regulatory framework.

JEL Classification Codes: G2, G3, G21, G28, G32

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