

# Banks Continue Their Recovery Despite Slowing Revenue Growth

By Kenneth J. Robinson

► *Questions persist about how long bank profits can continue increasing because a core revenue measure for banks—net interest margin, or the difference between interest earned and interest paid—remains in a long-run decline.*

**T**he banking industry continues its recovery from the financial crisis, with profitability and some measures of lending robustly increasing and asset-quality problems abating. Moreover, Eleventh Federal Reserve District-based banks are still outperforming their counterparts nationwide, although the gap between the two groups is narrowing.<sup>1</sup>

Questions persist, however, about how long bank profits can continue increasing because a core revenue measure for banks—net interest margin, or the difference between interest earned and interest paid—remains in a long-run decline. Additionally, a broader revenue measure, pre-provision net revenue, which strips out the effect of improving loan quality from top-line results, has been unusually weak during the industry's recovery.

## Profitability Remains Strong

In 2012, U.S. banks' profitability, as measured by return on average

assets (ROAA), exceeded 1 percent for the first time since 2006 and marked a third consecutive annual increase (*Chart 1*). Eleventh District institutions' ROAA exceeded 1 percent for a second straight year. At 1.1 percent, the 2012 district performance was down only two basis points (100 basis points equal one percentage point) from 2011.

Nationally, banks set aside less for bad loans—their provision expense—and incurred lower noninterest expenses, such as salaries and office space and furniture costs. Within the district, profitability narrowed as declining provision and noninterest expenses didn't offset a combination of lower net interest income and reduced earnings from fees (reflected in lower noninterest income).

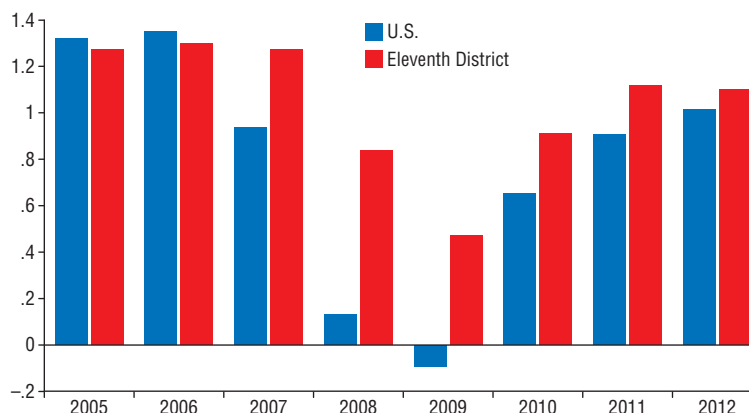
## Asset Quality Improves

The proportion of loans with payment 90 days or more past due plus those no longer accruing interest—the noncurrent loan rate—stood at 3.5 percent at banks nationwide at the end of

Chart  
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Bank Profits Continue to Recover

Return on average assets (percent)



SOURCE: Report of Condition and Income from the Federal Financial Institutions Examination Council.

last year, down from a record high that exceeded 5.5 percent in 2010 (*Chart 2*).<sup>2</sup> Noncurrent loans—with the largest component in residential real estate—remain far off their precrisis level of less than 1 percent. In the Eleventh District, where the noncurrent loan rate topped out at 2.8 percent in 2010 and has yet to fall below its precrisis 1 percent level, loan difficulties have been concentrated in commercial real estate.

Losses on loans also continue improving, with loans charged off, net of any recoveries, totaling 1.1 percent of average loans at U.S. banks in 2012 and 0.4 percent at district banks. Losses reached 2.7 percent nationally and 1.2 percent in the district in 2009 and are now closing in on precrisis levels.

