

**FEATURED IN THIS ISSUE** | Could Rising Municipal Bond Securities Holdings Increase Community Banks’ Risk Profiles? | Community Banking in the 21st Century | The Troubled Asset Relief Program—Five Years Later

# St. Louis Fed Research Focuses on How Community Banks Get or Stay Healthy in Difficult Times

Researchers have paid considerable attention to studying what can be learned from the failures of community banks during the recent financial crisis. Researchers at the Federal Reserve Bank of St. Louis, however, have taken a different approach in their studies of recent community bank performance.

In two separate research papers, authors Alton Gilbert, Andrew Meyer and James Fuchs explored features that distinguish community banks that thrived during the recent financial cri-

sis and those that were distressed and subsequently recovered. The paper “The Future of Community Banks: Lessons from Banks That Thrived During the Recent Financial Crisis” was published in the March/April 2013 issue of the St. Louis Fed’s *Review*. The working paper “The Future of Community Banks: Lessons from the Recovery of Problem Banks” was presented at the research conference *Community Banking in the 21st Century*, co-hosted

*continued on Page 4*

TABLE 1  
Metrics of Thriving and Recovering Banks

	Lessons from Thriving Banks		Lessons from Recovered Banks			
	Thriving	Surviving	CAMELS 5	CAMELS 4	CAMELS 3	CAMELS 1 or 2
Number of banks	702	4,525	191	332	196	155
TL / TA	54.4	65.0	63.19	63.12	63.03	61.15
CRE / TL	23.3	34.4	56.23	50.11	49.79	43.42
CLD / TL	4.6	8.3	9.40	8.10	6.96	5.56
Nonfarm nonresidential / TL	17.4	23.8	42.73	37.48	38.09	33.70
Multifamily / TL	1.0	1.9	3.91	4.13	4.34	3.79
Farmland-secured / TL	11.4	7.8	2.21	3.64	4.89	6.48
1- to 4-family property-secured / TL	24.4	23.8	22.12	22.52	20.26	22.10
HELOC / TL	1.2	2.5	4.16	3.66	3.40	2.81
C&I / TL	13.7	14.4	11.12	13.82	13.06	14.81
Consumer / TL	10.5	7.6	2.42	3.62	3.46	3.90
Agricultural / TL	14.1	8.2	0.82	1.85	3.52	5.33
All other loans / TL	1.2	0.9	0.74	0.37	1.22	0.77
Core deposits / Total deposits	83.0	80.7	72.88	78.45	81.08	82.94

SOURCES: “The Future of Community Banks: Lessons from Banks That Thrived During the Recent Financial Crisis,” R. Alton Gilbert, Andrew Meyer and James Fuchs, *Review*, March/April 2013; “The Future of Community Banks: Lessons from the Recovery of Problem Banks,” R. Alton Gilbert, Andrew Meyer and James Fuchs, working paper, September 2013.

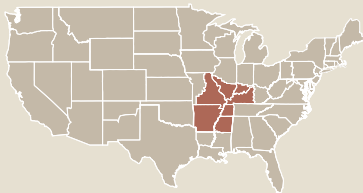
EDITOR  
RC Balaban  
314-444-8495  
[robert.c.balaban@stls.frb.org](mailto:robert.c.balaban@stls.frb.org)

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# Community Banking in the 21st Century

By Julie Stackhouse

Over the past 20 years, we have seen a material and sustained change in the structure of banking. Twenty years ago, there were more than 10,000 community bank charters. As of the end of 2012, there were approximately 6,000. Over that same time period, the percentage of banking assets held by community banks fell from 50 percent to 17 percent. The past five years have further challenged community banks, with nearly 500 bank failures over that time.

Yet, we intuitively know that community banks are important to their communities and the U.S. economy.

For that reason, the Federal Reserve System and the Conference of State Bank Supervisors partnered to sponsor *Community Banking in the 21st Century*, the inaugural community banking research conference held Oct. 2-3 at the Federal Reserve Bank of St. Louis. The goal of the conference was to foster expanded research on topics affecting community banks and to encourage policymakers to be cognizant of the value these institutions provide.



*Julie Stackhouse is senior vice president of Banking Supervision, Credit, Community Development and Learning Innovation for the Federal Reserve Bank of St. Louis.*

While challenges persist and some consolidation may be inevitable, the community bank business model clearly remains viable and important to the communities served.

