

Conference Summary

2019 Research Conference: “Bank Regulation, Lending, and Growth”

Sponsored by Columbia SIPA and the Bank Policy Institute

On Friday, March 1st, Columbia University’s School of International and Public Affairs and the Bank Policy Institute co-hosted their 3rd annual research conference entitled “Bank Regulation, Lending, and Growth.” Over the course of the day, academic researchers, leading market participants, Fed staff, and press had a chance to interact and debate ideas in four interactive sessions:

(1) Impact of Bank Regulation on Lending and Growth

The morning session began with the paper “The Impact of the Dodd-Frank Act on Small Business.”¹ The authors analyze the impact of the Dodd-Frank Act (DFA) on small business lending and its potential unintended consequences. Using commercial and industrial loans (C&I) from 1993-2017, they find evidence to conclude that the decrease in small loan share of C&I loans can almost all be statistically attributed to change in regulation, even after controlling for cyclical effects and bank size. In addition, the authors find a relative tightening of credit standards to small versus large businesses and a reduction in business formation post-DFA. The later discussion on small business lending centered around the impact of stress tests on capital allocation, the role of local supply, and the broader implications on inequality and systemic risk – particularly as regulation pushes lending activities beyond the banking sector.

In “Sharing the Pain? Credit Supply and Real Effects of Bail-ins,”² the authors use the unexpected failure of a large Portuguese bank to analyze the effects of bail-ins on credit supply and other real economic factors. Using a matched firm-bank dataset, the authors find significant reduction in credit supply from the banks most exposed to the bail-in, but affected firms were able to find alternative sources of funding to offset this credit tightening. However, the authors found some short-term costs of the bail-ins: a reduction of credit lines at SMEs, particularly those with worse pre-shock internal liquidity positions, and consequent reductions in investment and employment. Discussants weighed the tradeoffs between such a private sector bail-in, given the short-term costs, and a government bail-out, with all the associated moral hazard and political implications. In addition, discussants evaluated the generalizability of the Portuguese case, given the peculiarities of its economy.

(2) Keynote by Kevin Stiroh, Head of Supervision at the New York Fed

In his speech, “[Policy Efficiency in Supervision](#),” Kevin Stiroh³ talked about the role of supervision and regulation to support financial intermediation while limiting disruption and financial stability risks. He introduced the concept of an “efficient policy frontier” that maps the trade-off between these objectives. While policy preferences can lead to different levels of regulation, he highlighted the importance of an efficient policy that can minimize risk for a desired level of financial intermediation. For example, he mentioned the recent tailoring proposal as a way the Federal Reserve is trying to ensure supervision is scaled according to risk. From a practical stand-point he discussed several issues. Firstly, understanding the trade-offs and how the complexity of the issue allows for a dynamic discussion with a wide range of

¹ Bordo, Michael D., Rebel A. Cole, John V. Duca, 2018. “The Impact of the Dodd-Frank Act on Small Business.”

² Beck, Thorsten, Samuel Da-Rocha-Lopes, Andre F. Silva, 2018. “Sharing the Pain? Credit Supply and Real Effects of Bank Bail-ins.”

³ Executive Vice-President at the New York Federal Reserve and head of the Supervision Group.

estimates on optimal type and level of oversight for financial institutions. Secondly, he highlighted the difference between social and private optimal equilibria and how this can lead to debates relative to stated goals and the efficiency of certain policies. In addition, assessing the position of potential policy changes relative to the “efficient policy frontier” is not always easy as many of these policies interact and cannot be analyzed in a vacuum. Lastly, there is the question of the resources used to enforce and comply with regulation. In conclusion Mr. Stiroh stressed the importance of communication between the different stakeholders to promote a sound and stable financial system.

