Community Banking Research Conference 2022

Where Research and Policy Meet

CELEBRATING
10TH ANNUAL
2013 - 2022

CO-SPONSORED BY:

United States Federal Reserve System

CSBS
SINCE 1902
CONFERENCE OF STATE BANK SUPERVISORS

FDIC

The 10th Annual Community Banking Research Conference

Sept. 28-29, 2022

Sponsored by the Federal Reserve System, the Conference of State Bank Supervisors and the Federal Deposit Insurance Corp.

UNITED STATES FEDERAL RESERVE SYSTEM

CSBS SINCE 1902
CONFERENCE OF STATE BANK SUPERVISORS

FDIC

About the 2022 Conference

For the 10th consecutive year, the Federal Reserve, the Conference of State Bank Supervisors (CSBS) and the Federal Deposit Insurance Corp. (FDIC) welcome you to the *Community Banking Research Conference: Where Research and Policy Meet.*

Formerly known as the Community Banking in the 21st Century Research and Policy Conference, this event has brought together researchers, regulators, policymakers and community bankers since 2013 to discuss and debate the latest research on community banks. The research has explored the many facets of small-bank financial intermediation in the U.S. and has enhanced the understanding of the importance of relationship lending in the allocation of credit—especially for small businesses. In two of those years, 2020 and 2021, conference participants met virtually because of COVID-19 restrictions. This year, we are pleased to offer a hybrid event: both in person at the Federal Reserve Bank of St. Louis, as well as virtually via the Zoom conference platform.

Research presented at the conference is evaluated and critiqued by an academic moderator and by a community banker. Blending an academic perspective with a practitioner's perspective gives researchers feedback on the academic merits of their papers and provides important insights into the relevance of their work to the day-to-day challenges faced by the more than 5,000 community banks operating in the U.S. There is also an award granted for the paper making the most significant contribution to banking research. The award has been renamed this year the "John W. Ryan Award for Most Significant Contribution to Community Banking Research" in honor of the late John Ryan, the former CSBS president and CEO who helped found the conference. (See page 21 for more about the contributions to the conference of Ryan and the late Richard Brown of the FDIC.) A list of the past award winners and their papers can be found on page 20.

The insights generated by this research each year are further contextualized with the results of the annual CSBS National Survey of Community Banks, which has been conducted by CSBS and the state banking commissioners since 2014. The survey findings are presented as part of the conference proceedings and provide a current snapshot of the opportunities and challenges facing community banks. This year's findings have been published as a separate volume, available via the CSBS website at **csbs.org** or the conference website at **communitybanking.org**.

The conference also features keynote addresses by senior Federal Reserve, CSBS and FDIC officials, and by a community banker. Since its inception, the conference has evolved in ways that have added additional voices and perspectives to the annual proceedings. For example, in 2015, CSBS launched an annual Community Bank Case Study competition for undergraduate students. The competition requires student teams of no more than five to partner with a community bank to conduct an original case study on an important topic to community banks. The winning case study team is invited to present its findings at the conference. Also in 2015, an Emerging Scholars program was launched to support Ph.D. students who are considering or working on a dissertation on a banking-related topic. They are given the opportunity to attend the conference, with their travel expenses reimbursed by the program. The number of students chosen as Emerging Scholars can vary each year, with as few as one to as many as four.

In honor of marking the 10th annual conference, a list of our community banker keynote speakers over the years can be found on page 16, and a list of CSBS case study winners can be found on page 17. The roster of Emerging Scholars can be found on pages 18 and 19. We hope you enjoy this look back across the years.

(continued on page 4)

(continued from page 3)

To close this year's conference volume, we share insights from three participants from past conferences, with one representing a community bank perspective, one an academic perspective, and the last, a state bank supervisor perspective.

The community banker is Dorothy Savarese, now executive chair of Cape Cod Five Mutual Co., the sole shareholder of Cape Cod 5, an independent Massachusetts state-chartered savings bank founded in 1855 and headquartered in Orleans, Massachusetts. In 2013, she served as the conference's first community banker speaker when she was the chair, president and CEO of The Cape Cod Five Cents Savings Bank.

The academic is Allen Berger, the H. Montague Osteen Jr., Professor in Banking and Finance; the former Ph.D. coordinator of the finance department of the Darla Moore School of Business; and the Carolina Distinguished Professor at the University of South Carolina, among many other distinguished titles. He served as a moderator of a research paper session in 2017, presented a paper at the conference in 2019 and has a paper being presented at this year's conference.

The state bank supervisor is Tennessee Commissioner of Financial Institutions Greg Gonzales, who was a member of the inaugural conference planning committee in 2013 and was featured in the "Commissioner Perspectives" video series at the 2016 conference.

In addition to the articles that appear in this volume, videos of Savarese, Berger and Gonzales sharing their perspectives are available to view online on the conference website.

Letter from Michelle W. Bowman

Although the global pandemic necessitated that we host the Community Banking Research Conference virtually in 2020 and 2021, I'm pleased we can come together in person this year, the 10th year of the conference, to discuss and debate the latest research on community banking.

This conference benefits from a strong partnership among its sponsors—the Federal Reserve System, the Conference of State Bank Supervisors (CSBS) and the Federal Deposit Insurance Corp. (FDIC)—and continues to attract significant interest from researchers, policymakers, community bankers and regulators. I greatly appreciate the work the conference organizers do each year to identify important and thought-provoking research on community banking and to present it in this forum. We hear new voices and perspectives each year, which, in my view, ensures the long-term permanence of this conference.

When the conference first began, in 2013, we knew right away that these proceedings would fulfill an important unmet need: to create a forum to bring together a wide range of thought leaders and stakeholders each year. They have shared ideas that help us improve our understanding of the community bank business model and the unique roles community banks play in allocating credit and providing banking and other financial services to communities across the country.