The conference covered three sessions of academic papers and one practitioners' panel composed of bankers. The first academic session addressed the role of community banks; the second, community bank performance; and the final session, supervision and regulation. (Summaries of the papers can be found on Pages 6 and 7.) The practitioner session covered the results of 51 town hall sessions held in 28 states and involving 1,700 bankers. Attendees also heard comments from Federal Reserve Chairman Ben Bernanke, Fed Gov. Jerome Powell and banker Dorothy Savarese.

The conference noted a number of strengths of community banks:

- Community banks have a key advantage: social capital. They are an integral part of their communities.

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# Third-Quarter 2013 Banking Performance<sup>1</sup>

## Earnings Performance

	2012: 3Q	2013: 2Q	2013: 3Q
<b>RETURN ON AVERAGE ASSETS<sup>2</sup></b>			
All U.S. Banks	0.99%	1.00%	1.02%
All Eighth District States	0.89	0.92	0.95
Arkansas Banks	1.13	1.23	1.25
Illinois Banks	0.67	0.80	0.86
Indiana Banks	1.12	1.09	1.09
Kentucky Banks	1.10	0.89	0.88
Mississippi Banks	0.91	0.88	0.89
Missouri Banks	0.92	0.93	0.97
Tennessee Banks	0.83	0.85	0.90
<b>NET INTEREST MARGIN</b>			
All U.S. Banks	3.87%	3.79%	3.83%
All Eighth District States	3.84	3.66	3.72
Arkansas Banks	4.19	4.07	4.11
Illinois Banks	3.62	3.44	3.46
Indiana Banks	3.92	3.74	3.76
Kentucky Banks	4.04	3.80	3.83
Mississippi Banks	4.05	3.85	3.89
Missouri Banks	3.71	3.48	3.67
Tennessee Banks	3.92	3.85	3.89
<b>LOAN LOSS PROVISION RATIO</b>			
All U.S. Banks	0.35%	0.20%	0.19%
All Eighth District States	0.41	0.21	0.20
Arkansas Banks	0.37	0.19	0.20
Illinois Banks	0.58	0.30	0.27
Indiana Banks	0.22	0.13	0.10
Kentucky Banks	0.40	0.24	0.23
Mississippi Banks	0.25	0.14	0.13
Missouri Banks	0.37	0.15	0.15
Tennessee Banks	0.36	0.22	0.18

SOURCE: Reports of Condition and Income for Insured Commercial Banks

- NOTES: <sup>1</sup> Because all District banks except one have assets of less than \$15 billion, banks larger than \$15 billion have been excluded from the analysis.
- <sup>2</sup> All earnings ratios are annualized and use year-to-date average assets or average earnings assets in the denominator.
- <sup>3</sup> Nonperforming assets are loans 90 days past due or in nonaccrual status, plus other real estate owned.
- <sup>4</sup> The loan loss coverage ratio is defined as the loan loss reserve (ALLL) divided by nonperforming loans.

## Asset Quality Measures

	2012: 3Q	2013: 2Q	2013: 3Q
<b>NONPERFORMING ASSETS RATIO<sup>3</sup></b>			
All U.S. Banks	4.11%	3.17%	2.94%
All Eighth District States	4.50	3.62	3.40
Arkansas Banks	5.04	4.37	3.96
Illinois Banks	5.35	4.18	3.88
Indiana Banks	2.87	2.33	2.15
Kentucky Banks	3.69	3.32	3.20
Mississippi Banks	4.33	3.55	3.30
Missouri Banks	4.03	3.04	3.09
Tennessee Banks	4.70	3.81	3.47
<b>LOAN LOSS COVERAGE RATIO<sup>4</sup></b>			
All U.S. Banks	67.22%	81.06%	85.15%
All Eighth District States	66.11	78.01	81.11
Arkansas Banks	69.39	72.65	81.03
Illinois Banks	55.99	69.05	71.20
Indiana Banks	79.09	93.03	98.93
Kentucky Banks	71.63	74.93	75.05
Mississippi Banks	62.96	74.11	76.51
Missouri Banks	83.97	103.10	107.03
Tennessee Banks	68.86	81.87	84.36

Community Banks

continued from Page 1

by the St. Louis Fed, the Conference of State Bank Supervisors and the Federal Reserve System. (See article “Bankers, Regulators and Academics Gather at St. Louis Fed to Discuss State of Community Banking” on Page 6 for a summary of the conference.)

In both papers, the authors took qualitative and quantitative approaches to their research, not only digging into the data of qualifying banks, but also interviewing officials from these institutions to provide additional insights into how their institutions fared as they did.

