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Economic
perspectives

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Contents

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Bringing together policymakers, researchers, and practitioners to discuss job loss

Kristin F. Butcher and Kevin F. Hallock

Introduction

The most recent *Displaced Workers Survey*[1] (DWS) finds that 5.3 million workers were displaced between January 2001 and December 2003 from jobs that they had held for three or more years. These workers are of particular interest for several reasons. First, due to the design of the DWS, we know that they are workers who likely lost their jobs through no fault of their own. Second, they have proven through their long association with their employers that they are good employees. Third, research has demonstrated that they are unlikely to get new jobs that are similar to their old jobs—particularly if they lost their old jobs because of technological change or international trade. Fourth, research has also shown that these workers are likely to suffer long-term earnings losses due to their job loss. This is particularly true in cases where the workers had built up skills that were specific to a particular job and where they are unlikely to be reemployed in a similar job. (See Jacobson, LaLonde, and Sullivan, 1993; and Farber, in this volume).

Many economists and policymakers would agree that the United States enjoys a higher standard of living than many other countries, thanks, in part, to our openness to competition and technological change. Many point to improved technology and enhanced competition as driving forces behind high productivity growth over the past decade. However, technological change, competition, and even regulations that are meant to protect our citizens (environmental, health, and so on) may result in worker displacement. As with any change, the benefits and costs are likely to be unevenly distributed. However, by definition, if a change is for the better, the winners must win more than the losers lose. Thus, there is scope to compensate those who bear the cost of the change.

The preceding is a moral argument for why it is important to compensate displaced workers. They are those whose jobs are lost due to technological changes, for example, that help provide cheaper goods for the benefit of all consumers: Through their sacrifice, broader society benefits. However, there are reasons, beyond moral arguments, for paying close attention to displaced workers.

Industries and firms within industries often have idiosyncrasies that are tied to creating their product. It is important that their workers learn the skills that allow them to be effective at production within that idiosyncratic environment. Thus, it is important to firms that workers acquire some "specific human capital," and those skills may be specific to the firm or the industry.[2] However, for workers, this may entail risks. If they are incompletely compensated by the firm for learning something that will only be useful within that particular job, then they are at risk if technology changes and that job goes away. It is hard to predict which skills will be enduringly useful and which will turn out, from the worker's perspective, to have been a bad investment. To the extent that it is beneficial to the economy overall to have workers who are willing to invest in job-, firm-, or industry-specific skills, there may be a need to insure workers against the risk of investing in skills that may become obsolete.

In recent years, rates of job displacement have been relatively high—as high as in earlier periods when the unemployment rate was much higher (see Farber, this issue). This suggests that the pace of change in the economy has increased the risk that workers' skills will become obsolete. It also means that a higher fraction of unemployed workers are those who have been displaced, who often take longer to find new employment. This may help explain the relatively high fraction of long-term unemployment in recent years.

In addition to implications for specific labor market policies, the rate of job displacement may have implications for macroeconomic and monetary policy more broadly. From the perspective of monetary policy, the implications of displacement are complicated, because an increase in job displacement may have two offsetting effects. For one thing, the current unemployment rate may overstate the amount of slack in labor resource utilization if a higher proportion of the unemployed are likely to take a long time to find a new job. If a higher fraction of the unemployed lack the skills necessary for current vacancies, shortages may arise that would put upward pressure on labor costs. Then again, if job displacement is relatively common, that may make workers reluctant to press for wage increases, restraining labor costs. Although the implications of greater job displacement for monetary policy are ambiguous, it is clear that we need to monitor changes in the composition of unemployed workers and how that may affect the relationship between our usual measures of labor resource utilization and labor costs.

In sum, from a macroeconomic point of view, it is important to monitor how displacement rates may affect our interpretation of the typical measures of labor market slackness. For the displaced individual, displacement is likely to be very costly. For society, the loss of these workers' substantial productive capacity is costly. Furthermore, if workers who stand to lose out due to technological change or competition were to try to block these changes, that might lead to worse outcomes overall. Thus, it is important to develop appropriate labor market policies to address displacement.

On November 18–19, 2004, the Federal Reserve Bank of Chicago and the Joyce Foundation cosponsored a conference at the Chicago Fed, "Job Loss: Causes, Consequences, and Policy Responses," to bring together researchers, policymakers, and practitioners to discuss job loss from the perspective of both firms and workers. The first day focused on new research findings, with discussion and comment from participants with backgrounds in policy, practice, and research. The second day featured an address by Michael Moskow, president of the Federal Reserve Bank of Chicago,[3]

and panel discussions on layoff procedures from the point of view of firms and the post-layoff experience of workers. The balance of this special issue of *Economic Perspectives* presents papers by our keynote speakers, Lisa Lynch of Tufts University and Henry Farber of Princeton University, and the second-day panel participants. To begin, however, we provide an overview of the research results and discussion from the first day of the conference. This day was organized into three separate sessions. The first focused on the impact of job loss on workers. The second was devoted to the intersection of regulation and job loss. The final session focused on the impacts of job loss on firms. We discuss each of these in turn and then give a brief overview of the contributions of the keynote speakers and second-day participants that are included in this volume. We conclude with an overview of some of the recurring themes of the conference.

The impact of job loss on workers

The conference included three papers on displacement from the perspective of workers. It is important to understand what types of individuals are likely to suffer most or least in the event that they are displaced. This is important from the perspective of targeting policies after a layoff has occurred, but it may also be important for workers themselves as they consider what types of skills to invest in early in their careers.

Peter Kuhn and Arthur Sweetman's paper[4] examines whether workers with "multiple skills" suffer, on average, smaller earnings losses than other workers after a displacement occurs. Using data sources such as the *Quality of Employment Survey* and the *Dictionary of Occupational Titles*, the authors assign multi-skill levels to jobs based on statements such as "My job requires that I keep learning new things," "I get to do a number of different things on my job," and evaluations of job characteristics of "adaptability to performing a variety of duties, often changing from one task to another of a different nature without loss of efficiency or composure." Kuhn and Sweetman find that workers in jobs that require multiple skills earn more than other workers. Furthermore, workers who are displaced from these jobs have higher earnings in jobs they find after displacement. However, part of the return to multiple skills appears to be due to the fact that these workers received more training. After the authors control for the time it takes to train for the job, multi-skilled individuals have lower earnings than individuals who do not describe themselves as multi-skilled, in both the pre-displacement and the post-displacement jobs. However, earnings loss associated with job loss is smaller for those with multiple skills.

Currently, the authors point out that their results cannot be interpreted as "causal," in other words, as proving that acquiring multiple skills protects one from earnings losses associated with displacement, since it is possible (even likely) that workers who are more adaptable simply sort themselves into jobs requiring multiple skills in the first place. These workers might be expected to suffer smaller earnings losses, even if they were not multi-skilled as defined here. A particularly fruitful area for future work would be to analyze the causal effects of acquiring multiple skills in order to understand the policy implications of this provocative finding.

Clearly, the effects of job loss may be different for workers with different characteristics; understanding more about these differences across workers is important for designing effective policy. In particular, as the work force ages, it is critical for policymakers to understand whether and how the effects of displacement differ for older and younger workers. The research presented by Todd Elder[5] examines the reemployment patterns of older workers using a dynamic structural job search model. The main source of data is the *Health and Retirement Study* (HRS), a panel dataset that started in 1992 with respondents between the ages of 51 and 62.

Previous work on employment and retirement behavior has largely ignored the issue of job displacement. Elder documents that job displacement affects older workers differently. He finds that there has been an increase in involuntary job loss due to the elimination of a position for workers over age 50 in the past two decades. He also finds that workers over 50 have longer spells of unemployment and greater earnings losses than their younger counterparts. Older workers also suffer greater earnings losses, per period, on their subsequent job. However, younger workers may suffer larger earnings losses over their working lives, because they will receive the lower post-displacement wage over a longer period.

Elder's work has implications for policy. For example, his findings are consistent with the idea that the need for health insurance drives the employment decisions of older workers, making them particularly willing to accept a full-time job with benefits, even if the earnings associated with that job are low. Thus, changes in health insurance policies are likely to affect the labor supply of workers over the age of 50.

Finally, it is important to understand the best policies for helping displaced workers to find new jobs. One possibility is to re-train workers so they can qualify for jobs in new areas. However, little is known about the value of providing training to displaced workers. Many of the previous studies of the value of government

subsidized (post-high-school) training were conducted for young workers with few skills. Displaced workers tend to be older, since they have substantial work experience, with many, albeit perhaps outdated, skills. The paper by Jacobson, LaLonde, and Sullivan[6] (also see their review of this literature included in this volume) presents new research on the value of training for displaced workers. They use a unique administrative dataset from the state of Washington to examine whether displaced workers who enrolled in community college courses for retraining had better subsequent outcomes than otherwise similar workers who did not. They also evaluate community college training as an investment. The research presented by Jacobson, LaLonde, and Sullivan has a number of interesting findings. We point out four here. First, older displaced workers use community colleges less than younger displaced workers. Second, the increase in per-period earnings for each credit earned is similar for older workers and younger workers. Third, because younger workers have more of their working lives remaining, training younger workers appears to be a better investment than training older workers. Nonetheless, the benefits of training outweigh the costs even for older workers. However, the amount by which the benefits outweigh the costs depends on the assumptions one makes about the opportunity costs associated with attending school while unemployed. Finally, the returns to some courses are much higher than to others. Technical courses like nursing are much more likely to be good investments than nontechnical courses like history. There may be a role for policy to ensure that students get good advice about the courses that are most likely to lead to better paying jobs.

As pointed out by the discussants for this session,[7] we have much more to learn about these issues. For example, should workers be encouraged to acquire multiple skills? At what age should this begin? Should it only be after formal schooling? What, if anything, should government do for older workers? What are the implications for pensions and health insurance? Should we re-train more workers? Should we have a system of vouchers or reemployment bonus accounts[8] that could be used for employment services or retraining? We hope the work presented at the conference will stimulate more research in this important area.

Regulation and job loss

The second session focused on regulations that may affect whether job displacement takes place and its aftermath. There are countless regulations that might affect the probability and repercussions of displacement. With limited time, we chose three aspects of

regulation and job loss. The paper by Stephen Woodbury[9] examines the impact of experience-rating unemployment insurance on the temporary layoff behavior of firms.[10] At first glance, this paper is something of a departure from the other papers included in the conference because the focus is on temporary layoffs. However, the unemployment insurance (UI) system is the main source of support for workers who have experienced a layoff, whether that layoff is expected to be temporary or permanent.

Currently, the UI system is tailored to the needs of those who suffer short bouts of unemployment. It is not structured to meet the needs of those suffering permanent job loss. However, we need a better understanding of how the UI system affects temporary layoffs for a number of reasons. First, temporary layoffs are costly for workers. In addition, if there were fewer temporary layoffs, we might be able to structure the UI system better to meet the needs of displaced workers, for whom job loss is most costly in terms of earnings loss.

Woodbury's paper asks "To what extent does incomplete experience rating of the UI payroll tax influence the layoff behavior of employers in the United States?" His research uses unique panel data on employers from the states of Missouri, Washington, and Pennsylvania, with several special features. First, the unit of observation is not the employee but the employer. Second, Woodbury uses UI administrative data, allowing explicit observation of the tax rates and incentives to layoff for each employer. Finally, he has a long panel, so he can control for unobserved employer effects. The paper goes through several sets of careful empirical tests for robustness. In the end, Woodbury finds that increased experience rating significantly reduces layoffs.

International trade and outsourcing receive a disproportionate share of the attention surrounding job displacement. In Lori Kletzer's paper, included later in this volume, she provides an overview of how many of the jobs lost in manufacturing and services may be linked to trade. The paper she presented in this session, coauthored with Howard Rosen, provides an overview of the assistance the government provides to workers who have lost their jobs through trade.[11]

Kletzer and Rosen (2004) find that the labor market in the United States is very flexible and that most of the "burden of this flexibility is borne by U.S. workers, their families, and communities." They also suggest that there is increased anxiety over trade liberalization and potential growth of services outsourcing. They say that the current system of assistance to unemployed workers—a "modest" UI system, some training for all workers through the Workforce Investment Act programs, and additional assistance to workers whose

jobs are lost to imports or a shift in production—is "no longer adequate." Kletzer and Rosen point out that Trade Adjustment Assistance is the area in which policymakers have been more willing to reform and expand assistance to displaced workers.

The final paper in the second session on regulation also had an international focus. This paper, presented by Maia Guell and coauthored with Jose E. Galdon-Sanchez,[12] examines the relationship between firing costs and dismissal conflicts in the U.S. and several European countries. When critics of the U.S. economy point to the costs borne by workers due to the flexible nature of the U.S. labor market, its defenders point to Europe's perennially high unemployment rates. Some have suggested that the high costs of firing workers in Europe may limit firms' ability to hire in the first place. Although firing costs have been studied in the past, previous research often assumes that the costs of firing can be captured as a constant transfer from firms to workers. In actuality, what firms frequently complain about is the complexity and uncertainty associated with firing costs if a conflict goes to court. This paper models those court outcomes as a function of each country's particular institutional features. The authors argue that true dismissal costs are better captured by actual court outcomes than by typical measures of the "strictness" of Europe's employment protection legislation.

Guell and Galdon-Sanchez outline a model of dismissal conflicts in the U.S., Italy, France, Spain, and the United Kingdom that helps to explain three facts. The first is that the court outcomes of dismissal conflicts are extremely stable in each of the five countries over time. The second is that in Europe there are two possible outcomes: a) either the worker wins most cases or b) the firm and worker win half each. Third, in the United States, the unemployment insurance conflicts that go to court are mostly won by the firm. Their model suggests that the "gap" between severance pay for "fair" and "unfair" dismissals is an essential criterion for determination of outcomes in court. In countries where the gap is small, workers are more likely to win in court; conversely, where the gap is large, workers are less likely to win. The cost of firing is higher in countries with a lower gap. The authors conclude that "costly dismissals and rigid employment protection legislation are not necessarily synonymous. In particular, Italy and the UK, which are the most and least regulated countries in terms of firing costs, are closer to each other in terms of court outcomes, and therefore cost of dismissal, than to other countries with similar employment protection legislation strictness."

This session also generated interesting discussion from the panel and the floor.[13] From a policy perspective, it was noted that when it comes to displaced workers, labor market policy and trade policy are closely linked. Many asked whether it makes sense to make a distinction between the case where one loses a job because someone overseas does something "better" than her company versus the case where someone in another state in the U.S. does something better than her company. The consequences for the worker may be the same. There is more public assistance available to workers who are displaced from manufacturing jobs due to trade than from other industries, even though the causes and the consequences for workers may be similar.

It would make sense to design labor market policies that address displacement, regardless of the industry in which the individual worked and regardless of whether she lost her job due to technological change or international trade. However, it may be difficult to identify which workers are "displaced" versus those who simply lost their jobs for other reasons. For example, the papers on firing costs suggested that firms may be reluctant to reveal their true reasons for dismissing a worker, to avoid paying the costs associated with layoffs. On the other hand, workers may have an incentive to claim that they are in the "displaced" group, if that group receives more generous treatment. Some of the discussion focused on how we might design policies that would effectively encourage firms and workers to reveal the true circumstances of job loss.

The impact of layoffs on firms

The first two sessions on the first day of the conference focused either on the effects of job loss on firms or on the potential effects of regulation. The final session of the first day turned attention to the potential effects of job loss on firms.[14] One of the papers, by Henry S. Farber and Kevin F. Hallock, concentrated on the very short-term (three-day) stock price reaction to job loss announcements. The second paper, by Edward N. Wolff, examined longer-term issues of downsizing and focused exclusively on manufacturing firms.

Hallock presented "The changing relationship between job loss announcements and stock prices: 1970–99."[15] This paper focused on documenting the short-term relationship between job loss announcements and stock prices using a very large sample of all job loss announcements in all firms ever in the Fortune 500 in any year between 1970 and 1999. While the effect of job loss on workers is clearly negative, there have been suggestions in the business press and by policy groups that business owners profit handsomely from large layoffs as stock prices increase in the wake

of such announcements. Because chief executive officers (CEOs) (and other top executives) usually hold stock or stock options in their companies, they benefit when the stock price increases. If large layoffs are viewed by the market as evidence that management is aggressive about cutting costs and increasing profits, then the CEO and others may benefit from decisions that hurt workers. On the other hand, the market may view layoffs as an indication that the executives have information about bad times ahead and the stock price may fall. This paper is an attempt to understand how the stock price reacts to such announcements and how and why that reaction has changed over time.

The authors presented four main findings. First, the number of job loss announcements follows the business cycle quite closely. Second, the overall stock price reaction to job loss announcements was most negative early in the sample period and has become less negative over time. Third, "clean" announcements (that is, temporally separate from other announcements that might also affect stock prices) have larger negative effects than others. Fourth, although the authors tried many avenues for explaining the change in the share price reaction over time (such as a change in the types of reasons for layoffs or a change in the industrial composition of layoffs), they are, as yet, unable to explain this changing trend. Although the effects of layoff announcements are less negative than in the past, the authors find no evidence that *on average*, firm owners are profiting from large increases in stock prices by laying off workers. However, the stock price reactions vary, so some owners gain and some lose stock value after their layoff decisions.

In "Sources and consequences of downsizing in U.S. manufacturing,"[16] Wolff uses data from 1967 to 1997 to investigate the causes and consequences of job loss in manufacturing. Like Farber and Hallock, Wolff examines the effects on firms. His measure of downsizing is change in average establishment size within 20 (two-digit SIC [standard industrial classification] code) industries. He measures the change in size at five-year intervals. Wolff finds that the average establishment size has declined. He regresses the percentage change in mean number of employees per establishment on contemporaneous measures of research and development spending in the industry, change in a measure of exports to gross output, change in a measure of imports to gross output, unionization rates, computer usage per worker, and a lagged measure of industry profits. He finds, first, that average establishment size shrank more in industries with more exports and more imports. Second, unionization rates are also related to larger decreases in establishment size. Third, there

seems to be little relationship between measures of productivity and changes in establishment size. However, decreases in average establishment size are correlated with increased profits and lower wages and total compensation.

As pointed out by Wolff in his paper and in the discussion at the conference, there may be problems with interpreting these results as causal—for example, assuming that the change in average establishment size in an industry caused profits in that industry to increase. Many of the relationships he examines, like that between investment in IT, number of employees, and profitability, may be simultaneously determined, which makes it very difficult to discern which change caused another.

These two papers are part of a rather small literature on the likely effects on firms of laying off workers. There was general agreement among conference participants that a better understanding of firms' decisions and the consequences of those decisions for business owners and workers represents a fruitful area for future research; these papers are an important first step.

The general discussion in this session, and in the second session as well, highlighted the diversity of points of view in the audience. As we stated in the introduction, many economists agree that changes like technological progress and increased competition, while imposing costs on some, bring benefits for the majority, and that those benefits are greater than the costs. However, the discussion in these two sessions made it clear that not everyone shares that view. Additionally, even if one accepts that these changes generate benefits that are so large that those who benefit *can* compensate those who bear the costs, it does not automatically follow that such compensation actually happens.

Papers included in this volume

The two keynote speeches and the second-day panel discussions focused on facts about job displacement and the policies and practices that affect workers and firms. We asked the keynote speakers and panel participants to allow us to include a written version of their presentations in this volume. Here, we give a brief overview of these papers.

The paper by Henry Farber, professor of economics at Princeton University, sets out the main facts about job loss in the United States. By analyzing many years of *Displaced Worker Survey* data, Farber documents the changes over time in the characteristics of displaced workers, reemployment rates for displaced workers, and the impact of displacement on earnings.

In her paper, Lisa Lynch, professor of economics at Tufts University, draws on her experience as the

chief economist at the United States Department of Labor during the Clinton Administration. Here, she provides evidence on how policy changes have affected the supply of public money for training, for example. She also has suggestions for how researchers can make their work more useful to policymakers.

The effect of trade on job loss is a particularly contentious issue. In her paper, Lori Kletzer, professor of economics at the University of California Santa Cruz, examines the evidence for the impact of trade on job loss, both in manufacturing and services, and describes some of the programs available to ameliorate the effects of trade-related displacement.

The paper by Louis Jacobson, Center for Naval Analysis, Robert LaLonde, University of Chicago, and Daniel Sullivan, Federal Reserve Bank of Chicago, provides an overview of the literature on the effect of training on displaced workers' future labor market outcomes. Most of the labor market studies on the impact of (post-schooling) government-subsidized training focus on low-skilled populations. Thus, much less is known about the effectiveness of training for displaced workers, many of whom have substantial skills. This paper also summarized the authors' work on the impact of voluntary retraining through community colleges on the subsequent earnings of displaced workers.

Although the main focus of the conference was on displaced workers—those with substantial job histories with a particular employer who lose a job through no fault of their own—we thought it was important to keep in mind that many job losers are much less advantaged and less skilled than this group. We asked Steven Redfield, executive vice president of programs for STRIVE National, an organization that provides employment services and training to hard-to-employ populations, to describe some of the challenges that face workers with little tenure and few skills when they lose a job.

In order to better understand how public programs that serve displaced workers function, we asked Randall Eberts, executive director of the Upjohn Institute for Employment Research to draw on his experience. Eberts is uniquely positioned to bridge the gaps between research, policy, and practice, because the Upjohn Institute is responsible for some of the most influential evaluations of public labor market programs and provides employment services and training to displaced workers.

As mentioned above, one goal of the conference was to analyze job loss from the point of view of firms as well as workers. The paper included here by John Challenger, of the outplacement firm Challenger, Gray, and Christmas, describes how outplacement services

can improve the outcomes of laid-off employees, remaining employees, and the firm overall after a reduction in force (RIF).[17]

Kenneth Schwartz, of the law firm Duvin, Cahn, and Hutton, provides an insider's guide to the RIF process by drawing on his expertise in employment law and his experience as an attorney for many firms contemplating laying off workers.

Finally, Peter Cappelli, professor of human resource management at the Wharton School at the University of Pennsylvania, discusses some overarching issues affecting firms, workers, and the economy overall. For example, he notes that at the same time that many firms are contemplating a reduction in force, they also complain that one of their main challenges is in retaining qualified workers. He argues that the unfettered flexibility that firms currently have to lay off unneeded workers has an unintended consequence. In particular, if the risk of layoff permeates the firm–employee relationship, then the relationship will be inherently unstable. This may lead to increased costs for the firm, for example, in training of new employees. Cappelli suggests that under some circumstances, firms, workers, and the economy overall might be better off if firms gave up some of their flexibility. However, it is not clear how to design policies to address this issue.

Conclusion

Avenues for future work

In conclusion, we outline the following topics that threaded through the discussion at the conference:

- Participants agreed that in the United States a great deal rests on having a job. In addition to salary, access to health insurance is generally through one's employer. Thus, job loss may have effects beyond labor market outcomes.

- The current UI system is not optimally designed to meet the needs of displaced workers. In particular, these workers may need longer than the typical 26 weeks to find new employment. In addition, however, they may need incentives to return to the labor market instead of exhausting their UI benefits, because the wages they face on the subsequent job are typically substantially lower than on the job they lost.

- Trade Adjustment Assistance goes further toward addressing the particular needs of those facing a permanent job loss. However, it makes little sense, from the point of view of labor market policy, to make these programs available only to workers who are displaced from manufacturing

jobs due to import competition. Workers who lose service sector jobs due to changes in technology face similar challenges in finding suitable new employment.

