



# BANKING BRIEF

## FOR PENNSYLVANIA, NEW JERSEY, AND DELAWARE

Fourth Quarter 2006

Bank performance declined somewhat both locally and nationally in the fourth quarter. Profitability, as measured by return on average assets (ROA), decreased at both large organizations and community banks. In part, this was due to decreasing net interest margins. In spite of the decline in profitability, ROA is still above 1 percent for all classes of institutions, and capital levels remain high.

Loan quality continued to deteriorate, with the ratio of nonperforming loans to total loans increasing slightly at both large banking organizations and community banks locally and nationally. This reflects the continuing decline in the quality of real estate loans, particularly home equity loans and commercial real estate loans. Some large organizations also reported increasing problems with their auto loan portfolios. In spite of this, chargeoffs only slightly increased, and banks have not made increases in their loan-loss provisions.

### Worker Productivity at Banks

Over the past several decades, banks have invested heavily in technology, engaged in mergers, eliminated positions, and consolidated departments in an effort to increase productivity. Increasing productivity results from getting more output for the same number of inputs or the same output using fewer inputs. In the case of banks, this is often measured by revenue per employee. How well have banks done? Have banks of different sizes been better or worse at increasing productivity?

Since 1984, there have been nearly 8,000 mergers between banks, many with the intent of gaining efficiencies by eliminating redundant functions at the merging banks.<sup>1</sup> Overall employment in the banking industry has increased 26 percent, while in the economy as a whole it has increased over 44 percent.<sup>2</sup> In the same period, real banking revenue has increased 71.1 percent. As a comparison, real value-added in the nonfinancial corporate business sector increased 122.8 percent during that period.<sup>3</sup> Finally, the median wage and benefits of bank employees, adjusted for inflation, increased 41.4 percent.

From 1984 to 2006, average revenue per employee (RPE), adjusted for inflation, increased from \$98,149 per year to \$174,133. This is equivalent to a 1.6 percent annual rate of growth, but as shown in the figure, productivity growth has been anything but smooth.<sup>4</sup> The productivity of workers also varies by the size of the bank. In 2006, the smallest 25 percent of banks had RPE of \$115,748, as compared to \$177,007 for the largest 25 percent of banks. Moreover, the average annual growth rate in RPE for smaller banks was 1.2 percent, as compared to 2.8 percent for the largest banks. For banks in the middle two quartiles of the size distribution, both RPE and its rate of growth fell in between the experience of the smallest and largest quartiles.

There are several possible explanations for why larger banks have enjoyed higher productivity growth. One is economies of scope. Large banks

are able to offer a wider array of products, some of which can use the same resources (for example, advertising). A second is geographic diversification. Larger banks with widespread branch networks are not tied to lending in one area and are therefore better able to diversify their loan portfolios. This has the effect of lowering the cost of risk-taking; that is, a bank can take the same amount of risk and get a higher return for it.<sup>5</sup>

Another reason is that larger banks are more capital intensive; that is, they make greater use of technology. Technology lowers the average cost of delivering bank services, but it usually requires a large initial investment, larger than many small banks can afford. For example, from 1984 to 2006, the ratio of premises and fixed assets to employees at the largest banks averaged 45.9 percent, compared to 41.8 percent at the medium-size banks and 30.4 percent at the smallest banks. This measure of capital intensity has been rising over time, especially among large and medium-size banks.

<sup>1</sup> FDIC Historical Statistics on Banking.

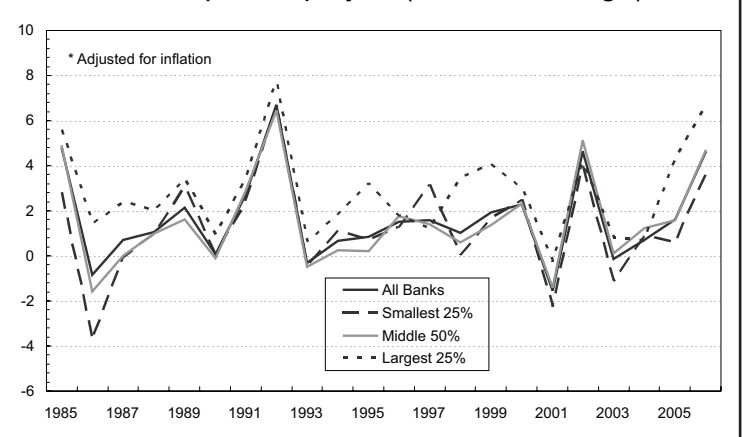
<sup>2</sup> Unless otherwise noted, all banking data presented here and in the chart are from call reports and are deflated using the GDP chain price index (base year=2000). Banks less than three years old are excluded from the data. The employment and GDP numbers for the overall economy, as well as the GDP deflator, are from the Bureau of Labor Statistics (BLS) via Haver Analytics, Inc. Revenue is defined as net interest income plus noninterest income.

<sup>3</sup> Value-added and revenue are not identical, but they are closely correlated.

<sup>4</sup> The top and bottom 5 percent of firms in terms of revenue per employee have been removed from the data presented in the chart in order to eliminate outliers. This was done to the overall sample and each size grouping.