How Thriving and Recovered Banks Performed

The authors discovered similarities between banks in both categories. (See the Definitions box below for definitions of thriving and recovered banks.) In general, thriving and recovered banks had lower total-loans-to-total-assets ratios and were less concentrated

in construction and land-development loans, commercial real estate and home equity lines of credit and were more reliant on core deposits. (See Table 1 on Page 1.)

These similarities weren’t limited to a particular asset range. Both thriving and recovered banks ranged from having less than \$50 million in assets to near or slightly more than \$10 billion in assets. Thriving banks were not concentrated in any particular asset range, though the greatest percentage of recovered banks was in the \$300 million to \$1 billion range.

As one might expect, performance metrics were better over the periods studied for thriving banks and recovered banks compared with their counterparts. The mean return on assets (ROA) for thriving banks was 1.5 percent, compared with only 0.8 percent for surviving banks, while the mean return on equity (ROE) was 12.7 percent for thriving banks versus 7.3 percent for surviving banks. Regarding recovered banks, those with CAMELS ratings of 1 or 2 experienced ROA of 0.88 percent and ROE of 7.50 percent, compared with -0.81 percent ROA and -20.55 percent ROE for banks with a CAMELS rating of 5.

TABLE 2  
Asset and Loan Growth of Thriving and Surviving Banks

	Asset Growth		Loan Growth	
	2004–2007	2008–2011	2004–2007	2008–2011
Thriving	23.58	31.16	31.06	19.68
Surviving	44.28	26.91	66.04	18.67

SOURCE: “The Future of Community Banks: Lessons from Banks That Thrived During the Recent Financial Crisis,” R. Alton Gilbert, Andrew Meyer and James Fuchs, *Review*, March/April 2013.

DEFINITIONS

CAMELS ratings are nonpublic supervisory ratings of a bank’s overall condition. The ratings focus on six areas: capital protection (C), asset quality (A), management competence (M), earnings strength (E), liquidity risk exposure (L) and market risk sensitivity (S). Each category gets a rating from 1 (best) to 5 (worst), and the bank is given a composite CAMELS rating, also 1-5. A rating of 1 means strong performance, while a 2 means satisfactory performance. Ratings below 2 may prompt supervisory action.

In the paper on thriving community banks, banks are split into two groups: thriving banks and surviving banks. A “thriving bank” was defined as a bank with total assets of less than \$10 billion that achieved a composite CAMELS rating of 1 from 2006 through 2011. Banks that did not meet these criteria were considered “surviving banks,” though it’s important to note that many surviving banks, while not thriving, were still in sound financial condition.

The paper on recovered community banks focused on banks that had a CAMELS rating of 4 or 5 at some point between 2006 and March 31, 2013, and subsequently recovered to a CAMELS rating of 1 or 2.

Lessons from Community Bankers

During the interviews with bank leaders, the authors sought common threads among these banks. For both thriving and recovered banks, management and ownership were significant factors, with local presences of each contributing directly to the banks’ prosperity. Many bankers from thriving banks indicated that they recruited managers and staff specifically from the communities they served because they would know the communities the best and be known by the banks’ customers. Bankers also said the importance of all staff members staying active in their communities was paramount because it helped build relationships based on trust and serving community needs.

Perhaps not surprising, recovered banks often experienced a change in management and/or ownership, and when a change in management occurred, the new president was generally well-known in local banking circles and well-connected in the geographic area served. It should be noted that a

change in ownership did not necessarily dictate a change in management. In some cases, new owners would leave existing management in place if they believed the banks' problems were caused by the previous owners.

Local ties were also important in helping foster relationships within the community, which thriving and recovered banks alike cited as being important to their successes. For example, the president of a recovered bank mentioned the importance of retaining nonmanagerial employees who had day-to-day interactions with customers and treating employees professionally and with respect as keys to managing the bank's reputation.

Related to the leadership of the banks was an emphasis by management of both thriving and recovered banks on basic banking practices. Many of those interviewed from thriving banks cited their conservative growth strategies as a reason for success, though it meant seeing slower growth than their competitors in the years leading up to the crisis. (See Table 2 on Page 4.)

Maintaining high lending standards was one example cited by many thriving banks. One bank in particu-

lar required its lenders to review all charged-off loans, reassess the fundamentals of the loan at the time it was made and communicate with management whether they would still make that loan today.

Most new presidents of recovered banks emphasized the need to return to such core banking principles and conservative underwriting standards. In many cases, this meant providing additional education to the bank's directors. One president, for example, used significant amounts of time during board meetings to educate the directors on their responsibilities and hired an outside consultant to analyze lending opportunities and present them to the board.