- Those who work closely with firms undergoing restructuring and laying off workers suggested that it was both the right thing to do and cost effective to provide high-quality outplacement services to workers who lose their jobs. We know very little about how many workers receive these types of benefits through their employers. It is likely, however, that firms that offer outplacement services and the workers who use these services when offered are different from the average firm and the average worker. Research into whether receiving outplacement services changes the subsequent outcomes of laid-off workers would be very useful in guiding policy.

- Training appears to yield benefits greater than the costs for displaced workers who voluntarily seek retraining through the community college system. In particular, technical and vocational classes, such as nursing, have a high return. There may be an important role for programs that advise displaced workers about which types of training may be most worthwhile.

- Currently, seven states are piloting "reemployment bonus account" programs. These programs would give unemployed workers a sum of money that they could use to obtain training. If they get a job within some specified period of time, they would get to keep any remaining money in the training account as a bonus. This pilot program may be a creative way to encourage retraining of displaced workers using local resources like community colleges. However, as with all such programs, this program needs rigorous evaluation in order to ensure that scarce public resources are used effectively.

- Many participants agreed that the United States enjoys a higher standard of living due, in part, to our willingness to embrace change generated by new technologies and increased competition. However, there will be winners and losers associated with these changes. Many participants also agreed that it is critical to have policies that help compensate those who lose in this equation, since this will help ensure that we continue to have a dynamic economy.

In the short run, this conference may have generated more questions than answers. However, we hope that the conference and this volume will spur more research on this important topic and, even more important, that they will encourage more mutually beneficial interactions among researchers, policymakers, and practitioners.

NOTES

[1]The DWS is a supplement to the *Current Population Survey* (CPS). It has been administered by the U.S. Bureau of Labor Statistics every two years since 1984.

[2]There is a large literature in economics on the acquisition of specific versus general human capital. See, for example, Becker (1962) for the classic model of general versus specific training and Neal (1995) for implications of industry-specific human capital.

[3]The text of this speech is available at www.chicagofed.org/ news_and_conferences/speeches/2004_11_19_job_loss.cfm. For the conference agenda, see the appendix to this article. Additional information and conference papers are available at http:// www.chicagofed.org/news_and_conferences/conferences_and_ events/research_conferences_past.cfm.

[4]www.chicagofed.org/news_and_conferences/conferences_and_ events/files/job_loss_paper_kuhn.pdf.

[5]www.chicagofed.org/news_and_conferences/conferences_and_ events/files/job_loss_paper_elder.pdf.

[6]ww.chicagofed.org/news_and_conferences/conferences_and_ events/files/job_loss_paper_sullivan_lalonde_jacobson.pdf.

[7]We thank our chair, Nancy Mills (Working for America Institute), and our discussants, Rich Hobbie (National Association of State Workforce Agencies) and Thomas DeLeire (Michigan State University), for their insightful comments on this session.

[8]Reemployment bonus accounts were proposed in the first term of the Bush Administration. These would consist of a sum of money that long-term unemployed workers could use for training. If the worker found a job within a specified period, he or she could keep any unused funds, which would constitute a "bonus" for reemployment.

[9]www.chicagofed.org/news_and_conferences/conferences_and_ events/files/job_loss_paper_woodbury.pdf.

[10]Firms pay a tax into the unemployment insurance system. That tax rate is based on their past layoff experience, thus, it is "experience rated." However, there is a cap such that once the top tax rate is reached, further layoffs do not increase the tax a firm pays, thus, the unemployment insurance tax is said to be "incompletely" experience rated.

[11]www.chicagofed.org/news_and_conferences/conferences_and_ events/files/job_loss_paper_kletzer.pdf.

[12]www.chicagofed.org/news_and_conferences/conferences_ and_events/files/job_loss_paper_guell_sanchez.pdf.

[13]We thank our chair Laura Miller Craig (Illinois Department of Employment Security) and our discussants Larry Mishel (Economic Policy Institute) and Derek Neal (University of Chicago) for stimulating discussion and helping to synthesize the messages from these papers on disparate aspects of regulation and job loss.

[14]We thank our chair Lou Jacobson (WESTAT) and our discussants Brad Jensen (Institute for International Economics) and Thea Lee (AFL–CIO) for an informative and thought-provoking discussion on these sometimes contentious issues.

[15]www.chicagofed.org/news_and_conferences/conferences_and_ events/files/job_loss_paper_hallock.pdf.

[16]www.chicagofed.org/news_and_conferences/conferences_and_ events/files/job_loss_paper_wolff.pdf.

[17]At the conference, Stephen Malia, now the senior vice president of human resources at Owens-Illinois, drew on his experience overseeing human resources at another Fortune 500 company to describe the importance of how layoffs are handled both for employees who lose their jobs and for remaining employees. His talk focused on a case study of the merger between IMC Global (a public company) and Cargill's Crop Nutrition Business (a privately held firm). Malia argued that treating laid-off workers with dignity is crucial, and severance pay and outplacement services are key elements of this dignified treatment. (This presentation is not available.)

APPENDIX: CONFERENCE AGENDA

Opening Remarks: Charles Evans, Director of Research and Senior Vice President, Federal Reserve Bank of Chicago

Day 1

Session 1: Impacts on Workers
Chair: Nancy Mills, AFL-CIO's Working for America Institute

Presentations by:
Peter Kuhn, University of California at Santa Barbara
Todd Elder, University of Illinois at Urbana-Champaign
Daniel Sullivan, Federal Reserve Bank of Chicago

Discussants:
Thomas DeLeire, Michigan State University
Rich Hobbie, National Association of State Workforce Agencies

Session II: Regulation and Job Loss
Chair: Laura Miller Craig, Strategic Planning, Illinois Department of Employment Security

Presentations by:
Stephen Woodbury, Michigan State University
Lori Kletzer, University of California at Santa Cruz
Maia Guell, Pompeu Fabra University

Discussants:
Lawrence Mishel, Economic Policy Institute
Derek Neal, University of Chicago

Session III: Impacts on Firms
Chair: Louis Jacobson, WESTAT

Presentations by:
Kevin Hallock, University of Illinois at Urbana-Champaign
Edward Wolff, New York University

Discussants:
Brad Jensen, Institute for International Economics
Thea Lee, Public Policy Department, AFL–CIO

Keynote Address: Lisa Lynch, the William L. Clayton Professor of International Economic Affairs,
The Fletcher School, Tufts University, and former Chief Economist at the Department of Labor
during the Clinton Administration

Day 2

Welcoming Remarks: Michael Moskow, President, Federal Reserve Bank of Chicago

Panel 1: Process and Policy
Chair: Lori Kletzer, University of California, Santa Cruz

Panelists:
Stephen Malia, Senior VP HR, The Mosaic Company
Kenneth Schwartz, law firm of Duvin, Cahn, and Hutton.
Peter Cappelli, University of Pennsylvania

Panel 2: Post Layoff
Chair: Steven Redfield, Project Strive

Panelists:
Robert LaLonde, University of Chicago
John Challenger, Challenger, Gray and Christmas
Randall Eberts, The Upjohn Institute

Keynote Address: Henry S. Farber, the Hughes-Rogers Professor of Economics, Princeton University

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What do we know about job loss in the United States? Evidence from the Displaced Workers Survey, 1984–2004

Henry S. Farber

Introduction

A defining characteristic of the U.S. labor market is its fluid nature. Half of all new jobs (worker/employer matches) end in the first year and, at any point in time, about 20 percent of workers have been with their current employer for less than one year (Farber, 1999a).[1] This fluidity allows rapid reallocation of workers across sectors in response to demand shifts, and the relatively small direct costs to employers of laying off workers encourages hiring in the face of uncertain future demand. Rates of employment growth in the U.S. have dwarfed those in Western Europe in no small measure because of the relatively small costs to firms of shedding workers in the U.S. compared with their counterparts in the European Union. However, this flexibility can impose substantial costs on the workers who lose jobs.

My goal here is to characterize the level of job loss and the costs to job losers over the 1981–2003 period and to look for changes over time, both cyclical and secular, in the types of workers who lose jobs and the costs borne by various types of job losers.

Perhaps the most comprehensive source of information on the incidence and costs of job loss in the United States is the *Displaced Workers Survey* (DWS), administered every two years since 1984 as a supplement to the *Current Population Survey* (CPS). In this article, I incorporate the data from the latest (January 2004) DWS, covering the period through 2003.[2] The tight labor market of the 1990s saw a dramatic reduction in the civilian unemployment rate from an average of 7.3 percent in the 1980s to a low of 4.0 percent in 2000. The annual average unemployment rate rose steadily through the 2001 recession and beyond, reaching 6.0 percent in 2003. Job loss and worker displacement are of particular concern in this period, given the perceived continuing general weakness in the labor market, fears of worker displacement due to import competition and outsourcing of jobs, and the substantial costs borne by job losers.

There are three important issues of measurement and interpretation that arise when one compares job loss rates calculated using the DWS over time. First, the DWS asks only about a single involuntary job loss. The survey does not capture multiple job losses by the same worker. Neither does it capture worker terminations "for cause." The survey is meant to capture worker terminations as the result of business decisions of the employer unrelated to the performance of the particular employee (for example, a plant closing, a layoff, the abolition of a job). Thus, the measure of the job loss rate that I calculate is the fraction of workers who lost at least one job not "for cause" in the relevant period rather than the rate of destruction of worker–employer matches.

From 1984 to 1992, the DWS asked about job separations in the previous five years, while the later DWS asked about job separation in the previous three years. The measure of job loss that I use is adjusted to account for this change in the recall period so that all rates are reported on a three-year basis. This adjustment is detailed in Farber (1997).

The basic wording of key questions has changed since the inception of the DWS in 1984. This may have affected whether survey respondents would report a job separation in a particular circumstance as an involuntary separation in one survey but would not report a separation in the same circumstance as involuntary in another year. In Farber (1998) and Farber (2004), I use additional data from debriefing questions asked of a fraction of DWS respondents in 1996, 1998, and 2000 to investigate how changes in the wording of the

Henry S. Farber is the Hughes-Rogers Professor of Economics and a research associate of the Industrial Relations Section at Princeton University. He is also a research associate of the National Bureau of Economic Research.

key question may have affected the likelihood that a worker reported a particular separation as an involuntary job change. I use the results of that analysis to calculate re-weighted job loss rates that I present in this study.

Based on the three-year rates of job loss that I computed, adjusting for the change in the recall period and for changes in the wording of the key job loss question, I find that the rate of job loss has followed a roughly cyclical pattern between 1981 and 2004. However, the overall rate of job loss increased through the 1993–95 period, despite the sustained economic expansion, and through the 2001–04 period, despite the onset of the expansion in late 2001.

I investigate the consequences of job loss along several dimensions. These include post-displacement probability of employment, the probability of part-time employment, and the magnitude of the earnings loss suffered by job losers. I break the earnings loss into two components: 1) the difference between the earnings received by job losers on their post-displacement job and the earnings they received prior to displacement; and 2) foregone earnings growth measured by the earnings growth received by a group of non-displaced workers. I find that more educated job losers have higher post-displacement employment rates and are more likely to be employed full-time. Those who are reemployed, even full-time and regardless of education level, suffer significant earnings declines relative to what they earned before they were displaced. In addition to the decline in earnings, foregone earnings growth is an important additional part of the cost of job loss. One striking finding is that, for re-employed job losers with education beyond high school, the earnings loss is dramatically larger in the 2001–2003 period than in any earlier period for which there are data.

The rate of job loss

I analyze data on 839,434 individuals between the ages of 20 and 64 from the DWS conducted as part of the January CPS in 1984, 1986, 1988, 1990, 1992, 2002, and 2004 and the February CPS in 1994, 1996, 1998, and 2000. In these surveys, I count as job losers workers who reported a job loss in the three calendar years prior to the survey. Based on these data, I calculate the rate of job loss as the ratio of the number of reported job losers divided by the number of workers who were either employed at the survey date or reported a job loss but were not employed at the survey date. I then adjust

these job loss rates as described in Farber (2004) to account for the change in the recall period from five years to three years in 1994 and changes in the wording of the key job loss question.[3]

In my view, information on rates of job loss is presented most accessibly in graphical form, and I organize the discussion here around a series of figures.[4]

Figure 1 contains plots of adjusted three-year job loss rates computed from each DWS from 1984 to 2004, along with the average civilian unemployment rate for each three-year period. The cyclical behavior of job loss is apparent, with job-loss rates clearly positively correlated with the unemployment rate ($\rho = 0.39$). Both unemployment and job-loss rates were high in the 1981–83 period and they both fell sharply during the expansion of the mid-1980s. However, the job-loss rate rose much more sharply from the 1987–89 to the 1989–91 period than did the unemployment rate. The job-loss rate rose by fully 3.1 percentage points (from 7.1 percent to 10.2 percent), while the average unemployment rate rose by only 0.2 percent (from 5.7 percent to 5.9 percent) over this period. Between 1993 and 1999, both the job-loss and unemployment rates fell sharply, but the gap between them remained larger than in the strong labor market of the late 1980s.

The unemployment rate continued to fall in the 1999–2001 period before rising somewhat in the 2001–03 period. The job loss rate rose sharply after the 1997–99 trough through the 2001–03 period.[5] The gap between the job loss rate and the unemployment rate is the largest it has been over the history of the DWS.

Figure 2 contains three-year rates of job loss by year for each of four education categories. Not surprisingly, job loss rates are dramatically higher for less educated

FIGURE 1

Unemployment and job loss rates, by year

FIGURE 2

Three-year job loss rate by education, 1981–2003

rate of job loss

Legend:
- ED < 12
- ED = 12
- ED 13–15
- ED ≥ 16

Has there been a secular increase in the rate of job loss?

It is clear that job loss was slow to decline in the early stages of the economic expansion of the 1990s relative to the decline in the economic expansion of the 1980s. Overall job-loss rates did decline substantially beginning in the 1995–97 period and, by 1997–1999, were approximately as low as they had been in the late 1980s. There was some variation by education and age. Job-loss rates among older and more educated workers did decline after 1995, but they remained higher than they were at the peak of the 1980s expansion. This may reflect the kind of restructuring that has been the subject of much attention since the early 1990s. Job loss rates have increased substantially since the 1999–2001 period and have not yet declined. This is despite the fact that the recession, as defined by the National Bureau of Economic Research, ended in late 2001, and it is likely due to the lack of robust employment growth in the recovery to date.

The consequences of job loss

Due to the unusual character of the recession of 2001 and the subsequent recovery beginning in November 2001, it is of interest to investigate how workers who lost jobs since 1991 have fared. The recession of

workers than for more educated workers. There is a strong cyclical pattern in job loss rates for less educated workers, but the cyclical pattern is weaker for more educated workers. For example, the job loss rate for workers with 12 years of education was 8.9 percent in 1997–99 (the lowest in the sample period), compared with 14.3 percent in 1981–83. In contrast, the job loss rate for workers with at least 16 years of education was 6.7 percent in 1997–99, compared with 6.9 percent in 1981–83 and 5.4 percent in 1987–89. It appears that there were upsurges in job loss rates for more educated workers in the early and mid-1990s and again early in the new century. The job loss rate for workers with at least 16 years of education attained its highest level in the 2001–03 period, 9.9 percent. Job loss rates for the other educational groups show a cyclical pattern but no upward trend.

Figure 3 contains three-year job loss rates by year for four age groups in a range from 20 to 64. Job loss rates are highest for the youngest workers (20–29) and generally show the standard cyclical pattern. The job loss rates of the two oldest groups, ages 40–49 and 50–64, are very similar. There is little evidence here of a secular increase in job loss rates among older workers.

FIGURE 3

Three-year job loss rate by age, 1981–2003

rate of job loss

Legend:
- Age 20–29
- Age 30–39
- Age 40–49
- Age 50–64

2001 followed a sustained expansion that lasted for almost ten years and was of quite short duration itself, lasting only eight months or so.[6] The expansion in 2002 and 2003 featured rapid gross domestic product (GDP) and productivity growth but relatively little employment growth and only a small decline in the unemployment rate. Additionally, as I documented above, job-loss rates remained high.

I examine two sets of outcomes for displaced workers. The first set concerns post job-loss employment experience, and I examine survey-date labor force status. These include rates of employment (both full- and part-time), unemployment, and nonparticipation. The second set of outcomes concerns earnings among reemployed job losers. Here, I examine the change in weekly earnings for displaced workers between the pre-displacement job and the job held at the DWS survey date. Because earnings of displaced workers would likely have changed had the workers not been displaced, I also use a control group of workers from the outgoing rotation groups of the CPS to compute the change in earnings over the same period covered by each DWS for workers who were not displaced. I then use these changes to compute difference-in-difference (DID) estimates of the effect of displacement on earnings of reemployed workers.
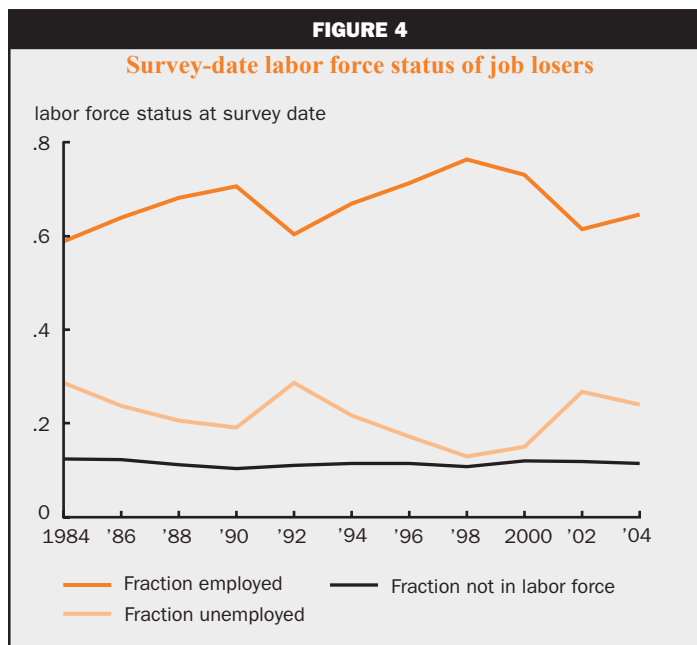
The design changes in the DWS since 1994 complicate the analysis of the consequences of job loss. Most importantly, the follow-up questions designed to gather information on the characteristics of the lost job and experience since job loss were asked only of job losers who reported one of the following three reasons for the job loss: slack work, plant closing, or position/shift abolished. I term these the "big three" reasons. Workers who lost jobs due to the ending of

FIGURE 4

Survey-date labor force status of job losers

labor force status at survey date

Fraction employed — Fraction not in labor force
Fraction unemployed

FIGURE 5

Survey-date labor force status of job losers, by sex

Male
labor force status at survey date, fraction

Female
labor force status at survey date, fraction

Employed — Unemployed — Not in labor force

FIGURE 6

Survey-date labor force status of job losers, by education

A. ED < 12

fraction

B. ED = 12

fraction

C. ED 13–15

fraction

D. ED ≥ 16

fraction

Employed   Unemployed   Not in labor force

a temporary job, the ending of a self-employment situation, or "other" reasons were not asked the follow-up questions. In order to maintain comparability across years my analysis, regardless of year, uses only workers who lost jobs for the big three reasons. Additionally, in order to have a consistent sample over time, I do not use information on job losers in the 1984–92 DWS whose reported job loss was more than three years prior to the interview date.

Post-displacement labor force status

In this section, I examine how the distribution of survey-date labor force status of workers has varied over time and with other factors, including sex, education,

and age. Figure 4 contains plots of the fraction of job losers employed, unemployed, and not in the labor force at each DWS survey date. It is clear from this figure that the post-displacement employment rate is procyclical, with relatively low rates in the slack labor markets of 1984 and 1992. The figure also shows that the post-displacement employment rate has been increasing since 1992, reaching its highest levels in 1998 before declining slightly in 2000 and then more sharply in 2002. The fraction employed increased slightly at the most recent (2004) survey date.

Not surprisingly, the survey-date unemployment rate among job losers moves counter-cyclically, with peak unemployment rates at the 1984, 1992, and

FIGURE 7

Survey-date labor force status of job losers, by age

A. Age 20–24
fraction

B. Age 25–44
fraction

C. Age 45–54
fraction

D. Age 55–64
fraction

——— Employed   ——— Unemployed   ——— Not in labor force

2002 survey dates. This mirrors the movements noted in the employment fraction. The survey-date fraction of job losers not in the labor force is remarkably constant across all years, at about 10 percent. There is no evidence that job losers are disproportionately discouraged in recessions, leading to withdrawal from the labor force.

The use of aggregate fractions in figure 4 masks some important differences in labor force status across workers by sex, education, and age. Figure 5 contains plots of the distribution of survey-date labor force status by sex, and, while the male and female plots show the same cyclical patterns, it is clear that female job losers have weaker attachment to the labor

force. Women have lower post-displacement employment and unemployment rates and substantially higher fractions not in the labor force. It is worth noting that these differences by sex are among both men and women who were working and lost a job, so that this does not simply reflect the fact that some women are consistently out of the labor force. It may reflect the fact that some women have a richer set of alternative activities on which to spend time, such as bearing and raising children. It may be that the timing of job loss among females, with its exogenous loss of specific capital, affects the timing of fertility decisions.

Another important dimension along which there are differences is education. Figure 6 contains plots

FIGURE 8

Fraction part-time at survey date, by part-time status on lost job

fraction part-time at survey date

Lost part-time job

Lost full-time job

Year of job loss
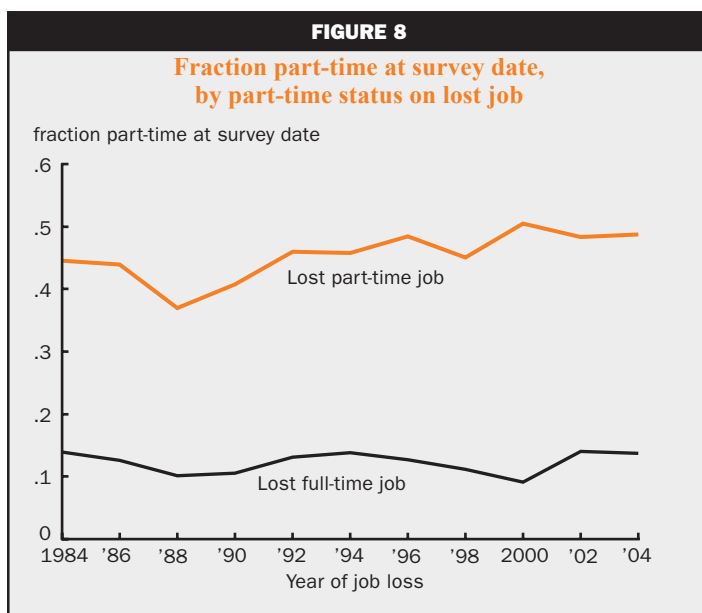
of survey-date employment probabilities for displaced workers by year broken down by education. Not surprisingly, the likelihood of post-displacement employment rises with education, while there is a negative relationship between post-displacement unemployment and education.

The usual cyclical pattern of both the employment and unemployment fractions exists at all education levels. However, until recently, there was substantially more cyclical variation among the less educated. In the early 1990s, the fraction employed among college graduate job losers fell from a peak of about 82 percent in 1990 to a trough of 74 percent in 1992, a decline of 8 percentage points. Over the same period, the fraction employed among high school graduate job losers fell from 68 percent to 57 percent, a decline of 11 percentage points. In the most recent recession, the fraction employed among college graduate job losers fell from a peak of about 85 percent in 1998 to a trough of 68 percent in 2002, a decline of 17 percentage points. Over the same period, the fraction employed among high school graduate job losers fell from 74 percent to 57 percent, also a decline of 17 percentage points. Fractions unemployed follow a similar pattern.