Despite the many innovations that have been incorporated into the conference each year, the organizers have always ensured that the primary focus remain on research. For this, I must credit the late John Ryan, former president and CEO of CSBS. John's passing in May was a shocking loss for all who knew him, but it was also a loss for the conference. John was a visionary leader who understood the vital connection between research and supervisory and regulatory policy. He set a vision for this conference in 2013 that has driven our efforts these past 10 years and will continue to do so in the future.

Looking at this year's research, we have an opportunity to look past the pandemic and explore issues around the benefits of relationship lending, the impact of greater transparency in our supervisory and regulatory processes, and the role minority-owned banks play in allocating credit in the communities they serve. These issues matter today, and they will likewise matter in the future.

The discussion around this research will be broadened by all who attend this year's conference—in person or virtually. The research will also be critiqued by academic moderators and community bank discussants who will offer their perspectives and reactions during the proceedings. Research is enhanced by these thoughtful discussions.

As we recognize 10 years of this conference, I would like to commend everyone who has supported this conference and helped it grow in reputation and importance each year. I'm excited to see what new issues and ideas we will explore over the next 10 years.

Michelle W. Bowman

Governor
Board of Governors of the Federal Reserve System

Letter from Martin Gruenberg

The Federal Deposit Insurance Corp. (FDIC) is pleased to join with the Federal Reserve System and the Conference of State Bank Supervisors (CSBS) in sponsoring the 10th annual Community Banking Research Conference. Over the past 10 years, the conference has developed into a leading platform for research on community banking, where researchers, policymakers and bankers discuss key risks and opportunities facing the industry.

Community banks play a critical role in supporting economic activity with their comparative ability in lending to small businesses and communities that may otherwise find it difficult to access financial services. The research on this year's agenda draws attention to how community banks are able to use their relationships with, and knowledge of, local communities to expand access to credit. The research also highlights the importance of having a community banking presence and maintaining a competitive banking environment to increase financial equity and economic growth. In addition, this year's agenda suggests a role for both public and supervisory monitoring in improving the performance of the overall financial system. Research such as this is central to the mission of the FDIC.

The pace of technological change presents challenges and opportunities for community banks. In recognition of this, the program includes a panel of community bankers who will share their experiences of using technology in innovative ways to support the traditional relationship lending model rather than replacing it. The panelists will discuss the types of technology that banks have adopted to enhance relationships and will provide valuable insights into the factors that led to, and the challenges encountered in, the adoption of new technology.

I wish to express my thanks to each of the presenters, discussants, panelists and participants for contributing to the success of this year's conference. We value your commitment to community bank research and the part you play in making this conference productive and engaging.

Martin Gruenberg

Acting Chairman
Federal Deposit Insurance Corp.

Letter from James Cooper

We are pleased to join the Federal Reserve Board of Governors and the Federal Deposit Insurance Corp. (FDIC) in sponsoring the 10th annual Community Banking Research Conference. It truly is a milestone.

In 2013, the Federal Reserve Board of Governors and the Conference of State Bank Supervisors (CSBS) convened for the first Community Banking Research Conference in St. Louis with a mission to increase policymakers' understanding of community banking through data and research. At the time, Washington was beginning to implement the Dodd-Frank Act, sweeping legislation intended to prevent another mortgage crisis that applied to all banks, no matter the size. The value of community banks and the regulatory burden that would hit them were not adequately considered.

That oversight revealed the need for tangible, academic research to inform policymakers about the importance of community banks and the role they play in their local economies. Over the last decade, the conference has provided a unique opportunity for academics, community bankers, and state and federal regulators to meet on an annual basis to better understand long-term strategies in community banking and the strengths and gaps of our financial system. We were fortunate that the FDIC joined us in 2018.

Lawmakers and policymakers have paid attention to the outcomes of the conference, as evidenced in how they considered the value of community banks when implementing the Paycheck Protection Program at the start of the pandemic. The work produced at the conference has been cited on Capitol Hill and by the Congressional Research Service. Research from this event has contributed to policy decisions in multiple areas, from the efficacy of risk-based capital for community banks, to the limitations of the Herfindahl-Hirschman Index, the efficacy of the federal appeal process of material supervisory issues and the importance of regulators' proximity to the banks they regulate.

Sadly, John Ryan, our longtime CSBS president and CEO, who was largely behind the creation of this conference, is not alive to celebrate this milestone. John died suddenly of natural causes in May. We sorely miss him, but we know he would be proud of this moment and all that it represents.

And while we celebrate these 10 years, we are looking toward the future. The work here is important, and we must continue to create the data and research that bring the value of community banking to Washington, D.C.

James Cooper

President and CEO
Conference of State Bank Supervisors

2022 Key Research Findings

Research Paper Session 1
Information and Bank Lending Terms

Bank Monitoring with On-Site Inspections

Authors: *Amanda Heitz, Tulane University; Alex Ufier, FDIC; Chris Martin, FDIC*

Using a proprietary database of nearly 30,000 multiple-draw construction loans, the authors examine empirically the theoretical determinants of bank monitoring within non-syndicated loans, how banks use the information collected when they monitor, and whether monitoring affects loan outcomes. They show that banks trade off monitoring with more-favorable loan origination terms, and that negative on-site inspection reports are associated with a greater likelihood of draw denials. They conduct a comprehensive analysis of the determinants of construction loan default and show that more monitoring ultimately decreases loan default.

Bank Loan Markups and Adverse Selection

Authors: *Mehdi Beyhaghi, Federal Reserve Bank of Richmond; Cesare Fracassi, University of Texas at Austin; Gregory Weitzner, McGill University*

The authors analyze market power in local U.S. corporate loan markets. They find that, in contrast to typical theories of competition, loan markups are higher in regions in which more banks operate. They provide evidence that this result is driven by asymmetric information across banks, which becomes exacerbated as the number of banks increases. They also provide causal support for the role of adverse selection by showing that markups drop following a shock to large banks' lending capacities, which reduces asymmetric information in local lending markets. Their findings suggest that adverse selection is an important driver of market power in local bank markets and has implications for antitrust policy.