### Summary

The results of both papers show banks that emerged from the financial crisis in good health—either through recovery or by maintaining good health throughout the period—largely centered on a commitment to sound standards and strong management.

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## Dodd-Frank Act Stress Testing Begins for Institutions with Assets of \$10 Billion to \$50 Billion

*By Mike Milchanowski*

**T**he annual cycle for Dodd-Frank Act (DFA) stress testing for banking institutions with average assets of between \$10 billion and \$50 billion (mid-sized institutions) officially began Oct. 1. The DFA requires annual company-run stress tests for bank holding companies (BHCs) with average total assets of between \$10 billion and \$50 billion and for savings and loan holding companies (SLHCs) and state member banks (SMBs) with \$10 billion or more in total assets. The rules were announced by the Federal Reserve Board, Federal Deposit Insurance Corp. (FDIC) and Office of the Comptroller of the Currency (OCC) on Oct. 9, 2012. The rules allow stress testing for institutions in this asset size range to be tailored to match the size

and complexity of the institution. DFA stress testing is one component of a bank's broader stress-testing program, which should also include, among other things, capital planning and an assessment of capital adequacy.

Institutions meeting the minimum average asset size requirement as of year-end 2012 are subject to DFA stress tests this fall. SLHCs will be subject to the rule at a future date to be determined. Going forward, as a company crosses the \$10 billion asset threshold, it will become subject to the requirements in the test cycle starting the next calendar year.

Under the DFA stress-test rules, mid-sized institutions must assess the potential impact of a minimum of three macroeconomic scenarios—baseline,

*continued on Page 11*



# Bankers, Regulators and Academics Gather at St. Louis Fed to Discuss State of Community Banking

On Oct. 2-3, the Federal Reserve Bank of St. Louis, the Conference of State Bank Supervisors and the Federal Reserve System co-hosted the first annual community banking research conference, *Community Banking in the 21st Century*. The conference focused on the opportunities and challenges facing the community banking industry.

The conference featured remarks from Fed Chairman Ben Bernanke and St. Louis Fed President James Bulard and keynote speeches from Fed Gov. Jerome Powell and Cape Cod Five Cents Savings Bank President and CEO Dorothy Savarese. Attendees also heard presentations of the latest academic research on community banking. In all, 12 papers were presented over the course of three sessions: the role of community banks, community bank performance and supervision and regulation of community banks. Summaries of the research papers can be found below.

Capping off the conference was a presentation of the results of a series of town hall meetings, during which bankers from across the country gathered to discuss the state of community banking. More than 1,700 bankers from 28 states participated in the town hall events, which ultimately culminated in the publication, "Community Banking in the 21st Century: Opportunities, Challenges and Perspectives."

For more information about the conference, see the Central View column by Julie Stackhouse, senior vice president of Banking Supervision, Credit, Community Development and Learning Innovation for the St. Louis Fed, on Page 2 or visit [www.stlouisfed.org/CBRC2013](http://www.stlouisfed.org/CBRC2013). The next conference will be held in 2014 at the St. Louis Fed. Details about next year's conference will be available in a future issue of *Central Banker*.

## COMMUNITY BANKING RESEARCH

### **Do Community Banks Play a Role in New Firm Survival?**

*Smith Williams, Yan Y. Lee*

The authors find a negative relationship between bank distance and the likelihood of using bank financing to finance operations.

### **Equipment Lease Financing: The Role of Community Banks**

*Charles Kelly, Mohammed Khayum, Curtis Price*

Banks participating in equipment lease financing (ELF) had better performance metrics than community banks in general, suggesting that ELF may be an untapped opportunity.

### **Bank Failure, Relationship Lending and Local Economic Performance**

*John Kandrak*

Recent bank failures were followed by significantly lower income and compensation growth, higher poverty rates and lower employment.

### **Small Business Lending and Social Capital: Are Rural Relationships Different?**

*Robert DeYoung, Dennis Glennon, Peter Nigro, Kenneth Spong*

The authors conclude that loan defaults are lower in communities arguably expected to have large amounts of inexpensive soft information and at banks likely to have a high level of personal knowledge about their customers.

### **Financial Derivatives at Community Banks**

*Xuan (Shelly) Shen, Valentina Hartarska*

The authors find that derivative use at community banks increased profitability over the period 2003–2012, and banning its use would have hurt banks, making them more vulnerable to interest rate risk and credit risk.

### **Lessons from Community Banks That Recovered from Financial Distress**

*R. Alton Gilbert, Andrew P. Meyer, James W. Fuchs*

(See article "St. Louis Fed Research Focuses on How Community Banks Get or Stay Healthy in Difficult Times" on Page 1.)

