

Where Have All the Tellers Gone?

by Ben Craig

Even in the rapidly expanding U.S. economy, the rising GDP tide has not been able to lift all boats. Some industries continue to contract as aggregate production bounds ahead. Other businesses are trimming their payrolls, but their production levels are picking up. The latter describes the banking industry, where employment has dropped considerably in the last decade, yet the industry as a whole has experienced strong growth.

Is the loss of banking jobs a bad thing? Like so many "normative" questions in economics, the answer depends on how we respond to an accompanying series of "positive" questions. Why did so many banking jobs disappear? Which occupations were most affected? And what alternatives were available to those who had to leave a potentially successful career?

This article describes the employment picture in the banking industry over the last decade and examines the nature of—and reasons for—the industry's shrinking payrolls. It also looks at the fate of those who lost their jobs or decided to leave. Did they remain unemployed? Did they find work in other industries? Or did they leave the labor force altogether? The answers may help other workers caught in an industrywide structural change reduce their costs of adjustment.

... Long Time Passing²

For many years, banking was a haven for those seeking safe employment. In some economic textbooks, a bank teller's job was the archetype of a position with great security, although the prospects for wage growth were dim. Banking employment in the post–World War II period expanded steadily and was relatively insulated from the effects of eco-

nomic downturns. During the recessions of the 1970s and 1980s, for example, banks continued to add to their payrolls, whereas employment in the steel industry fell more than 25 percent. Banking's enviable position was mirrored in the unemployment numbers, with the industry posting rates nearly 40 percent below the national average during the 1980–82 recession (see figures 1 and 2).

The 1990 recession was a different story. After decades of solid growth, banking employment peaked at 1½ million in 1989. While the U.S. employment rate fell 1 percent between 1990 and 1991, the decline in banking jobs was much greater in percentage terms. More important, banking positions continued to vanish, while employment nationwide grew an average of 2.5 percent per year between 1992 and 1996. By 1996, banking employment had contracted more than 6 percent from its peak year, and some analysts are predicting another 20 percent cut by the end of the next decade.

Three reasons are usually given for an industrywide drop in employment. First, the demand for an industry's output may fall, reducing the profitability of maintaining a large workforce. This causes firms to cut their staff until their existing labor force becomes more profitable. The decline in the number of workers employed in the West Virginia coal fields in the middle of this century is an excellent example of such a response. Second, the relative price of substitutes for labor can decrease, making labor comparatively more expensive. A substitute can become cheaper than labor because of technological advances or the discovery of new supplies. Labor can also become more expensive (and thus its substitute relatively less expensive) because of new institutions, such as labor unions, or

Until recently, U.S. banks were considered a haven from the employment uncertainties that affected other industries. Now, some analysts are predicting that as many as 400,000 banking jobs will be lost over the next decade. This article looks at the reasons behind this trend and examines the fate of the job losers.

because the demand for workers in the rest of the economy picks up.³ The third reason for an industrywide drop in employment is a change in industry structure. For instance, when the airlines were deregulated, they became more competitive and scaled back their workforces. In addition, consolidation may have eliminated duplicate jobs within the industry. In the next section, I examine the contribution of each of these factors to banking's dwindling payrolls.

Why Have All the Tellers Gone?

The first explanation cited above—a drop in the demand for an industry's products-does not appear to explain the layoffs in the banking community. Although an increasing number of services that were once provided solely by banks are now offered by other financial institutions, the demand for banking services continues to grow. Bank assets have risen steadily in the last decade, from less than \$2.4 trillion in 1988 to more than \$3.5 trillion in 1995 (an increase of 15 percent in real terms).4 What's more, the enhanced competition from outside the industry should induce banks to boost their payrolls. For example, major corporate clients now seek alternatives to large bank loans, including new equity or bond issues. Banks

have responded to this trend by making more loans to smaller businesses. Thus, the same value in total loans means that more loans have been extended—and these require more labor to service. Clearly, then, banks have not reduced their staffs because of a diminished demand for their products.