Non-Information Asymmetry Benefits of Relationship Lending

Author: *Daniel Rabetti, Tel Aviv University*

The author examines the benefits of relationship lending in the Paycheck Protection Program (PPP), a situation in which loan credit risk plays little role in the lending decision. He finds that relationship firms—those that receive PPP loans from lenders with whom they have a prior relationship—are granted economically significantly larger loans and faster approvals than transaction firms—those with no such relationships. PPP lenders tend to prioritize relationship firms primarily based on concerns about the increased default risk associated with the borrower's pre-crisis debt. These benefits come with costs, however, as firms are more likely to violate the program's rules when a relationship exists.

Research Paper Session 2
Minorities' Access to Credit

The Impact of Minority Representation at Mortgage Lenders

Authors: *W. Scott Frame, Federal Reserve Bank of Dallas; Ruidi Huang, Southern Methodist University; Erik Mayer, Southern Methodist University; Adi Sunderam, Harvard Business School*

The authors use a novel data set that matches mortgage applications to loan officers to examine the links between the labor market for loan officers and access to mortgage credit. They find that minorities are significantly underrepresented among loan officers, and that minority borrowers are less likely to complete mortgage applications, to have completed mortgage applications approved and to take out a loan. When minority borrowers work with minority loan officers, the authors find, these disparities are greatly reduced, and default rates on these loans are lower. They conclude that minority underrepresentation among loan officers adversely affects minority borrowers' access to credit.

Bank Competition and Entrepreneurial Gaps: Evidence from Bank Deregulation

Author: *Xiang Li, Boston College*

The author analyzes the effects of bank competition on gender and racial gaps in entrepreneurship and finds that the increase in competition that followed interstate banking deregulation increased the quantity and quality of banking services provided to minority borrowers. Improved banking services and a reduction in discrimination, the author argues, reduce entrepreneurship gaps by loosening financial constraints on female and minority entrepreneurs, which in turn fosters wealth equality.

"Let Us Put Our Moneys Together": Minority-Owned Banks and Resilience to Crises

Authors: *Allen N. Berger, University of South Carolina; Maryann P. Feldman, Arizona State University; W. Scott Langford, Arizona State University; Raluca A. Roman, Federal Reserve Bank of Philadelphia*

The authors examine whether the mission of minority-owned banks to promote economic well-being in their communities, and their use of soft-information-based lending, yield advantages in serving community needs during financial and economic crises. Their results suggest that minority-owned banks improved economic resilience in their communities and beyond during the global financial crisis and the COVID-19 crisis through increases in small-business and household lending. Fewer benefits, however, were found during other phases of the business cycle. Their findings are consistent with the predictions of the economic resilience literature.

Research Paper Session 3
Transparency in Supervision and Regulation

The Benefits and Costs of Transparent Supervision of Public Banks: Evidence from Disclosure of SEC Comment Letters

Authors: *Amy Hutton, Boston College; Yupeng Lin, National University of Singapore; Susan Shu, Boston College; Ira Yeung, University of British Columbia; Xin Zheng, University of British Columbia*

The authors analyze the consequences of increased regulatory transparency on banks by examining the effects of the 2004 decision of the U.S. Securities and Exchange Commission to begin publicly disclosing its comment letters—letters issued only to public banks. They find that, compared with private banks, public banks improved the timeliness of their loan loss provisions following this decision. The differences in private and public banks' lending activities are mixed. Increased transparency leads to slower and more procyclical loan growth for public banks; it also encourages public banks to shift credit toward safer borrowers. The public dissemination of comment letters leads to an increase in funding costs and less regulatory forbearance for the public banks receiving them.

The Social Externalities of Bank Disclosure Regulation: Evidence from the Community Reinvestment Act

Authors: *Sydney Kim, University of Illinois at Urbana-Champaign; Oktay Urcan, University of Illinois at Urbana-Champaign; Ha Young Yoon, Southern Methodist University*

The authors assess the effects of bank disclosure regulations on business activities through an examination of the 2005 reform of the Community Reinvestment Act (CRA), which lifted mandatory disclosure of geographic loan distribution data for certain banks. They found that the disclosure reform led to declines in small-business growth, small-business employment and wages in low- and moderate-income (LMI) neighborhoods. Using hand-collected data, they also show that non-disclosing banks reduced lending to LMI areas after the reform. Their findings suggest that eliminating disclosure leads to negative externalities for the communities that the CRA specifically targets to protect.

Bank Examination Reports and Bank Outcomes

Authors: *Maureen Cowhey, Federal Reserve Board; Seung Jung Lee, Federal Reserve Board; Thomas Popeck Spiller, Federal Reserve Board; Cindy Vojtech, Federal Reserve Board*

Does the bank examination process provide useful insight into the future outcome of banks? The authors investigate this question by analyzing the text of commercial bank examination reports for small- to mid-sized banks over the 2004 to 2016 period. They find that controlling for a variety of factors—including the CAMELS component ratings themselves—the sentiment supervisors express in describing most of the components predicts relevant future outcomes. The sentiment conveyed in the asset quality, management and earnings sections provides significant information in predicting future outcomes for problem loans, supervisory actions and profitability, respectively.