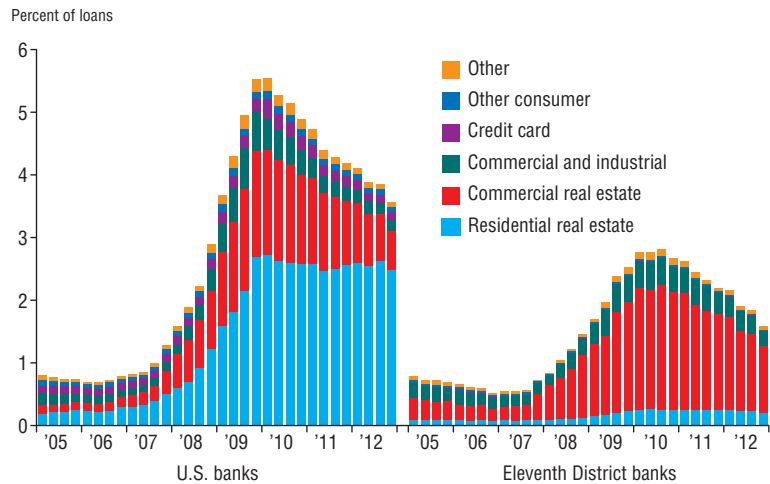
### Lending Rebounds

Weak profitability and asset quality problems during the crisis affected lending. Despite an economic recovery beginning in mid-2009, sustained bank lending increases did not appear until year-end 2011. Growth has since occurred for five consecutive quarters in the nation and in the district (*Chart 3*). Total loans outstanding rose 4.9 percent among all institutions, 6.9 percent in the district, where the result was off slightly from a recent peak increase of 7.6 percent in third quarter 2012.

Unfortunately, not all lending categories experienced robust activity. While the 9 percent business loan growth rate at U.S. banks in 2012 exceeded the district's 6.3 percent expansion, small business lending fell 1 percent nationally.<sup>3</sup> Overall, small business loans outstanding at year-end 2012 remained below 2006 levels, before the crisis. Meanwhile, district small business lending expanded 0.7 percent last year.

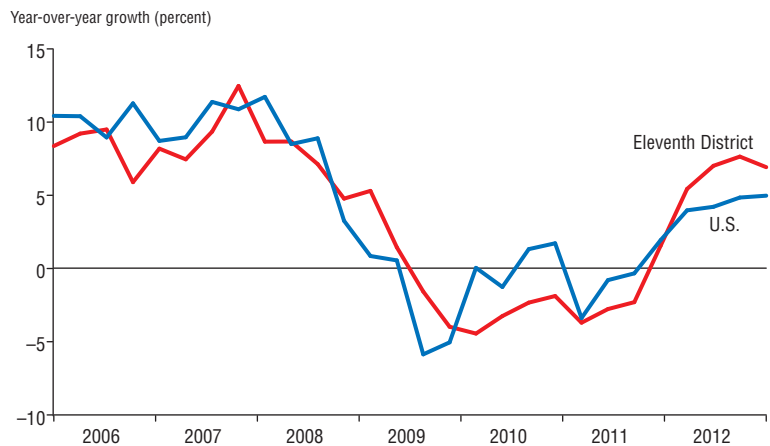
Small business loan growth varied among banks of differing sizes.<sup>4</sup> Such lending increased 0.2 percent at U.S. banks with assets of less than \$500 million, but declined 0.4 percent at institutions with assets between \$500 million and \$1 billion, and fell 2.5 percent among banks with more than \$1 billion in assets. In the Eleventh District, banks of all sizes increased small

**Chart 2** Noncurrent Loan Rate Steadily Improves



SOURCE: Report of Condition and Income from the Federal Financial Institutions Examination Council.

**Chart 3** Growth in Total Lending Continues



SOURCE: Report of Condition and Income from the Federal Financial Institutions Examination Council.

business loans—up more than 2.7 percent at the smallest institutions and at mid-sized banks, rising 0.4 percent among the largest lenders. The pattern confirms the significance of community banks as sources of credit to small businesses.

### Revenue Pressures Growing

Amid the good news regarding profits, asset quality and lending, concerns linger about banks' future ability to earn sufficient revenue to maintain profitability. A traditional measure of banks' revenue is net interest margin (NIM), or in-

come from interest earned on loans less the interest payments made on deposits, expressed as a percentage of average earning assets (*Chart 4*). Nationally, NIM plummeted to a record low of 3.15 percent in 2008 during the crisis, then appeared to recover before declining again. Similarly, NIM fell to a record low of 3.1 percent at Eleventh District-based banks during the regional financial crisis of the late 1980s and subsequently recovered. While NIM can steeply decline during periods of distress, it has been slipping nationally and regionally recently. After NIM peaked at 4.5 percent

in 1992 for all banks and at 4.7 percent in 2000 for district institutions, it stood at 3.4 percent nationally and at 3.5 percent regionally at year-end 2012.

