Conference Highlights Opportunities and Challenges Facing Community Banks

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If the inaugural Federal Reserve System and Conference of State Bank Supervisors’ (CSBS) community bank research and policy conference had one key takeaway, it was this: The community banking industry has experienced challenges and ongoing consolidation; however, there is a future for community banks that have strong management teams, adhere to solid banking fundamentals, and leverage their “social capital,” or community relationships, to tailor products and services that meet the needs of customers in their local markets.

Armed with hard and soft data underscoring the successes and failures of community banks in recent years, more than 175 academics, researchers, regulators, and community bankers met on October 2 and 3, 2013, at the Federal Reserve Bank of St. Louis. The conference, Community Banking in the 21st Century, featured speeches and comments from Federal Reserve Board Chairman Ben Bernanke, CSBS President and CEO John Ryan, Federal Reserve Governor Jerome Powell, and community banker Dorothy Savarese, president and CEO of Cape Cod Five Cents Savings Bank in Orleans, MA. In addition to featuring the latest academic research on the community banking industry, the conference gave voice to the perspectives of more than 1,700 community bankers who participated in 51 town hall meetings during the spring and summer of 2013.

Evolution of Community Banking in the U.S.
Dramatic changes within the community banking industry over the past 20 years are evident. According to the Federal

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The first article of this two-part series provided an overview of the risks inherent in home equity line of credit (HELOC) lending activity, especially for institutions with large HELOC portfolios. This article discusses some risk management elements — specifically, internal controls, management information systems (MIS), policies and procedures, board reporting, and loss mitigation strategies — that can help minimize these risks.

**Internal Controls and Management Information Systems**

For many community banks, MIS reports are often transactional rather than portfolio based. While transactional reports are effective for overseeing the activity of individual borrowers, these reports typically are not sufficient to determine whether the composition and overall risk profile of the HELOC portfolio remain within the acceptable risk levels defined by the bank’s board of directors. Unfortunately, some banks are tracking little more than the delinquency status for their HELOC portfolios. This is particularly troubling given the recent shifts in consumer payment hierarchies, as discussed in the first article. Ideally, MIS should capture credit risk in the HELOC portfolio both in terms of the likelihood of customer default (often referred to as probability of default, or PD) and the potential loss in the event of a default, or loss given default (LGD).  

Supervision & Regulation (SR) Letters 05-11 and 12-3 highlight key factors to consider when performing risk analysis of HELOC lending. Those factors most applicable to community bank HELOC lending are discussed below.

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*This article is the second of a two-part series that explores home equity lending. The first article, titled “Home Equity Lending: A HELOC Hangover Helper,” appeared in the Second Quarter 2013 issue of Community Banking Connections and is available at www.cbcfrs.org/articles/2013/Q2/Home-Equity-Lending-A-HELOC-Hangover-Helper.cfm.*

1 When this article discusses PD and LGD — which are parameters that are widely used by many large banking organizations in credit risk modeling — the intent is to refer to their conceptual meaning rather than to their use as credit metrics. Community banks are not expected to calculate quantitative PD or LGD estimates for extensions of credit.

Probability of Default Analysis
Credit Scores and Line Utilization

Monitoring changes in credit scores can be a very effective predictive tool. Although individual results vary, declining credit scores generally have a strong correlation with higher delinquency rates. However, consumer repayment assessment should begin, but not stop, with an analysis of credit scores. Ultimately, the accuracy of any predictive model is best determined by validation and backtesting; solely assessing the relationship between declining credit scores and default rates can leave lenders and risk management officers with an incomplete picture of portfolio risk.

Academic and industry studies also suggest a strong correlation between high credit line utilization rates and defaults on open-ended credit products. Tracking line utilization rates and segmenting HELOC portfolios accordingly is a useful risk management tool, particularly if these metrics are leveraged against other data such as credit scores and recent delinquency rates on the first-lien position. Subsegments of portfolios based on multiple high-risk variables could provide a solid base for robust analysis. For example, knowing that 21 percent of the borrowers in the HELOC portfolio have a credit score below 700 is beneficial. However, knowing that half of that segment also has a line utilization rate above 90 percent adds far more context that could trigger deeper reviews. Tracking line utilization is fairly simple to do with most loan system software.

Origination Terms, Initial Underwriting Standards, and Amortization

Community bank HELOC portfolios are subject to many of the systemic risk issues that affect the HELOC portfolios of their larger counterparts, such as reset volumes and changes in consumer payment behavior. Some community banks nevertheless appear to have avoided the underwriting pitfalls associated with the precrisis credit boom by, for example, underwriting their own loans and avoiding the low-doc and no-doc products originated by brokers. Furthermore, because these community banks originated loans to hold in their portfolios rather than to sell, they ensured that appropriate appraisals were used at loan origination.

However, many community banks failed to factor in borrowers’ ability to service their HELOC lines on an amortizing basis at origination. As highlighted in the first article, the difference in debt service requirements can be dramatic when a HELOC converts to amortizing terms. However, on an encouraging note, examiners in one Federal Reserve District noted that a number of community banks had already identified this risk and modified lending terms to require debt-to-income (DTI) analyses on an amortizing basis. These banks also seemed to have addressed, in part, the risk of higher interest rates by assuming a 6 or 7 percent interest rate in their DTI calculations.

Although these changes in banks’ policies are expected to improve the quality of future HELOC originations, they do not address risk in existing portfolios. This issue could have a greater impact as HELOC portfolios approach peak reset years for the 2004–2008 vintage originations. Banks that originated HELOC loans with underwriting terms that accounted solely for interest-only payments should incorporate revised amortizing DTI estimates into routine risk management processes and default calculations. Borrowers with a high potential for distressed cash flows, high utilization rates, or increased loan-to-value (LTV) ratios should be considered for additional analysis. The results of these efforts could identify high-risk HELOC relationships that may be considered for nonaccrual treatment, inclusion into analyses of the adequacy of the allowance for loan and lease losses (ALLL), and other workout or remediation options.

Other Probability of Default Issues

Other practices that may improve PD analysis include segmentation of HELOC lines by the underlying property type, such as liens on rental or vacation properties; origination channel (if applicable); and combined loan-to-value (CLTV) ratios. The CLTV ratio, in particular, is critical and warrants further discussion in the following section.

Loss Given Default Analysis

Real estate values in most markets have at least stabilized, and, in many cases, they have experienced appreciation in recent months. Whether this trend is the beginning of a meaningful recovery in real estate values or a temporary

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Are community banks prepared to manage the risk associated with the end of support for Microsoft Windows XP (XP) effective April 8, 2014? Community banks are being targeted by cybercriminals through corporate account takeovers and ATM cash-out and other fraud schemes. The increasing complexity, sophistication, and frequency of cyberattacks require that banks remain attentive to elevated and evolving information security risks. Community bankers should engage their user groups and have direct discussions with their technology service providers to ensure that they are properly addressing cybersecurity risks, including “end of life” for XP support.

Because XP was developed before Microsoft instituted a secure development process, XP systems are six times more likely than other Microsoft operating systems to fall victim to malicious software.¹ Gartner, Inc., an information technology research and advisory firm, estimates that between 10 and 15 percent of enterprise computers will still be running XP when Microsoft officially ends support on April 8.² This has implications for community banks that run XP and for service providers that deploy applications using XP on the bank’s behalf.

If a community bank decides to continue running XP after Microsoft ends support, bank staff members should be prepared to articulate to bank examiners how they plan to patch the system, implement mitigating controls, and eventually migrate to a supported operating system. While most banks intend to migrate their applications to run on a supported operating system, the reality is that some may miss the deadline. As a result, these banks will run on unpatched systems.

1. **Purchase an annual custom support plan license.**³
   This option typically costs several hundred thousand dollars and is intended for banks that have a large number of computers running XP.

2. **Purchase a “per-seat” license.** This option typically costs several hundred dollars per computer annually and may appeal to banks that have a small number of computers running XP.

Given the shrinking window of opportunity to address XP risk, bank staff should notify its board of directors and senior management in the event of potential exposure. Support from the highest level within the organization is needed in order to develop and implement a plan that minimizes risk; it is not sufficient to wait until April to develop a plan. The Board of Governors of the Federal Reserve System issued a supervisory letter,³ and the Federal Financial Institutions Examination Council (FFIEC) issued a joint statement⁴ emphasizing the risk associated with Windows XP and expectations regarding risk management.