Poster Session Papers

The Age Gap in Mortgage Access

Author: *Natee Amornsiripanitch, Federal Reserve Bank of Philadelphia*

The author examines the relationship between age and mortgage application outcomes, finding that older borrowers face higher rejection probabilities than younger borrowers, and that this age effect appears even between individuals whose ages differ by just one year. Mortality-related default risk is a key factor in this result, and the age effect is larger for subgroups with higher mortality risks, such as older individuals, men and individuals who live in low-life-expectancy countries; these results hold when age and the interest rate spread are compared. The author concludes that older individuals systematically face higher barriers to credit access because mortality risk is priced in credit markets.

The Procyclicality of FDIC Deposit Insurance Premiums

Authors: *Ryan Hess, Stanford University; Jennifer S. Rhee, FDIC*

The authors assess the procyclical effects of FDIC insurance premiums using changes in premium rate schedules that regulators set during the financial crisis. They are able to examine the effect of changes in deposit insurance premiums that are plausibly exogenous to the performance of an individual bank through use of internal FDIC data that allow them to remove the effect driven by endogenous factors. They document empirically a procyclical effect of deposit insurance premiums on bank lending during the financial crisis and show that community banks are disproportionately affected by this mechanism.

A Look Back over the Past 10 Years

When the Community Banking Research Conference launched in 2013, the goal was to provide a forum so that research on community banks could be discussed and critiqued by other researchers but also by regulators, policymakers and community banks. A common idea that has persisted across all 10 years of the conference is that good research leads to good policy. While the merits of what makes "good" policy will be a constant source of debate, the research and ideas presented at this conference have been part of a national conversation on banking policy since its inception.

Along the way, this conference added a number of important elements to enhance these proceedings. While different in design, they all serve to expand the range of voices that contributes to our understanding of the role community banks play in the U.S. economy. While research remains the foundation of this conference, the conference sponsors—the Federal Reserve, the Conference of State Bank Supervisors and the Federal Deposit Insurance Corp.—are grateful to those who have enhanced these proceedings with their insights and perspectives.

The next few pages provide a look back at the people and programs that have enriched the discussions over the past 10 years.

Community Banker Keynote Speakers

Year	Speaker	Bank
2013	**Dorothy Savarese** Chair, president and CEO (Now executive chair, Cape Cod Five Mutual Co.)	**The Cape Cod Five Cents Savings Bank** Orleans, Mass.
2014	**Rebeca Romero Rainey** President and CEO (Now president and CEO, Independent Community Bankers of America)	**Centinel Bank** Taos, N.M.
2015	**Reid Ryan** Founding investor, board member	**R Bank** Round Rock, Texas
2016	**H.E. (Gene) Rainbolt** Chairman (Now chairman emeritus)	**BancFirst Corp.** Oklahoma City, Okla.
2017	**Cynthia Blankenship** Vice president, chief financial officer and corporate president (Now director, vice chairman and corporate bank president)	**Bank of the West** Grapevine, Texas
2018	**Gerard Cuddy** President and CEO, Beneficial Bank (Now vice chairman of WSFS Bank)	**Beneficial Bank (Now WSFS Bank)** Philadelphia, Pa.
2019	**Julieann Thurlow** President and CEO	**Reading Cooperative Bank** Reading, Mass.
2020	**Laura Lee Stewart** President and CEO	**Sound Community Bank** Seattle, Wash.
2021	**Darrin Williams** CEO	**Southern Bancorp Inc.** Arkadelphia, Ark.
2022	**Clayton Legear** President and CEO	**Merchants & Marine Bank** Pascagoula, Miss.

CSBS Community Bank Case Study Competition First-Place Winners

All presentations can be found via the CSBS website at **csbs.org**.

Year	University	Location	Students	Faculty	Bank Partner
2015	University of Utah	Salt Lake City, Utah	**Jenny Flatberg Changsu Lee Kurt Moore Brett Welker**	Jack Brittain	Bank of American Fork American Fork, Utah
2016	Southeastern Louisiana University	Hammond, La.	**Nicholas Byrd Tarez Cowsar Joseph Edwards Andrea Villarreal**	Danielle Lewis	First Guaranty Bank Hammond, La.
2017	University of Akron	Akron, Ohio	**Jeffrey Kelbach Michael Moore Jacob Ruocchio-Cole Kenan Sprague**	Bhanu Balasubramnian	Peoples Bank Marietta, Ohio
2018	Eastern Kentucky University	Richmond, Ky.	**Lorelei Nguyen Aaron Schmidgall Dalton Stanley**	Maggie Abney	Central Bank & Trust Co. Lexington, Ky.
2019	Juniata College	Huntingdon, Pa.	**David Hibner Katherine Migatulski Wyatt Page Matthew Schaeffer**	Sinead Gallagher	Kish Bancorp Inc. Belleville, Pa.
2020	Mississippi State University	Starkville, Miss.	**Juan Benavides Liam Benson Byron McClendon Jake Mlsna Kirk Wright**	Matthew Whitledge	Citizens National Bank Meridian, Miss.
2021	University of Tennessee at Martin	Martin, Tenn.	**Benjamin Beard Seth Bishop Refugio Palacios Savannah Pham McKenzie Reagor**	John Clark	TriStar Bank Dickson, Tenn.
2022	James Madison University	Harrisonburg, Va.	**Collin Blanchard Sara Kate Garman Nicolas Gonzalez Emelia Potteiger Noah Vanhoy**	Carl Larsson	F&M Bank Timberville, Va.