By contrast, there have been numerous changes in the use of substitutes for banking labor. The most dramatic example is the explosive growth in automatic teller machine (ATM) usage. In 1975, fewer than 10 million ATM transactions were initiated for a total of \$1 billion. A decade later, it had become clear that ATMs were here to stay. In 1985, 3.5 billion transactions were completed for a total of more than \$200 billion. By 1995, those figures had ballooned to 10 billion transactions covering \$650 billion.

The result has been a sparsely staffed modern bank branch that looks much different from the institutions of 20 years ago. While some people bemoan the loss of their weekly visits to a friendly teller who greets them by name, most are unwilling to pay for this service with higher fees and a greater time commitment. 5 Instead, they opt for the convenience and cheapness of the ATM.

Although the substitution of automatic tellers for human ones is the most visible shift in the way banking is done, it is by no means the only change. Some of the new technologies have allowed machines to perform the laborious, repetitive tasks once done by low-skilled (and often low-paid) workers. Electronic scanners can now quickly and accurately record a binary check entry that previously had to be logged in by hand. And improved bookkeeping programs allow one person to do the work of many individuals, both skilled (as in the case of programmers at the nation's larger banks) and unskilled (operators of mechanical calculators at smaller institutions).

New machinery is not the only way a technological change can help a firm cut its labor expenses. In the past, loan applications were evaluated by highly skilled loan officers using a combination of data, personal knowledge, and instinct to reduce the probability of making a bad loan. Now, most mortgage banks make "cookie cutter" loans based on the same formula and bundled together for resale to the financial markets. Many banks are also experimenting with new formulas for evaluating loans. ⁶ Recent

studies indicate that this approach is generally better at lowering the number of bad loans than are the experience and instinct of most loan officers, meaning that the trend toward substituting less expensive, low-skilled workers for highly skilled professionals will probably continue.

Industrywide structural changes have also played a role in the disappearance of banking jobs. Mergers and acquisitions have dramatically reduced the number of banks, even as their total assets have skyrocketed. Between 1988 and 1995, total nominal assets (a common measure of bank size) held by U.S. commercial banks swelled by 49 percent. During the same period, the number of banks plummeted more than 20 percent.

Obviously, consolidation should have an effect on employment. When duplicate departments and offices are shut down, duplicate tasks are eliminated. Some mergers also involve the purging of many middle-management positions. On the other hand, consolidation could offer new *opportunities* for employment. Two small banks might not have the resources to support a research department, whereas it may make sense for the merged institution to do so.

The net effect of consolidation on employment can be seen in the experience of some bank acquisitions that occurred between 1984 and 1994. As shown in table 1, acquisitions are often associated with employment gains. A positive number represents the average percentage increase over a bank's employment in the quarter just prior to acquisition. Interestingly, employment in both types of institutions—the acquirer and the target bank—rose an average of 6 percent in the three years following takeover.

This is not to suggest that acquisitions necessarily boost employment. Typically, both acquirers and targets are growing banks. When all of the other variables are held constant (bank size, loan composition, prices, and so forth), it appears that acquisition reduces employment in both types of institutions. However, the decline is minimal—on the order of 1 to 2 percent. These numbers tend to refute the image of a bank takeover resulting in massive layoffs.

The decline in banking employment can thus be attributed to one factor—a substitution of capital equipment for labor,

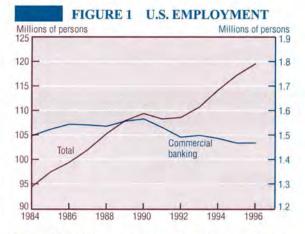
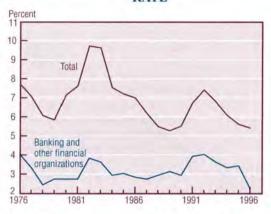


FIGURE 2 U.S. UNEMPLOYMENT RATE



SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.

spurred by technological advances (mostly by larger banks). The net effect of this shrinkage has been to alter the skill composition of the banking industry's labor force. In 1975, professional occupations (those requiring post-secondary education) made up less than 10 percent of banking's payrolls; by 1995, that figure had nearly doubled. Furthermore, the educational level of bankers has undergone a dramatic increase in the last decade.⁹

And Where Have They Gone?

