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To Mindy Ring

Allen N. Berger

To My Parents, My Daughter Arya,
and My Mentors

Christa H.S. Bouwman

Preface

We met in the summer of 2004 when Christa was a PhD student at the University of Michigan and Allen was a senior economist at the Federal Reserve Board in Washington. We were introduced via email by Arnoud Boot of the University of Amsterdam, who had been a former teacher of Christa and a professional colleague of Allen. Arnoud asked Allen if he would take on Christa as an intern for the summer and Allen agreed, and our long-term collaboration began. Eventually, Christa graduated, moved to Case Western Reserve University in Cleveland, and then went on to become an Associate Professor with Tenure and Republic Bank Research Fellow at Texas A&M University in College Station. Allen moved to the University of South Carolina in Columbia, where he is now H. Montague Osteen, Jr., Professor in Banking and Finance and Carolina Distinguished Professor.

Our first project, started in the early summer of 2004, was to test the theories of the effects of bank capital on liquidity creation. We quickly realized that there were no available measures of liquidity creation that incorporated the liquidity created or destroyed by all commercial bank assets, liabilities, and off-balance-sheet activities, so we developed our own measures of bank liquidity creation. Our preferred measure, "cat fat," classifies all bank financial activities as liquid, semiliquid, or illiquid. It uses categories for loans (the Call Report only allows classification by category or maturity, but not both) and both category and maturity for other assets, liabilities, and off-balance-sheet activities. We later found a contemporaneous working paper by Deep and Schaefer (2004) that measured bank liquidity transformation, but for reasons described in the book, did not suit our purposes. When we presented the paper the next May at the 2005 Federal Reserve Bank of Chicago Bank Structure and Competition conference, we were surprised that all of the attention and questions were on the liquidity creation measures, rather than on the tests of the effects of capital on liquidity creation. As a result, we flipped the order to focus first on the liquidity creation measures, eventually adjusted the title of the paper to be simply "Bank Liquidity Creation," and it was published in the *Review of Financial Studies* in 2009.

In early 2008, when the recent financial crisis was just underway, but well before the widespread panic of September 2008 when Lehman Brothers failed, we began work on financial crises. We developed a paper that linked financial crises with bank capital, liquidity creation, and monetary policy. We eventually separated it into two papers, one on bank capital and financial crises which was published in the *Journal of Financial Economics* in 2013, and one on liquidity creation, monetary policy, and financial crises, which is currently a revise-and-resubmit at another journal.

Since these papers, there has been a lot of research and policy interest in bank liquidity creation, financial crises, and their linkages. We contemplated writing a book on this topic and were therefore delighted when Elsevier approached us to do exactly that. In the book, we provide thorough reviews and integration of the existing research on these topics and run numerous new analyses using liquidity creation and financial crisis data. The new analyses use information on liquidity creation for virtually all individual commercial banks in the US on a quarterly basis for 31 years over the period 1984:Q1 – 2014:Q4.

The book's website (http://booksite.elsevier.com/9780128002339) makes the liquidity creation data used in the book available for benchmarking of bank performance, research, and policy work. This website also contains links to a number of other websites with U.S. data, documents, and other information relevant for such work. Regular data and website link updates will be posted there as well. It is our hope that readers find these to be helpful.

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Part III
Financial Crises, Liquidity Creation, and their Links