Emerging Scholars

Year	Emerging Scholars	University	Current Affiliations
2015	**Kyle Allen**	Rawls College of Business Texas Tech University	Assistant Professor of Finance Boise State University
	Matthew Whitledge	Rawls College of Business Texas Tech University	Assistant Clinical Professor of Finance Mississippi State University
2016	**Raymond Kim**	Texas Tech University	Assistant Professor of Finance W. A. Franke College of Business Northern Arizona University
	Xinming Li	University of South Carolina	Ph.D. Candidate in Finance Darla Moore School of Business University of South Carolina
	Herman Saheruddin	Darla Moore School of Business University of South Carolina	Director of Research Group Indonesia Deposit Insurance Corp.
2017	**Jin Cai**	University of South Carolina	Assistant Professor of Finance Sacred Heart University
	Padma Sharma	University of California–Irvine	Economist Federal Reserve Bank of Kansas City
	Jacob Walloga	Clemson University	Senior Consultant EY Quantitative Advisory Services
	Dayin Zhang	University of California–Berkeley	Assistant Professor University of Wisconsin–Madison
2018	**Cao Fang**	University of Arkansas	Senior Research Assistant and Ph.D. Candidate University of Arkansas
	Xiaonan (Flora) Ma	University of South Carolina	Ph.D. Candidate in Finance Darla Moore School of Business University of South Carolina
	Jiayi Xu	Auburn University	Assistant Professor of Finance Mount St. Joseph University
2019	**Kuan Liu**	University of Wisconsin–Madison	Assistant Professor of Finance University of Arkansas
	Nguyen Nguyen	Auburn University	Assistant Professor of Finance Minnesota State University–Mankato
	Prithu Vatsa	University of Miami	Ph.D. Candidate in Finance Miami Herbert Business School University of Miami

(continued on page 19)

(continued from page 18)

Year	Emerging Scholars	University	Current Affiliations
2020	**Jason Damm**	College of Business Florida Atlantic University	Senior Vice President and Chief Operating Officer Sanchez Global LLC
	Jiarui (Jerry) Guo	University of South Carolina	Ph.D. Candidate Darla Moore School of Business University of South Carolina
	Scott Langford	University of North Carolina at Chapel Hill	Post-Doctoral Research Fellow School of Public Affairs Arizona State University
	Paul Obermann	University of Alabama	Ph.D. Candidate in Finance Manderson Graduate School of Business University of Alabama
2021	**Jon Taylor**	Florida Atlantic University	Economist Federal Reserve Bank of St. Louis Ph.D. Candidate in Finance Florida Atlantic University
2022	**Agustin Hurtado**	University of Chicago	Coming soon!
	Kody Chinon Law	Cornell University	
	April Meehl	University of Wisconsin–Madison	
	Jose Ernesto Aldana Vizcaino	University of North Carolina at Chapel Hill	

NOTE: Emerging Scholar affiliations were based on LinkedIn or organizational pages as of August 2022.

Recipients of the Most Significant Contribution to Banking Research Awards

Now known as the John W. Ryan Award for Most Significant Contribution to Community Banking Research

Year	Award Recipients	Paper Title
2018	**Stefan Gissler** Federal Reserve Board of Governors **Rodney Ramcharan** University of Southern California **Edison Yu** Federal Reserve Bank of Philadelphia	The Effects of Competition in Consumer Credit Markets
2019	**Lamont Black** DePaul University **John Hackney** University of South Carolina	Who's Holding the Bag? Regulatory Compliance Pressure and Bank Risk-Shifting
2020	**Claire Brennecke** Consumer Financial Protection Bureau **Stefan Jacewitz** Federal Deposit Insurance Corp. **Jonathan Pogach** Federal Deposit Insurance Corp.	Shared Destinies? Small Banks and Small Business Consolidation
2021	**Tetyana Balyuk** Emory University **Nagpurnanand Prabhala** Johns Hopkins University **Manju Puri** Duke University	Small Bank Financing and Funding Hesitancy in a Crisis: Evidence from the Paycheck Protection Program

*NOTE: The papers can be read online at **communitybanking.org**.*

New for 2022 and beyond! The winning paper for 2022 will be announced at the conclusion of this year's conference on Sept. 30.

Remembering the Legacy of Two Conference Founders

John W. Ryan (left), former CSBS president and CEO, and Richard A. Brown (right), former FDIC chief economist, were instrumental in the founding and continued growth and evolution of the Community Banking Research Conference. Their passing in 2022 and 2020, respectively, was a loss for all who knew them. Both were deeply committed to the mission and purpose of this conference, and both contributed in ways that will forever influence these proceedings. As we look back at the past years of this event, we are reminded of their dedication, their passion for knowledge, their candor and, of course, their friendship.

John W. Ryan

1963-2022

John W. Ryan, the founder of the Community Banking Research Conference, was the president and CEO of CSBS, the national association representing state banking supervisors and the leading advocate for advancing the state financial system. Ryan was a leading force behind the work of the conference planning committee, providing a clear vision that robust discussion and debate among researchers, bankers, and state and federal regulators would lead to stronger research and ultimately better supervisory and regulatory policy. Before being named CSBS president and CEO in August 2011, Ryan was executive vice president of CSBS, a position he held since October 2003. He first joined CSBS in 1997 as an assistant vice president for legislative affairs. Prior to joining CSBS, Ryan worked at Newmyer Associates, a public affairs consulting firm, where he led the company's financial services consulting practice. Previous to that, Ryan spent four years as a professional staff member to the U.S. House of Representatives Committee on Banking, Finance and Urban Affairs. Ryan received a bachelor's degree in political science and economics from the University of California–Berkeley. He passed away unexpectedly on May 16, 2022.

Richard A. Brown

1962-2020

Richard A. Brown was also a founding member of the planning committee for the Community Banking Research Conference beginning in 2013. At the time, he concurrently served as the chief economist and as associate director in the FDIC's Division of Insurance and Research. Indeed, he was the FDIC's first chief economist. In this role, he was responsible for developing and communicating the FDIC's perspective on a wide range of economic and risk-management issues. In 2018 and 2019, he served on the White House Council of Economic Advisers, where he specialized in financial regulation and managed that section of the Economic Report of the President. Brown was also heavily involved in the National Association for Business Economics (NABE), for which he served as a board member from 2006 to 2009. He was named a NABE Fellow in 2017. He often spoke on the economy to bankers and trade groups and was interviewed by The Wall Street Journal, Fortune, Bloomberg Businessweek, CNBC and other media outlets. Prior to joining the FDIC in 1990, Brown held research positions at the Resolution Trust Corp., the Federal Savings and Loan Insurance Corp. and the Federal Home Loan Bank Board. Brown completed a doctorate in economics at George Washington University and received a bachelor's degree in economics from the University of Cincinnati. He passed away Nov. 8, 2020, after a four-year battle with brain cancer.