**Cost to Maintain XP Support**

Some community banks have ignored aging XP systems and deferred the decision to switch operating systems, perhaps because they were unaware of how critical these systems are to business operations or because they were focused on higher-priority projects. Whatever the reason, these banks are now faced with running applications using an operating system that will be very expensive to maintain.

There are two options for banks continuing to run XP after April 8, although both are expensive:


³ Microsoft offers a custom support plan for products that reach “end of life” and are no longer supported.
Either way, community banks or their service providers could incur substantial costs if they elect to pay Microsoft for support. A community bank could be found negligent, however, if an unpatched XP system leads to customer loss.

**XP Risk to Community Banks**

There are two significant risks associated with running unsupported XP. The first is that in-house computers may go unpatched and create a target for cybercriminals. Effective patch management programs require discipline and persistence. Without an accurate inventory, it is unlikely that all bank computers running XP are being patched, and thus the bank may be operating in a less-than-secure manner.

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The second risk involves service providers’ use of XP. Community bankers should engage service providers to discuss what measures they have taken to mitigate XP risk. Antivirus and anti-malware vendors have announced that they will maintain versions of their products that protect XP through 2014 and beyond. However, attackers are targeting the underlying operating system, and thus mitigating controls have to be maintained carefully. Examiners will seek to confirm that community banks have had appropriate discussions with their service providers to ensure that they have an XP migration strategy and that they are taking the appropriate steps, including implementing layered security, to mitigate XP risks on the bank’s behalf. Ideally, service providers and community banks that have in-house XP systems should obtain and deploy XP patches and use mitigating controls to achieve layered security consistent with guidelines outlined in the FFIEC Interagency Supplement to Authentication in an Internet Banking Environment.

**Mitigating XP Risk**

Community banks that plan to have in-house systems running XP after April 8 should take the following steps to mitigate risk:

1. Risk-assess the criticality of applications running on XP systems;
2. Obtain an accurate inventory of XP systems;
3. Develop a migration strategy that includes mitigating controls, patching, and/or operating system updates;
4. Validate the efficacy of mitigating controls; and
5. Apply patches.

Community banks should confirm that their service providers have followed these same steps.

The accuracy of both the risk assessment and the inventory can be boosted by engaging third-party firms that monitor network traffic for evidence of isolated XP systems. Internal and third-party audit reports can be used to confirm that patches have been applied to these systems. Mitigating controls that protect or “harden” an XP system are beyond the scope of this article, but examples of such controls include end-point protection, application whitelisting, network segregation, and restricted administrator access.

**Conclusion**

If a community bank chooses not to migrate its computers to a supported operating system or elects not to pay for Microsoft support, it is critical that the bank implement mitigating controls to achieve information security consistent with the guidelines outlined in the FFIEC Interagency Supplement to Authentication in an Internet Banking Environment. Examiners will assess the capability of the institution’s information technology department to ensure that banks are taking the appropriate steps to mitigate risks associated with the use of XP after April 8, 2014.

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6 The Verizon 2012 Data Breach Investigations Report indicated that 97 percent of breaches are avoidable by implementing simple or intermediate controls. Applying Microsoft patches to all Windows systems is a simple yet essential mitigation against breaches. See www.verizonenterprise.com/DBIR/2012/.

Bank holding companies (BHCs) and savings and loan holding companies (SLHCs), collectively referred to as “holding companies,” are required by federal law to file regulatory reports with the Federal Reserve Board. This article highlights some of the common reporting errors on the FR Y-9SP report, Parent Company Only Financial Statements for Small Holding Companies, and discusses how to identify discrepancies between the FR Y-9SP and the subsidiary bank’s Federal Financial Institutions Examination Council (FFIEC) 041 report, Consolidated Reports of Condition and Income (Call Report), as well as between the FR Y-10 report, Report of Changes in Organizational Structure, and the FR Y-6 report, Annual Report of Holding Companies.\footnote{Reporting forms and instructions are available at www.federalreserve.gov/apps/reportforms/default.aspx.} Holding companies and the Federal Reserve both benefit when these reports are submitted accurately and timely because it minimizes the need for corrections and follow-ups. Also, because the reports are made available to the public, it is important that the data are reliable.

**Background and Purpose**
BHCs are regulated by the Federal Reserve Board in accordance with the Bank Holding Company Act of 1956 (BHC Act), as amended, and Regulation Y, the implementing regulation for the BHC Act. SLHCs are also supervised by the Federal Reserve as a result of the Dodd-Frank Wall Street Reform and Consumer Protection Act amendments to the Home Owners’ Loan Act and Regulations LL and MM, the implementing regulations for SLHCs. Many holding companies have less than $500 million in total consolidated assets and are required to file the semiannual FR Y-9SP report. The FR Y-9SP report must be filed by: 1) top-tier holding companies with less than $500 million in total consolidated assets; 2) each holding company within a tiered organizational structure in which the top-tier holding company has total consolidated assets of less than $500 million; and 3) subsidiary holding companies of Employee Stock Ownership Plan holding companies with less than $500 million in total consolidated assets.

Information collected on the FR Y-9SP report is used to assess and monitor the financial condition of parent holding companies. In fact, the FR Y-9SP report is in the FR Y family of holding company reports that serves a variety of needs for the Federal Reserve and enables analysts and supervisory staff to:

- Analyze holding companies’ overall financial condition
- Review holding companies’ performance and conduct pre-inspection analysis
- Review applications for mergers and acquisitions
- Identify potential financial trends or problems

**Figure 1: Holding Companies Filing FR Y-9 Reports (as of 12/31/2012)**
The FR Y-9SP report is completed as of the last calendar day of June and December and must be filed with the Federal Reserve 45 days after the quarter ends. Shifts in reporting status occur when a holding company reaches $500 million as of June 30; generally, this requires the filing of the FR Y-9C report, *Consolidated Financial Statements for Holding Companies*, and the FR Y-9LP report, *Parent Company Only Financial Statements for Large Holding Companies*, beginning March 31 of the following year. However, if the $500 million threshold results from a business combination, the change in reporting to the larger series would occur as of the next calendar quarter.

The Federal Reserve received 4,095 FR Y-9SP reports for the December 31, 2012, reporting period. Figure 1 shows a breakdown, by Federal Reserve District, of holding companies that file the FR Y-9 series of reports.

### Data Analysis and Common Reporting Errors

The FR Y-9SP report collects basic financial data on a parent-only basis in the form of a balance sheet, an income statement, and a schedule for certain memoranda items. It must be prepared and filed in accordance with generally accepted accounting principles (GAAP). The equity method of accounting should be used when accounting for investments in subsidiary banks, as well as nonbank subsidiaries, associated companies, and corporate joint ventures in which the holding company exercises significant influence. Although the FR Y-9SP report is not complex in terms of the data collected, some accounting and reporting issues are common to FR Y-9SP reporters. Because the report is filed only twice a year, these issues seem to resurface from time to time. To ensure the accuracy of reported data, Federal Reserve analysts perform period-to-period consistency checks, paying particular attention to unusual fluctuations. Analysts also verify that the data and any edit explanations provided are consistent with accounting rules and reporting interpretations. In addition, analysts often perform extended editing beyond analysis of the FR Y-9SP report data by cross-referencing other sources, such as the Call Report, structure reports, and Securities and Exchange Commission reports, if available.

**Reconciliation of the FR Y-9SP Against the Call Report**

When the FR Y-9SP is reconciled against the Call Report data, analysts are able to uncover discrepancies and request revisions from the reporters. These examples assume the holding company owns 100 percent of the subsidiary’s equity. In cases of less than 100 percent ownership, a pro-rata calculation is used to verify accuracy for the Schedule SI (income statement) and Schedule SC (balance sheet) items noted (Figures 2a–c). As shown in Figure 2d, for item 1 (total consolidated assets of the holding company) of Schedule SC-M (memoranda), the subsidiary bank’s total assets, plus any parent-only assets, should be reflected. Line items that should reconcile properly are also noted.

**Figure 2a: Dividends from Bank Subsidiary**

The parent holding company’s dividend income on the FR Y-9SP (SI-1.a) should equal the bank subsidiary’s dividend payments on the Call Report (RI-A-8 and 9).