The likelihood of being out of the labor force post-displacement falls with education, although the gap by education level has narrowed slightly over time.

There are also strong differences in post-displacement labor force status by age. Figure 7 contains plots of survey-date employment probabilities for displaced workers by year broken down by age. As with sex and education, the usual cyclical pattern of both the

employment and unemployment fractions exists at all age levels. Not surprisingly, prime-age job losers (25–54 years of age) have the strongest attachment to the labor force. They have the highest fraction employed and the lowest fraction out of the labor force. Interestingly, older job losers (55–64 years of age) are substantially more likely than younger job losers to be out of the labor force.

Since older job losers have, on average, more seniority on the lost job, it is likely that they lose more specific capital on average as a result of job loss then do younger workers. The result is that the gap between earnings on the lost job and likely reemployment earnings of older displaced workers will be relatively large. In this situation, it would not be surprising that a substantial fraction of older displaced workers would decide to retire and report that they are not in the labor force subsequent to job loss.

Post-displacement full-time/part-time status

Many reemployed job losers are employed part-time subsequent to job loss. Some of these workers lost part-time jobs but many had lost full-time jobs. In addition to having lower weekly earnings, it is well known that part-time workers have substantially lower hourly wage rates then do full-time workers. The DWS collects information on part-time status (less than 35 hours per week) on the lost job, and it is straightforward to compute part-time status on post-displacement jobs from the standard CPS hours information. The analysis in this section focuses only on individuals employed at the survey date, and all part-time rates are computed based on this group of workers.

Figure 8 contains a plot of the fraction of reemployed job losers who are employed part-time at each survey date conditional on part-time status on the lost job.[7] Not surprisingly, workers who lose part-time jobs are substantially more likely to be working in part-time jobs at the survey date. Many of these workers are part-time due to labor supply choices, and it is reasonable to expect that these workers would continue to choose to work part-time. It is noteworthy, then, that on the order of 50 percent of part-time job losers are working full-time at the survey date.

In terms of the cost of job loss, a more interesting group to study consists of those workers who lost full-time jobs. About 10 percent of these workers are working part-time at the survey date. It appears that there

FIGURE 9

Fraction part-time at survey date, by sex and part-time status on lost job

A. Male
fraction part-time at survey date

A. Female
fraction part-time at survey date
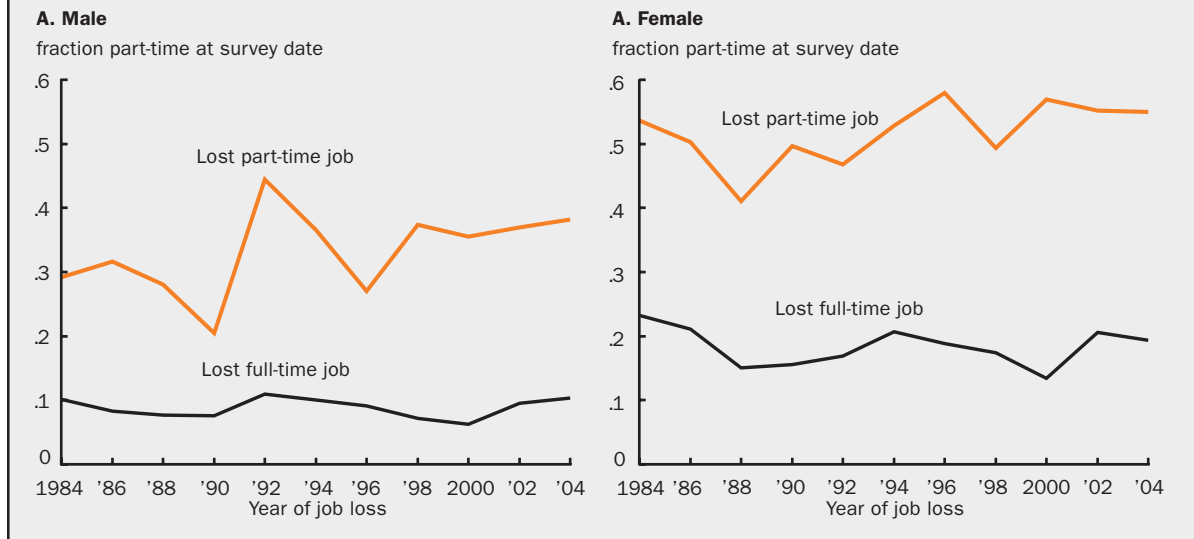
is a cyclical component to the ability of full-time job losers to find full-time employment. The post-displacement part-time rate among full-time job losers is higher in the slack labor markets of the early 1980s and the early 1990s. This part-time rate reached its lowest level in the late 1990s before increasing in 2002 and 2004.

There are important differences by sex in the post-displacement part-time employment rate. In order to illustrate these differences, figure 9 contains separate plots for males and females of the fraction of reemployed job losers that were employed part-time at each survey date conditional on part-time status on the lost job. The post-displacement part-time rate is substantially higher (about 10 percentage points) among females, even controlling for part-time status on the lost job. This is consistent with the earlier finding that, relative to male job losers, female job losers are less likely to be reemployed and more likely to be out of the labor force. As noted earlier, this may be a labor supply response, reflecting the fact that some women have a richer set of alternative activities.

The loss in earnings due to displacement

The analysis of the loss in earnings of reemployed displaced workers proceeds in two stages. First, I investigate the change in earnings between the lost job and the job held at the DWS survey date. However, had the displaced worker not lost his or her job, earnings likely would have grown over the interval between the date of job loss and the DWS survey date. Thus, second, I investigate the earnings loss suffered by displaced workers including both the decline in

earnings of the displaced workers and the increase in earnings enjoyed by non-displaced workers that is foregone by displaced workers. In order to measure this earnings loss, I need a control group of non-displaced workers, and later, I provide such a control group using data from the CPS outgoing rotation groups.

Difference estimates of the change in earnings as a result of job loss

I begin the analysis of earnings changes by examining the difference in real weekly earnings between the post-displacement job and the job from which the worker was displaced.[8] I restrict my analysis of weekly earnings changes to workers who make full-time to full-time employment transitions (that is, lost a full-time job and are reemployed in a full-time job).[9]

Figure 10 contains the average decline in log real weekly earnings between the lost job and the survey-date job for workers who were not self-employed on either the lost job or the new job and who made full-time to full-time transitions broken down by survey year. It is clear that there is a strong cyclical component to the earnings change. The average earnings decline was quite large in 1981–83 (10.8 percent) and eventually fell to 5.6 percent in 1987–89 before rising to 11.3 percent in 1989–91. During the 1990s the decline in average real earnings decreased, falling to a statistically insignificant 0.2 percent in the 1997–99 period. The magnitude of the decline increased subsequently, rising to its highest level (13.6 percent) in the most recent period.

Figure 11 contains the average decline in log real weekly earnings between the lost job and the survey-date

Average decline in real weekly earnings, by year

Average decline in real weekly earnings
Full-time to full-time transitions
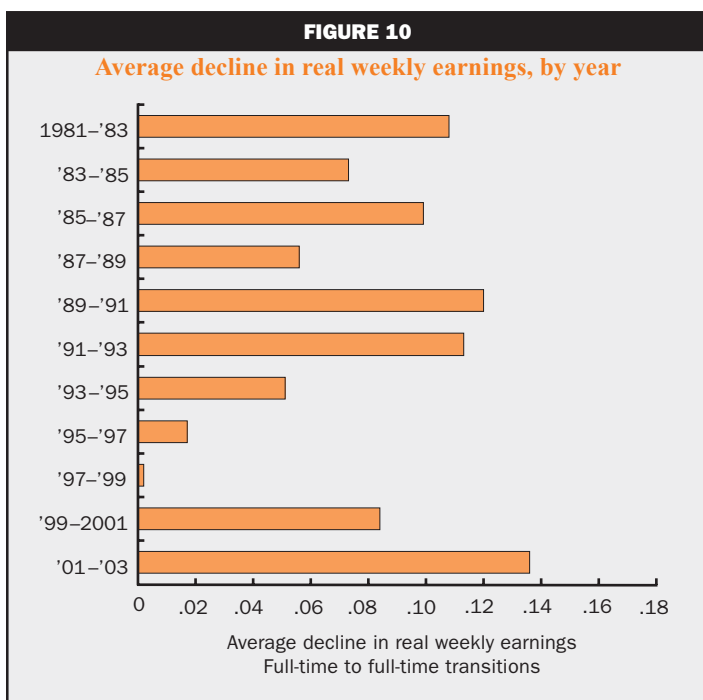
job for workers who make full-time to full-time transitions broken down by education. During the first part of the sample period (1981–91), there were statistically significant differences in earnings changes across educational categories, with workers with more education suffering smaller earnings declines, on average, than workers with less education. However, since 1991 the differences in earnings changes across educational groups have not been statistically significant. There was a general decline in the earnings loss across educational categories during the 1990s that has reversed since the 1999–01 period. One striking finding is that the average earnings decline of job losers who have attended college is now larger than the average earnings decline of workers with less education.

While not presented here, multivariate regression analysis of the earnings change of displaced workers shows no significant relationship with race or sex.[10] However, there is a very strong relationship between the change in earnings and tenure on the lost job. The average earnings loss is dramatically larger when the worker had accumulated substantial tenure on the lost job. This is consistent with the destruction of job-specific human capital when a long-term job ends.[11]

Difference-in-difference estimates of the effect of job loss on earnings

In order to account for the extent to which earnings might have grown had the workers not been displaced,

I generate a comparison group of workers using a random sample from the merged outgoing rotation group (MOGRG) files of the CPS for the three calendar years prior to each DWS (period 0), together with all workers from the outgoing rotation groups of the CPS containing the DWS (period *t*). The data from MOGRG files of the CPS provides the period 0 earnings, and the data from the outgoing rotation groups in the CPS containing the DWS provide the period *t* earnings.

More formally, define the change in log real earnings for displaced workers as

$$1) \qquad \Delta_d = (\ln W_{dt} - \ln W_{d0}),$$

and define the difference in log real earnings for workers in the comparison group as

$$2) \qquad \Delta_c = (\ln W_{ct} - \ln W_{c0}),$$

where *d* refers to displaced workers (the "treatment" group), *c* refers to non-displaced workers (the "comparison" group), *t* refers to "current" (post-displacement) period, and 0 refers to the "initial" (pre-displacement) period. The difference-in-difference estimate of the loss in real weekly earnings due to job loss is computed as

$$3) \qquad \Delta\Delta = \Delta_d - \Delta_c.$$

Assuming average earnings would have grown rather than declined in the absence of displacement, Δ_c will be positive, so that the difference-in-difference estimate of the average earnings decline ($\Delta\Delta$) will be larger in absolute value than the simple difference estimate (Δ_d).

I generate initial earnings for the comparison group ($\ln W_{c0}$) from a random sample from the merged outgoing rotation group CPS file (MOGRG) each year from 1981 to 2003.[12] The resulting comparison sample of initial earnings for full-time workers contains 121,550 observations.

The CPS containing the DWS has two outgoing rotation groups (OGRGs) with earnings data for all workers. These provide the observations on current earnings for the comparison group of non-displaced workers ($\ln W_{ct}$). This sample contains observations on full-time earnings for 119,269 workers at the DWS survey date.

Ideally, these comparison groups would contain only workers who had not lost a job during the relevant

FIGURE 11

Average decline in log weekly earnings, by year and education

A. ED < 12

B. ED = 12

C. ED 13–15

D. ED ≥ 16
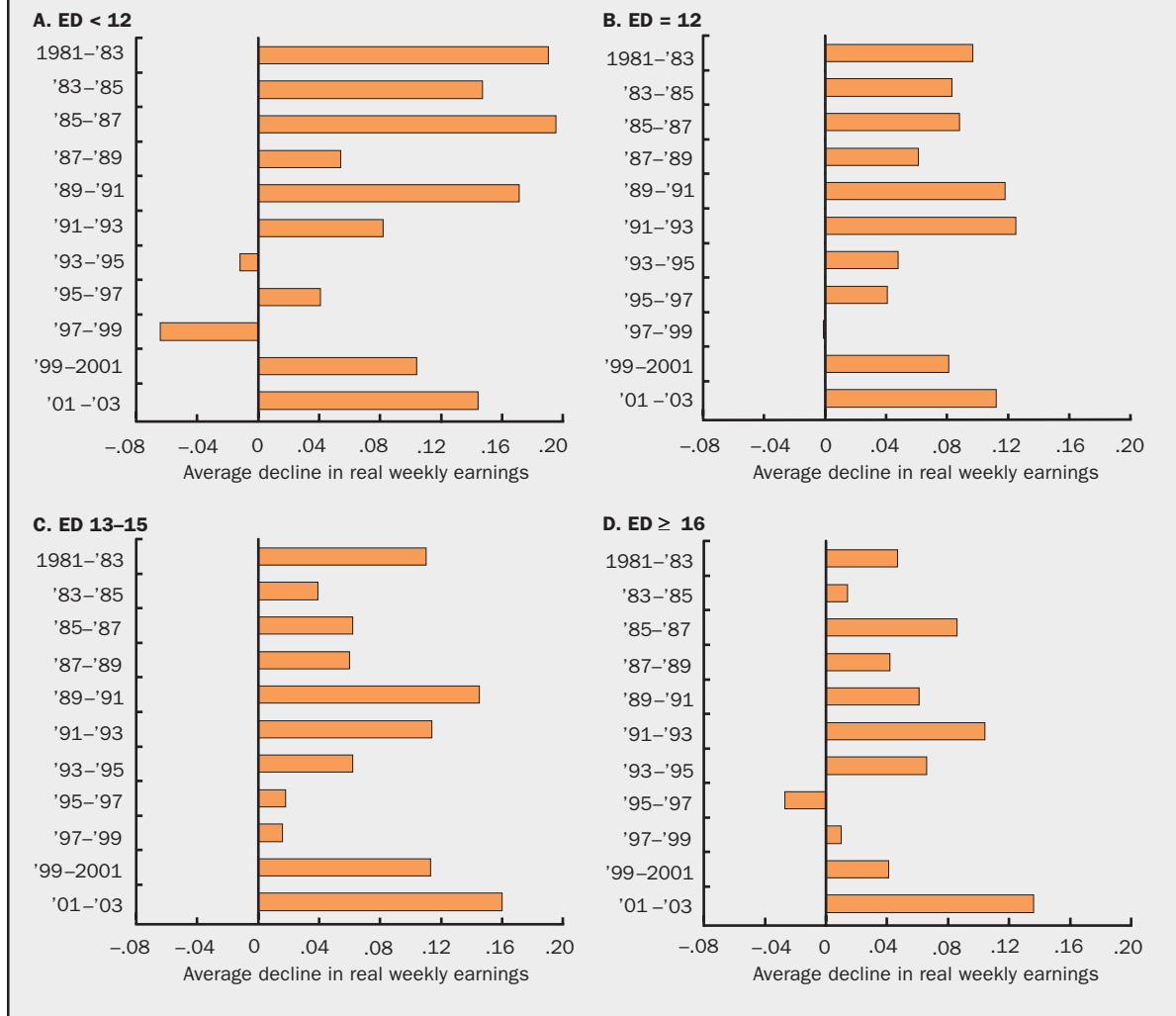
period. While I can identify the displaced workers in period t (since the data come from the CPS with DWS), I cannot identify the workers who will be displaced in the MOGRG samples. To the extent that earnings growth for displaced workers is different from that for the non-displaced workers, earnings growth computed from the comparison group as defined here would lead to biased estimates of earnings growth for a group of non-displaced workers. In order to address this problem, I adjust the estimates based on the outgoing rotation groups to provide unbiased estimates of the earnings change for a comparison group of non-displaced workers. This adjustment is described in the appendix.

The source of data for the treatment group's earnings is clear. These data come from the DWS, where $\ln W_{dt}$ is survey-date earnings for displaced workers

and $\ln W_{d0}$ is earnings on the lost job. The pre-displacement sample consists of all displaced workers who were not self-employed but were employed full-time on the lost job and who were employed with earnings available at the survey date ($n = 21,264$). The post-displacement sample consists of all displaced workers who were not self-employed but were employed full-time at the survey date and who had earnings data available on the lost job ($n = 19,460$).

These data are used as described in the appendix to compute the regression-adjusted difference-in-difference estimates of the earnings loss from job loss for full-time workers for each year.

Figure 12 contains the overall difference-in-difference estimates of the earnings loss from job loss for each year.[13] In order for the figure to be clearly readable, the earnings loss for displaced workers in presented

as a positive number (the negative of the earnings change for displaced workers: $-\Delta_d$). The foregone earnings increase is Δ_c, and the difference-in-difference earnings effect is $\Delta\Delta$. Note that these estimates incorporate the effect of normal growth along the age–earnings profile. This is because the age variables in the regression are measured at the DWS survey date (period t) for both the period 0 and period t observations.[14] The results show that in the 1980s displaced workers earned about 9 percent less, on average, after displacement than before, while earnings for the comparison group rose by about 4.5 percent over the same period. The difference-in-difference estimate of the earnings loss is the difference between these numbers, which is a loss of about 13 percent during the 1980s.[15] The 1990s show a more striking pattern. The earnings decline of displaced workers in the 1990s dropped sharply during the decade, from 11.3 percent in the 1989–91 period to a statistically insignificant 0.9 percent in 1997–99. During the same period, the earnings growth of the comparison group increased from 2.9 percent in 1989–91 to 7.5 percent in 1997–99, reflecting the general increase in real wages in the late 1990s. The difference-in-difference estimate of the earnings loss associated with job loss decreased during the 1990s (from a high of 13.8 percent in 1989–91 to a low of 6.7 percent in 1995–97), reflecting the fact that the earnings decline suffered by displaced workers fell by more than earnings grew among the comparison group.

The picture changes dramatically beginning with the most recent recession. While the foregone earnings increase fell somewhat from 7.5 percent in 1997–99 to 4.2 percent in 2001–03, the earnings decline suffered by displaced workers increased substantially from virtually zero in the 1997–99 period to 13.7 percent in 2001–03. The result is that the difference-in-difference estimate of the earnings loss from displacement increased from 7.8 percent in 1997–99 to 17.1 percent in 2001–03.

Figure 13 contains difference-in-difference estimates of the earnings loss by education category.[16] The year-by-year estimates by education level show some interesting changes over time. Not surprisingly given the work on increased inequality and the decline in earnings among the less-skilled, job losers with less than a high-school education suffered dramatic earnings losses in the 1980s. This improved in the early 1990s, but the difference-in-difference estimate of the earnings loss for these workers has been increasing since the mid-1990s. The estimated earnings losses are relatively stable (in the 10 percent to 15 percent range) over time for high-school graduates, although the composition has shifted from predominantly an earnings decline to more weight on foregone earnings growth.

The situation among job losers with more than a high-school education is particularly striking since the late 1990s. The difference-in-difference estimate of the earnings loss associated with job loss for workers with 13–15 years of education increased dramatically to about 20 percent in the 2001–03 period, more than tripling from about 6 percent in 1997–99. For these workers, the cause is a sharp increase in the earnings decline associated with job loss from zero in 1997–99 to 16.5 percent in 2001–03. The pattern is even starker for workers with at least 16 years of education. The difference-in-difference estimate of the earnings loss for these workers increased to 21 percent in the 2001–03 period, more than quadrupling from about 4.5 percent in 1995–97. For these workers, the cause is also a sharp increase in the earnings decline associated with job loss from less than zero (–2.5 percent) in 1995–97 to 16.1 percent in 2001–03. It is worth noting that, unlike in earlier periods, the earning decline suffered by workers with more than a high-school education dwarfs that suffered by workers with a high-school education or less.

It is also worth noting that foregone earnings growth (the earnings change of

FIGURE 12

Difference-in-difference analysis of proportional earnings loss

Legend:
— Earnings decline
— Foregone earnings increase
— Difference-in-difference earnings effect
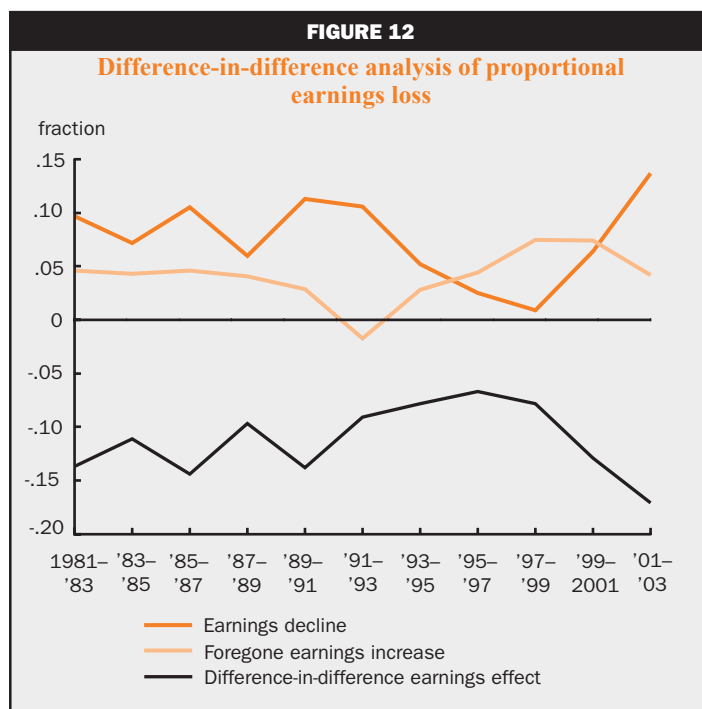
FIGURE 13

Difference-in-difference analysis of proportional earnings loss, by education

A. ED < 12

fraction

B. ED = 12

fraction

C. ED 13–15

fraction

D. ED ≥ 16

fraction

Earnings decline
Foregone earnings increase
Difference-in-difference earnings effect

the comparison group) has become a more important component of the overall earnings effect of job loss since the 1990s. This was particularly true for workers with at least 16 years of education since 1995, but it is a factor in all education groups in the 1995–99 period. Job losers with at least 16 years of education in the 1997–99 period suffered a dramatic real earnings decline on average, while the college-educated comparison group saw a sharp rise in real earnings. This pattern reversed somewhat in the 2001–03 period, with foregone earnings growth becoming less important relative to the earnings decline among those displaced.

Conclusion

Job loss and worker dislocation are facts of life in the U.S. economy. They are part of an efficient labor allocation process. The problem is in the costs that are borne by job losers. While these costs are cyclical, they are substantial even in good times. In the most recent period (2001–03),

■ About 35 percent of job losers are not employed at the subsequent survey date;

■ About 13 percent reemployed full-time job losers are holding part-time jobs;

- Full-time job losers who find new full-time jobs earn about 13 percent less on average in their new jobs than in the lost job; and

- Counting foregone earnings increases enjoyed by non-losers, full-time job losers who find new full-time jobs earn up to 17 percent less on average in their new jobs than they would have had they not been displaced.

These measures likely substantially understate the true economic cost of job loss. First, time spent unemployed by those workers who are reemployed is not considered. Second, more hinges on employment, particularly full-time employment, in the U.S. than in other developed countries. Health insurance and pensions are closely linked to employment, and many workers do not have alternative access to these important benefits. This makes job loss an expensive and damaging event on average.

There is an underlying tension here between equity and efficiency. Most economists argue that the relatively low costs of shedding workers in the U.S. are efficiency enhancing, resulting in higher total output. However, these costs are shared inequitably. Workers generally bear too large a share of the burden, particularly when measured relative to their resources. These costs, to the extent they reflect non-employment or under-employment, also represent inefficiency. An economy with too many unemployed workers is operating inside its production possibilities frontier, and resources are being wasted.

