

Research Statement

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I am a PhD candidate in Economics, with interests in banking, capital markets, and FinTech, focusing on the United States and China.

In my first essay **"How Dodd-Frank Act and Capital Market Incentives Deters Large Banks Lending to Small Businesses"**, I examine one of the poorly understood features of the United States 2008 financial crisis – the slow recovery of small business lending (SBL), by measuring how the new regulations imposed by Dodd-Frank Act of 2010 altered the capital market incentives for banks to lend to small businesses. The study requires matching stock market data with detailed balance sheet and loan data from the federal regulatory agencies and macroeconomic data. Analyzing this bank holding company-level data spanning 2001-2018, I find that, although U.S. banks were overall encouraged to lend to small businesses, large banks were penalized at the margin. After 2010, the effect became more severe and 1 percentage point increase in the SBL/assets ratio was associated with more than 2 percentage points decrease in Tobin's Q ratio for systemically important banks (SIB). This lack of financial incentives on SBL for large banks might have contributed to the slow recovery of SBL since the global financial crisis. For community banks, the financial incentives for SBL have been mostly positive, especially after 2014 when the Federal Reserve announced a relief plan for smaller banks. For an increase of 1 percentage point in the SBL/assets ratio, the Tobin's Q ratio for non-SIBs increases by 0.5 percentage point. The effect is five times greater than before 2014.

Although the Chinese stock bubbles of 2007 and 2015 have received considerable scholarly attention, the data available for their analyses has been generally limited to price and quantity data. In my second essay **"Can the Greater Fool Theory Explain Bubbles? Evidence from China"**, I unearthed new time series about the accounts of new investors who moved into the bubbly markets, a type of data not existing in the United States. I find that new investors, attracted by soaring stock prices and the intensive trading activities of others, drove the Chinese stock market bubbles in 2007 and 2015, supporting the Greater Fool theory of bubbles. Using the residual orthogonalization method, I build a data-driven structural model system, where shocks from the new accounts variable explain 40-55% of Chinese stock return variation.

My last essay **"FinTech vs. Traditional Banking: Complementary or Competition?"** aims to answer the question whether FinTech will replace the consumer financing role of traditional banks or it will promote the reform and development of banks, by examining the confidential consumer loan data from *Ant Financial*, the financial company of *Alibaba*. With my coauthor, I will apply a novel big data technique to identify the growth dynamics of fintech consumer loans from the account-level longitudinal data. By matching the account-linked credit or debit card information with the bank data, we will analyze the effects of fintech development on bank consumer loans.

For my future research plan, I will focus on three aspects of banking and fintech topics in the U.S. and China. First, I will further investigate the trends that I discovered from the U.S. regulatory bank data. For example, the funding cost and the contractual interest rate of large banks have been moving divergently from those of smaller banks since 2008. Second, I am cooperating with *Ant Financial* on other projects, such as analyzing the debt sustainability of FinTech consumer loans and comparing it with the cases of other countries. Third, working with my colleague in China who collected an account-level data of both borrowers and lenders on a P2P platform in 2015–16, I plan to investigate the P2P lending and borrowing behavior. For example, the effects of negative shocks from the Chinese stock market crash in June 2015.