**Schedule SI — Income Statement**

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<thead>
<tr>
<th></th>
<th>Dollar Amounts in Thousands</th>
<th>BHSP</th>
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<tr>
<td>1</td>
<td>Income from bank subsidiary(ies):</td>
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<td></td>
<td></td>
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<tr>
<td>a</td>
<td>Dividends</td>
<td>0000</td>
<td>2111</td>
<td>1.a</td>
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<tr>
<td>b</td>
<td>Other income</td>
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**Schedule RI-A — Changes in Bank Equity Capital**

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<td>5</td>
</tr>
<tr>
<td>9</td>
<td>4511</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>Other comprehensive income</td>
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Bank earnings are back! For smaller community state member banks (CSMBs), defined as those with total consolidated assets less than $1 billion, second quarter 2013 aggregate return on average assets (ROAA) reached an annualized rate of 0.91 percent, a significant improvement over the rate achieved during the depths of the financial crisis when full-year 2009 results were –0.17 percent. For the same period, aggregate return on equity (ROE) rose from –1.7 percent to 8.5 percent.

Is the earnings environment really that good? The evidence suggests a need for caution. As illustrated in Figures 1 and 2, the crisis period decline and postcrisis rise of bank ROAA nearly mirrors the inverse of provisioning. So, while declining provisions recently boosted ROAA results, further enhancements are unlikely. Also, though earnings have improved, ROAA and ROE remain well below prerecession levels (between 2002 and 2006, CSMBs’ ROAA and ROE averaged 1.14 percent and 11.41 percent, respectively).

A significant hurdle for smaller community bank earnings is compressed net interest margins. Since 2011, bank asset yields have declined faster than liability yields, causing reduced profitability on an asset base already struggling to remain at current levels.

Current Earnings Environment Encourages Reaching for Yield

Given this difficult earnings environment, it is easy to understand why bankers might consider — and regulators might be concerned about — activities that “reach for yield.” Put simply, reaching for yield is any activity that board members and management typically consider more risky (beyond the bank’s risk tolerance) but nevertheless have undertaken as a means to improve short-term earnings. Examples might include lowering loan and investment credit quality standards, increasing loan and investment durations, purchasing structured investments, leveraging investments, and pursuing novel loan and deposit products.

Of course, these actions might be appropriate in some contexts, but if board members and management change policies and procedures to accommodate new activities and ways of doing business, they should also recognize that they are increasing the bank’s risk tolerance.
Most recently, it appears that some CSMBs are taking additional risk in their investment portfolios, mostly through extended investment duration but also through more structured products and corporate credits.

As community banks refine their business strategies for the postcrisis environment, they should be mindful of the long-term risk/reward trade-offs on their balance sheets.

Longer-Term Cost of Reaching for Yield Can Be Significant

To that end, and building on the earlier analysis of earnings at smaller CSMBs, staff at the Board of Governors of the Federal Reserve System recently gathered data for top earnings performers in 2006 and evaluated whether or not the riskiness of their precrisis assets could predict future earnings performance in a downturn (2009). In short, the answer was yes.

The analysis used a wider sample that included all community banks (those with less than $10 billion in total consolidated assets) that reported a 1 percent or better ROAA in 2006. For each bank, the ratio of risk-weighted assets to total assets (RWA/TA) serves as a proxy for precrisis credit risk; a higher ratio suggests riskier assets. Banks were then segmented by their 2006 RWA/TA credit risk ratio and their 2009 ROAA performance, as seen in the table below.

The good news is that many community banks with healthy 2006 earnings maintained that performance throughout the crisis. For example, roughly 60 percent of banks with an RWA/TA ratio below 0.7 in 2006 earned an ROAA of 1 percent or better in 2009. Notably, those were the less risky banks among those with strong earnings in 2006.

But, when we look at the higher-risk banks (those with a 2006 RWA/TA ratio above 0.8), the story reverses: Only 29 percent of riskier banks in 2006 maintained a 1 percent or better ROAA in 2009. Unfortunately, the earnings performance of many of those banks not only slipped but also significantly faltered: Roughly half of them earned an ROAA below 0.25 percent in 2009.

To be sure, the measurement of balance sheet credit risk in this analysis is basic, and there are other indicators of financial performance other than ROAA. Moreover, this analysis does not consider how banks’ balance sheets might have shifted between 2006 and 2009, nor does it consider the much weaker earnings environment in 2009.

Do the results mean that banks should not consider taking more risk and reaching for yield? Not necessarily. Clearly, some banks maintained healthy performance, but, and perhaps more important, most did not. The analysis does not indicate whether or not the reward for higher risk was achieved over a longer period of time. What has been demonstrated over time, however, is that taking too much risk and having too little capital can put a bank out of business before the long term fully materializes. That is, if a bank is going to hold higher-risk assets, it must have the financial wherewithal to hold them in both good and bad times.

Things to Consider Before Reaching for Yield

Given the current earnings environment and this brief earnings risk analysis, community banks should consider several questions before reaching for yield.

- What are the bank’s historical risk-adjusted returns on its assets? It is difficult for a portfolio manager to allocate capital well without knowing the risk/reward trade-off of possible investment opportunities. Similarly, it is difficult for a banker to choose business activities and investments without similar data. One aid is to calculate a simplified business cycle return on capital for each asset class. By adjusting the returns of each asset class for its risk, bankers can create yields that are directly comparable and that may highlight clear winners and losers.

Table

<table>
<thead>
<tr>
<th>RWA/TA: 2006</th>
<th>ROAA: 2009</th>
<th>Percent of Banks</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Number of Banks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Above 1%</td>
<td>Between 1% and 0.75%</td>
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<tr>
<td>Above 0.9</td>
<td>73</td>
<td>18</td>
</tr>
<tr>
<td>Between 0.8 and 0.9</td>
<td>226</td>
<td>69</td>
</tr>
<tr>
<td>Between 0.7 and 0.8</td>
<td>448</td>
<td>185</td>
</tr>
<tr>
<td>Between 0.6 and 0.7</td>
<td>473</td>
<td>135</td>
</tr>
<tr>
<td>Below 0.6</td>
<td>433</td>
<td>97</td>
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continued on page 21
Fraud is a serious threat to payment system efficiency, consumer confidence, and a community bank’s bottom line. Safeguarding assets from fraud attacks is an ongoing challenge not only because community banks and their customers are regular targets of fraud schemes but also because these schemes evolve in response to changes in payment instruments, technology, and security.

To mitigate fraud risk, community banks have a challenging job: They have to keep pace with new and existing schemes while monitoring the effectiveness of their fraud prevention tools. To that end, the Federal Reserve’s 2012 Payments Fraud Survey — Consolidated Results1 is beneficial in that it helps assess the fraud landscape by providing insights into fraud risks and surveying the effectiveness of fraud-fighting methods so that bankers can stay ahead of fraudsters. Another resource is the free on-demand webcast titled Keeping Up with Fraudsters: What You Need to Know, which is available on the Federal Reserve Bank Services website.2 In addition to providing useful information, this webcast also summarizes the survey results.

Survey Participants
The 2012 Payments Fraud Survey was sponsored by the Federal Reserve Banks of Boston, Dallas, Minneapolis, and Richmond, as well as the Independent Community Bankers of America.3 Survey participants included financial institutions (FIs) from across the United States, with some concentration in the regions of the sponsoring Federal Reserve Districts. A total of 689 institutions — 86 percent banks, 10 percent credit unions, and 4 percent thrifts — responded. About six in 10 participating institutions had assets of less than $250 million (Figure 1).

Most respondents reported that they offered traditional payment services, such as wire transfers, debit cards, checks, automated clearinghouse (ACH), and bill payment services (Figure 2). Other payment products, such as remote deposit capture (RDC) or person-to-person (P2P) payments, are also offered, but to a lesser extent. This information is relevant because institutions implement fraud prevention measures only for the products they offer.

1 The survey questions are available at www.minneapolisfed.org/about/whatwedo/payments/2012_Payments_Fraud_Survey_Questions.pdf.
2 The webcast is available at events.frbservices.org/ep_web/DSP_eventlist.cfm.
Payments Fraud Attacks and Losses

Payments fraud is widespread: Ninety-six percent of the survey respondents experienced both fraud attempts and losses in 2011. From a list of nine payment types, institutions were asked to identify the top three payment types they encountered with the highest number of fraud attempts and losses (Figure 3). The survey found that institutions were especially vexed by signature-based debit card fraud, with more than 80 percent placing it among their top three payment types with the most attempts and losses. In addition, more than 40 percent of the respondents identified checks and personal identification number (PIN)-based debit card fraud as among their top three payment types with the highest levels of fraud attempts and losses.

