

# Chicago Fed Letter

## Job loss: Causes, consequences, and policy responses

by Kristin F. Butcher, senior economist, and Kevin F. Hallock, associate professor, University of Illinois at Urbana-Champaign

From 2001 to 2003, 5.3 million workers were displaced. Beyond quantifying the numbers of jobs lost lie important questions about gains and losses from these changes and what policies may affect them. These questions will be addressed at an upcoming Chicago Fed conference.

**Job** loss, layoffs, displacement, downsizing, reductions in force—few topics are more controversial, or seem to pit firm owners and workers against each other more than these. Firms devote many resources to deciding, whether and precisely *how*, to lay off workers. Clearly, from a

worker's point of view, non-voluntary job loss is unambiguously bad. Workers may lose their jobs through causes entirely beyond their control such as low aggregate demand, technological change, regulatory changes, or international competition. These causes draw a great deal of media and policy attention. Yet, William Anders, former CEO of General Dynamics,

once said, "The loss of jobs at General Dynamics is actually better for America if we redeploy those assets appropriately."<sup>1</sup> He makes the point that, from an aggregate perspective, workers losing their jobs because these tasks can now be performed more cheaply with fewer workers, or by workers elsewhere may benefit society as a whole as resources are applied to their comparative advantage. Indeed, there is a broad consensus among

economists that free trade, which receives substantial public attention, redounds to the benefit of all consumers.

Consider international trade. From a neoclassical economics point of view, if a good can be produced more cheaply abroad than in the U.S., then consumers are better off importing the good. There are efficiency gains that accrue to all if each country pursues its own comparative advantage. However, if there are efficiency gains, the winners must win more than the losers lose. Thus, there is scope for the winners to compensate the losers. There may be gains from trade but the gains from trade may not be distributed equally unless explicit policies are enacted to change the distribution.

In order to formulate such policies, however, one needs to know who benefits and who is hurt and be able to quantify their gains and losses. In this *Chicago Fed Letter*, we briefly survey the literature on job loss from the perspectives of both firms and workers. We describe why we think this is an area where it is particularly important to bridge the gap between research, policy, and practice. To that end, the Federal Reserve Bank of Chicago and the Joyce Foundation will co-sponsor a conference at the Chicago Fed on November 18–19, 2004, entitled "Job Loss: Causes, Consequences, and Policy Responses." The

### SAVE THE DATE!

#### Job Loss: Causes, Consequences, and Policy Responses

November 18–19, 2004

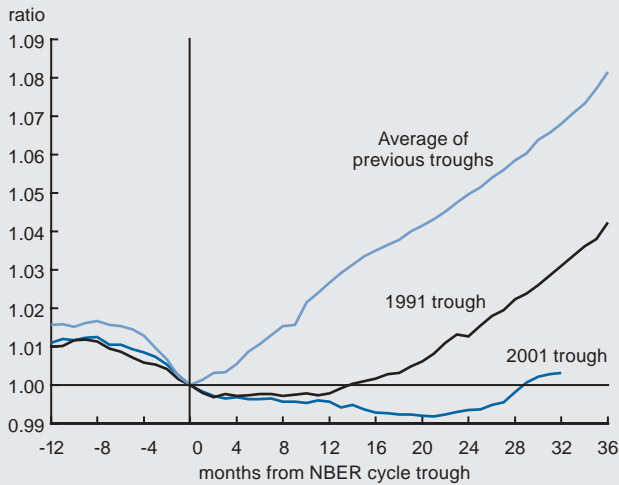
Co-sponsored by  
Federal Reserve Bank of Chicago  
The Joyce Foundation

#### Keynote speakers

Henry S. Farber, Princeton University  
Lisa Lynch, Tufts University

Conference information and registration under  
"Upcoming events" at <http://www.chicagofed.org>.

## 1. Payroll employment: Normed to NBER cycle troughs



NOTE: Ratio is current total payroll employment divided by payroll employment at trough.  
SOURCE: Authors' calculations using *Current Employment Statistics Survey* data from the Bureau of Labor Statistics.

goal of the conference is to present fresh research on job loss, from both firm and worker perspectives, and to extract the lessons for devising effective policy and practice.