## Central View

*continued from Page 2*

- Community banks have intense knowledge of the local market and flatter organizational structures. They are willing to tailor products to local needs (if the cost is not too high).
- Community banks play a critical role in small-business, farm and residential lending. This lending is critical to community building and stabilization.
- Community banks enhance the chance for survival of startups. Startups create jobs.
- A large number of community banks execute exceptionally well on the fundamentals.
- Great management can do great things, such as turning around a severely troubled bank.

However, challenges persist, including:

- Outmigration of population from small communities, which creates issues for economic viability, workforces and succession planning
- Rapid changes in technology, which create new competitors and new costs (but opportunities as well)

- Growing compliance costs
- Lack of economies of scale
- Management exhaustion, making it difficult to be visionary and strategic
- Banks seeking profit by undertaking big shifts in strategy without the necessary expertise

Finally, the conference found some possibilities for innovation. While more exploration is needed, they include:

- Finding “pockets of opportunity,” such as equipment lease financing and Small Business Administration lending
- Focusing on talent management, such as using local retirees as a source of mentoring and focusing on the development of younger employees
- Creating mechanisms to more closely align regulation with risk

Video recordings of the sessions and PDFs of the academic papers are available at [www.stlouisfed.org/CBRC2013](http://www.stlouisfed.org/CBRC2013).

Overall, the conference was encouraging. While challenges persist and some consolidation may be inevitable, the community bank business model clearly remains viable and important to the communities served.

### **The Effect of Distance on Community Bank Performance Following Acquisitions and Reorganizations**

*Gary D. Ferrier, Timothy J. Yeager*

The authors find that long-distance acquisitions are less profitable and riskier than near-distance acquisitions for the three years following the transaction.

### **Performance of Community Banks in Good Times and Bad Times: Does Management Matter?**

*Dean F. Amel, Robin A. Prager*

The authors find that variables under bank control generally have much bigger effects on profitabilities than variables not under bank control.

### **Estimating Changes in Supervisory Standards and Their Economic Effects**

*William F. Bassett, Seung Jung Lee, Thomas W. Spiller*

The authors find that standards in assigning CAMELS ratings were consistent across the period 1991-2011.

### **The Impact of Dodd-Frank on Community Banks**

*Tanya D. Marsh, Joseph W. Norman*

The authors conclude that while it is currently impossible to quantify the impact of the Dodd-Frank Act, enough burdens have been placed on community banks that a deeper look at the federal regulatory system is needed.

### **Capital Regulation at Community Banks: Lessons from 400 Failures**

*Robert R. Moore, Michael A. Seamans*

The authors show that the majority of failed community banks would have been considered well-capitalized even two years prior to failing. Capital at these banks didn't begin dropping until about one year prior to failing.

### **A Failure to Communicate: The Pathology of Too Big To Fail**

*Harvey Rosenblum, Elizabeth Organ*

The authors present the Dallas Fed Financial Reform Plan for resolving the “too big to fail” issue.

# The Troubled Asset Relief Program—Five Years Later

By Gary S. Corner

The Troubled Asset Relief Program (TARP) was created to stabilize the financial system during the financial crisis of 2008. Congress authorized \$700 billion through the Emergency Economic Stabilization Act of 2008, and the program is overseen by the U.S. Department of the Treasury. TARP is generally seen as one of the federal government’s primary responses to the financial crisis.

## Usage of TARP Funds

While widely known for use in the bank Capital Purchase Program (CPP), TARP funds were also used to make loans and direct equity investments to select auto industry participants, back-stop credit markets, provide a lifeline to the American International Group (AIG) and provide ongoing support for government housing initiatives.

The Treasury Department is actively exiting its remaining investments made under its CPP and auto industry and credit market programs and has already closed several other bank investment programs and its investment in AIG. It has not, however, taken specific actions to exit from its Community Development Capital Initiative. Moreover, the TARP housing program remains active with additional funding allocations. As of Sept. 30, \$421 billion has been deployed through TARP, although existing obligations may raise the total to \$457 billion. (See Table 1 below.)

## Status of TARP Initiatives

To date, cash recovered in excess of TARP’s initial investments has been generated from its bank investment programs and credit market programs. TARP’s auto programs and housing programs are expected to return less than their initial investments.<sup>1</sup> Treasury’s investment in AIG through TARP resulted in a loss. However, when combined with other Treasury investments in AIG, Treasury experienced a net gain of \$2.4 billion.

