Yizhi Xu

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EMPLOYMENT

International Monetary Fund, Washington, DC, USA
Economist — *since 2018*

EDUCATION

University of California, Los Angeles (UCLA), Los Angeles, USA
Ph.D. in Economics — *2018*
C.Phil (M.S. equivalent) in Economics — *2014*
Purdue University, West Lafayette, USA
B.S. in Mathematics, Statistics, and Economics with Honors (Highest Distinction) — *2012*

RESEARCH FIELDS

Primary: Macroeconomics, Banking, and International Finance
Secondary: Financial Economics and Fiscal Policy

PUBLICATION

"Fiscal Crises", with Kerstin Gerling, Paulo Medas, Tigran Poghosyan, and Juan Yacoub. *Journal of International Money and Finance,* Volume 88, November 2018, Page 191-207.

Mentioned in "IMF Key Issues" and "Fiscal Risk Report" presented to the UK Parliament

WORKING PAPERS

"Shadow Banking and Systemic Bailouts", Job Market Paper

We study the impact of systemic bailout expectations on bank credit growth patterns. Using daily put options data of U.S. bank holding companies, we measure each bank holding company's exposure to the systemic bailout factor, which is the sensitivity of each bank's out-of-the-money put option price to the variations of sector-wide put option basket-index spreads. We show that low market expectations of the banking sector systemic bailouts played a significant role in the weak bank credit recovery after the subprime crisis. Bank holding companies with higher pre-crisis exposure to the systemic bailout factor experienced larger post-crisis deviations from the pre-crisis bank credit growth trend. Perhaps surprisingly, such pattern is persistent even for banks that are less affected by the post-crisis financial regulations and less exposed to borrowers from the deteriorating sectors. Furthermore, we drill down to the commercial bank subsidiary level data while controlling for parent bank holding company fixed effects. This analysis reveals that commercial bank subsidiaries within the same bank holding company present same credit growth patterns even though they have different exposure to financial regulations and deteriorating sectors. To rationalize the empirical findings, we propose a model with both commercial banks and shadow banks. The securitization market, which connects the two types of banks, determines how market expectations of systemic bailouts to shadow banks affect the credit origination capacity of the whole banking system.

"Non-Performing Loans, Government Interventions, and Economic Recoveries", with Aaron Tornell

This paper studies the effects of government interventions towards bank non-performing loans (NPLs) during the aftermath of banking crises. Following the narrative approach, we constructed a cross-country database of government intervention plans for reducing NPLs. The database documented 72 systemic banking crises since 1990 and most of which are followed by direct capital injections or NPLs purchases that are conducted by the government. we expanded the existing banking crises database by providing detailed amount of direct capital injections and NPLs purchases based on IMF country reports and each country's central bank reports. Cross-country regression analyses show that both plans contribute to higher long-run growth in credit and output. Fiscal outlays on either capital injections or NPLs purchases with 1% of crisis year GDP are followed by an additional 0.5% annual credit growth and an additional 0.12% annual output growth. In addition, direct capital injections lead to faster recoveries in credit and output in emerging market countries, while NPLs purchases with lower haircut lead to faster growth in advanced market countries. However, these intervention plans are costly, as they significantly increase the public debt. Fiscal outlays with 1% of crisis year GDP are followed by an additional 0.3% increase in the public debt ratio in the short-run, and such effect is stronger if the haircut in NPLs purchases is higher. Despite the short-run fiscal cost, we do not observe significant long-run fiscal impact after both intervention plans, which implies that government bailouts to the distressed banking sector barely cause long-term fiscal burdens.

WORK-IN-PROGRESS

"Shadow Bank Bailouts and Asset Flows within Bank Holding Companies: A Tale of Two Bankers"

As the government bailout guarantees to the shadow banking sector become less likely, shadow bankers are motivated to convert themselves to commercial bankers who are in a safety net with the federal deposit insurance but are subject to stricter regulations. Indeed, the bankruptcy of Lehman Brothers without government bailouts was followed by a wave of conversions from shadow banks to commercial banks (including Goldman Sachs and Morgan Stanley). This paper provides a model framework to analyze the market efficiency and the banking sector stability following endogenous conversions between commercial banks and shadow banks caused by exogenous changes in the government guarantee policy. Securitization, which allows commercial banks to transfer a fraction of their balance sheet risks to shadow banks, is the key connection between these two banking sectors. The equilibrium securitization volume is determined by 1) commercial bankers' trade-off between balance sheet risks and private benefit from deposit insurance, 2) shadow bankers' ability to diversify their assets pool for sustaining higher leverage, and 3) the return on equity (ROE) between the two sectors. In a numerical experiment with a large decline in government guarantees to shadow banks, commercial banks expand, shadow banks shrink, and the banking sector is more stable under rational expectations. However, ROE in the whole banking sector is likely to decline and the exposure to the neglected tail risks increases as the shrinking shadow banking sector increases assets diversification to meet higher securitization requests from the expanding commercial banking sector.

"Sources of Credit", with Dulani Seneviratne, Jerome Vandenbussche, and Peichu Xie

We study if the heterogeneity in bank fundamentals contains information about future credit-related macrofinancial stability risks. We present our analyses based on (i) country-level measure of "riskiness of bank credit originations" and (ii) bank- and syndicated loan-level evidence of bank risk-taking patterns.

Honors and fellowships

Graduate School Doctoral Fellowship, UCLA	*2013-2018*
Graduate School Travel Grant, UCLA	*2017*
Phi Beta Kappa, Purdue Chapter	*2012*
Distinction in Economics Award, Purdue University	*2012*
Jean E. Rubin Scholar and College of Science Scholarship, Purdue University	*2011*

Invited seminars and presentations

CEF Ottawa (scheduled), NASMES Seattle (scheduled), International Monetary Fund (scheduled)	*2019*
City University of Hong Kong, Peking University (Guanghua and HSBC), Bank of Finland, EEA-ESEM Cologne, ES-China, ES-Australasia	*2018*
UCLA, European Central Bank*, University of Bonn*, IFABS Asia Meeting	*2017*
UCLA, International Monetary Fund	*2016*

* Presented by coauthors

Teaching experience

Financial Markets and Financial Institutions, UCLA	*Fall 2016, Fall 2017*
History of Capitalism in American Economy, UCLA	*Fall 2016*
Intermediate Microeconomic Theory, UCLA	*Fall 2013, Fall 2014, Fall 2015*
Intermediate Macroeconomic Theory, UCLA	*Spring 2015, Summer 2015*
Intermediate Microeconomic Theory, Purdue University	*Fall 2012*

References

Prof. Aaron Tornell (co-chair)
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Prof. Roger Farmer (co-chair)
Department of Economics, UCLA
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Personal information

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Date of Birth: November 3. 1989