### Displaced workers

Recent media coverage of the economy often focuses on the “jobless recovery.”<sup>2</sup> The most recent recession was anomalous in that the economy continued to shed jobs well past the beginning of the economic recovery. Figure 1 compares payroll employment from the Bureau of Labor Statistics (BLS) payroll survey across business cycles since 1969. The trough of each recession is normalized to 1 so that we can compare changes in employment across different business cycles. The three curves on the graph represent payroll employment around the most recent recession, around the 1991–92 recession, and on average around the four previous recessions. Although employment began to pick up last spring, job creation is still well below previous post-recession periods, employment growth for June and July has been unexpectedly weak, and concern about job loss continues to be widespread. Additionally, figure 2 shows that the job loss rate may be high even when the unemployment rate is low. Workers may be displaced from their old jobs, even when new jobs are plentiful.

comes from the *Displaced Workers Survey* (DWS). This is a supplement to the *Current Population Survey*, administered every two years since 1984. A new survey was released recently.<sup>3</sup> From January 2001 through December 2003, 5.3 million workers were displaced from jobs they had held for three years or more. Nearly one-third of these were manufacturing jobs, which is much larger than manufacturing’s share of workers with three or more years of experience. About 65 percent of the 5.3 million displaced workers were reemployed by January 2004; however, the re-employment rates were lower among women and moderately lower for African-Americans and Asians.

By comparing results from different years of the DWS, one can see how displacement has changed over time. Displacement has, since the data were first collected, been more common among lower-skilled workers. However, during the 1990s there was a relative increase in the

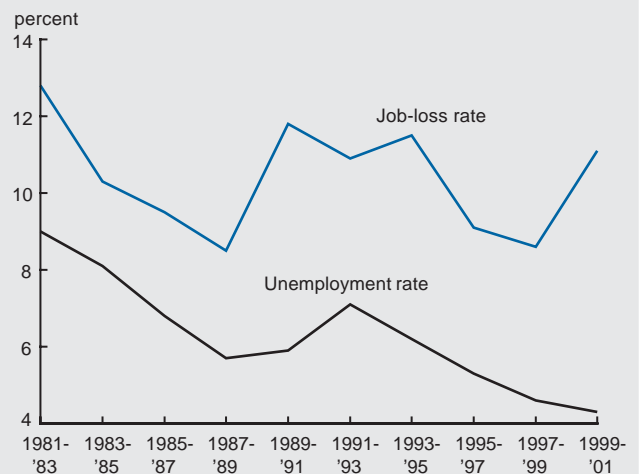
Displaced workers tend to be of particular concern because, by definition, these are workers who are unlikely to get their old jobs back and may not be able to get jobs in the same or related fields once the economy picks up. These are individuals with significant work histories, who lose their jobs through layoffs or closings, rather than poor individual performance. Much of what we know about displaced workers

displacement rates of well-educated, white-collar workers. Similarly, high-tenured women had been less subject to displacement than men, but by 1995 that gap had disappeared.<sup>4</sup>

How much are workers hurt by displacement? Workers who had been in their jobs for longer periods of time are likely to be most hurt by displacement. In economic parlance, they lose the benefits accruing from their “specific human capital,” for example, knowledge of a specific physical plant or insight into the production of a given product, and benefits accruing from high “job match quality,” for example, a good working relationship with a given set of co-workers. Additionally, firms may pay workers less relative to their productivity early in their tenure with the firm, and more relative to productivity later.<sup>5</sup> If workers are displaced, they never get a chance to recoup the losses accrued early in their tenure with the firm.

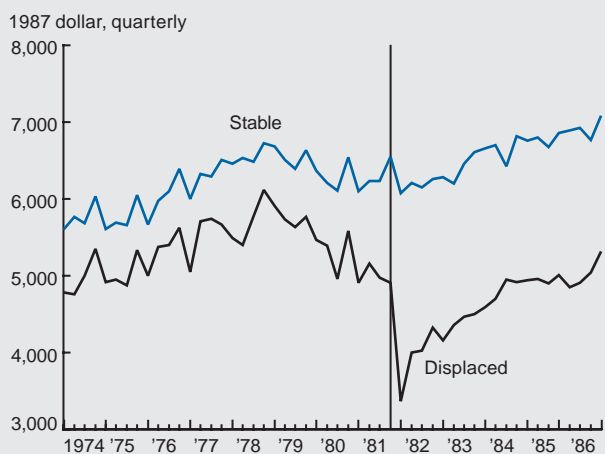
The detrimental effects of displacement depend on how quickly a worker is able to find new employment and her subsequent wage. Reemployment rates vary a great deal over the business cycle, ranging from about 57% around the recessionary trough to about 75% around the business cycle peak in the late 1990s.<sup>6</sup> However, this masks a great deal of variation across

## 2. Rate of job loss and unemployment rate



SOURCE: Data from Farber (2003), appendix table 1. Note that job loss rates are “three year” rates as described in Farber (2003).