Conference Perspectives

Since 2013, the Community Banking Research Conference has been enhanced by the inclusion of a diversity of voices in its annual proceedings.

In recognition of the 10 years of these proceedings, three individuals, all of whom are part of the history of this conference and who represent three distinct voices on the subject of community banking, agreed to share their perspectives on this conference, the banking and regulatory system, the importance of research and the future of community banking.

We are grateful to the following individuals for offering to share views in this year's conference volume.

Dorothy Savarese, Executive Chair

Cape Cod Five Mutual Co., Orleans, Massachusetts

(Page 23)

Allen N. Berger, the H. Montague Osteen Jr., Professor in Banking and Finance

Darla Moore School of Business, University of South Carolina

(Page 25)

Greg Gonzales, Commissioner

Tennessee Department of Financial Institutions

(Page 27)

Conference Perspectives

Dorothy Savarese, Executive Chair
Cape Cod Five Mutual Co.
Orleans, Massachusetts

Dorothy Savarese is the executive chair of Cape Cod Five Mutual Co., the sole shareholder of Cape Cod 5, an independent Massachusetts state-chartered savings bank founded in 1855. Until May 2022, she was CEO and chair of the board of trustees of the Cape Cod 5 and chair of the Cape Cod 5 Foundation Inc. Savarese served as the community bank keynote speaker during the inaugural conference in 2013.

What keeps community banking interesting and important to you?

I've been in community banking for almost three decades, and I've seen a lot of crises. But being a community banker has been the most rewarding journey in the world. It's an opportunity to work with wonderful people and make a difference in people's lives—for business owners, from their earliest days all the way to when they turn things over to the next generation of family. And when crises do hit, we're able to work collectively with them, with our colleagues and with other people in the community to help them through. That's incredibly rewarding.

And yes, it can also be exhausting. Take the Paycheck Protection Program, for example, which I think was a huge success story for the community banking industry. Community banks across the country rallied together to support the program. People from all over my bank worked to make sure we were ready on Day One to get the dollars out to our customers and to our community members before the funding ran out. Our employees literally worked around the clock, and it made such a difference in our community.

What keeps me interested in community banking is that it's constantly changing. It's always presenting us with new opportunities to serve our customers and our communities and to face the new challenges that come up every day.

What have been the most significant changes in banking over the last 10 years?

When I think about the last 10 years, I can't believe how much change has taken place in our industry. However, I don't believe that the essential role of the community bank has changed. The community bank is there to be that trusted financial partner for the families, the individuals, the businesses and the nonprofit organizations in their communities. While that hasn't changed, the way we do our business has changed significantly.

The digital transformation in banking has been enormous. The products and services we can now offer, and even the risk landscape, have changed dramatically. We are now facing cybercrime, ransomware, competition from nonbanks, and decentralized finance platforms, among many other challenges. Today's community bank leader has to take on all of these challenges while continuing to serve the bank's customers and its community.

What should community bankers focus on to ensure that the community banking model remains relevant? What changes, if any, do you think need to happen to ensure relevancy going forward?

One of the wonderful things that's happened over the last decade is greater public awareness of the critical role that community banks play. This conference has been important in increasing that awareness.

We need a comprehensive and healthy banking ecosystem in the United States that includes community banks. Research presented at this conference has underscored just how important they are to the economic vitality of local communities and to the growth of small businesses. So, how does that change over time? Well, community bank leaders must focus on the fact that the velocity of change will continue to increase. They will need to embrace change in technological expertise and risk management. Innovation is the name of the game, but it must take place in partnership with prudential regulators who provide tailored regulation and assist in battling cybercrime. The continued evolution of this engagement is necessary to ensure that community banks can continue to innovate and evolve.

How important is research to the future of community banking?

The research at this conference has provided insight into the winning strategies and decisions made by community bankers. We've learned what's working and what's not. Rather than just relying on anecdotal evidence, we depend on the empirical support of the research to help make the case for modernizing regulation. The research has also underscored the criticality of community banks. That cannot be overstated. When I think of the last 10 years, and all the progress that has been made in terms of the regulatory framework, I think the research that has been presented at this conference has made a very important impact.

(continued on page 24)

(continued from page 23)

What do community bank leaders need to do to keep the sense of community alive in the face of new technology?

It really is job one for community bankers to be able to maintain their competitive differentiation, their sense of purpose and their sense of community. But we must amplify those things with digital tools that are backed up with real people. That makes an enormous difference. For example, you can always reach a real person at my bank. In fact, not only can you reach a real person, but you can escalate your question all the way to the executive office and to the team that's running the bank, because they're local and they're your neighbors.

Another essential tool is social media. Customers from all walks of life are following social media. It's a tool to help you explain and demonstrate that you're interested in what's important to the community. You can highlight your customers, and you can highlight your employees. You can connect with them to keep that sense of community going.

I think one of the most important things, through all social media channels, is having a dialogue with customers and following up with them. If you're guided by your customers, you are able always to be there on that journey with them.