<sup>5</sup> See Loretta J. Mester, "Optimal Industrial Structure in Banking," in A. Boot and A. Thakor, eds., *Handbook on Financial Institutions* (Elsevier Science, forthcoming). Also, see Allen Berger and Loretta J. Mester, "Inside the Black Box: What Explains Differences in the Efficiencies of Financial Institutions?" *Journal of Banking and Finance*, 21 (1997), pp. 895-947.

Revenue per Employee (Percent Change)\*



**Fourth Quarter 2006**

**Community Banking Organizations**

	<i>Tri-State</i>			<i>Nation</i>		
	<i>\$Bill</i>	<i>% change from</i>		<i>\$Bill</i>	<i>% change from</i>	
	<b>06Q4</b>	<b>06Q3</b>	<b>05Q4</b>	<b>06Q4</b>	<b>06Q3</b>	<b>05Q4</b>
Total Assets	91.4	4.62	5.65	1721.8	9.17	8.01
Total Loans	61.8	6.54	9.55	1182.4	7.92	10.75
Business	8.5	8.48	8.11	184.3	12.75	10.27
Real Estate	48.7	6.32	10.27	866.8	8.67	12.38
Consumer	2.6	-1.99	-3.70	69.0	-1.52	-0.25
Total Deposits	72.3	6.93	7.21	1375.0	11.89	8.37

**Large Banking Organizations**

	<i>Tri-State</i>			<i>Nation</i>		
	<i>\$Bill</i>	<i>% change from</i>		<i>\$Bill</i>	<i>% change from</i>	
	<b>06Q4</b>	<b>06Q3</b>	<b>05Q4</b>	<b>06Q4</b>	<b>06Q3</b>	<b>05Q4</b>
Total Assets*	2429.6	2.16	7.89	7705.3	1.49	11.45
Total Loans*	1347.9	4.41	10.19	4359.1	3.77	10.63
Business	269.4	7.44	8.53	895.0	10.35	11.01
Real Estate*	809.4	5.67	11.43	2442.5	6.59	15.00
Consumer	113.2	0.92	18.53	546.9	-5.06	0.42
Total Deposits*	1628.0	15.86	8.26	5059.4	16.94	11.24

<b>Ratios (in %)</b>	<b>06Q4</b>	<b>06Q3</b>	<b>05Q4</b>	<b>06Q4</b>	<b>06Q3</b>	<b>05Q4</b>
Net Income/ Avg Assets (ROA)	1.08	1.13	1.18	1.19	1.21	1.23
Net Interest Inc/ Avg Assets (NIM)	3.36	3.40	3.44	3.75	3.79	3.78
Noninterest Inc/ Avg Assets	1.20	1.18	1.18	0.95	0.95	0.98
Noninterest Exp/ Avg Assets	2.97	2.92	2.94	2.91	2.92	2.92
Loans/Deposits	85.51	85.59	83.69	85.99	86.77	84.14
Equity/Assets	10.32	10.32	10.05	9.96	9.96	9.70
Nonperforming Loans/ Total Loans	0.80	0.79	0.60	0.77	0.70	0.65

<b>Ratios (in %)</b>	<b>06Q4</b>	<b>06Q3</b>	<b>05Q4</b>	<b>06Q4</b>	<b>06Q3</b>	<b>05Q4</b>
Net Income/ Avg Assets (ROA)	1.25	1.26	1.36	1.22	1.24	1.24
Net Interest Inc/ Avg Assets (NIM)	2.48	2.55	2.65	2.64	2.70	2.77
Noninterest Inc/ Avg Assets	2.03	1.99	1.92	2.22	2.30	2.28
Noninterest Exp/ Avg Assets	2.55	2.57	2.57	2.85	2.95	3.00
Loans/Deposits	82.80	84.98	81.35	86.16	86.62	86.63
Equity/Assets	10.00	10.00	9.94	9.54	9.54	9.64
Nonperforming Loans/ Total Loans	0.47	0.43	0.46	0.73	0.71	0.74

A banking organization is an independent bank or all the banks within a highest-level bank holding company; however, banks less than five years old and those whose credit card loans make up greater than 50 percent of their total loans are excluded. The large banking organization sample is based on banking organizations whose total assets were at least as large as those of the 100th largest banking organization in the United States as of December 31, 2005. The community banking organization sample is based on the remaining banking organizations. Tri-state large banking organizations are those large banking organizations that have either at least 5 percent of the deposits of the region or any state therein or at least 5 percent of their deposits in the region. Tri-state community banking organizations are those community banking organizations that are headquartered in the region. The numbers of banking organizations in the categories are as follows: (1) community banking organizations — 179 for the tri-state area and 5692 for the nation; (2) large banking organizations — 19 for the tri-state area and 98 for the nation. Ratios are aggregates, that is, the numerators and denominators are summed across all banks in the group, then divided. Data are adjusted for mergers. Quarterly percentage changes are compound annualized rates.

\* The growth numbers in the fourth quarter at large organizations nationally were affected by one institution merging a large thrift subsidiary into one of its bank subsidiaries. If this merger is not accounted for, asset growth would be 12.24 percent, loan growth would be 17.96 percent, real estate loan growth would be 34.62 percent, and deposit growth would be 20.49 percent.