Although credit card fraud was not among the top three payment types with the highest number of fraud attempts

or losses for respondents to this survey — many of whom do not issue credit cards — credit cards are nevertheless vulnerable to payments fraud. In the 2013 Federal Reserve Payments Study, credit cards accounted for the highest number of fraudulent transactions (third-party fraud) and highest losses, without respect to the organization incurring the loss.\(^5\)


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Reserve’s definition of community banks (those with less than $10 billion in total consolidated assets), there were more than 10,000 community banks 20 years ago. At the end of 2012, however, there were fewer than 6,000 community banks. Over that same period, the percentage of total U.S. banking assets held by community banks fell from 50 percent to 17 percent. The past five years have been particularly challenging for community banks, as net interest margins have compressed, regulatory challenges have increased, and competition from other financial institutions has grown more intense. Since 2008 alone, there have been nearly 500 community bank failures.

What Current Community Banking Research Tells Us About the Future of Community Banks

Despite these challenges, the conference papers indicated that there were many strengths and opportunities for community banks. The academic papers were divided according to the session in which they were presented: the role of community banks, community bank performance, and the supervision and regulation of community banks.

The Role of Community Banks

The papers presented during the first session, “The Role of Community Banks,” attempted to quantify how community banks leverage their knowledge of soft information about their communities, customers, and borrowers to successfully allocate credit. For example, one paper found that community banks play an important role in providing funding to borrowers who want to start a small business. In particular, findings from this paper suggest that when a start-up borrower is physically located closer to a community bank, the borrower is more likely to receive a loan. Other findings from this session included:

- Community banks that effectively managed their equipment lease financing operations outperformed similarly situated community bank peers that did not engage in this type of business;
- Community banks headquartered in rural regions of the United States experienced lower default rates on Small Business Administration (SBA) loans than peer banks that served urban markets;
- Default rates on SBA loans were higher when the borrower was located outside of the community bank’s primary market; and
- Loss-sharing agreements between the Federal Deposit Insurance Corporation and the acquirer of a failed bank actually lessened the adverse consequences of a community bank failure on its community.

Community Bank Performance

In the second session, “Community Bank Performance,” researchers explored community bank performance during several different periods since the late 1980s, including during the recent financial crisis. In general, community banks with less than $10 billion in total consolidated assets have lagged noncommunity banks in terms of overall profitability since the end of the financial crisis. This can be attributed to several factors, including low interest rates and tepid loan demand. The papers in this session explored opportunities to sustain strong performance.

One paper in particular looked at community banks that undertook “big shifts” in strategy from 1992–2011 to facilitate growth. This paper found that such shifts rarely improved community bank performance (and frequently risked hurting performance) and that, in general, smaller community banks tended to underperform compared with larger community banks. Other findings from the papers in this session included:

- Community banks that recovered after experiencing significant stress during the financial crisis generally exhibited a lower loan volume and were less concentrated in construction and land development loans, commercial real estate loans, and home equity lines of credit. They were also less reliant on brokered deposits.
- Derivatives can be used to improve community bank performance as long as the bank understands how to use them.
- Mergers can be a highly successful strategy. However, local knowledge is a more important determinant of success than the growth or diversification benefits derived from the merger.
• The most important success factors for community bank performance included local knowledge, strong management, stable funding, an adherence to conservative underwriting principles, and organic growth.

**Supervision and Regulation of Community Banks**

In the final session, “Supervision and Regulation of Community Banks,” research papers examined the effect of complex supervisory rules on community banks and on the overall health of the U.S. banking system. Findings from the papers in this session included the following:

• The tier 1 leverage ratio was as good at predicting bank failures during the financial crisis as was the tier 1 risk-based capital ratio;
• The Dodd-Frank Wall Street Reform and Consumer Protection Act increased compliance costs for community banks because seven of the act’s 16 titles affected banking institutions with less than $10 billion in total consolidated assets; and
• Standards used in recent CAMELS ratings have been in line with historical norms.

**Findings from a Nationwide Series of Town Hall Meetings**

The conference concluded with the release and discussion of findings from a series of 51 town hall meetings held across 28 states during the spring and summer of 2013. The discussion featured a panel of community bankers from across the nation who analyzed the findings of the town hall meetings and offered their thoughts on the opportunities and challenges facing community banks in the future.

The town hall meetings highlighted differences across community banks operating in different states and regions. However, there were also many similarities. For example, social capital was generally viewed as the community banking industry’s greatest strength and as providing community banks with the greatest opportunity for growth and success in the future. Many community bankers shared examples of how individuals and small businesses in their markets preferred to bank with a community bank because of its emphasis on personalized customer service. Customer knowledge also gives community bankers a real-time understanding of customer demands and provides them with an opportunity to respond more aggressively to these demands — particularly in regard to the use of technology.

The challenge most frequently cited was what bankers saw as a “one-size-fits-all” approach to regulation that had affected the community banking industry’s ability to leverage its social capital and tailor products and services to meet the specific needs of its customers. Bankers from across the country also cited increased competition from credit unions, government-sponsored enterprises such as the Farm Credit System, nonbank payment providers, and banks without a brick-and-mortar branch network.

Community bankers also offered thoughts on the types of research they felt would be most beneficial in assisting policymakers in understanding the community banking industry. The types of research most frequently recommended included:

• Understanding the types of customized products community banks offer and understanding the effect that the loss of some of those products, at least in part because of changing regulations, has had on the industry and on certain types of borrowers;
• Exploring the relationship between increased regulation and the number of individuals accessing banking services outside the banking system;
• Quantifying the local economic effect of community banks; and
• Identifying opportunities created by a shared services model.

**Looking Ahead**

The inaugural community banking conference has laid a strong foundation for continued engagement by academics, researchers, regulators, and community bankers. Following the success of this year’s event, the conference will now be an annual gathering of thought leaders committed to exploring how community banks can remain competitive in an ever-changing banking landscape.

**Additional Resources**

All conference proceedings, including webcast versions of the sessions, copies of academic papers, and photographs of community banking in action from across the United States can be found at www.stlouisfed.org/banking/community-banking-conference/. ■
anomaly based on a surge in cash-based investor purchases is the subject of some debate. Regardless, community banks need to be aware of the LGD profile of their HELOC portfolios, particularly if the business line represents a substantial concentration of assets. As a general principle, lenders should not wait until a HELOC loan is seriously delinquent to update collateral values. Indeed, updating CLTVs is a critical principle in understanding HELOC credit risk, ALLL analyses, and the need for active loss mitigation strategies. Revaluing real estate collateral on performing assets can be a hard sell for banks with large HELOC portfolios. For community bankers already pressed by tight net interest margins, it is not difficult to understand why senior management might be reluctant to do so. However, updating collateral values does not need to be an expensive exercise.

A “Prox” on Thy House…

Automated valuation models (AVMs) can provide a much more cost-effective alternative to full appraisals. Some valuation model applications can be fairly robust in terms of analysis, and, if well documented and supported, a population of updated AVMs can form the basis for updating internal evaluations based on a general proxy adjustment to market values. For example, a population of AVM updates on 50 homes in a particular area in a bank’s lending footprint can support the conclusion that market values in that area have declined an average of 11 percent since 2006. Vintage 2006 origination values can then be adjusted downward by 11 percent, or some factor thereof, to support ALLL analyses. Moreover, banks have the discretion to order updated appraisals or AVMs based on an assessment of the other PD variables previously discussed, such as all HELOC loans with originating CLTV ratios greater than 85 percent and average line utilization of 90 percent or more. With some well-detailed AVM models costing as little as $20 per property, such measures can keep the costs of updating collateral values well contained.

For community banks in rural areas, sales volume can be insufficient to form a basis for an AVM approach. The best alternative for such organizations may be to perform similar proxy analyses using tax-assessed values for each county in the lending footprint. The sales in a given rural county over the course of a year will typically be far fewer than those in an urban area, but documenting and updating the relationship between appraised values and tax-assessed values can still form a solid, cost-effective basis for internal analysis.

Bank management should also be mindful of the minimum requirements set forth in SR Letter 10-16, “Interagency Appraisal and Evaluation Guidelines,” regarding real estate valuation methods that support credit decisions. Many AVMs contain sufficient detail to substantiate updates to existing lines of credit for internal analyses, but they may not meet all of the acceptable evaluation criteria to support loan originations or renewals. In addition, LGD analysis should also factor in the cost of selling the property, whether the bank uses an AVM or a full appraisal to value collateral.