One appropriate policy response is to speed the reallocation of workers to appropriate alternative employment. Perhaps modern information technology, including internet job listings, job search, and so on, would be useful. A second appropriate policy response is helping workers acquire new skills suitable to a changing economy. Another, more controversial, policy response would be relocation aid to encourage displaced workers to relocate geographically to alleviate any geographic mismatch of workers and jobs. While this may make sense in purely economic terms, such mobility away from hard-hit areas imposes serious social costs. However, living in chronically depressed communities also imposes such costs. A program of universal health care that is not linked to employment would also mitigate some of the costs of job loss.

To conclude, job loss is both a strength and a weakness of our economy. The core problem is how to manage job loss to minimize the costs borne by displaced workers and their communities. Programs to aid matching of firms and workers, education and retraining of job losers, relocation aid, and alternative sources of health care and other job-related benefits can all play a role.

NOTES

[1]Tabulation of the mobility supplement to the January 2004 *Current Population Survey* yields the result that 19.5 percent of workers have been with their employer for less than one year and 22.9 percent of workers have been with their employer for one year or less.

[2]Examples of earlier work using the DWS include Farber (1993, 1997, 1998, 1999b, 2004), Podgursky and Swaim (1987), Kletzer (1989), Topel (1990), Gardner (1995), Neal (1995), Esposito and Fisher (1997), and Hipple (1999). I present a brief review of this literature in Farber (2004).

[3]Job losers are asked to report the reason for their job loss. One allowable response is "other." The adjustment for changes in the wording of the key job loss question discounts job loss rates for "other" reasons by 37.4 percent for the 1984–92 DWS and by 74.8 percent for the 1994 and later DWS. See Farber (1998) for details.

[4]For the numerical values underlying all figures in this study, all counts are weighted using the CPS sampling weights.

[5]The use of three-year averages here hides the facts that the job loss rate was steady in 1999 and 2000 before increasing sharply in 2001, while the unemployment rate declined slightly in 1999 and 2000 before increasing slightly in 2001. The comparison of job loss rates for specific years of job loss compares the job loss rates across surveys computed using only job losers who reported losing jobs the same number of years prior to the survey date. For example, the 2001 job loss rate is computed from the 2002 DWS and compared with the 1999 job loss rate computed from the 2000 DWS. Similarly, the 2000 job loss rate is computed from the 2002 DWS and compared with the 1998 job loss rate computed from the 2000 DWS.

[6]The Business Cycle Dating Committee of the National Bureau of Economic Research dated the recession as starting March 2001 and ending in November 2001. See www.nber.org/cycles/july2003.html.

[7]Note that there is a problem of temporal comparability of the data on part-time employment at the survey date. The new survey instrument, first used in the 1994 CPS, asks a different battery of questions about hours of work on the current job, and this may have the effect of raising the fraction of workers reporting they are currently working part-time (Polivka and Miller, 1998). The survey question regarding whether the lost job was part-time is unchanged in the 1994 and later DWS.

[8]Earnings are deflated by the 1982–84 = 100 Consumer Price Index (CPI). The CPI in the reported year of displacement is used to deflate earnings on the old job. The CPI for the DWS survey month is used to deflate current earnings.

[9]The change in real weekly earnings for workers who make a full-time to full-time transition is a straightforward measure, but it only gets at part of the effect of displacement on earnings. It does not account for the effect of job loss on unemployment spells, employment probabilities, or probabilities of part-time work. Nor does it account for earnings growth that may have occurred absent the job loss.

[10]See Farber (2004) for presentation of regression results on the earnings change through the 2002 DWS.

[11]Kletzer (1989), Neal (1995), and Parent (1995) address the issue of job loss and specific capital, both at the firm and industry level.

[12]The size of the random sample was set so that 1) the size of the sample with initial earnings on the control group was expected to be the same as that with current earnings on the control group (two rotation groups); and 2) the distribution of years since the associated DWS survey date roughly mimicked the distribution of years since displacement in the sample of displaced workers. In other words, a separate control sample was drawn for each DWS from the three MOGRGs for the years immediately prior to the DWS that reflected the distribution of time since job loss. Each MOGRG file has 24 rotation groups (two per month for 12 months). Denote the share of reported job loss one, two, and three years prior to the survey date t as p_{1t}, p_{2t}, and p_{3t} respectively. In order to get the appropriate sample size in survey year t, I took a random sample with probability $(p_{1t})(2)/24$. Similarly, for the second and third years prior to the DWS, I took random samples with probability $(p_{2t})(2)/24$ and $(p_{3t})(2)/24$, respectively.

[13]These differences in log earnings are approximations to the appropriate proportional differences in earnings levels that are reasonably accurate for values of $|\Delta| < 0.2$. Since some estimated values are outside this range, I convert each of the estimates to the appropriate proportional difference as $exp(\Delta) - 1$ and proceed using these transformed measures.

[14]This is one reason why it was important that the sample fractions in the initial-earnings control group mimic the fractions in the treatment group with respect to the time until the DWS survey date.

[15]Because I present the earnings loss rather than the earnings change for displaced workers in the figure, the difference-in-difference estimate is the negative of the sum of the earnings decline for displaced workers and the foregone earnings increase.

[16]These estimates are based on separate regressions by educational category for each year.

APPENDIX: DETAILS OF THE DIFFERENCE-IN-DIFFERENCE PROCEDURE

The observed wage change of workers in the outgoing rotation groups (which include both displaced and non-displaced workers) is a probability-of-job-loss weighted average of the change in earnings for displaced and non-displaced workers. Define the change in earnings for the outgoing rotation groups as

$$4) \quad \Delta_c = (1 - \theta)\Delta_c + \theta\Delta_d,$$

where Δ_c is the earnings change in the outgoing rotation group sample ($\ln W_{ct} - \ln W_{c0}$) and θ is the fraction of workers in the outgoing rotation group sample who lost a job (the displacement rate).

The observable quantities are Δ_c and Δ_d, but calculation of the difference-in-difference estimate of the earnings change due to job loss requires both Δ_d and Δ_c (equations 1 and 2).[1] I can compute Δ_c with the available data on Δ_c, Δ_d, and θ. Using equation 4, the change in earnings for the comparison group is

$$5) \quad \Delta_c = \frac{\Delta_c - \theta\Delta_d}{(1 - \theta)}.$$

and the difference-in-difference estimate of the effect of job loss on earnings is

$$6) \quad \Delta\Delta = \frac{\Delta_d - \Delta_c}{(1 - \theta)}.$$

Intuitively, the samples from the outgoing rotation groups are "contaminated" with displaced workers so that the difference-in-difference estimate computed using this contaminated control group needs to be scaled up by the factor $\frac{1}{(1-\theta)}$ to compensate.

The difference-in-difference estimates are derived from separate ordinary least squares (OLS) regressions for each DWS survey year of log real earnings (deflated by the CPI) on a set of worker characteristics and an indicator for time period (before or after displacement), an indicator for whether the observation is part of the "contaminated" control sample or part of the displacement sample, and the interaction of the time period and sample indicators.[2] This regression is

$$7) \quad \ln W_{is} = X_{is}\beta + \gamma_1 T_s + \gamma_2 D_i + \gamma_3 T_s D_i + \varepsilon_{is},$$

where $\ln W_{is}$ measures log real full-time earnings for individual i in period s (either 0 or t), X is a vector of individual characteristics, β is a vector of coefficients, T_s is a dummy variable indicating the post-displacement period, D_i is a dummy variable indicating the displacement sample, and ε is an error term.[3] The parameters γ_j are used along with information from the DWS on job loss rates (θ) to compute estimates of the earnings effects as follows:

$$8) \quad \Delta_d = \gamma_1 + \gamma_3,$$

$$9) \quad \Delta_c = \gamma_1 - \frac{\theta\gamma_3}{(1 - \theta)}, \text{ and}$$

$$10) \quad \Delta\Delta = \frac{\gamma_3}{(1 - \theta)}.$$

---

[1]Note that I do not use the information on who is displaced that is available in the DWS outgoing rotation groups. My estimate of Δ_c includes both displaced and non-displaced workers at both time 0 and time t.

[2]Note that I do not calculate first-differenced estimates for the displaced workers, as I did in the previous section, despite the fact that the observations are paired. This is because observations for the control group are from a set of cross-sections and are not paired. I do not account for the correlation over time in the two observations for each displaced worker.

[3]The X vector includes a constant and dummy variables for sex, race, nine age categories, and four educational categories.

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Job loss: Bridging the research and policy discussion

Lisa M. Lynch

Although the economy is finally adding net new jobs beyond what is necessary to keep pace with the growth of the working age population, this current economic recovery is unprecedented in terms of its anemic job growth. There are a variety of culprits cited for this sluggish job creation—"offshoring" (moving jobs overseas), productivity growth, geopolitical insecurity, digestion of investments in information and communication technology, rising oil prices, and falling labor supply.

However, few of these explanations are likely to explain much of this sluggish job market on their own. For example, rising health care costs have been cited as a possible reason why employers might be more reluctant to hire new workers. But when we look at trends in total employee compensation, we do not see the kinds of increases that would explain such slow job creation. Since the work force is aging, we might expect that this would reduce the size of the work force as a greater share of workers reach retirement age. However, the labor force participation rate of workers over the age of 55 actually rose about 4 percentage points from 2000 to 2004. So for the moment, the slow pace of job creation does not seem to be related to an aging work force.

Another possible explanation for slow job growth is the phenomenon of offshoring. Manufacturing jobs have moved overseas during the past two decades and this trend continues, especially now in the apparel sector with the elimination of the Multifiber Arrangement in January 2005.[1] What has changed, however, is that service jobs, once thought immune to the offshoring threat, are now going abroad as well. This shift has important policy implications for the extension of trade adjustment assistance to service sector workers, as Lori Kletzer and Howard Rosen discussed in their paper for this conference (also see Kletzer, 2005, in this issue). While I think that the impact of offshoring of

service sector jobs will become increasingly important over time, I do not think it is sufficient to explain a major part of our current anemic job growth.

A more likely explanation for the lackluster job growth is some combination of the good news of sustained productivity growth (although what lies behind this is still fertile ground for research) and the dampening effect of geopolitical concerns, including the price of oil. However, before we conclude that concerns about the structure of the U.S. labor market have been misplaced, I would like to argue that there are quite sensible and rational reasons why people should be concerned about our policy responses in the context of trade and technological change and their impact on workers.

Skill levels in the work force

So what is the problem? Both trade and technological change put pressure on our economy to raise the skill level of the work force. But the supply of skilled workers is just not keeping pace with the changes in demand due to technology and trade. Managers live with this reality everyday. For example, the 2001 American Academy of Management Association Survey on Workplace Testing reports that one in three job applicants tested by employers lacked the basic skills necessary to perform the jobs they sought in 2000. This skill crisis was in place during the boom of the 1990s, it was here during the recession of 2001, and it is still here today. It threatens to be a significant drag on our ability to remain competitive in the global economy through the production of innovative high-skill-content goods. It also undermines our ability to move

Lisa M. Lynch is the William L. Clayton Professor of International Economic Affairs at The Fletcher School, Tufts University and a research associate at the National Bureau of Economic Research.

workers from contracting sectors of our economy to expanding ones.

But fixing this crisis requires us to understand the skill quality both of workers entering the labor market and of those already in the job market. In terms of the skills of new entrants, we see that in spite of a significant increase in the wage premium paid to those with a college degree, there has been a slowdown in the rate of growth in the United States for college enrollment and completion. This slowdown is concentrated among individuals from low-income families and minority families. As Carneiro and Heckman (2003) point out, we are now producing a greater share of low-skilled youth than we did 30 years ago. Thirty years ago, 25 percent of 17 year olds dropped out of high school and didn't return or only completed a general equivalency diploma (GED). That percentage today has risen to 28 percent. Meanwhile, around the world, young people are staying in school longer and outperforming U.S. youth in math and science. The recently released Organization for Economic Cooperation and Development (OECD) Program for International Student Assessment 2003 results for 15 year olds show that the U.S. ranked twenty-eighth out of 40 countries in mathematics and twenty-second out of 40 for science performance.
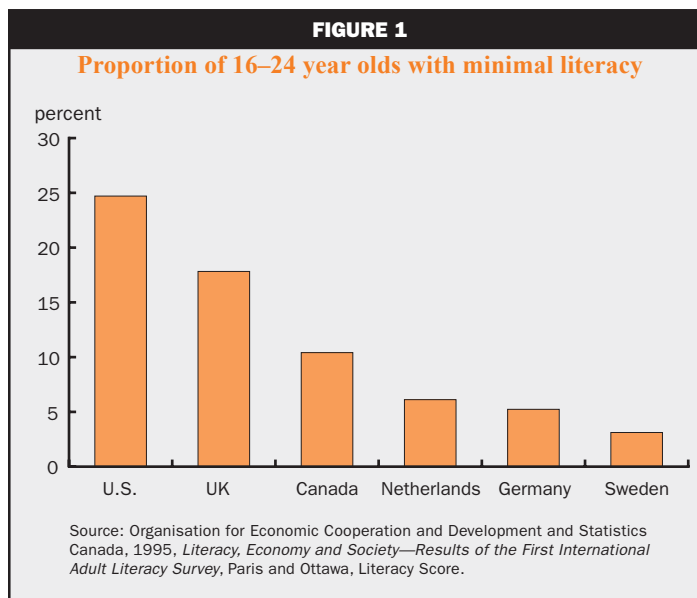
FIGURE 1

Proportion of 16–24 year olds with minimal literacy

Source: Organisation for Economic Cooperation and Development and Statistics Canada, 1995, *Literacy, Economy and Society—Results of the First International Adult Literacy Survey*, Paris and Ottawa, Literacy Score.

FIGURE 2

An emerging gap: The unemployment rate and the share of long-term unemployed

Source: U.S. Bureau of Labor Statistics.

A simple picture can help put this into some perspective. Figure 1 shows the share of 16–24 year olds by country with minimal literacy skills. Twenty-five percent of young people in the U.S. are at this low level versus 5 percent or less in countries such as Germany and Sweden. We think of ourselves in the United States as having a comparative advantage in the production of highly educated workers, but these numbers are disturbing.

What is happening to the stock of workers already in the work force? We know that the wage differential paid to those with a college degree relative to those with just a high school diploma has grown rapidly over the past 30 years and remains high (from 1.4 times greater to 1.7 times greater). While the job loss rate for more educated workers increased over the 1990s relative to earlier periods (Farber, 2003), it remains true that less-educated workers continue to have the highest rates of job loss overall. More-educated workers who do lose their jobs have higher reemployment rates and are more likely to be working full time. But the fact remains, as shown in Farber's (2003) work, that since the mid-1990s, regardless of education, those displaced workers who do succeed in being reemployed suffer large earnings losses compared with their earlier earnings.

Something seems to have changed structurally in our labor market with respect to the experience of displaced workers. Job losers are increasingly people who have permanently lost their jobs rather than being on temporary layoff. The struggle to find new employment shows up as a break in the relationship between the duration of unemployment and the unemployment rate. This break appears to begin in the mid-1990s, as shown in figure 2.

As one can see, there is an emerging gap between the unemployment rate and the share of the unemployed out of work for six months or more that appears around 1994. In December 2004, the U.S. Bureau of Labor Statistics reported that more than one in five unemployed workers were out of work for six months or more in spite of an unemployment rate of 5.4 percent. Historically, this is a very high share relative to the unemployment rate. A major policy concern related to this is that our unemployment insurance system was designed to provide temporary wage coverage for workers on temporary layoff, not to prepare them for new employment.

So where do workers turn to get skills training, and what do we know about the returns to this training? In particular, what has research informed us about what works and how has this research informed the policy process. First, let us look at employer-provided skills training (table 1).

TABLE 1
Employer-provided training and labor market outcomes

- There are large returns to employer-provided training (10 percent–26 percent) that appear to exceed the returns to college (Lynch, 1994).

- Displaced workers with greater amounts of multi-skilling in pre-displacement jobs suffer smaller subsequent wage losses (Kuhn and Sweetman, 2004).

- More-educated workers get more employer training. This creates an important selection issue when evaluating the returns to training, creating a virtuous cycle for the educated and a vicious cycle for those who are not well educated (Lynch, 1994).

- Smaller employers are much less likely to offer training—even for health and safety (Lynch and Black, 1998).

- A real challenge for incumbent workers who have not lost their job but are at risk and want to invest in training is that they also suffer from a shortage of discretionary time to undertake training outside work—this is particularly true for women.

How have these findings influenced policymaking? They have been used by some legislators to justify proposals to provide permanent tax relief to employers who train their workers or to provide additional tax relief for small employers who train. In other countries these findings have also been used as a justification for "pay or play" training taxes. But on the whole in the U.S., these outcomes are viewed in the policy arena as the result of private choices of individuals and firms. There has been little interest in funding the kind of evaluation of employer-provided training programs that government training programs have been subjected to in order to assess private and social returns. Instead, much of the recent policy discussion has focused on accounting standards for these investments in their role as intangible assets to the firm. We do not systematically collect data in any of our national surveys of households or firms on how the training investments by employers or workers have changed in response to supply and demand shocks—including technology and trade. This represents a large deficit in our understanding of trends in this area.

What happens to less-educated workers when they are out of work? If employers are not investing in them, then the government becomes a critical source of skills training. Here the academic research has been very informative and influential for policymakers. In particular, the use of random assignment to evaluate

the effectiveness of the Job Training Partnership Act (JTPA) programs for disadvantaged adults and out of school young workers has been extremely important. Apart from the merits of using random assignment to better evaluate these training programs, an advantage of this methodology is that it is easy to produce simple tables with two columns of results for treatments and controls. No need to talk about propensity scores, standard errors, selection bias, and so on. This has made the random evaluation studies very accessible to a broad audience of non-economists.

In general, research suggested that JTPA training for out of school youth was largely ineffective relative to JTPA adult training. The policy and budgetary response to this research finding was rapid and sharp. We saw a significant shift of federal training funds

away from youth and toward adults during the 1990s. At the same time, evaluation studies of the Job Corps program produced a more optimistic assessment of this type of youth intervention program, especially when outcome measures were broadened to welfare receipt, arrest rates, jail time, along with the usual outcomes of employment probabilities and weekly earnings. Some researchers have interpreted the discrepancy in findings between the returns to JTPA and the Job Corps program for youth as an indication that you get what you pay for—JTPA is a much less expensive program than Job Corps.[2] In other words, small investments yield small returns. However, in the policy world this interpretation of these studies has not translated into a massive expansion of the Job Corps program. It is always easier to cut than to add programs, especially in an era of tightening budget constraints for non-military discretionary spending.

For adult workers, there is more promising evidence that government training programs work—especially certain types of programs and for specific demographic groups (see table 2).

The evaluation evidence on displaced workers programs relative to training for disadvantaged adults has had a significant impact on policymakers' funding priorities. As we see in figure 3, funding for adult training (this includes out of school youth in the JTPA years) has declined steadily since 1985. It fell most sharply in the mid-1990s and this was driven by the evaluation results on youth JTPA training programs. However, since 1994 the share of training funding for displaced workers has risen sharply. Again, this was influenced by more positive findings on the returns to training of displaced workers and a growing need to help permanently displaced experienced workers find employment in expanding sectors of the economy.

Figure 3 also shows what has happened to training dollars for manufacturing workers displaced by trade— this is mandatory spending, while the other two parts are discretionary spending. While this has risen over time, it still represents a very small part of what we spend our training dollars on. (See Kletzer and Rosen, 2004). What does this say about our trade policy? More generally, looking at the figure we see that training dollars (at least as distributed across these three programs) have fallen in real terms since the mid-1980s from approximately $3.7 billion to a bit more than $2.5 billion. This decline has occurred in spite of rising training needs among workers displaced by trade and technology that are cited by policymakers on both sides of the aisle over and over again.

TABLE 2

Government-funded training programs and labor market outcomes

What works

- Classroom training for displaced workers— especially in math/science and health vocational—has a significant impact on wages and employment (Jacobson et al., 2005).

- Old dogs can learn new tricks and their newly acquired skills do not seem to depreciate over time (Jacobson et al., 2005).

- Returns of training for displaced workers seem to be higher than what disadvantaged adults, especially males, experience in their training programs (U.S. Department of Labor, 1995).

- On-the-job training for disadvantaged women is cost-effective, along with classroom training (U.S. Department of Labor, 1995).

- Targeted reemployment bonuses can result in decreased unemployment insurance payments that are cost-effective (O'Leary et al., 2005).

What helps make this work?

- Smaller programs work better than larger programs—they can better tailor program content to specific needs of participants (U.S. Department of Labor, 1995).

- Working with training providers that are well connected with local employers (for example, CET in San Jose, CA) improves the training outcomes (U.S. Department of Labor, 1995).

- Increasing the role of community colleges in the provision of training (see National Governors Association, 1999, for a summary of state-funded employer-focused training programs through community colleges).

FIGURE 3

Workforce Investment Act, JTPA, and trade funding for worker training and employment assistance, 1985–2004

billions of inflation-adjusted dollars

Notes: Adult training includes training for disadvantaged adults and youth. JTPA is Job Training Partnership Act.
Source: Based on author's calculations.
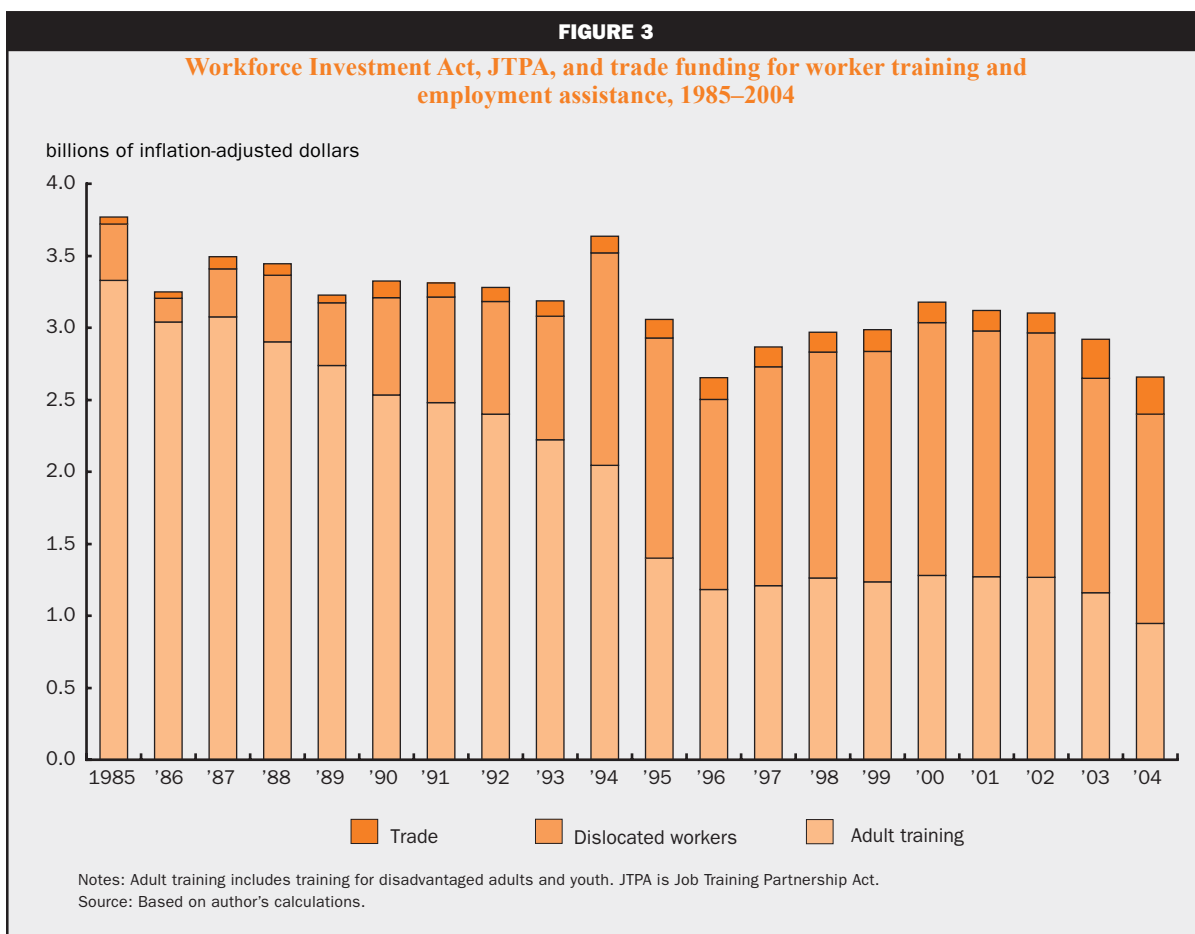
However, figure 3 does not provide the complete picture, because it does not take into account the fact that the work force has been growing over this period. Figure 4 plots per capita (labor force) spending on these three training programs over time, relative to the unemployment rate.