The Treasury Department estimates TARP will bear an overall lifetime loss of about \$41 billion, as further funding of TARP’s housing program is expected. According to the Treasury Department, funds that have been or are expected to be dispersed under TARP’s housing program are generally not considered recoverable.

## The Bank Investment Program

TARP’s bank investment program consists of five components, of which the CPP was the most significantly funded component.<sup>2</sup> The CPP was designed to bolster the capital position of viable banks of all sizes and locations, though the program heavily supported banking organizations with less than \$10 billion in assets. (For locations of these TARP fund originations, see Figure 1 on Page 9.) Under the program, 707 institutions received capital investments. (See Figure 2 on opposite page). In exchange, the Treasury Department received preferred stock or debt securities at a dividend rate of

TABLE 1  
Financial Status of TARP Initiatives

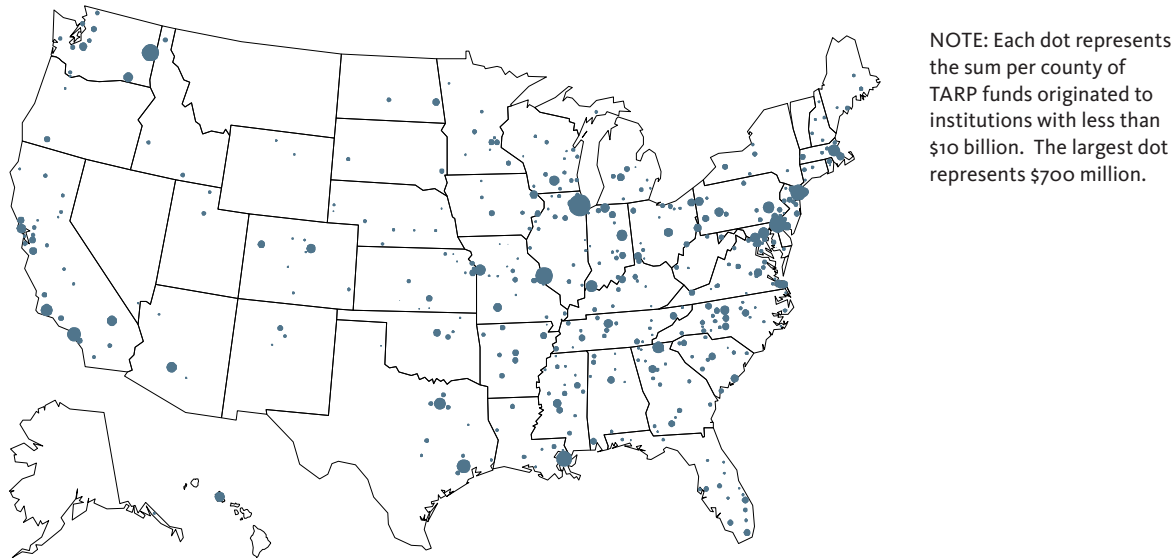
TARP initiatives	Treasury obligation (billions)	Disbursed	Outstanding investment balance (billions)	Estimated lifetime gain (loss) (billions)
Banking programs	\$250.46	\$245.46	\$2.84	\$23.93
Credit market programs	20.08	19.09	0.00	3.36
Automotive programs	79.69	79.69	19.87	(14.98)
AIG	67.84	67.84	0.00	(15.18)
Housing programs	38.49	9.48	—	(37.67)
Total for TARP	\$456.56	\$421.20	\$22.72	(\$40.54)

SOURCE: Office of Financial Stability TARP Report, Oct. 18, 2013  
NOTE: Due to rounding, the columns may not add up correctly.



FIGURE 1

Aggregate TARP Fund Originations by County, Institutions under \$10 Billion



5 percent for five years and 9 percent thereafter. In addition, the Treasury Department received warrants to purchase stock or other securities.

According to the Treasury Department, \$2.8 billion of the \$245 billion dispersed under the bank investment program remains outstanding today, primarily from the CPP.<sup>3</sup> As of Sept. 30, 15 percent of the initial CPP recipient institutions remained in the program.

Conclusion

The Treasury Department continues to unwind most of its TARP programs. Only TARP’s housing initiatives are actively funded. Cash collections under TARP’s bank investment programs represent more than 100 percent of the original Treasury investment. This level of repayment exceeds original expectations for the five components of TARP’s bank investment programs. Overall, relative to original expectations and perhaps to public perception, TARP’s bank investment programs appear to have been successful in stabilizing banking conditions and at a cost far less than originally projected.