Lien Position

With appropriate collateral valuations, lien position status is an easy, effective metric for capturing LGD exposure for management reporting and ALLL analysis, and it relates directly to CLTV ratios. Many banks capture this exposure by segmenting the lien position into three categories: first-lien HELOCs, second-lien HELOCs behind their own first positions, and second liens behind third parties. Second-lien positions behind third parties are obviously the most susceptible to loss given declines in property values, and ALLL factors can be targeted to capture this exposure. Similarly, this segment should be subject to far more ongoing monitoring should management need to pursue higher allowances and active loss mitigation strategies.

4 The Truth in Lending Act (TILA) and Regulation Z, TILA’s implementing regulation, prohibit a creditor from freezing or reducing a HELOC unless an exception applies. See 12 CFR section 1026.40(f). One exception under section 1026.40(f)(3)(vi)(A) is when “the value of the dwelling that secures the plan declines significantly below the dwelling’s appraised value for purposes of the plan.” The Federal Reserve System’s compliance publication, Consumer Compliance Outlook, included an article that discussed these requirements. See Jason Lew, “HELOCs: Consumer Compliance Implications,” Consumer Compliance Outlook (Third Quarter 2008), available at www.philadelphiafed.org/bank-resources/publications/consumer-compliance-outlook/2008/third-quarter/q3_02.cfm.

Other Odds and Ends — Back-End Control Functions
When considering the scope of the internal audit and loan review functions for most community banks, retail lending, in general, is rarely the first business line that comes to mind. The inherent credit risk in loans collateralized by residential real estate has traditionally been far lower than commercial credits, and the relatively low dollar exposure on a per-event basis has usually been sufficient justification to limit coverage or scopes for both disciplines. From an audit standpoint, scope is often limited to an assessment of loan administration and accounting processes, postings, and similar back-office functions often embodied in an overall loan administration audit. Loan review personnel typically conduct a large portion of their sampling based on the dollar amount of the subject loans, and retail loans are usually too small to warrant assignment of internal loan grades. Community banks with significant HELOC exposure should assess the roles of internal audit and loan review to determine whether those control functions could enhance their analysis with modified coverage that focuses on risk management processes rather than standard “sample-and-grade” techniques. Aside from compliance-related reviews, traditional transaction testing may not provide as much value as conducting reviews of risk management practices, policies and procedures, and controls.

Policies and Procedures
Based upon a recent assessment by one of the Federal Reserve Districts, even those banks with the strongest HELOC risk management practices needed more robust policies governing the business line. Policies focused almost exclusively on initial underwriting terms often collapsed into little more than underwriting crib sheets containing DTI, LTV, and credit score targets. Little was noted in regard to ongoing risk management practices. HELOC policies should describe procedures needed to assess overall portfolio risk after origination, such as updating credit scores or LTV ratios and assessing DTI ratios, line utilization, origination vintage, property type, and lien position. Banks should address the suggested frequency of these recurring practices and clearly detail possible remediation plans, such as freezing or closing the line in a manner compliant with Regulation Z, segmenting the portfolio by risk, and provisioning for riskier segments. They should also address a protocol for board reporting of key risk metrics.

Charge-Off and Uniform Retail Credit Classification Policies
Although many banks have focused on the Financial Accounting Standards Board’s Accounting Standards Codification (ASC) sections 310 and 450, they are still expected to comply with the standards in the Uniform Retail Credit Classification (URC) and Account Management Policy. Banks may perceive the ASC requirements as a more conservative approach; however, in some cases this can be a misperception based on an incomplete interpretation of the regulatory guidance.

In response to the financial crisis, many banks revised their standards for internal loan risk grading, including lowering the dollar threshold for relationships that would be individually analyzed, graded, and measured for potential impairment. However, what was generally viewed as more conservative treatment of these individual credits often resulted in untimely charge-off practices for some retail loans, including HELOCs, as banks in many cases did not distinguish between retail and commercial credits for charge-off purposes. Commercial grading and impairment processes were misapplied to certain retail loans; this involved taking specific allowances against impaired, but not collateral-dependent, loans regardless of delinquency status. If those loans were in a state of severe delinquency, this treatment would be inconsistent with URC guidance, which contains specific, delinquency-based thresholds that trigger a charge-off of a retail loan.

For example, a bank could have a $300,000 HELOC that was individually analyzed for impairment, and the bank could have assigned an internal rating of “doubtful,” with specific impairment taken in full in the ALLL. Since the URC methodology does not employ a “doubtful” rating, the bank’s treatment could result in higher credit risk classification numbers if the loan was within the 120- or 180-day delinquency period (as it would be “substandard” under URC with certain LTV ratios). Such a loan may not have been charged off even after breaching the URC delinquency thresholds. This can result in an overstatement of credit risk classifications, the ALLL, interest income, and possibly nonaccrual numbers, as well as an understatement of period loan losses. A bank can adopt a more conservative credit risk classification approach on a retail loan, but regardless of the internal

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classification, it must adhere to URC charge-off triggers. Consider that SR Letter 00-8 clearly states:

Actual credit losses on individual retail credits should be recorded when the institution becomes aware of the loss, but in no case should the charge-off exceed the time frames stated in the policy. This policy does not preclude an institution from adopting a more conservative internal policy.

And in regard to home equity lending, the letter states:

Home equity loans to the same borrower at the same institution as the senior mortgage loan with a combined loan-to-value ratio equal to or less than 60 percent need not be classified. However, home equity loans where the institution does not hold the senior mortgages that are past due 90 days or more should be classified Substandard, even if the loan-to-value ratio is equal to, or less than, 60 percent.

The Federal Reserve does not discourage banks from adopting more conservative treatment on credit risk classifications, provided that the subject loans are always charged off by delinquency in accordance with guidance. Banks need to charge off retail loans in compliance with SR Letter 00-8, regardless of internal loan grades and ALLL analyses.

Board Reporting
A sound HELOC program does not simply end with the implementation of robust internal controls, MIS, and policies. An article in a previous issue of Community Banking Connections underscored the responsibility of the bank’s board of directors for establishing the risk philosophy of the organization and for holding management accountable for implementing sound policies and procedures. The quality of information presented to the board of directors is paramount to its ability to fulfill that responsibility. The information presented on HELOC exposure should be similar in nature to other risks; reports should contain consistent, salient, timely information in a format that allows for period-to-period comparisons. The metrics should be compared against policy limitations and benchmarks. Exceptions to policies and procedures should be detailed and aggregated based upon common exceptions, such as breaches of internal LTV ratio limitations. The volume and the formatting of information are critical considerations; presenting a stack of data-intensive reports to each director is unlikely to impart a sense of overall risk, particularly if no synopsis of the data has been prepared. Beyond these considerations, management has substantial discretion over the nature of the metrics to be presented, as long as those metrics capture the risk in an adequate manner.

Loss Mitigation Strategies
In banking, the term loss mitigation is frequently used interchangeably with collection, workout, or special assets. However, in the context of this article, loss mitigation refers to an active process in which risks in HELOC structures, cash flows, or collateral are identified and addressed well before those risks manifest themselves in delinquencies. Freezing further advances on credit lines seems to be a prominent, well-understood strategy for most retail credit managers, particularly in regard to Regulation Z requirements. However, this practice has legal and reputational risks, and management may wish to act on a problem before a significant decline in collateral value occurs.

Renegotiating problematic HELOC loans may provide a path of lesser resistance with fringe benefits. HELOCs in lien positions junior to third parties are prime candidates for such treatment, particularly if they are approaching conversion to amortizing status. Renegotiated structures tend to vary based on individual circumstances, but a common objective is to capture the first-lien position, along with the existing second, into a new amortizing structure. Some community banks view this effort as a risk management initiative, rather than an income generator, and waive some fees and points to provide borrowers with additional incentive to refinance. Such a program can be a “win-win” for all parties.

With appropriate underwriting and risk management practices, second-lien residential lending can be a highly profitable business line and serve as a ready investment alternative to banks with heavy concentrations in other asset classes. HELOCs can also serve the personal financial needs of the bank’s customers. Most banks with substantial second-lien exposure appear to be gradually, but steadily, acclimating to regulatory guidance, and risk management practices in general are in varying stages of development. Much remains to be done, however, and community bank managers should feel free to contact their supervisor for additional insight and perspective on HELOC risk management strategies. ■

The following SR and CA letters that have been published since the last issue of Community Banking Connections (and are listed by release date) apply to community banking organizations. Letters that contain confidential supervisory information are not included. All SR letters are available by year at www.federalreserve.gov/bankinforeg/srletters/srletters.htm and by topic at www.federalreserve.gov/bankinforeg/topics/topics.htm. A complete list of CA letters can be found at www.federalreserve.gov/bankinforeg/caletters/caletters.htm.