As shown in this figure, per capita spending fell from a "high" of over $30 per worker in 1985 to around $17 per worker in 2004. We are spending about $1 billion less on worker training today than we would have spent 15 years ago for a similar state of the economy.

This might not be cause for concern if the private sector was making up some of this gap—but what we do know about private employers is that training expenditures usually are among the first items to be cut during a recession. The same is true for state governments, many of which had expanded state training programs during the boom times of the 1990s. Recently, depending on how these training programs were funded, many states have had to curtail their discretionary spending on work force training as they have struggled to balance their state budgets in this past recession.

Closing the gap between research and policy

In sum, the evaluation studies on federal training programs have had an important impact on federal funding priorities. These data have helped us better understand what works and for whom with respect to government-funded training programs. But when we look at the overall policy response, we see that the findings on lower returns to some types of training for some disadvantaged adult males have been used to justify reductions in spending for all groups of workers. So the policy debate is not about how much to expand the federal training commitment as much as it is about how to make sure that those programs that do work are not cut. How can academic economists get involved in the policy debate to influence the direction of policies such as unemployment insurance, training programs, and outplacement services?

Joseph Stiglitz (1998), writing about his experience as chairman of the Council of Economic Advisors, talks about the so-called simplicity constraint faced by economists trying to participate in the public

Inflation-adjusted WIA, JTPA, and trade funding per civilian worker relative to the unemployment rate (1985–2004)
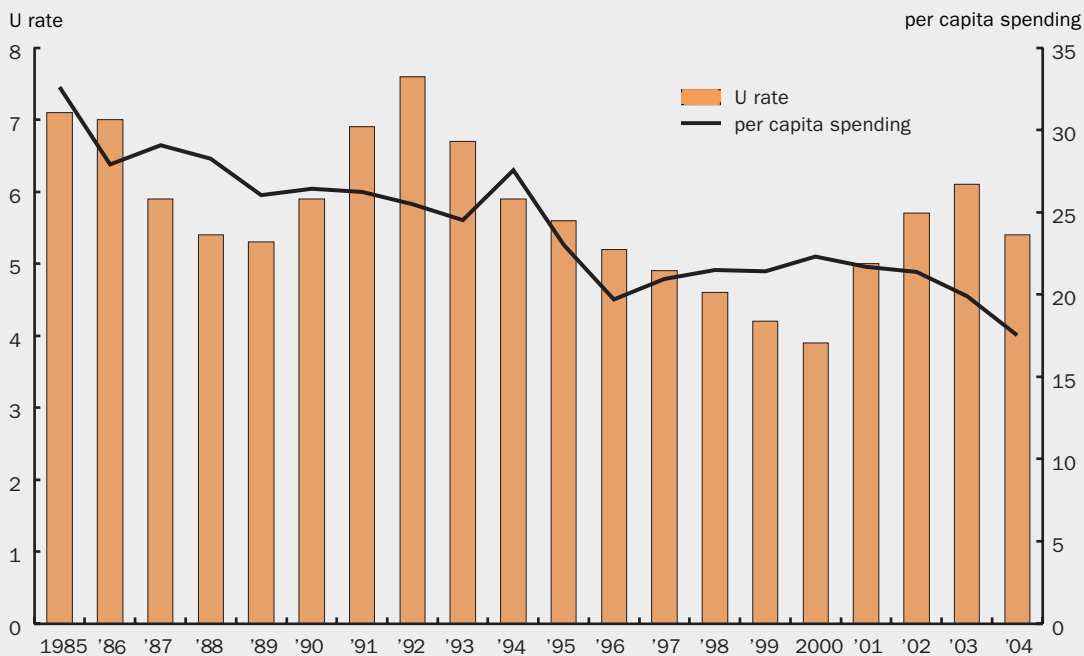
Source: Based on author's calculations.

policy process. He argues that complicated policies and arguments have little place in political discourse. As researchers we need to understand that much of our subtle qualifiers get lost in the politics of policy-making. But at the same time, we must resist the temptation to present our work in black and white and ignore the qualifications and caveats that are so important to understand. So how do we do this? We need to put on our teacher's hat and educate the policy community about our work. We have to do this in a more accessible and jargon-free way. We cannot simply throw our work over the wall to an academic journal and expect that the policymaker will read it. Conferences such as this that bring together academic researchers with policymakers are a good example of how to do this.

This means that we need to understand what policymakers need to know. The good news is that our research agendas and their policy interests are not that dissimilar. Table 3 summarizes some of the topics of common interest.

While there are many areas of common interests for academic researchers and policymakers, unfortunately the funding by the federal government for pilots, demonstration projects, and research on training has

been reduced dramatically—from a high in nominal dollars of $130 million in fiscal year 2002 to only $58 million in 2004. The amount allocated to research out of this total is very small. But without more detailed evaluation of what works, it will become impossible to influence policy direction in the area of training.

Random assignment evaluation is wonderful with respect to its ability to meet Stiglitz's simplicity constraint. But we need to acknowledge that our controls in random assignments are not always so controlled. For example, many youth and adults who were not assigned to JTPA training went on to get it from other sources. A careful review of the JTPA evaluation study by Heckman, Smith, and Taber (1996 and 1998) also indicated that there was considerable discretion on the part of local program officers in the so-called random assignment process with evidence of reverse creaming. In other words, in some sites the most disadvantaged youths were put into JTPA, while the less disadvantaged were "controls." In addition, as Jacobson et al. (2005) show, we need to follow up on program participants for more than 18 months. Finally, the program content of training programs varies across sites but the evaluation design does not usually take this

An agenda for training research and policy

For the quality of skills of labor market entrants

- Additional evaluation of preschool programs and their long-term benefits.

- Assess K–12 school reform, especially with respect to math and science.

- Evaluate returns to investment in math, sciences, and engineering for undergraduate and graduate students.

- Expand college enrollment and completion rates for lower-income and minority families—financing and information barriers; role of mentoring.

For the stock of workers

- Reform of the unemployment insurance system to address permanent layoffs—continued assessment of targeted reemployment bonuses and personal reemployment accounts.

- Understanding the mix of services required by workers displaced by trade, as well as other job displacement reasons.

- Understanding barriers to participation in trade adjustment assistance programs and other government training programs. (See Heckman and Smith's [2004] work on workers' lack of awareness of eligibility to participate in JTPA programs.)

- Extend and improve federal programs for job training, job search assistance, and relocation—including evaluation of benefits over time by participant type.

- Expand the provision of employer-provided training and track and evaluate its returns more systematically.

- Systematically evaluate state-funded employer-based training programs.

- Evaluate community colleges as training provider for workers—both working and displaced.

- Expand educational opportunities and student loan eligibility for full-time workers to go to school part time.

- Evaluate how best to use narrowly targeted wage insurance and subsidies to employment.

into account. As a result, researchers will need to be able to evaluate programs without using random assignment methods. This will require administrative data to track the outcomes of alternative programs and make sure that our econometric techniques address the concerns of selection bias. The policy community needs to help academic researchers by providing access to these administrative data, so that this type of evaluation can happen. Such a partnership between academic researchers and policymakers would be extremely fruitful. How we explain our academic results to a non-technical audience, though, will be critical to making this partnership effective.

Another way research economists can influence policymaking is to actually spend time in a policy-making position. From my own experience in government, most policymakers within departments and agencies at the political appointee level have a thorough understanding of how to move legislation through Capital Hill but few have much economics expertise. The usual result is that there is little policy discussion of economic constraints, opportunity costs, and implementation issues and lots of discussion of how best to maneuver a particular initiative. The challenge for the economist is not to become corrupted by the process and start using bad arguments to win policy debates. Then, we lose our role as honest brokers and ultimately undermine our ability to bring economics expertise into political discourse.

In the aftermath of the "blue state–red state" exit poll analysis of the 2004 presidential election, it appears, as Blinder and Krueger (2004) also argue, that "people seem to use ideology as a short-cut heuristic for deciding what position to take when properly informing oneself is difficult." However, before we economists pat ourselves on the back and say thank goodness we are not like the general public, it is sobering to consider the findings from a study by Fuchs, Krueger, and Poterba (1998) of public economics and labor economists. Their survey indicated that left–right political ideology seems to have shaped the opinions of economists more than parameter estimates. The specific issue of the relative merits of investing in federal job training programs was one of the questions for which this reliance on values rather than parameter estimates was greatest.

Thus, our final task as researchers informing the public policy community is to ensure that policy decisions are made on the basis of knowledge and not exclusively "values." Ignorance is never a recipe for good policy. This is how we battle the simplicity constraint.

NOTES

[1]The Multifiber Arrangement (MFA) came into effect in 1974 and extended trade protection (via quotas) from cotton products to wool and manmade fibers. It expired in 1994 but, with the establishment of the World Trade Organization in 1995, was followed by the Agreement on Textiles and Clothing (ATC), which provided a transition period between the MFA and the full integration of textiles and clothing in the multilateral trading system. This transition period ended on January 1, 2005. For a review of the potential impact of the expiration of this protection of the textile and apparel industry, see Nordås (2004).

[2]JTPA for youth targeted economically disadvantaged youth, and most programs were of relatively short duration (three to four months) with an average expenditure around $4,000 per participant. Job Corps participants are typically more disadvantaged than JTPA youth, and the program is more intensive and comprehensive than JTPA. Ninety percent of the participants are in a residential program (usually eight months in duration) and the average cost of the program per participant is closer to $20,000 (in 2001 dollars).

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Globalization and job loss, from manufacturing to services

Lori G. Kletzer

Introduction

The impact of free trade, and more generally global-
ization, is a ready source of public debate, and the
reach of that debate is broadening. When the impact
of increasing foreign competition was felt mainly by
the manufacturing sector (call this "stage one" of the
free trade/globalization debate), the view of many, if
not most, economists was strikingly uniform: Trade
generates large net benefits to national economies.
The gains accrue to consumers from lower prices and
to the overall economy in efficiency, leading to high-
er aggregate welfare. Within the economics profes-
sion, there is similar, if less visible, agreement that
liberalized trade reduces incomes to some producers
and workers. With (large) net benefits, a common
professional view of the question of "free trade" is a
distributional one—that the distribution of the bene-
fits from free trade, across industries, occupations,
regions, and ultimately individuals, is uneven.

Perhaps not surprisingly, the economists' view
does not resonate well with many Americans. Opinion
surveys show that when asked a question mentioning
both benefits and costs to trade, a majority of respon-
dents chose the answer emphasizing the costs over the
benefits (see chapter two in Scheve and Slaughter, 2001).
It seems fair to conclude that many Americans have
their doubts about the value of free trade, particularly
when the costs are known to be borne by workers.

This dissonance of views arises from the nature
of the economists' "It's a distributional issue" perspec-
tive. Economic theory suggests that not everyone ben-
efits from free trade: Positive economy-wide benefits
result from the gains of the "winners" exceeding the
losses of the "losers." Clearly, some of the most con-
tentious issues regarding free trade concern the size of
the costs associated with moving workers from im-
port-competing sectors to other parts of the economy.

The highly visible nature of job loss, and the failure
of current federal adjustment programs to compensate
workers for their losses, clearly weakens popular sup-
port for the view that economic integration brings wide-
spread benefits.

While perhaps overly simple, the characterization
above captures much of the "free trade and jobs" de-
bate, up to 2002.[1] That year saw the emergence of
"services outsourcing," which I call "stage two" of
the debate over globalization and the American labor
market. Global outsourcing of services (or offshoring)
is the services version of the globalized production that
has become (almost) commonplace in manufacturing.
With services outsourcing (potentially) broadening
job loss to higher-skill (white-collar) workers and with
its implicit challenge to presumed American compar-
ative advantages, these activities appear to raise some
new concerns, different from the ones voiced in the past.

Whether different or the same, the arrival of ser-
vices outsourcing virtually guarantees that internation-
al trade and globalization will remain an important focus
of public attention to job loss. The reverse will also
likely continue to be true: Pervasive concerns about
the incidence and consequences of job loss will remain
an important part of discussions about globalization.
In this article, I report on recent research on the nature
and extent of manufacturing job loss related to trade.
Investigations of services outsourcing are in their infan-
cy, and my discussion reflects that thin knowledge base.

My discussion here is framed by the perspective
that understanding the labor market costs of global

*Lori G. Kletzer is a professor of economics at the
University of California, Santa Cruz, and a nonresident
senior fellow at the Institute for International Economics.
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international trade data.*

trade is a requirement for moving forward equitably on the path of international economic integration. To understand how the principle of national net benefits from free trade can be translated into programs that compensate workers, it is necessary to identify who bears the burden of costs and to measure the size of that burden. In Kletzer (2001, 2002b), I report on recent research measuring the extent and nature of job loss related to imports; and in Kletzer (2002a), I summarize that research, with a particular focus on job losses associated with the North American Free Trade Agreement (NAFTA).

In what follows, I summarize what is currently known about the magnitude of job loss related to import competition. Current research suggests that high import-competing industries accounted for about 40 percent of manufacturing job losses from 1979 to 2001. I describe the earnings losses associated with trade-related job loss. I also discuss the little that is currently known about services outsourcing. I conclude with a brief discussion of policies aimed at ameliorating the impact of import-related job loss on workers. Although job displacement due to services outsourcing is likely a small part of economy-wide job displacement, it is likely to grow in importance in the future. With this growth will likely come pressure to change or expand worker adjustment programs.

What we know about trade and job loss: Evidence from manufacturing[2]

Trade displacement is a notion that exists in public discourse, in large part due to the Trade Adjustment Assistance Act (TAA), first passed by Congress in 1962. With 40-plus years of usage, trade-related job loss is commonly understood to mean job loss due to increasing imports, and a trade-displaced worker is a worker for whom increased imports have contributed to job loss. This definition faces a number of complications, including the obvious: We have no way of knowing for certain whether a given worker is trade displaced, nor do we have any widely agreed-upon ways of identifying the share of workers in a given industry who are trade displaced. Within academic circles, there is the additional empirical challenge of capturing the causal nature of the "trade and employment change" question (see Kletzer, 2002b, for details). My research takes as its starting point that there is a common notion of trade displacement in public discourse. I have sought to define the term in a way that is grounded in economic analysis. My goal has long been to identify workers whose job loss is associated with rising imports. I am not claiming to prove that trade or imports are the cause of the job loss.[3]

The notion of an import-competing industry can be made operational by considering changes (specifically increases) in import share (also called import penetration rate). Import share is calculated by dividing industry imports by the sum of industry output plus imports (thus the denominator is industry supply). As noted in Kletzer (2002b), changes in import share can be conceptually related to changes in employment and job loss (through changes in product demand).[4] Industries with rising import shares are where we might expect to see a relationship between the flow of imports and declining domestic employment and job loss. In Kletzer (2001), I defined a set of highly "import-competing" industries as those industries in the top 25 percent of a ranking of industries by their percentage change in import share over the 1979–94 period (from largest positive to smallest). Industries in this top quartile, those with the largest percentage increases in import share, include most of the ones we would call traditional import-competing industries: electrical machinery, radio and television, apparel, motor vehicles, footwear, blast furnaces, knitting mills, and toys and sporting goods. This industry definition, applied to the worker-based *Displaced Worker Surveys* (DWS),[5] yielded a sample of highly import-competing displaced workers, based on a worker's industry of displacement.

Table 1 lists the high import-competing (or import-sensitive) industries, as defined in Kletzer (2001), with updated trade information for the period 1979–96.[6] These industries are the most likely to produce import-competing job losses, and we can usefully consider workers displaced from these industries to be import-competing displaced workers. Industries are listed in table 1 in order of estimated total number of workers displaced during the period 1979–2001 from largest to smallest.[7] High import-competition industries vary from low-wage (apparel, footwear, knitting mills, leather products) to high-wage sectors (computers, blast furnaces, tires and inner tubes, construction and material moving machines, motor vehicles).[8]

Along with the number of workers displaced, table 1 reports each industry's share of manufacturing displaced. The large employment industries, such as electrical machinery, apparel, transportation equipment, and non-electrical machinery, accounted for about 30 percent of manufacturing displacement. The risk of job loss in an industry is roughly captured by the job loss rate (calculated on a yearly basis as the ratio of the number of workers displaced to average industry employment). That rate is reported in table 1 as an average across the years 1979–2001. As discussed in Kletzer (2001), the link between risk of job loss and

TABLE 1
High import-competing industries (top quartile by change in import share for 1979–94), by estimated number of workers displaced for 1979–2001

	Total displaced 1979–2001	Share of total mfg. displaced	Mean job loss rate	Change in import share			1979 import share	Change in exports 1979–96	Importer/exporter? Balanced/unbalanced?
				1979–96	1979–85	1985–96			
Electrical machinery	1,851,348	0.104	0.044						
Electrical machinery	1,381,647	0.078		0.2104	0.0712	0.1392	0.1066	2.3022	Balanced importer
Radio, TV	469,701	0.026		0.1978	0.0458	0.152	0.151	2.1083	Unbalanced importer
Apparel	1,279,081	0.072	0.056						
Apparel	1,130,502	0.064		0.2659	0.1034	0.1625	0.1322	1.9257	Unbalanced importer
Misc. fabricated textiles	148,579	0.008		0.1085[a]	0.0434	0.0651[b]	0.0397	0.1624[a]	Unbalanced importer
Transportation equipment	1,056,002	0.059	0.053						
Motor vehicles	988,938	0.056		0.1153	0.0857	0.0296	0.1733	0.8671	Unbalanced importer
Cycles & misc. transport	67,064	0.004		−0.0623	−0.0221	−0.0402	0.2906	1.5842	Balanced importer
Machinery, except electrical	997,321	0.056	0.065						
Electronic computing equipment	605,569	0.034		0.402	0.086	0.3160	0.1031	2.5337	Balanced exporter
Construction & material moving machines	350,675	0.020		0.1605	0.0905	0.07	0.0595	−0.2013	Unbalanced exporter
Office & accounting machines	41,077	0.002		0.3026	0.0827	0.2199	0.0795	0.2699	Balanced importer
Metal industries	518,898	0.029	0.066						
Blast furnaces	364,943	0.021		0.0923	0.0739	0.0184	0.1191	0.072	Unbalanced importer
Other primary metal	153,955	0.009		−0.0259	0.0222	−0.0481	0.189	0.3069	Balanced importer
Misc. manufacturing	355,601	0.020		0.3813	0.1099	0.2714	0.1857	0.6293	Unbalanced importer
Leather & leather products	243,762	0.014	0.081						
Footwear	188,149	0.011		0.3873	0.2192	0.1681	0.3478	3.1746	Unbalanced importer
Leather products	47,897	0.003		0.42	0.195	0.225	0.2694	1.0899	Unbalanced importer
Leather tanning & finishing	7,716	0.000		0.1145	0.0725	0.042	0.16	2.9170	Balanced exporter

TABLE 1 (CONTINUED)

High import-competing industries (top quartile by change in import share for 1979–94), by estimated number of workers displaced for 1979–2001

	Total displaced 1979–2001	Share of total mfg. displaced	Mean job loss rate	Change in import share			1979 import share	Change in exports 1979–96	Importer/exporter? Balanced/unbalanced?
				1979–96	1979–85	1985–96			
Professional & photographic	244,497	0.014	0.014						
Scientific & controlling instruments	163,637	0.009		0.0714	0.0424	0.029	0.0743	1.8561	Balanced exporter
Photographic equipment	71,917	0.004		0.2080	0.0519	0.1561	0.1206	20.2364	Balanced importer
Watches, clocks	8,943	0.001		0.4297	0.2261	0.2036	0.3873	0.6220	Unbalanced importer
Rubber & misc. plastics	203,402	0.011	0.033						
Other rubber products	118,284	0.007		0.3103	–0.0125	0.3228	0.0861	0.3150	Unbalanced importer
Tires & inner tubes	85,118	0.005		0.0682	0.0380	0.0302	0.1295	8.4873	Unbalanced importer
Textiles	886,593	0.050	0.036						
Knitting mills	241,236	0.014		0.0261	0.0973	–0.0712	0.0606	1.4685	Unbalanced importer
Dyeing textiles	43,522	0.002		0.0704[a]	0.0349	0.0355[b]	0.0452	—[c]	Balanced importer
Floor coverings	62,417	0.004		0.0262	0.0220	0.0042	0.0466	0.6776	Balanced importer
Yarn, thread	539,418	0.030		0.0837	0.0450	0.0386	0.0402	0.2267	Balanced importer
Misc. textiles	44,666	0.003		0.0127	0.0145	–0.0019	0.1183	0.9203	Balanced importer
Toys & sporting goods	171,050	0.010	0.069	0.3008	0.1480	0.1528	0.2292	1.7489	Unbalanced importer
Pottery & related	22,536	0.001	0.056	0.0821	0.1054	–0.0233	0.3126	1.0155	Unbalanced importer
Totals/means	7,107,795	0.399	0.039	0.1832	0.0846	0.1027	0.1689	2.2862	

[a]Change in import share presented spans period 1979–1994.

[b]Change in import share presented spans period 1985–1994.

[c]Values missing due to changes in industry classification schemes.

Sources: National Bureau of Economic Research (NBER) trade database (1979–94 import, export, and industry shipment values); USITC trade database (1995–96 import and export.
values); NBER–CES manufacturing industry database (1995–96 industry shipment values); U.S. Bureau of Labor Statistics, *Displaced Worker Surveys*.

rising import share is somewhat complex: Some industries with high rates of job loss had large increases in import share (leather and leather products, pottery and related products), but within and across industries, the relationship between rising import share and job loss risk is fairly weak.

I report changes in import share for 1979–96, 1979–85, and 1985–96. The appreciation of the exchange value of the dollar from 1981 to 1985 was particularly important for American manufacturing. The strong dollar made U.S. exports more expensive to buy and made imports cheaper. Recovery from the 1981–82 recession fueled U.S. demand for foreign imports, while the more sluggish recovery of U.S. trading partners dampened demand for U.S. exports. The exchange value of the dollar peaked in 1985 (with the September 1985 Plaza Accord), and the dollar depreciated about 30 percent from 1986 to 1989. Thus, it is appropriate to consider a pre-1985 period and a post-1985 period.[9]

One additional point about "trade" is that the discussion here follows a tradition of focusing on imports when examining the costs of trade. Trade, of course, includes both imports and exports, and many industries, including the high import-competing ones highlighted here, do both. The simple view of trade, that the U.S. imports watches and apparel and exports airplanes and construction equipment, is not only simple, it is wrong. A more realistic view is that the U.S. exports and imports all or parts of all these goods, either as intermediates or as final goods. Before moving on, it is important to note that the "importers" noted here are also exporters. Electrical machinery and equipment, motor vehicles, and electronic computing equipment count among the top exporters, as well as being importers.