A broader historical perspective may help us assess the impact of the decline in banking jobs. Since 1900, many occupations have become less prominent in the U.S. employment picture. Some, like blacksmithing, have been forced into the background because the demand for the service has fallen off. Others, such as farming, play less of a role because technological progress has made it possible for the same output to be generated by fewer workers. Still others, like corner grocers, have been casualties of consolidation. As supermarkets have emerged

TABLE 1 BANK ACQUISITIONS AND EMPLOYMENT, 1984-94 (Percent change from quarter

before acquisition)

Number of Quarters after Acquisition	Acquiring Bank	Target Bank	
1	1.7	1.5	
2	2.5	3.4	
3	2.9	4.7	
4	2.9	4.7	
6	4.4	6.0	
8	4.8	6.8	
12	5.3	6.7	
16	5.8	4.9	

NOTE: Numbers in black are significant at the 15 percent level

SOURCE: Author's calculations.

TABLE 2 GROSS EMPLOYMENT FLOWS FROM BANKING (Percent of total)

Destination	1988-96	1991	1996
Currently employed		1540	600
in banking	78.1	76.3	78.0
Currently employed outside			
banking (total):	13.5	14.9	13.5
Nonbanking FIRE ^a	3.2	3.1	4.0
Misc. services	3.5	3.6	3.2
Other nonmanufacturing	5.5	6.9	4.7
Manufacturing	1.4	1.5	1.6
Unemployed			
Looking for work in bankin	g 1.7	2.5	1.2
Looking for work outside			
banking	0.5	0.4	0.4
Out of labor force	6.1	5.9	5.0

a. Finance, insurance, and real estate. NOTE: Sample size is 11,560. SOURCE: Author's calculations.

> and expanded, local grocery stores have been forced to close their doors and lay off their workers.

Few people would argue for a long-term policy of maintaining employment in these industries just to preserve the status quo. Ultimately, jobs represent a resource use. In a dynamic economy, it is always better to use scarce labor where it gives the most value in the long run. However, in the short term, a decline in employment imposes costs, particularly on those who are forced to look elsewhere for work. The magnitude of these costs can be seen by examining where the unemployed end up.

While little is known about the general fate of job losers, some evidence can be gleaned from the Bureau of Labor Statistics' March Current Population Survey (CPS), which queries about 60,000 households on their labor market activities.10 Our interest lies in the fate of those persons who answered "banking" when asked, "In what kind of business or industry did you work the longest last year?" If the respondent is no longer working, or if he/she has changed industries, we get some idea of the "gross flows" of labor out of banking.

Note that gross flows differ from other possibly useful (but unavailable) numbers. Gross changes do not provide us with the net movement of labor out of banking, since we do not know how many people who either were not working or were working in another industry moved into banking. One further note of caution regarding the gross flow concept: The survey did not ask, "What kind of business or industry were you working in on March 15 of last year?" which might have given the difference between "snapshots" taken one year apart. Instead, if a banker became unemployed in May of the previous year and then became a lawyer in July, he would not show up in our sample as having left the banking industry (because he would not answer "banking" as the area in which he worked the longest last year). Still, gross employment flows tell an interesting tale, as evidenced in table 2.

First, between 1988 and 1996, the number of people moving out of banking in a given year was huge-between a fifth and a quarter of the entire workforce. This is much larger than the roughly 1 percent annual jobs reduction experienced by the industry in the past decade. Small net flows of employment out of banking in a normal year mask the incredible ability of the American economy to accommodate industry changes by large numbers of workers in the same year.

Second, only a sixth of those represented in the gross flows are currently unemployed. Of these individuals, more than 15 percent have been jobless for less than a week, while more than half have been without work for 26 weeks or more. Clearly, few bankers join the unemployed ranks. But if they do, they are likely to stay unemployed for a long time. If we think of the decline in banking employment as imposing economywide adjustment costs, then a few workers are bearing large costs in the form of

long unemployment spells. Interestingly, most of the displaced bankers are still seeking work within the industry.