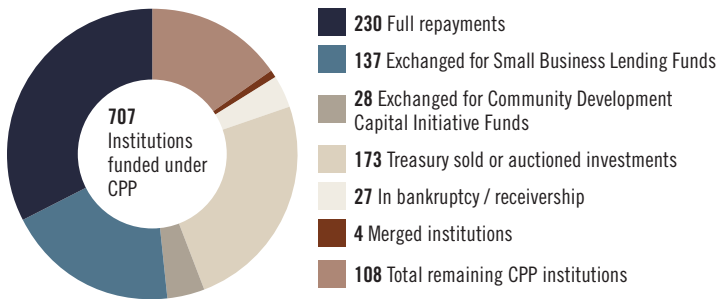
Gary S. Corner is a senior examiner at the Federal Reserve Bank of St. Louis.

ENDNOTES

1 For further explanation of the TARP programs, refer to <http://www.treasury.gov/initiatives/financial-stability/TARP-Programs/Pages/default.aspx>.

FIGURE 2

Status of Institutions under CPP



SOURCE: Office of Financial Stability TARP Report, Oct. 18, 2013

2 The other four programs are the Supervisory Capital Assessment Program, the Asset Guarantee Program, the Targeted Investment Program and the Community Development Capital Initiative. The Supervisory Capital Assessment Program was a supervisory stress-test exercise performed on the nation’s 19 largest, most systemically important institutions. The aim was to restore market confidence; however, Treasury was not required to make any supporting investments. The Asset Guarantee Program and Targeted Investment Program provided assistance to two institutions: Bank of America and Citigroup. Both programs closed in 2009 at a net gain to taxpayers of about \$7 billion. The Community Development Capital Initiative provided funding to qualified community development institutions. Funding for this program was completed in 2010.

3 This includes \$2.2 billion refinanced out of the Capital Purchase Program and into the Small Business Lending Fund. In addition, \$363 million in funds were exchanged from Capital Purchase Program funds into the Community Development Capital Initiative.

# Could Rising Municipal Securities Holdings Increase Community Banks' Risk Profiles?

By Gary S. Corner, Emily Dai and Daigo Gubo

Community banks in the U.S. have significantly increased their municipal securities holdings since the onset of the financial crisis. Increased holdings of municipal bonds mean possible increases in interest rate risk, credit risk and liquidity risk. Without a well-considered asset/liability management strategy, these risks may manifest themselves at just the wrong time.

An analysis of call report data reveals that U.S. commercial banks' municipal securities as a percentage of total assets have elevated significantly since the financial crisis, especially for community banks (Figure 1).<sup>1</sup> The trend also holds in the Eighth District as shown in Figure 2.

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Since the onset of the financial crisis, community banks' balance sheets have seen greater investment in municipal bond holdings. While favorable tax treatment and yield opportunity nudged community banks in this direction, the potential risk buildup should not be ignored.

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## Reasons for Increased Muni Bond Holdings

Several factors may have contributed to community banks' increased municipal exposure. A provision of the American Recovery and Reinvestment Act of 2009 (ARRA)<sup>2</sup> increased the tax efficiency of municipal bonds issued in 2009 and 2010. This tax treatment change provided a strong incentive for banks to deploy funds into municipal bonds holdings. This trend continued in 2011, 2012 and 2013, even though banks no longer benefited from the favorable tax treatment. Thus, seeking yield may be another factor behind the increase in municipal securities hold-

ings. In a low interest rate environment, banks are under pressure to find sources of additional earnings. With ample funds to deploy and reduced lending opportunities, municipal bonds remained attractive compared to other lower-yielding assets.

## Potential Risk

Significant municipal bond holdings bring increased risk in several areas. One is interest rate risk, a major threat to all fixed income securities holders. At the end of the first quarter, for banks with total assets under \$10 billion, the unrealized gain from their municipal securities portfolios was \$4.7 billion. By the end of the second quarter, the gain slid to less than \$0.4 billion. The \$4.3 billion decline in value of the municipal securities was equivalent to 1.9 percent of these banks' tier 1 capital.

Community banks with significant municipal bond holdings also face potential credit risk and liquidity risk. Financial stress on state and local governments has increased since 2008. Local governments continue to face significant challenges: a slow economic recovery, mounting pension and health care liabilities, and continued decreases in funding from federal and state governments. However, extremely distressed state and local governments are outliers and are not reflective of the overall credit profile of the municipal bond market, especially the general obligation debt market. On the other hand, community banks' holdings include a significant amount of smaller, infrequently traded municipal issuances for which liquidity risk cannot be ignored.