This notion of within-industry, two-way trade, has an extensive literature.[10] As I report in more detail in Kletzer (2001), a simple variation of the trade overlap index of Grubel and Lloyd (1975) provides some insight on an industry's level of engagement in world trade. This measure is reported in the last column of table 1. Balanced industries are those with a high degree of trade overlap (both imports and exports), where the flows of exports and imports are equal (or nearly so). Unbalanced industries are those where one of the flows dominates the other in size.

As seen in table 1, 23 of the 27 three-digit industries listed are importers, with 14 unbalanced importers. The industries we most strongly associate with import competition are also unbalanced importers (apparel, motor vehicles, blast furnaces, footwear, knitting mills). Among the balanced importers (electrical machinery,

cycles and miscellaneous transport, office and accounting machines, photographic equipment), some of the textile industries are particularly notable. In terms of job loss, these industries can be vulnerable to both rising imports and declining exports. As I report in Kletzer (2002b), the focus on import competition and jobs underplays the link between exports and jobs. Export growth is associated with employment growth, and as sales increase due to exports, the risk of job loss falls.

Using a somewhat conservative count of displaced workers, I estimate that 18.6 million workers lost jobs in all of U.S. manufacturing during the period 1979–2001, about 37 percent of the total U.S. nonagricultural job loss of 49.8 million.[11] During this period, manufacturing represented, typically, just under 18 percent of total nonagricultural employment. The high import-competing group accounted for about 40 percent of manufacturing displacement, at 7.45 million workers. During the 1979–2001 period, these industries accounted for just under 30 percent of manufacturing employment.

In Kletzer (2002a), I reported estimates of the extent of job loss related to NAFTA and imports, and concluded that NAFTA-import-related job loss accounted for 24 percent–27 percent of manufacturing job losses over the 1993–99 period. For the economy overall, NAFTA-import-related job losses are more modest, accounting for 10.7 percent of the total.

Just from these estimates, we see that import-related job loss is a sizable share of U.S. manufacturing job loss and a much smaller share of economy-wide job loss.[12] Although the "trade and jobs" debate will continue to focus on the numbers of jobs lost, it is important to note that total employment is essentially determined by macroeconomic conditions and policies, both in the U.S. and worldwide. As noted above, the impact of "trade" is distributional—on where the jobs are located.

Trade, job loss, and policy

Compared with other Organization for Economic Cooperation and Development (OECD) countries, the U.S. has a modest set of labor market adjustment programs (primarily unemployment compensation, training and job search through the Workforce Investment Act and Trade Adjustment Assistance).[13] With workers bearing most of the burden of labor market change and flexibility, the fact that the U.S. provides only modest adjustment assistance programs tends to heighten anxiety over government policies that might place (more) workers at risk of job loss. Trade liberalization is one example. Historically, Trade Adjustment Assistance (TAA) has been seen as trade policy, a

response to the uneven distribution of benefits and costs arising from trade, and only secondarily as labor market adjustment assistance. TAA is provided to workers displaced by "trade," while other displaced workers are eligible for a lesser set of benefits through the Workforce Investment Act. For policy, it is important to question this underlying assumption. Are trade-displaced workers different from other displaced workers? What are the characteristics of trade-displaced workers? What are the labor market consequences of this type of job loss? I have answered these questions in some detail in my earlier work. What follows is a summary—Call these the stylized facts of trade-related job loss.[14]

On average, the import-competing displaced worker looks very much like any other displaced manufacturing worker. However, there is a striking difference in the degree to which high import-competing industries displace women, particularly the lower-wage import-competing industries, which tend to employ large shares (and often large numbers) of women. Across apparel, textiles, footwear and leather products, women accounted for 65 percent–80 percent of workers displaced over the period 1979–2001 and slightly smaller shares of employment. Observers note that this gender predominance may occur again as call-centers and back office processing move to other countries.

As reported in more detail in Kletzer (2001), compared with displaced non-manufacturing workers, import-competing displaced workers are older, less formally educated, notably more tenured, less likely to be female, more likely to be minority, and far more likely to be production-oriented.

For many workers, import-competing job loss is very costly, due to difficulties finding new employment at a level of pay similar to the old job. Two-thirds of reemployed workers earn less on their new job than they did on their old job, and one-quarter experience earnings losses in excess of 30 percent. The average earnings loss is more modest, but still sizable at 13 percent. The distribution of earnings losses is very similar to that found for all workers displaced from manufacturing jobs for other reasons.

Import competition is associated with low reemployment rates (on the order of 63 percent for the period 1979–2001). The characteristics that limit the reemployment of import-competing displaced workers are the same as those that limit the reemployment of all displaced workers: low educational attainment, advancing age, high tenure, minority status, and marital status. Workers with high tenure and/or low skill levels may confront serious skill-related adjustment problems, along with having rusty job search skills. Workers with these characteristics appear to need the most help.

For most workers, the costs of job loss occur as reemployment earnings losses. Less formally educated workers experience the greatest difficulty maintaining earnings. More generally, reemployment earnings losses rise with age and job tenure and fall with education.

Reemployment in manufacturing minimizes earnings losses (on average). An advantageous outcome for production workers with manufacturing-specific skills is to stay employed in manufacturing. Earnings losses are reduced if the worker gets a new job in an industry similar to the one in which he or she was previously employed. Reemployment in services is associated with the largest earnings losses. There may be little retraining associated with these moves.

In summary, manufacturing workers are wise to be anxious about losing jobs and wages. Permanent job loss is costly for many manufacturing workers. Trade liberalization is often a flash point for the fear of job loss, while other factors, notably technological change, rank ahead of trade as a source of job loss and declining real wages for less-educated workers. Shifts in international investment, corporate restructuring, and changes in consumer demand are other sources of change that affect job security and wages. Two of these forces, shifts in international investment and (information) technological change, are coming together to influence what is being called services outsourcing.

What do we know about services outsourcing?

Globalization, particularly in the guise of globalized production, is evolving and broadening from a manufacturing base into services. These changes, and their implications for American workers, have attracted widespread attention. Services now account for a larger share of global trade than they have in the past. Trade in services has almost doubled over the past decade: Over the period 1992 to 2002, service exports increased from $163 billion to $279 billion and imports grew from $102 billion to $205 billion.

Coincident with the broadening of global economic integration from manufacturing to services, the face of job displacement in the United States is changing. While manufacturing workers have historically accounted for more than half of displaced workers, in the most recent downturn non-manufacturing workers accounted for 70 percent of displaced workers.[15] The industrial and occupational shift in job loss has been associated with a rise in the probability of job loss for more-educated workers.[16] For example, the share of job losses accounted for by the finance, insurance, and real estate, business services, and professional services sectors, all relatively high-skill industries, more than

doubled from 15 percent during the 1979–82 recession to 34 percent during the 2000–01 period.

Currently, there is little clear understanding of the role of services globalization in domestic employment change and job loss. More fundamentally, there is little clear understanding of the size and extent of services global outsourcing, the vulnerabilities of American workers, and how large this phenomenon is likely to become in the near term.[17]

What is known comes from mostly subjective judgments, though admittedly based on detailed industry knowledge. The most widely quoted projection of future job losses due to movement of jobs offshore is Forrester Research's "3.3 million U.S. services jobs to go offshore" (McCarthy, 2002). In addition, Deloitte Research estimates that by 2008 the world's largest financial service companies will have relocated up to two million jobs to low-cost countries; Gartner Research predicts that by the end of 2004, 10 percent of information technology (IT) jobs at U.S. IT companies and 5 percent of IT jobs at non-IT companies will have moved offshore; another Gartner Research survey revealed that 300 of today's Fortune 500 companies do business with Indian IT services companies. Goldman Sachs estimates that 300,000 to 400,000 services jobs have moved offshore in the past three years and anticipates a monthly rate of 15,000 to 30,000 jobs, in manufacturing and services combined, will move offshore in the future. Bardhan and Kroll (2003) estimate that 14 million workers are vulnerable to job loss from services outsourcing.

While the size and scope of this activity are not clear, the changing location of service activities is likely to affect labor market outcomes of U.S. service sector workers. Research on this question is barely in its infancy. In preliminary work with J. Bradford Jensen (Jensen and Kletzer, 2004), I have begun to explore comparisons between displaced manufacturing workers and displaced services workers. Very briefly, we are learning that the incidence of job displacement is notably lower in services than in manufacturing. Where the risk of job loss can average 6 percent to 7 percent (annual averages) in manufacturing, for the three services industries commonly mentioned as vulnerable to offshoring (finance, insurance, and real estate; business services; and professional services), incidence averages around 2 percent to 3 percent for the period 1979–2001. The risk of job loss is trending upward over the period for services, starting from a relatively low level. The share of displaced workers accounted for by services has increased over time, as has the share of employment.

In terms of outcomes, reemployment rates are higher for displaced services workers than observed for displaced manufacturing workers. Reemployment rates average about 70 percent to 75 percent for services workers, compared with 65 percent in manufacturing. Reemployment rates fell considerably from the late 1990s to the 2000–01 recession in both services and manufacturing.

Workers displaced from services are more highly educated than workers displaced from manufacturing, with key differences at the lowest and highest ends of the educational attainment distribution. Relatively few displaced services workers are high school dropouts (ranging from 3 percent to 10 percent), while 30 percent to 40 percent of displaced manufacturing workers are high school dropouts (depending to some extent on the industry). Although there is a considerable degree of variation, for the most part, pre-displacement earnings were higher for services than for manufacturing.

In my manufacturing-based research (Kletzer, 2001), I found a 10 percentage point to 12 percentage point difference in the likelihood of reemployment between a high school dropout and a high school graduate. The reemployment advantages experienced by college graduates, relative to those without a college degree, are again seen in services. Mean earnings losses are somewhat smaller from services than from manufacturing, and a larger share of displaced services workers experience no earnings loss (or a gain) than we observe for manufacturing. The shares of workers experiencing losses in excess of 15 percent are smaller for services, but still notable, in the range of 25 percent to 30 percent.

Policy implications and conclusions

The notion that trade costs jobs, together with the notion that trade-related displacement is particularly costly, creates a compelling case for targeted adjustment assistance. Neither notion is systematically true, based on the empirical evidence, but both are "true enough" to be persuasive and politically influential. For better or worse, fears of job and earnings losses associated with "trade" are the hook for reforming labor market adjustment policies. Services outsourcing and its link to trade present challenges for the current system of adjustment assistance. Currently, the U.S. Department of Labor (DOL) follows a narrow interpretation of TAA eligibility, denying TAA services to workers displaced from services industries. As discussed in Kletzer and Rosen (2005), the DOL interpretation is that workers must prove they lost a job from a firm that makes a product that is "similar or like an imported good." It seems likely that the trend in services outsourcing, and any associated job loss, will lead to pressure on Congress to extend TAA eligibility criteria to include services workers.

A common ending for papers in this area is the (truthful) acknowledgement that free trade, open markets, economic integration, and dynamic labor markets can facilitate economic growth and convey benefits. But change, and open engagement with the world, does not help everyone. For manufacturing, rising imports are associated with costly job loss. For services, we simply do not yet know. That the numbers may be small or that the association is limited to a particular set of industries does not diminish the significance of the cost to those whose jobs and earnings are directly affected.

NOTES

[1]With apologies to the diversity of views not represented in the paragraphs above.

[2]This section borrows heavily from Kletzer (2001, 2004).

[3]Chapter 5 of Kletzer (2002b) discusses the descriptive and causal aspects of the question.

[4]The appropriateness of changes in import share as an operational measure is highlighted by the language of the Trade Adjustment Assistance Act, whereby certification for eligibility depends on a determination that increased imports have contributed to displacement.

[5]The DWS is administered biennially by the U.S. Bureau of Labor Statistics as a supplement to the *Current Population Survey* (CPS). The first survey was administered in January 1984. The 1984–2002 surveys provide coverage of displacements over 1979–2001. In each survey, adults (aged 20 years and older) in the regular monthly CPS were asked if they had lost a job in the preceding three- or five-year period due to "a plant closing, an employer going out of business, a layoff from which he/she was not recalled, or other similar reasons." If the answer was yes, a series of questions followed concerning the old job and period of joblessness. Other causes of job loss, such as quits or firings are not considered displacements. This categorization is consistent with our common understanding of job displacement: It occurs without personal prejudice in that terminations are related to the operating decisions of the employer and are independent of individual job performance. A key advantage of the DWS is its large-scale, representative nature. As part of the CPS, it draws upon a random sample of 60,000 households, which is weighted to be representative of the U.S. work force. As a result, the surveys yield large numbers of displaced workers from a wide variety of industries.

[6]Table 1 is an updated and revised version of Table 2.1 in Kletzer (2001).

[7]Industries are defined and listed at a three-digit CIC (census industrial classification) level of detail. For readability, some three-digit industries are grouped together under more aggregated (or two-digit) headings.

[8]My judgments moved several industries into the high-import category: Motor vehicles, tires and inner tubes, blast furnaces, other primary metals, and cycles and miscellaneous transport all have a history of import competition, are large and visible employers, but experienced increases in import share just below the top quartile cutoff.

[9]See Kletzer (2002b) for a more detailed discussion of manufacturing and trade over this period.

[10]The literature is summarized in Kletzer (2002b).

[11]This number will be different from the often-cited declines in employment in manufacturing. Manufacturing employment decline is a net loss in employment, the difference between employment gains (through new hires, rehires, and recalls) and reductions in employment (through quits, layoffs, displacements, retirements, and deaths). See details in Kletzer (2002b).

[12]See Scott (2001) for an alternative view on the scale of job loss.

[13]See Kletzer and Rosen (2005) for a detailed discussion.

[14]These stylized facts are presented in more detail in Kletzer (2004).

[15]The shift in job loss from manufacturing and production workers toward service and white-collar (non-production) workers has been in evidence since the recession of the early 1990s. At that time, concerns about downsizing and re-engineering were coincident with a rise in the share of white-collar and service sector job loss (see Podgursky, 1992, Farber, 1993, Gardner, 1993, and Kletzer, 1998).

[16]It is still the case that less-educated workers have the highest rates of job loss overall. In the 2000–01 downturn, workers with a high school diploma or less accounted for 38 percent of non-manufacturing job losses. On average, these low-skilled workers earned under $20,000 per year in their pre-displacement jobs (estimates from the *Displaced Worker Surveys*, 1984–2002).

[17]The literature on services outsourcing is expanding rapidly. Recent contributions include: Amiti and Wei (2004); Arora and Gambardella (2004); Bardhan and Kroll (2003): Bhagwati, Panagariya, and Srinivasan (2004); Brainard and Litan (2004); Bronfenbrenner and Luce (2004); Samuelson (2004); and Schultze (2004).

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Is retraining displaced workers a good investment?

Louis S. Jacobson, Robert LaLonde, and Daniel Sullivan

Introduction

Studies have found that for many workers, job loss has a major long-term adverse impact on earnings. For example, in earlier research we found the earnings losses for high-seniority workers displaced from jobs in Pennsylvania during the early 1980s amounted to approximately 25 percent of their expected earnings even five years after job loss. The losses were larger for workers displaced in the Pittsburgh area and in other labor markets with substantial employment declines, for workers with many years of service with their former employer, and for workers whose former industries were declining (Jacobson, LaLonde, and Sullivan [JLS], 1993a, b).

For such hard-hit workers, "passive" labor market policies such as unemployment insurance (UI) offset about half of their earnings losses during the typical six-month period when workers are eligible to collect benefits. However, because experienced displaced workers often face especially difficult readjustments, they are more likely than others to exhaust their unemployment insurance benefits. Moreover, a period of unemployment is not the only, or even the major, cause of financial loss suffered by displaced workers. Rather, the majority of their losses are attributable to their subsequent reemployment in lower paying jobs. The standard unemployment insurance program obviously does not address such losses.

Policymakers also provide retraining and other benefits through "active" labor market policies, such as the Workforce Investment Act (WIA) and its predecessor, Title III of the Job Training Partnership Act (JTPA), as well as the Economically Displaced Worker Adjustment Act (EDWAA). However, as we discuss, the modest resources available through such programs cannot fund large enough investments in displaced workers' skills to offset a significant portion of their long-term earnings losses.

In this paper, we examine the literature on the consequences of worker dislocation and the potential of retraining policy to ameliorate these effects. We observe that displaced workers differ from other job losers, in that temporary earnings losses associated with unemployment constitute only a small portion of the income losses associated with their layoffs. Second, retraining can be a productive investment both for displaced workers and for society. Third, incentives to acquire retraining differ in predictable ways among displaced workers. These differences influence who participates in retraining and how we interpret estimates of the impact of retraining among groups of displaced workers. Finally, current public investments in retraining are far too small to substantially mitigate the earnings losses of displaced workers. Because the long-term effects of displacement on earnings are large, policymakers would need to make comparably large investments in workers' skills to fully offset displaced workers' losses.

In the remainder of this article, we first discuss the key characteristics that set displaced workers, apart from other unemployed workers. Next, we survey the literature on the short- and long-term consequences of job loss. Then, we consider the predictions

Louis S. Jacobson is a senior economist at the Center for Naval Analysis (CNA). Robert LaLonde is a professor at the Irving B. Harris Graduate School of Public Policy Studies, University of Chicago. Daniel Sullivan is a vice president and economic advisor at the Federal Reserve Bank of Chicago. Some of this research was funded under U.S. Department of Labor, ETA contract 99-0-0584-75-055-01 and by the Washington State Workforce Training and Education Coordinating Board. The views expressed are those of the authors and are not official positions of the Federal Reserve Bank of Chicago, the Federal Reserve System, the U.S. Department of Labor, or the Washington State Workforce Training and Education Coordinating Board.

of human capital theory for the effects of programs and policies to retrain displaced workers. We survey the relatively limited existing empirical literature on retraining displaced workers and briefly recount the history of public-sector retraining programs. Then, we explore the costs and benefits of retraining displaced workers from the perspective of both the worker and society. Finally, we summarize our conclusions and discuss some of the policy implications of research on retraining displaced workers.

Who is a displaced worker and why should job loss be so costly?

Although there is some variation across studies, there are three common elements in most descriptions of displaced workers: 1) They have not been discharged for cause; 2) they have permanently separated from their former employer or have only a very small likelihood of being recalled to their old jobs; and 3) they have had strong prior attachment to the industry of their pre-displacement employer.

Policies and programs designed for displaced workers tend to target unemployed workers with some or all of these characteristics. In addition, some policies apply only to workers whose job loss stems from industry- or region-wide structural change, rather than from idiosyncratic shocks affecting a single firm. In our view, this additional characteristic is not an essential attribute of a displaced worker. If job loss implies the loss of specific skills or valuable seniority, workers can expect lower earnings regardless of whether others in their industry or region experience the same fate.

More essential to the notion of displacement is that workers have had strong prior attachment to their former employer or at least to their former employer's industry. Such ties make it less likely that displaced workers will be able to find new jobs that pay as well as their prior jobs. Because they recognize that job loss is more costly for workers with longer job tenure, the U.S. Bureau of Labor Statistics usually defines displaced workers as persons having at least three years of tenure when they permanently lose their jobs.

Why should job loss have long-term consequences?

There are several reasons why the loss of a job may imply long-term earnings losses for the affected workers and why earnings losses tend to increase with job tenure.

First, employees may have firm-specific skills. These skills can derive from familiarity with employers' processes, product lines, other employees, or business culture. Because such knowledge is usually less valuable to other employers, job loss can result in earnings

declines. This can be the case even when a displaced worker finds a job with another employer in the same industry (Becker, 1975). But, when job loss results in a change of industry, the value of any additional industry-specific skills may also be lost. The extent of such firm- and industry-specific skills, and thus the cost of job loss, is likely to rise with time spent with the firm or industry. Thus, the earnings losses associated with displacement should increase with these factors as well.

Long-term earnings losses for displaced workers may also result from firms' operation of what are sometimes referred to as "internal labor markets." Companies that follow such policies tend to hire new employees mainly into entry-level positions, while filling vacancies in more-responsible, higher-paying positions by promoting from within their current pool of workers. Those losing more advanced positions and needing to start over in an entry-level position with another firm will tend to suffer earnings losses. Workers displaced after several years of service are more likely to be in such a situation. More generally, any tendency for firms to pay or promote employees based in part on seniority would cause employees with more years of service to be hit harder by job loss. By contrast, those with only a short tenure at the time of their job loss would often have an easier time finding a new job at a similar rate of pay.

Evidence on the cost of displacement

Consistent with the above considerations, research on job displacement indicates that 1) job loss has long-term effects on subsequent earnings; 2) earnings losses tend to be greater for workers changing industries, and 3) these effects are larger for workers displaced after several years of service with the same employer.

Much of this research relies on the biennial *Displaced Workers Survey* (DWS). Studies based on these data indicate that displaced blue-collar workers' earnings losses rise at a rate of 1 percent to 2 percent for each year of tenure with their former employer (Topel, 1990). Therefore, workers displaced after one year on the job are predicted to be able to find jobs paying nearly the same rate of pay as their old job. By contrast, otherwise comparable workers with 20 years of tenure tend to find jobs that pay, on average, between 20 percent and 40 percent less than their old job. Other DWS studies indicate that the losses for displaced white-collar workers are approximately one-half the size of the losses for blue-collar workers. (For summaries of this literature, see JLS, 1993b, chapter 2; Fallick, 1996; Aaronson and Sullivan, 1998; and Farber, 1996 and 2005).

Supporting the notion that industry-specific skills are often important, Neal (1995) found that males who changed industries following the loss of a job experienced much greater wage losses than their counterparts who found new jobs in the same industry. In addition, in JLS (1993a, b), we found that displaced manufacturing workers' earnings losses were twice as high when they took new jobs outside manufacturing.

Earnings losses and prior job tenure

We illustrate the dynamics of displaced workers' earnings and show how losses are related to years of tenure with the prior employer using Washington State administrative data. The sample used in this illustration consists of all workers who filed a valid unemployment insurance claim in 1991 in Washington State and who were consistently attached to the state's UI covered labor force between 1987 and 1996.

As shown by figure 1, the inflation-adjusted earnings of displaced workers exhibit a characteristic temporal pattern. During the year prior to losing their jobs, their earnings begin to decline, likely reflecting short-term temporary layoffs or real wage cuts. Earnings drop sharply immediately following workers' job losses. Afterwards, their earnings rise, but at a decreasing rate. The long-term losses, as measured by the difference

between individuals' pre- and post-displacement earnings are especially large for high-tenure workers. This pattern also has been reported in studies using administrative data from Pennsylvania and California (JLS, 1993; Shoenei, 2000.)

