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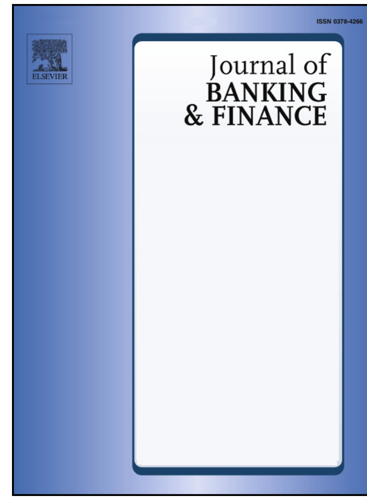

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Assessing Financial Stability:

The Capital and Loss Assessment under Stress Scenarios (CLASS) Model*

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Abstract:

The CLASS model is a top-down capital stress testing framework that uses public data, simple econometric models and auxiliary assumptions to project the effect of macroeconomic scenarios on U.S. banking firms. Through the lens of the model, we find that the total banking system capital shortfall under stressful macroeconomic conditions began to rise four years before the financial crisis, peaking in the fourth quarter of 2008. The capital gap has since fallen sharply, and is now significantly below pre-crisis levels. In the cross-section, banking firms estimated to be most sensitive to macroeconomic conditions also have higher capital ratios, consistent with a "precautionary" view of bank capital, though this behavior is evident only since the crisis. We interpret our results as evidence that the resiliency of the U.S. banking system has improved since the financial crisis, and also as an illustration of the value of stress testing as a macroprudential policy tool.

* Corresponding author: James Vickery, Research and Statistics Group, Federal Reserve Bank of New York, 33 Liberty St New York NY 10045 USA; Email: james.vickery@ny.frb.org; Tel: +1-212-720-6691. For outstanding research assistance, we thank Dafna Avraham, Peter Hull, Matthew Mazewski, Lev Menand, Lily Zhou, and particularly Ulysses Velasquez. We also thank many Federal Reserve colleagues for their suggestions and ideas, as well as our discussants Ignazio Angeloni and Mark Jensen, and participants at the Yale Program for Financial Stability Annual Conference, Interagency Risk Quantification Forum and a research seminar at the FDIC. Finally, we thank Viral Acharya and Robert Engle for providing data and assistance regarding their SRISK measure of capital shortfall. The views expressed in this paper are those of the authors and do not necessarily reflect the position of the Federal Reserve Bank of New York or the Federal Reserve System.