Bank Capitalization Heterogeneity and Monetary Policy *

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Abstract

This paper argues that heterogeneity in bank capitalization's rate plays a crucial role in the transmission of monetary policy to bank lending. First, I offer new empirical evidence on the transmission of monetary policy to bank lending. I find that the response of banks' lending depends on their capitalization rate, in which highly-capitalized banks reduce their lending more after monetary tightening, even after controlling for bank liquidity, size, and market power on deposit. I also document that highly capitalized banks have a higher share of commercial and industrial loans and personal loans. I also show that these type of loans are riskier compared with real estate loans, as measured by charge-off rates, and default rates increase after a tightening of monetary policy. I then provide a theoretical mechanism that supports the empirical evidence based on heterogeneous recovery technologies of banks facing a risk-weighted capital constraint. Finally, I develop a simple dynamic macro model with novel feature of bank heterogeneity in recovery rates for defaulting loans, and interaction with risk-weighted asset constraint that qualitatively reproduces my empirical findings. Further, I evaluate the impact of capital requirements, finding that it amplifies the effects of monetary policy.

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