Bank Capitalization Heterogeneity and Monetary Policy *

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Abstract

This paper shows that heterogeneity in bank capitalization rates plays a crucial role in the transmission of monetary policy to bank lending. First, I offer new empirical evidence on the dependence of bank lending responses to monetary policy shocks on their capitalization rates. Highly-capitalized banks reduce their lending more after a monetary tightening, even after controlling for bank liquidity, size, and market power in the deposit market. I also document that highly capitalized banks have a riskier portfolio, as measured by loan charge-off rates, and default rates on their loans increase relatively more after a tightening in monetary policy. I then construct a dynamic macroeconomic model that rationalizes the empirical evidence through the interaction of heterogeneous recovery technologies of banks facing a risk-weighted capital constraint. In particular, after an increase in the policy rate, the model predicts that loan rates and default probabilities increase in both sectors. Higher-capitalized banks with a riskier portfolio are more sensitive because the risk-weighted capital constraint affects them more, so they contract lending more. In a counterfactual analysis, I find that higher capital requirements amplify the effects of monetary policy.

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