(3) Consumer Protection and Lending

This session began with a deep-dive into the auto-loan market and the effects of state laws related to usury and wage garnishments. While usury laws led to lower rates to higher risk borrowers, this was mostly offset by greater principals. On the other hand, on average, all type of borrowers face higher total observable loan costs in areas where wage garnishment is prohibited, leading to important distributional effects between those who pay in full and those who do not. The discussion continued with a high-level overview of consumer debt. While mortgage and credit card debt have remained broadly stable since the Great Financial Crisis (GFC), student debt and auto-loans have soared. One panelist argued this could be due to the fact these loans proved to be extremely resilient through the GFC. The conversation then moved on to the importance of home-ownership as a measure of wealth and the role that the definition of a “qualifying mortgage” plays in the market. The role of Federal Housing Administration (FHA) and other Government Sponsored Enterprises (GSEs) was debated at length, in particular with respect to non-banks and the potential threat to financial stability. This discussion was followed by an overview of the role of Artificial Intelligence (AI) in consumer lending. Banks have long used algorithms to guide their lending decisions, but discussants noted that incorporating AI and machine-learning may have unintended consequences. As quoted by one of the panelists: “Machine learning algorithms will always identify a pattern, even if there is none.”⁴ Practitioners must be careful about overfitting the data and make sure they comply with fair lending laws. Finally, the panel discussed the role of the Consumer Financial Protection Bureau (CFPB) and its obligations under DFA to publish assessment papers, essentially evaluations of enacted rules against their stated goals. Three of these documents have already been published related to Remittances, HRQM and Mortgage Servicing. The Q&A session revolved around the issue of fintech companies and the role that regulation must play in both allowing and incentivizing innovation while ensuring a level playing field, and that there is a better understanding of the new risks that arise with this innovation.

(4) Regulation and The Cost of Capital

The next two papers linked regulation to reductions in banks’ cost of equity and increases in equity value. In “Regulatory Changes and The Cost of Capital for Banks,”⁵ the authors argue that post-DFA, the value-weighted cost of capital fell differentially more for banks than for non-banks. Some evidence indicated that stress-testing had lowered the cost of capital for the very largest banks. Discussants pointed out that cost of equity tells an incomplete picture: in fact, banks’ weighted average cost of capital has increased, as regulation has forced banks to source more expensive equity funding rather than debt. Discussants also cautioned against interpreting the effects as purely due to changes in regulation, as other factors took

⁴ Marcos Lopez de Prado. AQR Capital Management. <https://www.bloomberg.com/news/articles/2018-10-09/the-big-problem-with-machine-learning-algorithms>

⁵ Kovner, Anna, Peter Van Tassel, 2018. “Regulatory Change and the Cost of Capital for Banks.”

place simultaneously. Finally, discussants suggested using alternative measures of expected returns to equity, such as option prices, which are inherently forward-looking.

In “The Value of Regulators as Monitors: Evidence from Banking,”⁶ the author exploits a quasi-natural experiment. New regulation changed the threshold for certain reporting requirements for banks that were between \$150m and \$500m in assets. The author identifies that reduced Fed supervision leads to a 1% loss in bank Tobin’s q and a 7% loss in bank equity market-to-book. Discussants raised one noteworthy issue: if regulatory monitoring is value accretive to equity, why don’t banks provide the information directly? Another commenter raised issue with the identification strategy related to managerial rent extraction.

(5) Costs and Benefits of Capital and Liquidity Requirements

The last session of the day looked at costs and benefits of capital and liquidity requirements with respect to derivatives markets. In the Bank of England paper “Repo Market Functioning: The Role of Capital Regulation,”⁷ the authors examine the change in the required method to calculate the leverage ratio from month-average to daily average and look at its impact on the country’s bilateral repo market. They find that the change resulted in banks being less willing to accept repo investments from smaller clients and conclude that banks prefer interacting with larger clients where more ancillary income can be obtained. They find a corresponding and offsetting increase in repo with smaller clients by financial institutions not subject to the change in the leverage ratio requirement.

“When Leverage Ratio Meets Derivatives: Running Out of Options?”⁸ explores the impact of Basel III on the US derivatives market. The authors find that banks lose market share to non-banks, U.S. banks lose market share to European banks and bank clearing activities shift toward house accounts. These trends are more pronounced for low-delta options (which are less risky than high delta options but carry the same leverage ratio requirement) than for high-delta options. Treasury options, on the other hand, were unaffected because they are not included in the leverage ratio. Discussants debated whether reducing the size of the derivatives market was in fact an intended consequence of the regulation. Discussants also highlighted the increase in the cost of doing business for broker-dealers, with repercussions that could trickle down to smaller banks.

Finally, discussants highlighted the role of electronic trading and algorithms to provide liquidity, as well as associated systemic risks in moments of stress. In particular, the persistence of flash-crashes and how they ultimately could reduce liquidity in the system as market participants evaluate if they are just glitches or advanced signals of a systemic risk event. Participants also discussed whether other regulations, including the GSIB surcharge, could be working as a binding constraint in the derivatives market.

⁶ Bisetti, Emilio. 2018. “The Value of Regulators as Monitors: Evidence from Banking”

⁷ Kotidis, Antonis, Neeltje van Horen. 2018. “Repo Market Functioning: the Role of Capital Regulation”

⁸ Haynes, Richard, Lihong McPhail, Haoxiang Zhu. 2018. “When Leverage Ratio Meets Derivatives: Running Out of Options?”