The positive relationship between years of service with a displaced worker's prior employer and the long-term costs associated with job loss can be seen by comparing the earnings patterns of job losers with three different levels of prior job tenure: those with 1) six quarters to 11 quarters of prior tenure, 2) 12 quarters to 23 quarters of prior tenure, and 3) six or more years of prior tenure. In the year prior to their job losses, the earnings of workers in the group with six to 11 quarters' tenure averaged approximately $5,000 per quarter (see the black line). Four years (16 quarters) after their job losses, their post-displacement quarterly earnings were about $500 or 10 percent less than their pre-displacement levels.[1] By contrast, the pre-displacement earnings of the group with 13 to 23 quarters' tenure averaged about $6,500 per quarter prior to displacement. By the sixteenth quarter following displacement, the quarterly earnings of this group were approximately $1,500 or 23 percent less than their pre-displacement levels. Finally, the pre-displacement earnings of the group with six or more years' tenure were even

FIGURE 1

Earnings of displaced workers by prior tenure

1995 dollars per quarter

Legend:
- 6–11 quarters
- 6 or more years
- 12–23 quarters

quarter relative to displacement
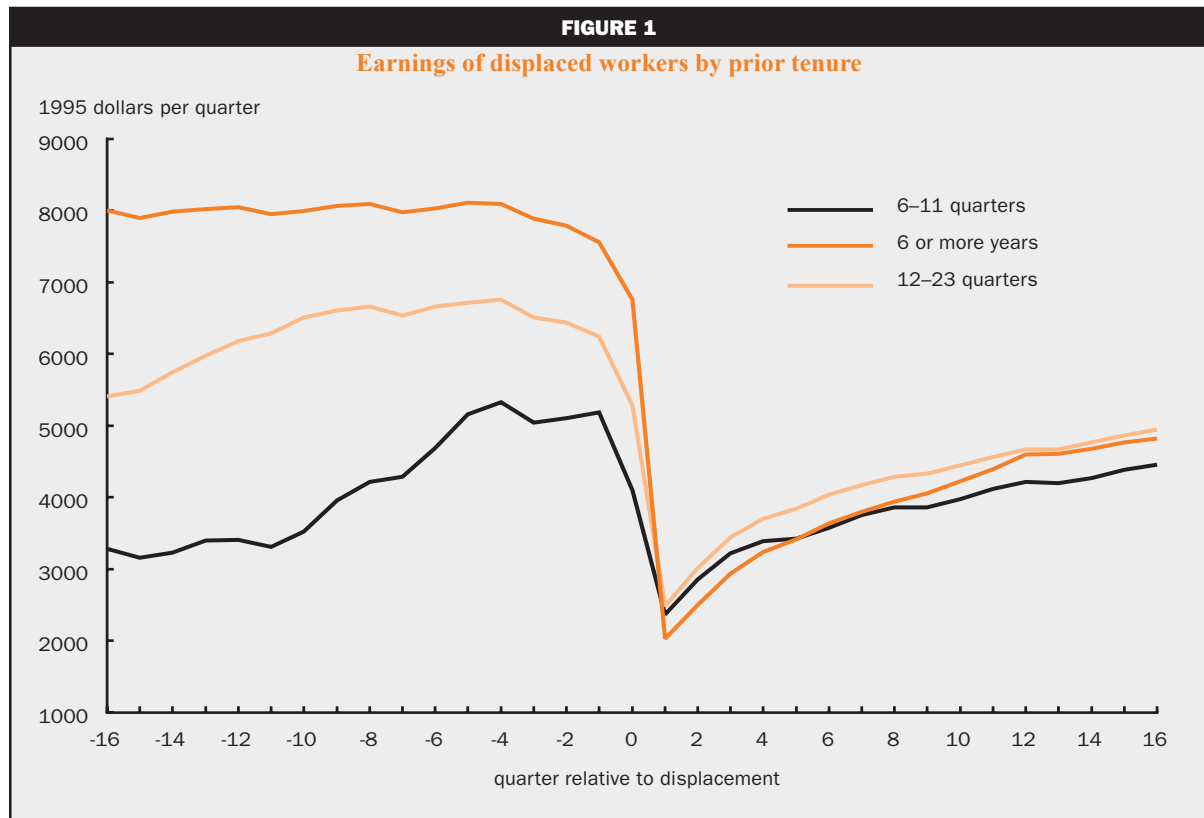
greater. And their post-displacement earnings were about 30 percent less than their pre-displacement earnings.

The differences between pre- and post-displacement earnings shown in the figure indicate that workers with greater job tenure experience larger earnings losses. Prior to their job losses, the earnings of the three groups differed by $2,500 to $3,000 per quarter, but after displacement, their earnings differed by only about $1,000 per quarter. These results are consistent with the extent of firm-specific human capital increasing with years of service with an employer or with internal labor markets making high-seniority workers more likely to have to give up a valuable job for an entry-level position.

Large earnings losses from displacement are common

Studies of displaced workers, using either administrative data or the DWS, indicate that earnings losses associated with displacement are common among all groups of workers with significant prior job tenure and are not otherwise limited to specific demographic groups or to workers displaced from particular sectors of the economy. Women, minority, and less-educated workers, as well as non-manufacturing workers, all tend to experience substantial long-term earnings losses after job loss. However, the magnitude of these losses

can differ among groups. This latter finding suggests that the incentives to seek retraining after displacement also may differ among groups.

Our research using Washington State data shows that losses associated with displacement are not limited to workers displaced from particular durable goods industries, such as aircraft or wood products manufacturing. As shown by figure 2, displaced manufacturing and non-manufacturing workers from our Washington State sample with six or more years of tenure experienced substantial earnings losses. During the sixteenth quarter following their job loss, the quarterly earnings of the displaced non-manufacturing workers are still about $1,500 below their pre-displacement levels—a reduction of about 20 percent relative to their pre-displacement earnings. Manufacturing workers do tend to experience somewhat greater losses, but our analysis indicates this is primarily because the average tenure of displaced manufacturing workers is much greater than that of displaced non-manufacturing workers.

That high-tenure displaced workers outside the manufacturing sector have large earnings losses implies that policies that target displaced workers in specific manufacturing industries, such as the federal government's Trade Adjustment Assistance program, are probably not justified on equity grounds. The

FIGURE 2

Earnings of displaced workers by prior industry

1995 dollars per quarter

Legend: Manufacturing, Nonmanufacturing

x-axis: quarter relative to displacement
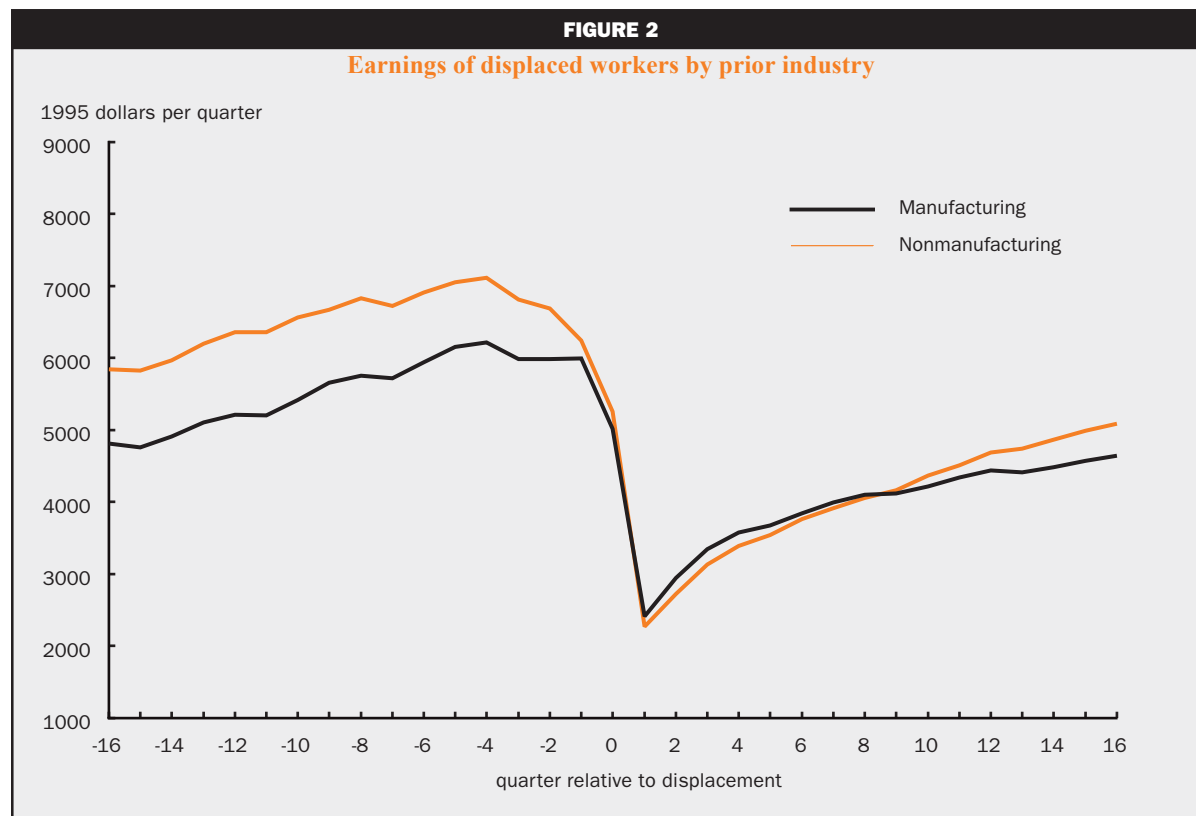
cost of displacement is closely associated with workers' attachment to a particular firm or industry, but is less affected by workers' demographic characteristics or former industry.

What should policymakers expect from retraining?

Ever since the passage of the Area Redevelopment Act of 1961, the Manpower Development and Training Act of 1962, and the Trade Adjustment Assistance Act of 1962, policymakers have sought to use various forms of schooling, classroom vocational training, and subsidized on-the-job training to ameliorate displaced workers' earnings losses (LaLonde, 2003). If such programs are well run, policymakers clearly have reason to expect them to raise workers' subsequent earnings. But, should policymakers expect such programs to fully offset the effects of displacement? If not, how much impact on earnings is it reasonable to expect?

A useful frame of reference is the large literature on the returns to traditional schooling. A rough summary of the findings of that literature is that an additional year of schooling raises recipients' subsequent annual earnings by approximately 10 percent; taking account of the associated costs, the inflation-adjusted internal rate of return is near 7 percent (Heckman, Lochner, and Todd, 2003). Such an investment compares favorably with returns available in financial markets. However, as we noted, the earnings losses suffered by high-tenure job losers could easily be on the order of 20 percent of their previous earnings. Thus, if the effectiveness of manpower retraining programs in raising earnings was equal to that of traditional education, it would take roughly two years of such training to fully offset the effects of displacement.

As an illustration, consider a worker for whom job displacement reduced his annual earnings from $30,000 to $25,000. That is, his previous earnings were 20 percent higher than those he could expect in the absence of retraining. What level of investment would be required to raise his annual earnings by 20 percent? Using the 7 percent return estimate from the schooling literature as our guide, we would expect that the level of investment required to increase his earnings by $5,000 would be $5,000/0.07, or somewhat in excess of $70,000. Such a program might provide 20 months of training with direct costs of $30,000 and foregone earnings of roughly $40,000.

Very few public-sector training programs come close to providing the equivalent of two years of retraining, incurring direct costs of $30,000, or making overall investments of $70,000 per participant. Indeed, the investments made by the typical program are an

order of magnitude less. Thus, unless these programs are extremely effective, it is unreasonable to expect them to fully offset displaced workers' earnings losses. As with traditional education, they may still be good investments. However, policymakers should not be disappointed if programs with direct costs of, say $3,000, increase earnings by only 2 percent or 3 percent.

The decision to obtain retraining and the interpretation of training impacts

Motives for enrolling in retraining following job loss vary. Most obviously, individuals may enroll to enhance their skills. As we discuss below, the optimal extent of investments in new skills depends on their impact on future earnings, time remaining in the trainees' work lives, and direct and indirect costs of going to school. In addition to the human capital investment motive, individuals also may enroll in training in order to facilitate job search (Heckman, LaLonde, and Smith, 1999). Exposure to new skills and new networks of contacts may allow workers to find appropriate work more quickly. Another possibility is that workers' retraining constitutes a form of consumption while unemployed. For example, displaced workers might decide to enroll in, say, a photography course, while waiting for an acceptable job offer to arrive. These varying motives have different implications for who enrolls in retraining, what effects it should have, and what these effects imply about the potential for an expansion of retraining to aid those not currently receiving services.

The human capital investment framework links displaced workers' decisions to enroll in retraining to the impact of that training on earnings (Heckman, LaLonde, and Smith, 1999). To illustrate the different incentives for participation in retraining, one can characterize the decision to enroll in retraining using equation 1:

1) $\quad \delta_i (1 - (1/1 + r)^{N_i}) / r - C_i > 0.$

In equation 1, the term δ_i denotes the annual impact of retraining on person i's post-training earnings. The subscript i indicates that the impact of schooling varies among individuals in the population.[2] The term $(1 - (1/1 + r)^{N_i}) / r$ is the present value of $1 paid to an individual annually for N_i years, where N_i denotes the number of remaining years in a trainee's work life, and r is the real interest rate. C_i denotes the costs of retraining. These costs include both the direct costs of training, such as tuition, supplies, transportation, and child care, as well as the opportunity costs of training

connected with spending less time working or searching for a new job. This formulation may be easily modified to account for the possibility that the impact of training, δ_i, depreciates or appreciates over time.

Because older workers typically will have fewer years remaining in their work lives, the term $(1 - (1/1 + r)^{N_i})$ will be smaller for older workers, implying that other things being equal, they have less incentive to enroll in retraining than younger workers. Such differences in remaining working lives can substantially alter the incentives to obtain retraining. For example, suppose training raises annual earnings by $2,000 per year for the remainder of a worker's career, that the cost of retraining averages $10,000 per trainee, and that the real discount rate is 2 percent. Then the present discounted value of retraining for a 50-year-old displaced worker who expects to work an additional 15 years is $15,700. The comparable figure for a 30-year-old displaced worker who expects to work for 35 more years is $40,000. According to this framework, in order for the 50-year-old displaced worker to obtain the same (present discounted) gains from training, the annual impact on his earnings would have to increase from $2,000 to $3,900 per year. That is, a 50-year-old would need to expect nearly twice the increase in annual earnings to have the same incentives to enroll in retraining as the 30-year-old.

Although the human capital framework suggests that older workers are less likely to enroll in retraining, among those who do enroll, the annual impact of retraining is likely to be larger than it is for younger workers. Older workers are less likely to enroll in retraining because they have fewer remaining years left in their work lives and, possibly, because they face higher opportunity costs of training due to their higher foregone earnings and perhaps a higher psychological barrier associated with returning to a classroom setting. If they do enroll, it must be because the impacts on annual earnings are high enough to offset those effects. Thus, among those who enroll, the average impact of training on annual earnings is likely to be higher for the older workers.

A related point is that if we observe empirically that, among those who enroll, the impact of retraining on annual earnings is greater for older workers than it is for younger persons, it would not necessarily follow that, among the general population, older workers are more effective learners than younger workers. Nor would this finding imply that policymakers should necessarily encourage additional older workers to take up training. Instead, differences between the underlying distributions of training impacts for older and younger workers may manifest themselves more in differences among workers' rates of participation in retraining than in differences in mean outcomes among those who participate (Heckman and Honoré, 1990).

The foregoing framework is useful for thinking about the decision to enroll in training, but it does not address the equally important decision of how much training enrollees should acquire. Indeed, because the incremental costs and benefits of additional training do not depend on the levels of training, the framework of equation 1 implies that as long as it is beneficial to enroll in one community college course, it makes sense to enroll in and complete any additional number of courses. Obviously, we do not observe this behavior in the data. Rather, we find that most displaced workers in Washington State who enrolled in community college courses around the time of their job losses completed only a few classes (JLS, 1999). To make it consistent with this pattern of behavior, one could modify the framework of equation 1 to allow for the possibility that the annual impact of training rises at a decreasing rate with the number of credits completed or that the costs are rising with the number of credits completed.[3] For example, the opportunity cost of participating in training may increase as more courses are completed, because each course raises the value of the worker's services to available jobs and, thus, the opportunity cost of turning down an available job to get more training. Alternatively, the more courses taken, the harder it is for the worker to hold a full-time or even a part-time job.

Who participates in retraining?

The foregoing discussion indicates that when assessing the impact of retraining among displaced workers, we also should examine their participation rates. To date there has been little systematic study of the determinants of participation in training generally, and especially so for displaced workers. (One exception is the study of training participation by economically disadvantaged adults in Heckman and Smith, 2004).

Here we describe participation patterns of displaced workers in community college retraining around the time of displacement. Our sample is 65,000 Washington workers who lost their jobs between 1990 and 1994. About 15 percent of these displaced workers completed at least one community college course around the time of their job loss.

These trainees differ in several ways from displaced workers in our sample who did not enroll. Among both older and younger displaced workers, community college participants are better educated, more likely to be white, and more likely to be displaced from

the aerospace industry than are the non-trainees. Among the older males, we see that community college participants also are more likely displaced from the state's wood products industries.

The higher levels of educational attainment among trainees suggest that the trainees were more skilled than the non-trainees. But, as shown near the bottom of table 1, despite their higher levels of education, we find that the average pre-displacement earnings of both the older and younger trainees are similar to those of comparably aged non-trainees. Thus, while trainees are better educated than other displaced workers, they also had lower than expected earnings relative to comparably educated non-trainees. Therefore, they are not representative of the population of displaced workers with similar levels of education.

The foregoing evidence underscores two points: 1) Trainees are not representative of the population of displaced workers, and 2) it is particularly important to control for individuals' prior earnings power, and their potential loss of earnings power associated with job loss in assessing the impact of retraining.[4]

One explanation for the participation patterns we observe in table 1 is that those with prior schooling beyond high school are more familiar with the demands of and types of courses offered by community colleges and have had more success in learning material in a classroom setting. Consequently, they are more likely to enroll in community college retraining. The possibility that variation in knowledge about the existence of retraining opportunities might play a role in retraining decisions is also consistent with anecdotal evidence that workers displaced from aerospace and wood products industries were given information about training opportunities by their unions and former employers and that these displaced workers had higher training rates than workers from other industries during the period studied (Jacobson and Sullivan, 1999).

Some direct evidence on the impact of information on rates of enrollment in training was provided by the Lifelong Learning Demonstration, a large randomized trial conducted during 1996. Two mass mailings of information were targeted at "incumbent" workers with recent work experience. The demonstration defined such workers as those who had earned more than $1,105 in at least six of the previous eight quarters. Because of this definition, in principle, the study sample could have included some displaced workers. The results indicated that this very modest intervention had no effect on participation rates in training. (Abt Associates, 1999). This finding suggests, albeit weakly, that the higher enrollment rates that we observed for displaced workers with some prior college education were not

simply due to their knowledge about the existence of such opportunities.

Another factor that may influence displaced workers' training decisions is the condition of their local labor market. Individuals whose job search prospects are poor may choose to enroll in retraining because their opportunity costs are low. As shown in table 1, our two measures of local labor market conditions, the county unemployment rate and its rate of employment growth, do not reveal any differences between trainees and comparisons. By contrast, our measure of labor market conditions in displaced workers' prior (two-digit Standard Industrial Classification) industry does differ for trainees and non-trainees. Trainees appear to be displaced from industries that have had slower employment growth.

This last difference in industry conditions suggests that displaced workers who are more likely to change industries as a result of their job loss and, as a result, expect larger earnings losses may be the ones who are most inclined to seek retraining (JLS, 1993a; Neal, 1995). This pattern is consistent with the idea that workers who expect to experience very large earnings losses from displacement, because they can not find a new job in their old industry, likely have lower opportunity costs of retraining and participate in it at higher rates. This possibility suggests that studies of the impact of retraining programs should adjust for the expected loss in earnings associated with displacement from different industries.

A final observation about table 1 is that, as implied by the human capital framework, older displaced workers in Washington State were less likely to enroll and complete community college courses than younger displaced workers. Given that displaced workers tend to be older than other unemployed workers and others seeking training, understanding the relationship between age and training participation is especially important.

To further explore this relationship among Washington State's displaced workers, we decomposed the total community college schooling that they acquired into three measures of participation: A) the probability of enrolling in community college, B) the probability of completing at least one course given enrollment, and C) the number of credits completed.[5] We consider separately the relationship between age and each of these measures of participation, using a step function for age that allows for eight separate age intervals. We also control for several individual and pre-displacement job characteristics using ordinary least squares. These characteristics are summarized in table 1 and include the three measures of labor market conditions and earnings during the year prior to job loss. Among

TABLE 1

Characteristics of displaced workers in Washington State

	Males				Females			
	Under 35		35 and over		Under 35		35 and over	
Characteristic	T[1] (1)	C[2] (2)	T[1] (3)	C[2] (4)	T[1] (5)	C[2] (6)	T[1] (7)	C[2] (8)
Age at job loss	28.70 (3.62)	29.63 (3.45)	43.06 (5.92)	43.97 (6.28)	28.92 (3.70)	28.82 (3.44)	43.62 (5.76)	44.45 (6.15)
Minority	.12	.17	.10	.13	.11	.17	.09	.14
> 6 years' tenure	.12	.13	.25	.23	.16	.15	.28	.27
Educational attainment								
< High school	.09	.18	.06	.12	.06	.12	.04	.12
> High school	.43	.28	.55	.43	.49	.38	.53	.41
Prior industry								
Aerospace	.19	.11	.18	.10	.13	.09	.11	.07
Wood products	.09	.08	.16	.07	.02	.02	.04	.02
Other manufacturing	.24	.24	.34	.23	.14	.14	.15	.15
Region of state								
Seattle–Tacoma MSA	.55	.55	.51	.57	.59	.60	.53	.58
Other counties with MSAs	.13	.12	.13	.11	.12	.11	.13	.12
Rural counties	.32	.33	.37	.31	.29	.29	.33	.30
Labor market conditions at job loss								
County U_ rate (%)	7.04	7.20	7.31	7.06	6.94	7.00	7.09	7.04
County E_growth (%)	1.50	1.54	1.13	1.47	1.44	1.45	1.45	1.48
Employment growth in 2-digit industry (%)	0.41	1.08	–0.12	1.17	1.31	1.72	1.51	2.02
Mean earnings prior to job loss								
1–4 quarters before ($000s)	26.5 (11.6)	25.7 (12.1)	34.5 (15.3)	33.3 (17.6)	21.1 (9.7)	20.5 (10.0)	24.5 (11.8)	23.4 (13.2)
5–8 quarters before ($000s)	26.7 (11.7)	26.2 (12.4)	35.8 (14.8)	34.5 (17.5)	21.1 (9.2)	20.6 (10.2)	24.7 (11.4)	23.5 (12.6)
Observations	2,936	14,560	2,371	19,342	2,291	7,462	2,809	13,552

the characteristics we control for in this analysis are a worker's prior tenure and prior industry, which are likely related to the expected long-term earnings losses associated with their displacement (JLS, 1993a). These variables, along with schooling, prior earnings, minority status, gender, and region of the state also are likely predictors of post-displacement earnings. One way to interpret these controls is that we are measuring the effects of age on the retraining participation decision, while roughly holding constant the opportunity cost of retraining.

Our findings on the determinants of age on retraining participation are shown in table 2. As shown by the first column, the number of community college credits completed by male and female displaced workers declines nearly monotonically with age. In the

second column, we see that participation, defined as completing one or more courses, also declines monotonically with age. The results in the last three columns of the table indicate that the reason older male displaced workers complete less training than younger males is that they are less likely to enroll in courses in the first place. However, once they enroll in a course, they are almost as likely to complete at least one class and, given that they complete one class, except for the very youngest and oldest age groups, on average they complete nearly the same number of credits as their younger counterparts.[6]

The results in table 2 have several possible interpretations. If we have successfully controlled for workers' expected post-training earnings, then the age–participation relationship might reflect either retraining

having a lower impact on annual earnings for older workers or older workers having shorter remaining work lives. However, another possible interpretation of the results in table 2 is that we have not completely controlled for expected post-displacement earnings and that among workers who have the same prior education and earnings, older workers differ in some unobservable dimension that makes them less productive at new jobs. Such an interpretation would explain the otherwise puzzling result that older workers with more labor market experience have the same earnings as observationally similar younger workers. To the extent that the unobserved attribute that lowers older workers' earnings also makes them less effective learners (that is, a lower value of δ_i), we expect increasing age to be associated with a lower propensity to enroll in training.