Third, far more bankers exited the labor force than became unemployed. This may represent an increase in discouraged workers-those who stopped looking for a job rather than face the frustration of not finding one. On the other hand, 5 or 6 percent seems well within the magnitude we might expect for retirements plus temporary exits from the workforce (to care for young children, aging parents, and so on).

Finally, most employees who left banking found work in a spectrum of other industries. The largest employer of exbankers was "miscellaneous services," a catch-all for a wide variety of occupations ranging from house cleaning to skilled financial accounting (fastfood jobs are not included).11

The major difference between a recession year (1991) and an expansion year (1996) in the placement of ex-bankers was that they tended to find work in a broader number of industries during the recession. Not surprisingly, more former bankers were also unemployed when the economy headed down.

Although gross flows tell us something about the cost of the decline in banking employment, they do not reveal the entire story. We do not know how much bankers displaced by consolidation earned in their next job, or whether their new position was in banking or another industry. Gross flows also leave us guessing about how many middle-aged managers took early retirement from a career that may have had many productive years left.

When Will We Ever Learn?

What the available banking employment numbers do tell us is something about the competitive labor market's ability to adapt to an extremely dynamic environment. This is of great relevance in determining an appropriate employment policy. The U.S. labor market has accommodated a period of tremendous technological and structural changes in the banking industry by enabling bankers to become more skilled and professional. The share of bankers who find jobs outside the industry each year now stands at about 15 percent of the entire banking workforce.

The proper question, then, is not "How do we keep from losing jobs in the banking industry," but "How is banking so able to adapt to its changing environment?" The answer could help policymakers alleviate the adjustment costs that fall unequally on individuals (in the form of extended unemployment spells or reduced earnings) without destroying this extraordinary flexibility.

Footnotes

- 1. The answer to a normative question implies a value judgment about whether one situation is better than another. A positive question can be answered with facts alone because it does not require a value judgment.
- 2. With apologies to Pete Seeger.
- 3. One example of a technological change making labor relatively expensive is the spinning jenny, which reduced the cost of using machinery instead of labor to produce the same output and ultimately resulted in fewer spinners. An example of new supplies making labor more expensive is the discovery of the Arabian oil fields, which lessened the need for coal shovelers on ships. Increased union activity may help explain the growing use of laborsaving machinery in auto assembly plants.

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- 4. See Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, August 1997, table 1.26, p. A15. (Seasonally adjusted bank credit for December, various years.)
- 5. See Alan Ehrenholt, *The Lost City*, New York: Basic Books, 1995.
- See John Gruenstein, "Credit and Mortgage Scoring: Implications for Mortgage Markets," PMI Mortgage Company, Chicago, unpublished manuscript, 1997.
- 7. See Board of Governors of the Federal Reserve System (footnote 4).
- **8.** See Ben Craig, "The Long-Run Demand for Labor in Banking," Federal Reserve Bank of Cleveland, *Economic Review*, 1997 (forthcoming).
- 9. See Rebecca Demsitz, "The Evolving Business of Banking: Banks' Changing Human Capital Needs," Federal Reserve Bank of New York, unpublished manuscript, 1997.
- 10. I am grateful to Mark Schweitzer for providing me with these data. Further interesting facts about gross employment flows are available in his article, "Workforce Composition and Earnings Inequality," Federal Reserve

Bank of Cleveland, *Economic Review*, vol. 33, no. 2 (Quarter 2 1997), pp. 13–24.

11. Some of those finding work in "miscellaneous services" may have been bankers who were contracted to work for a bank in a nonbank firm. Thus, the data are not detailed enough to distinguish a person doing the same consulting job that before would have been handled by an in-house banker.

Ben Craig is an economist at the Federal Reserve Bank of Cleveland. The author thanks Michael Bryan and Mark Schweitzer for helpful comments and suggestions.

The views stated herein are those of the author and not necessarily those of the Federal Reserve Bank of Cleveland or of the Board of Governors of the Federal Reserve System.

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