Municipal bond holders also face potential structural changes in the municipal bond market. The city of Detroit's recent bankruptcy filing created significant anxiety in the municipal bond market. Detroit's appointed emergency manager has proposed classifying some general obligation unlimited tax (GOULT) bonds as "unsecured" debt. Rating agencies usually give GOULT bonds high ratings because municipal governments gener-

ally attach these bonds with unlimited property taxing authority to fulfill the obligations of these bonds. An unfavorable court ruling for bond holders in this case may have a far reaching effect on the credit ratings and ultimately the prices of municipal bonds. Although banks are now required to assess the credit quality of municipal bonds independently, many other municipal bond market participants rely on the ratings.

Since the onset of the financial crisis, community banks' balance sheets have seen greater investment in municipal bond holdings. While favorable tax treatment and yield opportunity nudged community banks in this direction, the potential risk buildup should not be ignored. The municipal bond market also might have structural changes in the near future as long-held assumptions on the credit strength of general obligation bonds are being tested. These factors increase the need to monitor municipal bond portfolios closely.

Gary S. Corner is a senior examiner, Emily Dai is an economist, and Daigo Gubo is a policy analyst, all with the Federal Reserve Bank of St. Louis.

ENDNOTES

- 1 Community banks are generally defined as banks with total assets under \$10 billion.
- 2 The American Recovery and Reinvestment Act of 2009 (ARRA) is also known as the Stimulus. It was an economic stimulus package signed into law on Feb. 17, 2009.

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*continued from Page 5*

adverse and severely adverse—on their consolidated losses, revenues, balance sheets (including risk-weighted assets) and capital. The proposed guidance indicates that these companies should apply each scenario across all business lines and risk areas, so that they can assess the effects of a common scenario on the entire enterprise. Results of the company-run stress tests will be reported using the FR Y-16 reporting form and are due on March 31. Companies do not have to publicly disclose the results of their 2013 stress tests, but they will be required to publicly disclose the “severely adverse scenario” results beginning with the 2014 stress test.

FIGURE 1  
Municipal Securities as a Percent of Total U.S. Banking Assets

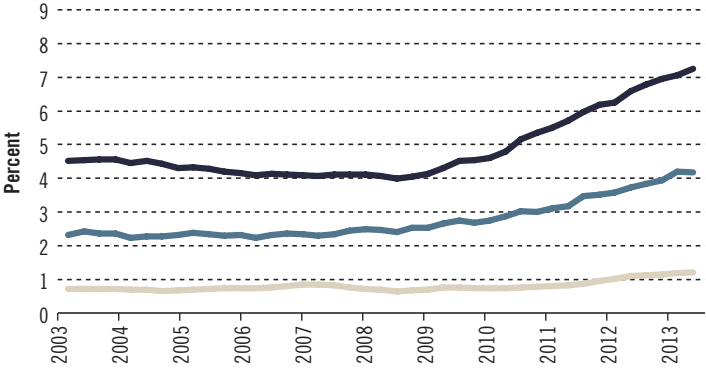
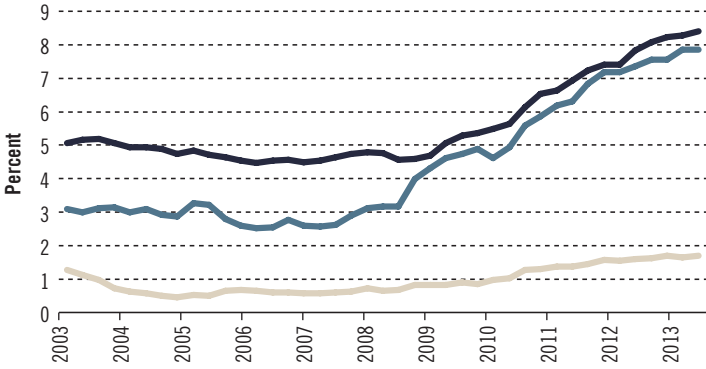


FIGURE 2  
Municipal Securities as a Percent of Total Eighth District Banking Assets



KEY

Banks under \$1 billion

Banks \$1 billion to \$10 billion

Banks above \$10 billion

SOURCE: Call Reports

In preparation for the Oct. 1 stress-testing start date for mid-sized institutions, the Fed announced an interim final rule on Sept. 24 that clarifies how companies should incorporate the Basel III regulatory capital reforms into their DFA stress tests. The interim rule provides a one-year transition period requiring most mid-sized institutions to calculate their stress-test projections using the Board's current regulatory capital rules during the 2013 stress test to allow time to adjust their internal systems to the revised capital framework.

Mike Milchanowski is a manager at the Federal Reserve Bank of St. Louis.



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