### 3. Earnings of displaced and stably employed workers



NOTE: Displaced workers lost their jobs in 1981:Q4. Stably employed workers worked for the same firm from 1974:Q1 to 1986:Q4.  
SOURCE: Jacobson, LaLonde, and Sullivan (1993).

education groups. Those with a college degree or more are 10–20 percentage points more likely to be reemployed by the survey date than those with only a high school diploma.<sup>7</sup>

Workers who are displaced have earnings that are substantially lower than they would have had otherwise. Jacobsen, LaLonde, and Sullivan (1993), using an administrative data set from Pennsylvania uniquely suited to answering questions about earnings of displaced workers over time, find that the long-term losses, even five years after displacement, are on average 25% of pre-displacement earnings.<sup>8</sup> As figure 3 shows, the earnings losses begin prior to displacement, suggesting that workers in struggling firms earn less before the job terminates. Other researchers also find substantial earnings losses due to displacement (see Kletzer, 1998, and Farber, 2003). Additionally, Stevens (1997) documents the negative impact of multiple job losses on earnings.<sup>9</sup>

The outcomes for workers after displacement vary for different types of workers and the outcomes themselves are more varied than simple financial well-being. For example, Elder (2002) has found that job displacement differentially affects older workers. He finds that there has been a dramatic increase in involuntary job loss for workers over 50 in the last 20

years. He also finds that over-50 workers have longer rates of unemployment and greater earnings losses than their younger counterparts.<sup>10</sup>

#### Effects of layoffs on firms

Further, Charles and Stephens (2004)<sup>11</sup> find that divorce is significantly more likely following a job loss. They also find that the effect is entirely due to layoffs and not from plant closings. There are many other potential outcomes, such as effects on health or children's well-being, which have received relatively less research attention.

While there has been quite a bit of work on the impact of layoffs on workers, considerably less attention has been placed on what happens to firms around the time of a layoff. Several recent papers have begun to fill this void. Hallock (1998) examined the relationship between mass layoffs and CEO compensation. There is a widespread belief that CEOs preside over enormous layoffs, while at the same time, reaping considerable personal financial rewards, in part as a direct result of the layoffs. Using data from 1988–95, Hallock showed that CEOs leading firms that made layoffs in the previous year have considerably higher pay and larger raises than CEOs heading firms that did not make layoffs in the previous year. However, larger firms are more likely to make layoffs and to pay CEOs more. Once this difference (and others) are accounted for, the relationship between mass layoffs and CEO pay disappears.<sup>12</sup>

Since CEOs have considerable holdings of stock and stock options, another way they could profit from layoffs in their firms is through stock price reactions around the time of the layoffs. Farber and Hallock (2004) collected information on over 4,800 layoff announcements

made in any firms ever in the Fortune 500 in any year between and including 1970 and 1999. They hypothesize that the share price reaction would be negative in the 1970s (perhaps due to “deficient demand”) and the share price reaction may be positive in the 1990s (perhaps due to “efficiency” gains). It turns out that the share price reaction was negative in the 1970s, has roughly monotonically increased toward zero, and by the late 1990s was even slightly positive. So CEOs didn't profit from the share price reaction to layoffs in the 1970s and 1980s and perhaps modestly did so in the late 1990s.<sup>13</sup> Some authors have investigated the longer-run impact of layoffs on firms.<sup>14</sup>

Although many firms now provide consulting services to help companies through the layoff process, there is little academic work in economics that investigates how, when, and why firms make layoff decisions. Bewley (1999) investigates this briefly as part of a larger study on why wages don't fall during recessions.<sup>15</sup> Using Bewley's method, Hallock (2004) interviews 40 senior HR managers, CEOs, CFOs, and others and asks a series of questions about the execution of layoffs, timing of announcements, the role of unions, white-collar versus blue-collar workers, reasons for layoffs, and

Michael H. Moskow, *President*; Charles L. Evans, *Senior Vice President and Director of Research*; Douglas Evanoff, *Vice President, financial studies*; David Marshall, *Vice President, macroeconomic policy research*; Richard Porter, *Senior Policy Advisor, payment studies*; Daniel Sullivan, *Vice President, microeconomic policy research*; William Testa, *Vice President, regional programs and Economics Editor*; Helen O'D. Koshy, *Editor*; Kathryn Moran, *Associate Editor*.

*Chicago Fed Letter* is published monthly by the Research Department of the Federal Reserve Bank of Chicago. The views expressed are the authors' and are not necessarily those of the Federal Reserve Bank of Chicago or the Federal Reserve System.

© 2004 Federal Reserve Bank of Chicago  
*Chicago Fed Letter* articles may be reproduced in whole or in part, provided the articles are not reproduced or distributed for commercial gain and provided the source is appropriately credited. Prior written permission must be obtained for any other reproduction, distribution, republication, or creation of derivative works of *Chicago Fed Letter* articles. To request permission, please contact Helen Koshy, senior editor, at 312-322-5830 or email [Helen.Koshy@chi.frb.org](mailto:Helen.Koshy@chi.frb.org). *Chicago Fed Letter* and other Bank publications are available on the Bank's website at [www.chicagofed.org](http://www.chicagofed.org).

ISSN 0895-0164

other areas.<sup>16</sup> However, these studies are just beginning to examine an area with many potentially important practical implications. For example, does the way a firm chooses to execute layoffs (gradually or abruptly) affect workers' outcomes?