**SR Letter 13-25,** “Interagency Statement Regarding the Treatment of Certain Collateralized Debt Obligations Backed by Trust Preferred Securities Under the Volcker Rule”

**CA Letter 13-26,** “Regulation X Homeownership Counseling List Requirement”

**CA Letter 13-25,** “Revised Interagency Examination Procedures for Regulation Z and Applicability of CA Letter 09-12”

**CA Letter 13-24,** “Revised RESPA Interagency Examination Procedures”

**SR Letter 13-21,** “Inspection Frequency and Scope Requirements for Bank Holding Companies and Savings and Loan Holding Companies with Total Consolidated Assets of $10 Billion or Less”

**SR Letter 13-20/CA Letter 13-23,** “Interagency Statement on Supervisory Approach for Qualified and Non-Qualified Mortgage Loans”

**CA Letter 13-22,** “Social Media: Consumer Compliance Risk Management Guidance”


**CA Letter 13-20,** “Consumer Compliance and Community Reinvestment Act (CRA) Examination Frequency Policy”

**CA Letter 13-19,** “Community Bank Risk-Focused Consumer Compliance Supervision Program”

**CA Letter 13-18,** “Final Revisions to Interagency Questions and Answers Regarding Community Reinvestment”

**CA Letter 13-17,** “Revised Interagency Examination Procedures for Regulation E”

**CA Letter 13-16,** “Interagency Examination Procedures for Garnishment of Accounts Containing Federal Benefit Payments Rule”

**SR Letter 13-18,** “Uniform Agreement on the Classification and Appraisal of Securities Held by Depository Institutions”

**SR Letter 13-17,** “Interagency Supervisory Guidance Addressing Certain Issues Related to Troubled Debt Restructurings”

**CA Letter 13-15,** “Interagency Statement on Fair Lending Compliance and the Ability-to-Repay and Qualified Mortgage Standards Rule”
Figure 2b: Equity in Undistributed Income

The parent holding company’s equity in undistributed income (losses) of the bank on the FR Y-9SP (SI-12.a) should equal the bank subsidiary’s net income less its dividends declared or paid on the Call Report (RI-12 less the sum of RI-A-8 and 9).

Schedule SI — Income Statement

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.</td>
<td>Equity in undistributed income (losses)</td>
<td>SI-12.a</td>
</tr>
<tr>
<td>12.</td>
<td>(Item 9 minus Item 10)</td>
<td>RI-12</td>
</tr>
<tr>
<td>12.b</td>
<td>(Less the sum of RI-A-8 and 9)</td>
<td>RI-A-8 + RI-A-9</td>
</tr>
</tbody>
</table>

These items should equal SI-12.a equals RI-12 minus the sum of RI-A-8 plus RI-A-9.

Schedule RI — Continued

Figure 2c: Equity Investment in Bank Subsidiary

The parent holding company’s equity investment in bank subsidiaries and associated banks on the FR Y-9SP (SC-4.a) should equal the bank subsidiary’s total equity capital on the Call Report (RC-28).

Schedule SC — Balance Sheet

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.b</td>
<td>Equity investment</td>
<td>SC-4.b</td>
</tr>
<tr>
<td>10.</td>
<td>Other comprehensive income</td>
<td>SC-10</td>
</tr>
</tbody>
</table>

Schedule RC — Continued

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.</td>
<td>Total bank equity capital (sum of items 23 through 26.c)</td>
<td>RC-26.c</td>
</tr>
<tr>
<td>27.c</td>
<td>Noncontrolling (minority) interests in consolidated subsidiaries</td>
<td>RC-27.c</td>
</tr>
<tr>
<td>28.</td>
<td>Total equity capital (sum of items 27.a and 27.b)</td>
<td>RC-28</td>
</tr>
<tr>
<td>29.</td>
<td>Total liabilities and equity capital (sum of items 21 and 28)</td>
<td>RC-29</td>
</tr>
</tbody>
</table>
Reconciliation of FR Y-9SP Against FR Y-10 and FR Y-6 Structure Reports

Some line items on the FR Y-9SP report provide for a cross-check with the FR Y-10 and FR Y-6 structure reports. As shown in Figure 2c, Schedule SC, line item 4.a discloses the holding company’s equity investment in its subsidiary bank. Because the equity method of accounting is used, Reserve Bank staff can reconcile this figure against the subsidiary bank’s Call Report. A discrepancy between the FR Y-9SP report and Call Report data may indicate that an FR Y-10 report should be filed to report a change in ownership percentage.

In addition, other items on Schedule SC and Schedule SC-M may have balances that indicate the holding company has commenced or ceased some nonbanking activities. Reserve Bank staff cross-check this information with organizational structure data reported on the FR Y-10 report. If the nonbanking company or activity does not coincide with the FR Y-9SP report data, a follow-up call is made to request an FR Y-10 report or revisions to the FR Y-9SP report.

Other Common Reporting Errors

As shown in Figure 4a, the cash dividends reported in SI-M.1 should include dividends from both common and preferred stock.
As noted in Figure 4b, the respondent should answer yes or no to the question and provide the auditor information as requested. This section should be left blank for June but should be completed for December.

As noted in Figure 4c, SC-M.14 must always be completed and no portion should be left blank. The respondent should answer yes or no to the question and provide the FR Y-10 contact information as requested. If a top-tier holding company reports no to SC-M.14, analysts will follow up with the company to confirm whether an FR Y-10 report should be expected to record a change(s).

Figure 4a: Cash Dividends Declared by the Holding Company to Its Shareholders

Schedule SI — Memoranda

Figure 4b: External Auditor Information (SC-M.1 Through M.2b)

Schedule SC — Continued

Figure 4c: FR Y-10 Information (SC-M.14)

Schedule SC-M — Continued
Upcoming Reporting Changes
SLHCs with less than $500 million in total consolidated assets that currently report on FR Y-9SP will soon be subject to consolidated regulatory capital requirements. A proposal to amend the FR Y-9SP form by adding a new schedule SC-R, Regulatory Capital, was published for public comment in the Federal Register on August 12, 2013. Additionally, evolving accounting changes could also result in a more complex FR Y-9SP report for all holding companies. Therefore, additional analysis of the data will be implemented to ensure reporting accuracy, as needed.

Outreach Efforts and Reporting Aids
The Regulatory Reporting and Structure Reporting sections at the Federal Reserve Banks and the Board work together to ensure that accurate and timely data are collected in accordance with the regulations and reporting instructions. Many Federal Reserve Districts conduct outreach programs with reporters to educate holding companies and to help ensure more accurate reporting, particularly when there are changes to reporting forms. Some of these outreach efforts include Ask the Fed sessions and webinars on various reporting topics that community banks are invited to attend. Some Districts also provide checklists or worksheets to aid reporters in completing the reports.

The current FR Y-9SP form is straightforward. With periodic accounting rule and report form changes, it is to the holding companies’ advantage to understand the reporting issues highlighted above and collaborate with their local Federal Reserve Bank analysts to resolve any confusion related to them. Staff members at the Federal Reserve Banks are available to assist holding companies with any reporting questions.

Reaching for Yield: Short-Term Gains, Longer-Term Pains?
continued from page 9

• Is the bank distributing earnings that should be retained for unexpected losses? If there are good reasons for the bank to lend in higher-risk asset categories, it may be a good bet. However, it might also be prudent to retain more bank earnings over the economic cycle to ensure that the bank can absorb more than industry-typical losses in tough times. Management does not want to determine in hindsight that the bank distributed income it should have retained for loss absorption.

• What are the ROE requirements of the bank’s particular investors? Many community banks have small, closely held investor bases. Though these investors — like all investors — want reasonable risk-adjusted returns on capital, some may be willing to take a less generous return given the bank’s important role in the community.

Conclusion
Tough times frequently challenge a banking organization’s plans and habits. After careful analysis of the current difficult earnings conditions, management may decide to make strategic and/or tactical changes. However, it is important to differentiate between these types of changes to ensure that a reasonable tactical decision does not unintentionally become a problematic strategic one. If a tactical shift — such as reaching for yield — makes sense for a community bank, management should also protect the bank against potential longer-term troubles by ensuring that there are meaningful limits, appropriate capital-to-risk allocations, and knowledgeable and timely oversight to keep the activities within the bounds of safe and sound banking operations.