Conference Perspectives

Allen N. Berger, the H. Montague Osteen Jr., Professor in Banking and Finance
Darla Moore School of Business
University of South Carolina

Since 2008, **Allen N. Berger** has been the H. Montague Osteen Jr., Professor in Banking and Finance in the finance department of the Darla Moore School of Business at the University of South Carolina. He is a Carolina Distinguished Professor, as well as co-director of the Center for Financial Institutions at the Darla Moore School of Business, and a former Ph.D. coordinator of the finance department. He has nearly 130 publications in refereed research journals, submitted every year but one from 1987 to 2022; these include contributions to top finance journals. This is the eighth year in a row that Berger has actively participated in the conference, having served in roles including research paper presenter, session moderator and discussant, and provider of research advice to other research paper presenters. Berger has also helped behind the scenes with suggestions for the CSBS National Survey of Community Banks. At the conference, he often cites his pride from serving as an endowed chaired professor whose chair is named for community banker Monty Osteen, who has become his friend over the years.

What are your overall thoughts, as a researcher and as an attendee, on the conference and its contribution?

I really enjoy being a consumer of the conference, which I have attended every year for the last eight years, and I'll continue to do so. The conference is something that's both unique and essential at the same time. It's unique in that it's the only top-notch conference that's focused on community banking. It also has this incredible characteristic, which I had never heard of before, of combining the views of academics, regulators and real live community bankers, with whom most researchers really don't have contact.

We all understand that community banking has been under threat essentially forever. The threat is increasing. It has gotten not only more challenging, but also more confusing—because of regulation that is complicated to understand, and because of advances in information and financial technologies that are accelerating. We need more understanding of these challenges from the research, from the community bankers themselves and from the regulators. The conference is a great place to keep this conversation going.

In addition, social attitudes and preferences are changing our society in ways that we do not really understand. We do not know if people are going to want to work remotely or at the office. We do not know for sure about their future banking needs. We do not know the extent to which some people are going to decide to live and work permanently in more rural locations. We need to figure these things out, as a society and as an industry, as we go along.

Are there some relatively well-understood things, or stylized facts about community banking, that the research tells us about community banking?

A little over 40 years ago, something called the modern theory of financial intermediation was introduced. It turns out this modern theory is almost entirely about community banking. It really asks: Why do we have loans and deposits in the same organization? It says that what banks do is evaluate credit, make loans and take deposits for safekeeping—basically, banks provide liquidity, and they lower risks for households, firms, financial markets and governments. That's the core of what community banks do; that's the business model. Some banks add fancy things like off-balance sheet activities, derivatives, etc., but none of these change the basic model. We have four decades of theory that really boils down to that.

One of the things we know about community banking is that bankers have comparative advantages in dealing with information; they know how to find, acquire and process information, particularly private information on small businesses. They cannot just go to the market and find a stock price or a bond rating. They must do the work. What do bankers know about the business? What do they know about the community? What do they know about the borrower? They figure it out and design optimal contracts. It's an art; it's a science; it's technology. It sounds very complicated, and in some ways, it is. But really, it's fundamental. That's what community bankers do.

We also know that community banks are essential and unique in alleviating financial constraints on small businesses—getting them credit to do valuable things that financial markets alone cannot provide. These small businesses in turn support their local communities. This is true in normal times, and it is also true during financial crises. The very first paper that I gave at this conference found that the level of satisfaction with financing opportunities was greater for small businesses located in markets with more community banks.[1] Other papers similarly found that big banks often have difficulties making small-business loans.[2] After the financial crisis, some big banks dropped a lot of their small-business loans, which is perfectly understandable, and never really brought them back. What if we do not pay attention and community banks disappear? The big banks are not going to be able to solve that need.

(continued on page 26)

(continued from page 25)

Another thing we know is that, regardless of what the circumstances are, no matter what community banks are up against, bolstering capital works. It works in normal times. It works in crises. It works across the country. Wherever a bank is, more capital helps them perform better.[3]

What are some of the more contentious new ideas from the research?

A good area of research would be how to ameliorate the problem of banks' making financial crises worse by reducing credit. How do we keep the good things about banking and make sure that, during crises, they do not cut back too much? One obvious solution is bank capital, but there are many others, like bailout policies and stress tests. Countercyclical capital requirements might be a good idea. Countercyclical everything might be a good idea: countercyclical regulation, countercyclical supervision. It is important to not punish the banks when they're down, because that's when we need them the most.

Another research question is whether competition is good or bad for relationship lending. There are theories that go both ways, and they are not thoroughly tested. It could be either one.

We know from the conference that community banks are worried about credit unions. We are told credit unions have unfair competitive advantages because they are not paying taxes, that they have member sentiment on their side, and that they are going to take over community banks. Well, results from a recent study of mine suggest that some of these things are not true. The unfair aspect might be true, but research cannot address that issue. Does it hurt the community bank to have more credit unions in its local footprint? The answer is no. It actually helps them.[4]

The same paper reinforces the importance of bank capital as a competitive tool: You will beat the competition if you are financially stronger. Stronger banks have more flexibility on the rates they pay depositors because they are safer.

Many are also worried that large banks are taking advantage. We hear customers are going to go with the large bank that offers the shiny lobby or whatever. The research suggests that this is also not true. If there is a greater local market presence of large banks, community banks are actually better off.[5] They have their niche, and people generally like them better. People have more trust in community banks. That's a good thing.

What are the biggest competitive challenges for community banks?

Since Adam Smith in 1776, there have been more than two centuries of debate on competition. We have learned a lot of interesting things from this debate that apply to banking. But when the modern theory of financial intermediation rolled around in the 1980s, we found bank competition has its own special nature. Banks are special. They provide things to society that nobody else does. Community banks are a big part of that.

We know there will always be pressures on community banks. There might be a technological improvement that gives some competitors an edge. Community banks can deal with that in one of two ways: They can join them, or they can beat them. By joining them, community banks work with potential competitors when it makes sense; for example, correspondent banking, whereby a larger bank helps with check processing or credit cards or fintech platforms. Or community banks can choose to beat them, which means focusing on things that give them a competitive advantage; for example, working with borrowers that need relationship lending services that big banks do not provide, or finding underserved communities where big banks that do not have a presence can work.