## Conclusion

Job loss, and the firms and workers involved, are affected by policies and practices that cut across international, national, state, and local levels. At the international level, labor standards and human rights enforcement may affect

job loss in different countries. At the national level, trade policies and environmental regulations may affect job loss. Policies are also created, such as the Worker Adjustment and Retraining Notification Act (WARN) or Trade Adjustment Assistance (TAA), that try to ameliorate the impact of job losses. Decisions made at national and state levels affect the duration and generosity of unemployment insurance benefits. Local governments set tax policies that may encourage or deter companies from locating in an area. Local entities like community

colleges are often the providers of retraining that displaced workers need.

This is not meant as an exhaustive list of either the economic research on displaced workers or the policies and practices that may affect job displacement. It is meant to point out the vast scope for fruitful exchange among researchers, policymakers, and practitioners around this critical topic. We hope that the conference at the Chicago Fed November 18–19, 2004, will encourage such an exchange.

<sup>1</sup> Quote from Jay Dial and Kevin J. Murphy, 1995, "Incentives, downsizing, and value creation at General Dynamics," *Journal of Financial Economics*, Vol. 37, March, pp. 261–314.

<sup>2</sup> Erica L. Groshen and Simon Potter, 2003, "Has structural change contributed to a jobless recovery?," *Current Issues in Economics and Finance*, Federal Reserve Bank of New York, Vol. 9, No. 8, August.

<sup>3</sup> BLS report, see <http://stats.bls.gov/news.release/pdf/disp.pdf>.

<sup>4</sup> Daniel Aaronson and Daniel Sullivan, 1998, "The decline of job security in the 1990s: Displacement, anxiety, and their effect on wage growth," *Economic Perspectives*, Federal Reserve Bank of Chicago, Vol. 22, No. 1, First Quarter, pp. 17–43.

<sup>5</sup> Edward P. Lazear, 1979, "Why is there mandatory retirement?," *Journal of Political Economy*, Vol. 87, No. 6, pp. 1261–1284.

<sup>6</sup> Henry S. Farber, 2003, "Job loss in the United States, 1981–2001," Princeton University, Industrial Relations Section, working paper, No. 471, May, figure 5.

<sup>7</sup> Farber (2003) and Lori G. Kletzer, 1998, "Job displacement," *Journal of Economic*

*Perspectives*, Vol. 12, No. 1, Winter, pp. 115–136, 123.

<sup>8</sup> Louis Jacobson, Robert J. LaLonde, and Daniel G. Sullivan, 1993, "Long-term earnings losses of high-seniority workers," *Economic Perspectives*, Federal Reserve Bank of Chicago, Vol. 17, No. 6, November/December, pp. 2–20.

<sup>9</sup> Ann Huff Stevens, 1997, "Persistent effects of job displacement: The importance of multiple job losses," *Journal of Labor Economics*, Vol. 15, No. 1, pp. 165–188.

<sup>10</sup> Todd Elder, 2002, "Reemployment patterns of displaced older workers," University of Illinois, working paper.

<sup>11</sup> Kerwin Kofi Charles and Melvin Stephens, Jr., 2004, "Job displacement, disability, and divorce," *Journal of Labor Economics*, Vol. 22, No. 2, pp. 489–522.

<sup>12</sup> Kevin F. Hallock, 1998, "Layoffs, CEO pay, and firm performance," *American Economic Review*, September. Sherrilyn Billger and Kevin F. Hallock, 2004, "Mass layoffs and CEO turnover," *Industrial Relations*, forthcoming, investigate the relationship between layoff announcements and CEO turnover.

<sup>13</sup> Henry S. Farber and Kevin F. Hallock, 2004 "The changing relationship between job loss announcements and stock prices: 1970–1999," University of Illinois, working paper.

<sup>14</sup> Peter Cappelli, 2000, "Examining the incidence of downsizing and its effect on establishment performance," in *On the Job: Is Long-Term Employment a Thing of the Past?*, David Neumark (ed.), New York: Russell Sage Foundation, pp. 463–516; William J. Baumol, Alan S. Blinder, and Edward N. Wolff, 2003, *Downsizing in America: Reality, Causes, and Consequences*, New York: Russell Sage Foundation; and Wayne F. Casio, Clifford E. Young, and James R. Morris, 1997 "Financial consequences of employment change decisions in major U.S. corporations," *Academy of Management Journal*, Vol. 40, No. 5, pp. 1175–1189.

<sup>15</sup> Truman Bewley, 1999, *Why Wages Don't Fall During Recessions*, Cambridge, MA: Harvard University Press.

<sup>16</sup> Kevin F. Hallock, 2004, "A descriptive analysis of layoffs in large U.S. firms: Archival and interview data 1970–2002," University of Illinois, working paper.