Moreover, this decline is evident across different sizes of banks (*Chart 5*). For the smallest-sized banks, NIM peaked in 1994; for banks with assets between \$1 billion and \$10 billion and \$10 billion to \$50 billion, the high occurred in 1997; among the largest institutions, NIM held fairly steady, peaking in 2002. Such sustained interest-margin declines suggest increased competitive pressure, especially for smaller-sized banks. Some of the competition is attributable to relaxed interstate branching restrictions with the Riegle-Neal Act of 1994, increasing popularity of money market mutual funds and growth of the shadow banking sector—including hedge funds and private equity—that accelerated in the late 1990s.

Another important measure of revenue, pre-provision net revenue (PPNR), is the sum of net interest income and noninterest income subtracted from noninterest expense. It is a more comprehensive measure of revenue than NIM and, like NIM, is unaffected by the amount banks set aside to cover potential bad loans. That makes it particularly informative around turning points.

In times of difficulties, increases in provision expense often lead to declining

profitability.<sup>5</sup> Conversely, when the industry begins to recover, lower provision expense presages greater profitability. For instance, when looking at the 111-basis-point improvement in ROAA from 2009 to 2012, declining provision expense contributed 153 basis points to improved profitability, more than offsetting a combined 29-basis-point reduction in net interest income and noninterest income (*Table 1*). PPNR provides a sense of the industry's core revenue unaffected by sometimes large swings in provision expense.

PPNR peaked in 2002 at 2.64 percent of average assets, falling to 1.58 percent in 2008 (*Chart 6*), led by decreases in both net interest income and noninterest income that more than offset declining noninterest expense. PPNR's subsequent recovery from 2008 to 2010 reflected favorable movements in net interest income and noninterest income that more than compensated for increased noninterest expense. The recovery, however, proved short lived; PPNR declined in 2011 and 2012.

For 1984–2012, PPNR as a percentage of average assets has exceeded ROAA by an average of 108 basis points. After this gap peaked in 2009 at 203 basis points, it narrowed steadily and stands at a record low of 76 basis points. Varying provision expense is the biggest contributor to this gap over time.<sup>6</sup> This current relationship between an improving ROAA and a declining PPNR is unusual. Lower provision expense would continue to increase ROAA while leaving PPNR unchanged, thus narrowing the gap further. However, provision expense has just about returned to its precrisis level. Bolstering ROAA requires new sources of revenue, overhead expense reductions or some combination.

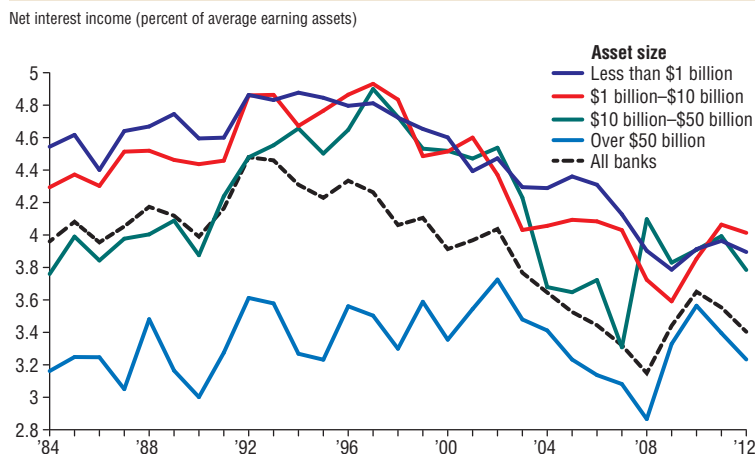
Achieving this combination might be more difficult for small community banks than for larger institutions. Larger banks can use their size to realize

**Chart 4** Net Interest Margins Decline in District and U.S.



SOURCE: Report of Condition and Income from the Federal Financial Institutions Examination Council.