There is great concern that many community bankers are getting older and want to retire and leave their banks to their children or somebody else. In many cases, the children do not want to run the bank. So, we must ask: Where are we going to get our community bankers in the future? How do you get people interested in community banking? This is certainly a big threat to the future of community banking. I think the conference has helped promote community banking, but more needs to be done.

For community banks, new technology is always going to give another bank a competitive advantage, so they need to watch out. Community bankers should always make sure they have enough capital, so they're prepared for any challenge. Community banks need to collaborate where they can. Research tells us that common sense is a good policy. When faced with challenges, community banks should always go with their strengths. What area of life doesn't work that way?

---

1. Berger, Allen N.; Bouwman, Christa H.; and Kim, Dasol. "Small Bank Comparative Advantages in Alleviating Financial Constraints and Providing Liquidity Insurance over Time." *The Review of Financial Studies*, 2017, Vol. 30, No. 10, pp. 3416-54.

2. Berger, Allen N.; Miller, Nathan H.; Petersen, Mitchell A.; Rajan, Raghuran G.; and Stein, Jeremy C. "Does Function Follow Organizational Form? Evidence from the Lending Practices of Large and Small Banks." *Journal of Financial Economics*, 2005, Vol. 76, No. 2, pp. 237-69.

3. Berger, Allen N.; and Bouwman, Christa H. "How Does Capital Affect Bank Performance during Financial Crises?" *Journal of Financial Economics*, 2013, Vol. 109, No. 1, pp. 146-76.

4. Berger, Allen N.; Kravitz, Troy A.; and Shibut, Lynn. "The Many Facets of Bank Competition: Evidence from an Extraordinary Dataset." Working paper, 2022.

5. Ibid.

Conference Perspectives

Greg Gonzales, Commissioner
Tennessee Department of Financial Institutions

Greg Gonzales is the 18th commissioner of the Tennessee Department of Financial Institutions, who began serving in this role in 2005. He has served in the department since 1986. In this position, Gonzales serves as Tennessee's chief regulatory officer of all state-chartered depository and licensed nondepository financial institutions. Additionally, he has served as assistant commissioner and general counsel for the department. Gonzales was a member of the Community Banking Research Conference planning committee during its inaugural year in 2013.

What role do community banks play in the state of Tennessee?

The provision of banking services by a local community bank is an important factor in the success of our communities. The economic empowerment it provides allows a local community to influence its economic destiny. Over the last few years in particular, because of the pandemic and the economic fallout, community banks have provided stability, and economic relief and recovery. They are part of the fabric of our communities.

I had a discussion with a Memphis banker a few years ago on the Black community's experience in the 1950s and '60s. He talked about the local church, but he also talked about the impact of the local community bank. He discussed how the bank was a catalyst for change and how it provided confidence, direction and purpose for a community that was pushed down and held down for decades. That's the impact of community banking.

That's also one of the reasons this research conference is so important. It gives us all a chance to step back, on an annual basis, and think about what's happening in community banking. What are the latest developments? How are community banks innovating? How can we better understand community banks? How can we better supervise the industry and partner with it?

What is your view of the dual banking system?

The country has diverse economic needs, and that calls for a diverse banking system. The dual banking system avoids a single regulator. It avoids a one size-fits-all approach. One of the most fundamental attributes of our regulatory system is the ability of a local regulator to tailor its regulation to meet not only the needs of a bank, but also the needs of a local community.

The dual banking system provides for charter choice. Healthy banks can switch charters. That incentivizes both state and federal regulators to create an appropriate and balanced environment for reasonable and cost-effective regulation. But it's not really about regulation. Regulation is a means to an end. The goal is the provision of important banking services to consumers and the people of this country. The dual banking system supports that.

What is the value of the conference in connecting researchers, community bankers and regulators?

The conference has a unique format. Think about the various stakeholders—bankers, regulators, policymakers and academics—and the dynamic dialogue they create, with a mix of views that informs us and helps us all improve our roles within the banking ecosystem. Think about CSBS's National Survey of Community Banks, which informs policymakers, including Congress and the White House Council of Economic Advisers. And think about the research papers—more than a hundred of them since the beginning of the conference—that have really hit on some very important issues from a big picture standpoint. The research challenges us to think about things that we've not thought of before. Research challenges us to improve.

What have been the most significant changes in community banking?

The first change is technology. Technology creates opportunities to better meet the needs of customers through greater efficiencies, new business lines and new partnerships. But it also creates challenges, including managing costs, time to implementation, cybersecurity, dealing with bad actors and third-party relationships. Many institutions are thinking about technology from the perspective of thriving rather than surviving.

The second change is consolidation. This is not a new issue. We've lost hundreds of community banks over the last decade. At the same time, we don't have any significant new bank formations.

What do you see impacting community banking over the next 10 years?

I'll start again with technology, particularly with respect to use of data. We've heard from some institutions about how data can help them be more efficient and help them meet the expectations of their customers. From a regulatory standpoint, we are working to see how we can better use technology to understand the health of the industry.

(continued on page 28)

(continued from page 27)

Digital assets are a big issue going forward. I'm not currently getting a lot of queries regarding digital assets, although we do have a handful of institutions that are either engaged or asking serious questions. We're looking forward to seeing what the regulatory infrastructure is going to look like for digital assets in the future.

Finally, I would like to return to my earlier comment on the importance of community banks to the success of our communities. Our states and communities depend on community banks.

I want to thank the Federal Reserve System, the Conference of State Bank Supervisors and the Federal Deposit Insurance Corp. for supporting this conference. I especially want to thank John Ryan for his wisdom and his vision and the role he had in making this conference possible.

SUP22-236306 9/22