The author would like to thank Padraic Glackin, Financial Analyst, Board of Governors, for his collection of the earnings data in this article.
Survey participants were also asked to identify the top three fraud schemes involving their customers’ accounts (Figure 4). The survey found that 80 percent of the respondents reported counterfeit or stolen cards used at the point of sale (POS) or in person among the top three schemes, and 68 percent reported counterfeit or stolen cards used online (card-not-present transactions). Counterfeit checks were mentioned among the top three schemes by about four in 10 institutions.

Survey respondents also identified their top three data sources used in common payment fraud schemes. The most prevalent source, reported by 64 percent of institutions, was “sensitive” information obtained from lost or stolen cards, checks, or other physical documents or devices in the consumer’s control. This finding underscores the importance of educating customers about ways to protect their personal and financial information. Therefore, community banks should consider offering tips to their customers about effective ways for them to avoid becoming fraud victims.

To avoid losses, community banks must effectively manage fraud risk for all payment products offered. Data from the 2012 Payments Fraud Survey can be used by community banks to identify payment methods, such as signature-based debit cards, that they should consider targeting for heightened fraud prevention measures. Effective fraud mitigation considers the potential of payments fraud attempts as well as the size of losses to which various payment methods are vulnerable. For example, survey respondents reported that the takeover of customer accounts that can involve wire transfers or ACH credits was not a very common scheme. However, this fraud scheme, if successful, can compromise security credentials used to access an account and result in comparatively high-dollar losses to banks and/or their customers.

**Good News, Bad News**

The good news is that most institutions experienced low losses from payments fraud. According to the survey, 76 percent reported a 2011 fraud loss rate of less than 0.3 percent of annual revenues, the lowest loss category in the survey (Table 1).

The bad news is that 51 percent reported an increase in their fraud loss rate in 2011 as compared with that in 2010. Only 16 percent reported a reduction, and 34 percent reported that their fraud loss rate stayed the same in 2011 as compared with that in 2010.

For institutions that reported increased fraud losses, one-half reported fraud loss rates that were between 1 and 5 percent higher in 2011. Nineteen percent reported fraud loss rate increases of more than 10 percent. It is not surprising that increased losses were most common among debit card payments. Nearly nine in 10 institutions reported increased losses among signature-based debit card payments, and more than four in 10 cited losses among PIN-based debit card payments. The survey results show that institutions can act to fight fraud successfully: About three in 10 institutions reported they were able to cut fraud losses by more

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**Figure 4: Top Three Most Used Schemes Involving FI Customers’ Accounts**

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counterfeit or stolen cards used at POS</td>
<td>80%</td>
</tr>
<tr>
<td>Counterfeit or stolen cards used online</td>
<td>68%</td>
</tr>
<tr>
<td>Counterfeit checks</td>
<td>41%</td>
</tr>
<tr>
<td>Altered or forged checks</td>
<td>29%</td>
</tr>
<tr>
<td>Other Internet payments</td>
<td>20%</td>
</tr>
<tr>
<td>Account takeover of customers’ accounts</td>
<td>7%</td>
</tr>
<tr>
<td>Telephone-initiated payments</td>
<td>5%</td>
</tr>
<tr>
<td>Counterfeit currency</td>
<td>5%</td>
</tr>
<tr>
<td>Use of fraudulent credentials/data</td>
<td>5%</td>
</tr>
<tr>
<td>Fraudulent checks converted to ACH</td>
<td>4%</td>
</tr>
</tbody>
</table>

*Source: Federal Reserve Bank of Minneapolis*
than 10 percent, including losses due to signature and PIN-based debit card fraud and check fraud.

**Risk Mitigation Strategies**

Once funds have been transferred, they are hard to retrieve, so it makes sense to invest in fraud prevention proactively before losses occur. Because no silver bullet exists, effective fraud mitigation requires a layered approach.

The survey explores the use and effectiveness of a number of fraud mitigation methods, including internal controls and procedures, customer authentication methods, transaction screening and risk management methods, and risk management services that institutions offer to their customers.

Internal controls and procedures are the most frequently used fraud mitigation methods and were rated highly by institutions (Figure 5). Indeed, of the 15 internal controls and procedures listed in the survey, more than 80 percent of the respondents used 12 or more.

Respondents were asked about 10 customer authentication methods (Figure 6). PIN authentication, signature verification, and customer authentication for online transactions were used by more than 80 percent of the institutions. However, the effectiveness of signature verification and magnetic stripe authentication were rated comparatively low, receiving a “somewhat ineffective” rating of 11 percent and 8 percent, respectively.7

### Table 1: FI Payment Fraud Losses

<table>
<thead>
<tr>
<th>Loss Range as a Percent of 2011 Annual Revenue</th>
<th>Percent of FIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 0.3%</td>
<td>76%</td>
</tr>
<tr>
<td>0.3% – 0.5%</td>
<td>14%</td>
</tr>
<tr>
<td>0.6% – 1%</td>
<td>7%</td>
</tr>
<tr>
<td>1.1% – 5%</td>
<td>4%</td>
</tr>
<tr>
<td>More than 5%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Source: Federal Reserve Bank of Minneapolis

### Figure 5: Internal Controls and Procedures

<table>
<thead>
<tr>
<th>Method</th>
<th>Use</th>
<th>Plan to Use by 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Periodic internal/external audits</td>
<td>99%</td>
<td>0%</td>
</tr>
<tr>
<td>Address exception items timely</td>
<td>98%</td>
<td>1%</td>
</tr>
<tr>
<td>Dual controls/separate duties within payment processes</td>
<td>95%</td>
<td>0%</td>
</tr>
<tr>
<td>Verify controls applied via audit or management review</td>
<td>95%</td>
<td>1%</td>
</tr>
<tr>
<td>Reconcile bank accounts daily</td>
<td>95%</td>
<td>1%</td>
</tr>
<tr>
<td>Authentication/authorization controls-payment process</td>
<td>94%</td>
<td>2%</td>
</tr>
<tr>
<td>Logical access controls to network/payment applications</td>
<td>94%</td>
<td>2%</td>
</tr>
<tr>
<td>Review card-related reports daily</td>
<td>92%</td>
<td>1%</td>
</tr>
<tr>
<td>Transaction limits for payment disbursements</td>
<td>92%</td>
<td>1%</td>
</tr>
<tr>
<td>Physical access controls to payment processing functions</td>
<td>88%</td>
<td>1%</td>
</tr>
<tr>
<td>Restrict/limit staff use of Internet via organization’s network</td>
<td>81%</td>
<td>4%</td>
</tr>
<tr>
<td>Transaction limits for corporate card purchases</td>
<td>80%</td>
<td>1%</td>
</tr>
<tr>
<td>Separate banking accounts by purpose or payment type</td>
<td>68%</td>
<td>1%</td>
</tr>
<tr>
<td>Dedicated computer for transactions with FI or financial service provider</td>
<td>53%</td>
<td>2%</td>
</tr>
<tr>
<td>Employee hotline to report potential fraud</td>
<td>43%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: Federal Reserve Bank of Minneapolis

7 For more information on how methods were rated for effectiveness, see the 2012 Payments Fraud Survey.
Although the current use of card-chip authentication was low at 2 percent, 12 percent of institutions planned to use card-chip authentication by 2014. This may reflect the concerted efforts underway by the major card brands to migrate U.S. magnetic stripe cards to chip-enabled cards, which reduce counterfeit fraud by using dynamic data to authenticate the card versus static data on the magnetic stripe card. Chip cards do not protect against lost and stolen card fraud, unless PIN or biometric authentication is used. They also do not protect against “card-not-present” fraud, which requires additional risk mitigation measures. Multilayered approaches, such as multifactor authentication (sometimes referred to as “something you have, something you know, and something you are”), or layered security, are more effective in preventing fraud, according to recommendations by the Federal Financial Institutions Examination Council (FFIEC) in Authentication in an Internet Banking Environment and Supplement to Authentication in an Internet Banking Environment.

Transaction screening and risk management methods with the highest use included staff education and training on fraud mitigation, use of a fraud detection pen for currency, and human review of payment transactions (Figure 7). Eleven percent of the institutions planned to provide customer education about payments fraud prevention, and 10 percent planned to use software that detects fraud through pattern matching, predictive analytics, or other indicators.

These plans make sense based on the record of institutions with reduced fraud losses. Seventy-two percent of these institutions pointed to “enhanced fraud monitoring systems” that targeted debit and credit card transactions as the reason for their fraud reduction results. This includes fraud monitoring systems that employ anomaly detection to identify unusual payment behavior. Anomaly detection technology addresses the question: Based on past behavior of this cardholder, is this particular transaction a legitimate one? Community banks should explore what services their vendors, core banking providers, and other payment services providers offer to help protect them and their customers from fraud.