**Chart 5** Net Interest Margins Decline Across Bank Size



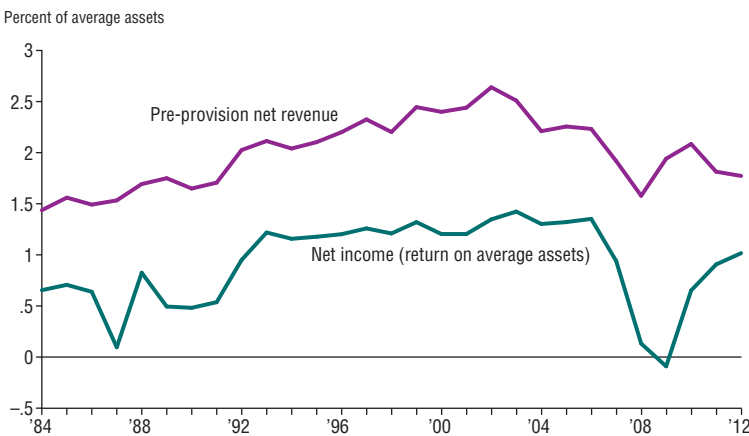
SOURCE: Report of Condition and Income from the Federal Financial Institutions Examination Council.

**Table 1** Gauging the Contributions to U.S. Bank Profitability

	Percent of average assets		Difference (basis points)	Effect on return on average assets
	2009	2012		
<b>Revenue</b>				
Net interest income	3.04	3.02	-2	-
Noninterest income	2.05	1.78	-27	-
<b>Expenses</b>				
Noninterest expense	3.15	3.02	-13	+
Provision expense	1.94	0.41	-153	+
Taxes	0.04	0.41	37	-
<b>Other items*</b>	-0.05	0.06	11	+
<b>Net income (return on average assets)</b>	-0.09	1.02	111	

\*The "other items" category includes securities gains/losses and extraordinary items.  
SOURCE: Report of Condition and Income from the Federal Financial Institutions Examination Council.

**Chart 6** Pre-Provision Net Revenue Weakens



SOURCE: Report of Condition and Income from the Federal Financial Institutions Examination Council.

opportunities in activities such as venture capital and investment banking and may more easily increase revenues. Cost cutting at a time of new regulations is especially difficult for community banks and their relatively more-labor-intensive operations.<sup>7</sup>

Moreover, since the financial crisis, the largest declines in net interest margins have occurred in banks with assets of less than \$1 billion. Today's low-interest-rate environment may have helped depress margins at community banks, which heavily rely on time deposits for funding. They are constrained by competitive pressures that result in

an effective floor on the rates paid on interest-bearing deposits.<sup>8</sup>

### Revenue Challenges

The banking industry's recovery from the financial crisis proceeds amid encouraging profitability increases, asset quality improvement and sustained lending growth. Still, revenue growth seems to be especially weak—despite three years of solidly advancing profitability—partly attributable to declining provision expense that has just about played itself out. Future profitability will depend on how the industry responds to the revenue challenges it faces.

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### Notes

<sup>1</sup> The Eleventh Federal Reserve District is composed of all of Texas, the northern portion of Louisiana and the southern portion of New Mexico. Data for the Eleventh District banking industry have been adjusted for structural changes involving recent relocations of banks into the district. For more on the robust performance of banks based in the Eleventh District, see "Eleventh District Banking Industry Weathers Financial Storms," by Kenneth J. Robinson, Federal Reserve Bank of Dallas *Southwest Economy*, Second Quarter 2010.

<sup>2</sup> Banking data are generally available on a consistent basis beginning in 1984. References to record levels of various measures therefore cover the period beginning in 1984.

<sup>3</sup> Business loans are defined as commercial and industrial loans plus loans secured by nonfarm, nonresidential properties. Small business loans are defined as business loans less than \$1 million.

<sup>4</sup> Lending data by size are based on a panel of banks and are adjusted for mergers.

<sup>5</sup> See "Bank Profits Rebound as Loss Set-Asides Ease," by Kelly Klemme and Kenneth J. Robinson, Federal Reserve Bank of Dallas *Southwest Economy*, Second Quarter 2011.

<sup>6</sup> This gap between PPNR and ROAA consists mostly of provision expense plus taxes minus gains on securities sold. Historically, of the average gap of 108 basis points, provision expense accounts for 68 basis points, taxes 44 basis points and gains on securities (minus) 4 basis points.

<sup>7</sup> See "Regulatory Burden Rising," by Christoffer Koch, Federal Reserve Bank of Dallas *Financial Stability: Traditional Banks Pave the Way*, [www.dallasfed.org/microsites/fed/annual/2012/ar12d/index.cfm](http://www.dallasfed.org/microsites/fed/annual/2012/ar12d/index.cfm).

<sup>8</sup> See "Community Banking Study," Federal Deposit Insurance Corp., December 2012, Chapter 4.