Six in 10 institutions also identified “staff training and education” as a key change that led to reduced fraud losses. Staff training can typically be accomplished at a reasonable cost; it can also reap added benefits, such as good customer service, because staff members are able to help prevent customers from becoming victims to fraud schemes.

Institutions also offer services to help their customers mitigate payments fraud. About nine in 10 offer online information services and multifactor authentication tools to their business customers.
customers. About two-thirds of the respondents offer account alert services and about one-half offer account masking services and ACH debit blocks.

Relatively few institutions offer check and/or ACH positive pay services to their business customers. Thus, community banks may want to review the current set of fraud prevention services they offer to business customers and consider the opportunity to supplement them. ACH fraud prevention tools were of particular interest to business respondents. Smaller business customers may be reluctant to buy fraud prevention services from their banks due to the cost and time involved. However, educating customers about the benefits of fraud prevention, including what service options are available and how to use them, may help address the reluctance of small businesses to buy these services.

**Fraud Prevention Methods Needed**

Institutions were asked what new or improved methods are most needed to fight future payments fraud. Most institutions identified controls over Internet payments, consumer education on fraud prevention, and replacing card magnetic stripe technology with stronger security.

Community banks are well positioned to provide payments fraud prevention education to customers. They can consider offering tips to consumers and businesses on their website about how to avoid becoming fraud victims. They might also discuss payments fraud and risk mitigation during regular meetings with clients. Law enforcement officers can also be a valuable resource in helping to educate consumers and businesses about the dangers of fraud and the importance of protecting financial data. On the Federal Reserve Bank of Minneapolis’s website, the Payments Information and Outreach Office has a list of *Industry & Government Information-Sharing Resources Related to Payments Fraud*, which provides a wide variety of resources, including education resources.

Institutions also expressed preference for a “chip-and-PIN” requirement for cards and multifactor authentication over other authentication methods, such as just chip, just PIN, or out-of-band authentication (Table 2). Under the chip-and-PIN approach, cardholders authenticate their card with the chip and authorize themselves as the card user with their PIN. Chip cards contain embedded microprocessors that can store information securely and perform cryptographic processing during a payment transaction. Cards carry security credentials, or keys, that are stored securely in the card’s chip and are used to authenticate the card. These credentials help to prevent card skimming and card cloning, which are two of the common ways that magnetic stripe cards are compromised and used for fraudulent activity. Each payment transaction made with a chip card also includes dynamic data that

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10 See www.minneapolisfed.org/about/whatwedo/paymentsinformation.cfm.
are unique to a single transaction. By using dynamic data, transaction data cannot be reused, or replayed, to authorize a second payment. Chip-and-PIN authentication for cards requires significant investment in infrastructure changes on the part of issuers, merchants, and other stakeholders, but there are payoffs in terms of less counterfeit fraud and elimination of card skimming. Chip authentication combined with PIN verification helps to protect against lost and stolen card fraud.

Table 2: Authentication Method Preferences

<table>
<thead>
<tr>
<th>Method</th>
<th>FIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chip-and-PIN requirement</td>
<td>60%</td>
</tr>
<tr>
<td>Multifactor authentication</td>
<td>57%</td>
</tr>
<tr>
<td>Chip for dynamic authentication</td>
<td>43%</td>
</tr>
<tr>
<td>PIN requirement</td>
<td>39%</td>
</tr>
<tr>
<td>Out-of-band/channel authentication to authorize payment</td>
<td>38%</td>
</tr>
<tr>
<td>Token</td>
<td>38%</td>
</tr>
<tr>
<td>Mobile device to authenticate person</td>
<td>28%</td>
</tr>
<tr>
<td>Biometrics</td>
<td>24%</td>
</tr>
</tbody>
</table>

Source: Federal Reserve Bank of Minneapolis

As U.S. industries make plans to implement chip cards, community banks that issue debit and/or credit cards should meet with their card service providers to discuss options, as well as an appropriate timetable for issuing chip cards and their preferred security model, such as the chip-and-PIN or chip-and-signature approach.\(^{11}\)

Payoffs for Investing in Fraud Prevention

What is holding institutions back from investing more in fraud prevention? Four of the top five barriers that were reported related to some aspect of cost. A lack of staff resources was a barrier at more than half of the institutions. Concerns about consumer data privacy was a barrier for about four in 10 institutions.

Community banks should fully analyze their dollar losses from fraud to help determine whether more investment in risk mitigation is warranted. That is, when considering the business case, it is important to assess both quantitative and qualitative factors. In general, banks should determine whether it makes sense for fraud losses to be higher than prevention costs (Figure 8). Banks should also consider marginal costs and benefits. Sixty-one percent of the institutions reported that losses attributed to signature-based debit card fraud were greater than what they spent on preventing such fraud, and about 45 percent reported the same for losses due to debit PIN and check fraud. This suggests that institutions should at least understand the relationship between the fraud prevention investments and the losses that they are experiencing by payment type and consider increased spending to prevent fraud in areas in which losses outweigh risk mitigation spending.

It is also important to consider other consequences of fraud, such as damage to a bank’s reputation and costs incurred for recovery, reporting, and other expenses for handling fraud incidents. On the flip side, bankers should evaluate the impact of fraud prevention measures on qualitative factors such as customer goodwill. What are the consequences if another party or a bank customer suffers financial losses? What is the impact on convenience? If controls are lax, unauthorized transactions may slip through; if controls are too tight, customers may be annoyed at having a payment denied. Community bankers should strive to implement fraud prevention tools that achieve an appropriate balance.

Conclusions

Payments-related fraud remains a significant concern for institutions. Nearly all respondents to the survey reported payment fraud attempts and losses. Most reported fraud losses that represented less than 0.3 percent of their annual revenues. While any fraud loss is undesirable, by this measure, institutions appear to be doing a good job of keeping loss levels low.

Institutions identified signature-based debit cards as the payment instrument with the highest number of fraud attempts and losses. More than 60 percent reported that losses from signature-based debit card fraud exceeded their costs of preventing such fraud. This suggests that institutions should weigh their specific situation in terms of losses from signature-based debit card fraud against the cost and benefits of investing in fraud prevention.

Institutions that reduced their fraud loss rates are targeting high-risk payment types. Seventy-two percent of respondents cited enhancement of fraud monitoring systems for debit and credit card transactions, including techniques such as anomaly detection, among the key changes they made that contributed to their reduction in payments fraud losses. Institutions are

\(^{11}\) See www.emv-connection.com for more information.
also focused more on the need to use stronger security alternatives to magnetic stripe authentication technology for card payments.

Community banks must manage fraud risk for all payments to avoid losses. Strategies for detecting and preventing fraud effectively use multiple risk mitigation methods and tools, or a layered strategy.

Given the tenacity and innovation of fraud perpetrators, it is important for banks to stay informed about fraud trends to protect themselves and their customers from payments fraud and to arm themselves with fraud-fighting methods that work effectively.

Figure 8: Prevention Costs vs. Fraud Losses

The federal bank regulatory agencies released an estimation tool to help community bankers understand the potential effects of the recently revised regulatory capital framework on their capital ratios. The estimation tool is not part of the revised capital framework and not a component of regulatory reporting. Results from the tool are simplified estimates that may not precisely reflect banks’ actual capital ratios under the framework. In addition, bankers should be aware that the estimation tool requires certain manual inputs that could have meaningful effects on results; therefore, they should reference the revised capital framework when using the estimation tool. The estimation tool is available at www.fdic.gov/regulations/capital/Bank_Estimation_Tool.xlsm. The revised capital frameworks are available in the Federal Register at www.gpo.gov/fdsys/pkg/FR-2013-10-11/pdf/2013-21653.pdf (for institutions supervised by the Federal Reserve Board or the Office of the Comptroller of the Currency) and www.gpo.gov/fdsys/pkg/FR-2013-09-10/pdf/2013-20536.pdf (for institutions supervised by the Federal Deposit Insurance Corporation).

A final rule amending the definitions of “funds transfer” and “transmittal of funds” under regulations implementing the Bank Secrecy Act was announced. The final rule adopts the amendments as proposed in November 2012. The complete press release is available at www.federalreserve.gov/newsevents/press/bcreg/20131203a.htm.


A final rule that creates exemptions from certain appraisal requirements for a subset of higher-priced mortgage loans was issued. The complete press release is available at www.federalreserve.gov/newsevents/press/bcreg/bcreg20131212a.htm.
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