Federal retraining initiatives and the role of community colleges

The initial intent of the Manpower Development and Training Act (MDTA) was to retrain workers who had lost jobs due to technological change. But by the mid-1960s, Congress had changed the emphasis of these programs away from workers displaced from steady jobs and toward the economically disadvantaged. This emphasis was especially strong in the Job Training Partnership Act (JTPA) program, enacted in 1982 (LaLonde, 2003). However with the passage of the Economically Displaced Worker Adjustment Act (EDWAA) in 1988 and then with the mid-1990s amendments to JTPA, resources were gradually shifted back toward retraining displaced workers.

Over the years, government-sponsored retraining has taken place in a variety of settings, including technical schools and subsidized positions with private employers. However, during the last 30 years, community colleges have played an increasingly prominent role in worker retraining policy. This change coincides with the greater emphasis that these institutions have given to vocational training. Although community colleges continue to offer traditional academic courses, they also offer a wide range of vocational courses that in the past were offered mainly by proprietary schools (Freeman, 1974; Grubb, 1993b; Kane and Rouse, 1999.) Typical course offerings cover areas as diverse as computer information systems, food preparation and management, real estate, word processing, respiratory therapy, the construction trades, and automobile repair. Moreover, students who complete these kinds of courses can often obtain certification in a particular trade or take state licensing exams.

Several federal programs have funded community college services for displaced workers. These programs include those funded under the Trade Adjustment Assistance Act (TAA), EDWAA, which is now Title I of the Workforce Investment Act (WIA), and the 1972 Higher Education Amendments (Pell Grants).

The TAA program was first established by Congress in 1962 and has been amended several times since then. TAA currently provides extended unemployment insurance benefits to unemployed former manufacturing workers who participate in retraining and who the Secretary of Labor determines to have lost jobs in trade-impacted plants and industries. About 40 percent of those receiving TAA-sponsored job-skill training and 73 percent of those receiving TAA-sponsored general education received these services at community or four-year colleges (Corson, Decker, Gleason, and Nicholson, 1993).

There also is a similar program for workers displaced because of the effects of the North American Free Trade Agreement (NAFTA). NAFTA Transitional Adjustment Assistance was established in 1993 to provide assistance to displaced workers and to workers who retained jobs but had their hours or wages cut as result of increased trade between the U.S. and Mexico and Canada. Applicants who the Secretary of Labor determines meet these criteria are eligible to receive a variety of services, including training with long-term income support. Since the passage of the Trade Act of 2002, this program has been merged with the TAA program.

In 1988, Congress established EDWAA as an amendment to Title III of JTPA. EDWAA provides displaced workers with retraining and other services, but does not extend unemployment benefits. One important change from previous legislation was to require that at least one-half of EDWAA funds be spent on retraining as opposed to job search and other reemployment services. Eligibility for EDWAA services extends to all permanently displaced workers. Initially, funding levels limited annual participation in EDWAA programs to about 120,000 workers at a cost of approximately $200 million. However since fiscal year 1994, expenditures have exceeded $1 billion annually. Also, compared with JTPA, proportionally more Title I WIA funds have gone to displaced adults than to economically disadvantaged adults.

EDWAA defined displaced worker eligibility more broadly than we did earlier in this article. EDWAA funds could be used to train applicants who program operators determined would likely benefit from the services and who lost jobs because of plant closures or mass layoffs, or were long-term unemployed persons with

		Probability of completing one or more credits	Probability of enrolling in credit course	Probability of earning credits given enrollment	Credits earned given at least one credit

TABLE 2

Adjusted participation in community college by age of displaced workers

	Credits completed	Probability of completing one or more credits	Probability of enrolling in credit course	Probability of earning credits given enrollment	Credits earned given at least one credit
Males					
20–24	6.77	0.191	0.229	0.023	10.65
	(0.53)	(0.011)	(0.013)	(0.035)	(3.63)
25–29	3.61	0.107	0.130	0.027	7.90
	(0.45)	(0.010)	(0.011)	(0.033)	(3.44)
30–34	2.47	0.070	0.090	–0.005	7.36
	(0.44)	(0.010)	(0.010)	(0.033)	(3.42)
35–39	1.95	0.046	0.061	0.002	8.48
	(0.44)	(0.010)	(0.010)	(0.033)	(3.44)
40–44	0.98	0.027	0.042	–0.017	5.07
	(0.42)	(0.010)	(0.010)	(0.034)	(3.50)
45–49	1.15	0.024	0.032	0.006	5.71
	(0.47)	(0.010)	(0.010)	(0.035)	(3.60)
50–54	0.79	0.021	0.030	–0.035	3.78
	(0.50)	(0.011)	(0.011)	(0.037)	(3.83)
55–60	0.0	0.0	0.0	0.0	0.0
Observations	39,208	39,208	39,208	6,568	5,306
Females					
20–24	10.30	0.225	0.258	0.050	21.15
	(0.72)	(0.017)	(0.018)	(0.032)	(3.17)
25–29	4.55	0.121	0.147	0.028	12.00
	(0.59)	(0.014)	(0.015)	(0.030)	(2.95)
30–34	2.92	0.073	0.094	0.013	10.18
	(0.58)	(0.013)	(0.014)	(0.030)	(2.92)
35–39	2.72	0.059	0.079	0.009	11.20
	(0.57)	(0.013)	(0.014)	(0.030)	(2.92)
40–44	2.32	0.048	0.067	–0.004	9.94
	(0.57)	(0.013)	(0.014)	(0.030)	(2.93)
45–49	1.72	0.032	0.483	–0.010	8.57
	(0.59)	(0.014)	(0.015)	(0.031)	(3.01)
50–54	0.80	0.023	0.029	–0.005	4.50
	(0.62)	(0.015)	(0.016)	(0.032)	(3.22)
55–60	0.0	0.0	0.0	0.0	0.0
Observations	26,113	26,113	26,113	6,156	5,099

Notes: Figures in columns 1 and 5 are from a regression with the indicated column heading as the dependent variable and with an intercept and indicators for the age ranges shown. Figures in columns 2 through 4 are coefficients from a linear probability model with an intercept and indicators for the age ranges shown. No other controls are included in the regressions. Information on the sample is given in the text. The figures in the table are coefficients for the indicators of the age ranges shown in the table. All models include controls for prior schooling, prior industry, earnings in year prior to displacement, tenure on pre-displacement job, minority status, region of state, county unemployment and employment growth rates, the statewide employment growth rate in the individual's prior two-digit industry, and quarter and year of job loss. Numbers in parentheses are standard errors (under the incorrect assumption of homoscedasticity).

limited job prospects, farmers, ranchers, and other self-employed persons who become unemployed due to general economic conditions, and, if states so desired, spouses of displaced workers.

Although it was not designed specifically for displaced workers, the Pell Grant program has provided low-income displaced workers with grants to cover the cost of retraining. Current regulations base eligibility on prior year income, allowing relatively few displaced workers to participate. However, the program once allowed administrators to waive the normal limit on an applicant's assets and base their eligibility on current instead of the previous year's income. As a result, displaced workers were eligible to receive grants to cover the tuition costs of retraining and schooling. Many displaced workers have taken advantage of this provision. During the 1990–91 academic year, more than 75,000 displaced workers received Pell Grants. Approximately 30 percent of displaced Pell grantees attended proprietary schools, another 10 percent

attended four-year colleges, and the remaining 60 percent enrolled in community colleges.

Today, most displaced workers who receive federally sponsored retraining services participate in programs authorized under WIA. These programs provide clients with a diverse set of services that may include job search assistance, on-the-job training, or classroom instruction in vocational, remedial, or college-level skills. Currently, most federal training is funded through locally provided Individual Training Accounts (ITAs), which are flexible vouchers that can be used at certified institutions, such as community colleges and proprietary schools. In the past, local Private Industry Councils assigned clients to training provided by their own operating organizations or through subcontracts to a variety of educational institutions.

In practice under both WIA and JTPA, most of the training that displaced workers receive is relatively low intensity and low cost. For example, below, we discuss the Texas Worker Readjustment Demonstration, in which participants received on average 20 weeks of either job search assistance alone or job search assistance combined with vocational classroom training or on-the-job training. The costs for this program ranged from $1,300 to $3,000 per participant, which is fairly typical of the training that historically has been available to displaced workers.

In practice, two-year community colleges are one of the most common providers of government-sponsored training services. Although community colleges that receive WIA funds frequently place displaced workers into specially designed noncredit courses, they also enroll WIA participants into regular community college programs. In these mainstream programs, displaced workers take classes with non-displaced workers and full-time students. State and local governments typically subsidize 80 percent of the cost of community college schooling (Kane and Rouse, 1999). For more technical lines of retraining, such as nursing programs, the subsidies tend to be even larger. Displaced workers likely account for a significant part of community college enrollments. About one-third of community college students in the United States are over 30, and the vast majority work at least part-time (Kane and Rouse, 1999).

Impact of retraining on displaced workers' earnings

There have been relatively few evaluations of the impact of training on the employment outcomes of displaced workers according to our definition. Instead, there has been greater interest in assessing the effect of job training on economically disadvantaged youth and adults. One study that is relevant is Ashenfelter's classic early study of the 1964 Manpower Training Development Act (MDTA) cohort, who received training just prior to the shift of federal funding toward the economically disadvantaged. His impact estimates for the second year following training indicate that the vocational classroom training provided under MTDA raised the earnings (in 2002 dollars) of white and minority males by $830 and $2,065, respectively; impacts for white and minority females were $2,020 and $2,870, respectively.[7] These impressive earnings gains amount to about 4 percent and 12 percent of post-training earnings for the white and minority men, respectively, and 18 percent and 29 percent of post-training earnings for the women. Ashenfelter estimates that in subsequent years these gains declined significantly for males, but remained relatively stable for females, persisting for at least five years after training. Though one could question the current relevance of a study of training that took place 40 years ago, Ashenfelter's study did show that vocational retraining programs can significantly increase participants' earnings and possibly by more than what one would expect from completing one year of traditional schooling.

In the 1980s the large structural changes that hit the manufacturing sector led to at least the perception of a surge in the number of displaced workers. In response, the Department of Labor sponsored seven demonstration programs to assess the effectiveness of displaced worker programs. During fiscal year 1983, these demonstrations served approximately 10,000 displaced workers. Participants received a range of services, including job search assistance, classroom training, and on-the-job training (Corson, Long, and Maynard, 1985).

In the Buffalo Dislocated Worker Program, officials assigned some applicants to program slots using a lottery. The follow-up survey indicated that the opportunity to receive the program's employment and training services increased average earnings during the first six post-program months by about $179 per week (in 2002 dollars) or by 65 percent of post-displacement earnings.[8] However, only 18 percent of participants received classroom training as their major activity, with the rest mainly receiving job search assistance. No separate estimate of the impact of the program on those who did receive training was produced (Corson, Long, and Maynard, 1985).

The Texas Worker Readjustment Demonstration, which operated during 1984 and 1985, also targeted displaced workers (Bloom, 1990). In this study, roughly one-half of the training participants were between the ages of 35 and 54 and, on average, had held their

prior jobs for more than four years. This demonstration used randomized trials to study the effects of job search assistance combined with vocational classroom training in Houston and subsidized on-the-job training in El Paso.

Overall, in this study received relatively little training. On average, participants received 20 weeks of services, but 62 percent of male participants and 50 percent of the female participants received only job search assistance while enrolled in this program. For males, who were more likely to have participated at the Houston site, with its more expensive classroom training, the direct cost of these services averaged approximately $3,000 per participant. For females, who were more likely to have participated at the El Paso site, with its less expensive on-the-job training, the direct cost averaged approximately $1,300 per participant. The figure for females was fairly typical of JTPA expenditures at the time.

The experimental evaluation of the Texas program indicated that the opportunity to participate in training raised participants' earnings. Men's earnings rose by about 8 percent and women's earnings rose by nearly 34 percent (Bloom, 1990, p. 163). (The increase in women's earnings was statistically significant at conventional levels.) The more impressive impacts for female participants in the Texas program are consistent with findings from the literature on training for the economically disadvantaged. Such studies typically report larger training impacts for women than for men. If the gains in the Texas study persisted, the social internal rate of return for this training intervention would be very impressive. But without longer follow-up data, it is impossible to determine whether the Texas program was successful.

The Buffalo and Texas evaluations indicate that Job Search Assistance (JSA) could be a highly cost-effective service for displaced workers. Duane Leigh (1990) summarized the random assignment demonstrations as showing that, on average, job search assistance is about as effective as retraining, but much less expensive. However, more recent evidence is mixed. In the Job Search Assistance Demonstration, the earnings of Washington, DC, participants who received JSA were about 10 percent above those of a control group. But a similar treatment that operated contemporaneously in Florida showed no effect on participants' earnings (Decker et al., 2000). When job search assistance is effective, studies indicate that it is associated with about a 3 percent to 5 percent increase in short-term earnings.

The impacts of JSA for displaced workers are similar to the earnings impacts reported in the Unemployment Insurance Bonus experiments conducted in New Jersey, Washington State, Pennsylvania, and Illinois (Woodbury and Spiegelman, 1987; O'Leary, Spiegelman, and Kline, 1995; Corson and Haimson, 1995). In these studies, the only treatment received by unemployment insurance claimants was a cash bonus for returning to work early in their unemployment spell. As with JSA, there were significant differences in the impacts across states, a finding that should make policymakers cautious about generalizing from these studies. Differences in how policies and services are implemented in different locations and differences in local labor market conditions appear to have major effects on the results.

Another study that evaluated the impact of retraining for displaced workers is the Evaluation of the TAA Program (Corson, Decker, Gleason, and Nicholson, 1993). Here, access to training and job search assistance among workers who lost jobs for reasons related to international trade was estimated to have raised participants' quarterly earnings by about $1,176 on an annual basis. Given that the program cost averaged $2,350 per participant, this program would pay for itself in less than three years if the impact persisted.

But this careful study of TAA has three shortcomings commonly associated with evaluations of retraining programs. First, the follow-up period was too short. Human capital theory predicts that investments in skills should generate returns over a long period through higher worker productivity (Ashenfelter, 1978). The benefits of retraining should therefore be measured over a long period. In practice, a one- or two-year follow-up period is likely to be inadequate, especially when one effect of retraining is to enable participants to get jobs that offer the possibility of career advancement.

A second shortcoming of the TAA study was that the sample size was too small. The estimated impact is large relative to the cost of the program. But, given the standard error associated with the impact estimate, one cannot be confident that the program impact is significantly different from $0 per year or from $3,000 per year. When evaluating programs like the TAA retraining program, evaluators must ensure that the sizes of their samples are large enough to detect an impact on annual earnings of about $500. This is necessary because given the typical cost of these programs, if such an impact persisted, it would still imply very respectable rates of return. In the case of the TAA study, the required sample size is about 16 times greater than the sample actually used. Such requirements for the sample size make relying on survey data to evaluate training programs very expensive.

Third, the study used a single yes/no variable to describe the training offered, while there was actually enormous variation in the rigor and length of the programs. Had more information about the characteristics of training been used in producing the estimates, it is possible that the confidence interval surrounding the point estimate could have been substantially reduced. Moreover, factors associated with high and low returns might have been identified. Controlling for variation in training characteristics was especially important with respect to the TAA program because entering training, or receiving a waiver, was necessary to qualify for six months or more of additional UI benefits. Thus, there were unusually strong incentives for program participants to enter training programs simply to qualify for the extended benefits, even if the training was unlikely to raise their long-term earnings.

Effects of community college retraining

As noted above, it may be inappropriate to use the findings of several of the studies described above to assess the effect of training, because the major activity that program participants received was job search assistance. In the Buffalo, NY, Texas, and New Jersey demonstrations, only small percentages of participants received vocational classroom training or on-the-job training. To remedy this shortcoming, we recently have examined the effects of training on the earnings of a large number of displaced workers from Washington State who completed regular community college courses during the early 1990s.[9] Approximately 15 percent of displaced workers in our sample completed at least one course around the time of their job loss and, on average, earned about 0.6 academic years of community college credits. Very few such workers completed enough retraining to earn a degree or certificate. Nonetheless, the incidence and intensity of classroom training received by the displaced workers studied here is greater than that usually received by participants in studies of public-sector-sponsored retraining.

Our analysis indicates that on average the impact of this community college retraining for displaced workers is somewhat larger, but still consistent, with the impacts reported by Kane and Rouse (1995) and Leigh and Gill (1997), who studied younger community college participants rather than displaced workers per se. We estimate that the equivalent of a year of community college credits raises displaced workers' earnings by about 9 percent for men and by about 13 percent for women. Further, like Kane and Rouse, we also find that workers appear to benefit even if they complete only a few courses. Indeed, for males we found no evidence of a "sheepskin" effect—an increase in earnings associated with degree completion greater than what would be predicted on the basis of the individual courses completed. In fact, we found evidence that males who take a very large number of community college courses may do worse than their counterparts who complete somewhat fewer classes.

The average results just discussed mask considerable differences in impacts among individuals taking different types of courses. One academic year of courses in more quantitative subject matter raised individuals' subsequent earnings by about 14 percent for males and by about 29 percent for females. These gains are large by the standards of the schooling literature and suggest that by completing a large number of such courses, displaced workers can offset a substantial portion of the earnings losses associated with their job loss.

By contrast, the effects of other community college courses are much smaller than conventional estimates of the return to formal schooling. We find little evidence that displaced workers benefit financially from completing less quantitative vocational or academic courses. Our estimated impacts for some workers could even be negative. An implication of our results is that public subsides of community college schooling for displaced workers will not pay off unless displaced workers enroll in appropriate courses.

Our results indicate that the impact of community college retraining on annual earnings is similar for older and younger displaced workers. More specifically, one academic year of community college retraining raises older males' earnings—those 35 or older—by about 7 percent and older females' earnings by about 10 percent. These impacts are consistent with conventional estimates of the return to formal schooling. The fact that older displaced workers' annual earnings are not raised by more than those of younger workers is somewhat surprising in light of our argument earlier that a shorter pay-back period for human capital investments should lead to older workers enrolling in training only when the expected increases in their annual earning are especially high.

As we found with our full sample of displaced workers, we find larger impacts for older trainees when they complete courses in quantitative vocational or academic subject areas. Completing one academic year of such retraining increased the long-term quarterly earnings of older male displaced workers by about 10 percent. Among women, the gains were larger. The effect of completing one academic year of all other community college courses was positive, but generally small at about 3 percent to 5 percent of post-displacement earnings. Therefore, it is reasonable to conclude that, at least among those who participate in retraining,

older workers in Washington State effectively increased their earnings power.

Worker training is an investment in which upfront costs are incurred to obtain future benefits. An important component of those upfront costs may be reduced earnings while workers are in training. Training takes time and that time may come at the expense of working or searching for work. Thus, in our Washington State study we attempted to measure these opportunity costs by assessing how much lower trainees' earnings were than similar workers who did not enroll in community college courses. We found that being in school approximately full time was associated with earnings reductions of 60 percent for younger workers and 75 percent for older workers. We also find that the more courses that displaced workers enroll in, the lower their earnings.

In estimating the foregone earnings associated with retraining, we attempted to control as much as possible for factors that make community college enrollees different from other displaced workers. However, we recognize that estimating foregone earnings is an especially difficult problem. Displaced workers must, practically by definition, engage in a difficult search for new employment. The length of time spent in that job search is best thought of as random. It is possible that workers whose job search turned out to be especially long and difficult made the best of a bad situation by enrolling in community college while they continued to search for new jobs with little or no reduction in intensity. If this is the case, then a portion of the reduced earnings we associate with enrollment in community college does not actually correspond to foregone earnings. Thus, our estimates should be considered upper bounds on the magnitude of the opportunity costs associated with community college retraining.

Should we teach old dogs new tricks?

The above results clearly indicate that at least among those displaced workers who choose to enroll in community college retraining, old dogs can be taught new tricks. But is having displaced workers return to school to obtain new skills a good investment? Given that state and local governments subsidize many of the costs of community college retraining, how does the answer to this question depend on whether the investment is viewed from the point of view of the individual or society as a whole? In this section, we explore the answers to these questions by putting our estimates of the effects of community college on earnings together with some figures on its costs and assumptions on the workings of the tax system.

In deciding whether to continue supporting community college education for displaced workers or possibly to expand its scope, policymakers need to know the net social benefits and rates of return from investments in classroom training. Individual displaced workers and those who counsel them need comparable information. In terms of the human capital framework we outlined earlier, displaced workers tend to be 1) older and thus to have shorter remaining work lives, and 2) more skilled and thus to have higher opportunity costs of schooling and training. So, the rate of return from retraining displaced adults in community college could be lower than for training economically disadvantaged individuals and low-tenure job losers. Thus, policymakers may wish to compare our analysis of the cost and benefits of community college training for displaced workers with similar analyses of other human capital investments.

Here, we present alternative estimates of the private and social net benefits and the internal rate of return (IRR) from investments in community college retraining based on our study of displaced workers in Washington State. We assume that trainees complete one academic year of the same mix of courses as the individuals in our Washington State sample. We also assume that individuals pay one-fourth of their increased earnings in taxes and that the welfare cost of the taxes raised to subsidize community college schooling amounts to $3,250 per academic year of schooling. This figure assumes that the "deadweight loss" associated with raising $1 in taxes is $0.50 (Browning, 1987; Heckman, LaLonde, and Smith, 1999).

In table 3, panel A, we present estimates of the net benefit of retraining from the perspective of the trainee and of society. These calculations assume that our estimates of forgone earnings discussed in the last section are a true, opportunity cost of retraining. The table shows both the present value of net benefits in 2004 dollars, assuming a 4 percent real interest rate, and the ratio of benefits to costs, again in present value terms.

As the table shows, our calculations indicate that Washington State's displaced workers experienced substantial net benefits from their investments in community college schooling.[10] As expected, the private net benefits of retraining are larger for younger displaced workers (those under 35 years of age) than for older displaced workers. The benefit–cost ratios indicate that for every dollar invested in retraining by younger male displaced workers, they got $3.88 back, in present value terms.[11] For younger female workers, the figure is $4.52. By contrast, the corresponding ratios for older male and female displaced workers are $2.27 and

TABLE 3

Net benefit and internal rates of return from year of community college for displaced workers

A. Cost–benefit analysis of investments in retraining

| | Include "just showing up" effect | | | |
| | Males | | Females | |
	Young (1)	Old (2)	Young (3)	Old (4)
Perspective of participants				
Net benefit ($000s)	18.2	9.8	17.5	11.6
Benefit to cost ratio	3.88	2.27	4.52	3.05
Perspective of society				
Net benefit ($000s)	16.6	5.9	15.5	7.6
Benefit to cost ratio	2.04	1.34	2.04	1.49

B. Alternative social internal rates of return calculations

| | Include "just showing up" effect Opportunity costs (%) | | |
	No (1)	1/2 (2)	Yes (3)
Younger men	12.6	9.2	7.1
Older men	10.8	6.5	3.9
Younger women	12.0	9.4	7.6
Older women	11.0	7.8	5.5

Notes: Calculations based on estimates in Jacobson, LaLonde, and Sullivan (2004), column 6 of table 3a for males and column 6 of table 3b for females. We assume that the average remaining work lives of older displaced workers is 22 years and for younger displaced workers is 36 years. This assumption likely overstates the numbers of years that these individuals will work before retirement. In panel A, we discount future per period earnings impacts using a real rate of 4 percent. We also assume that individuals pay 25 percent of these gains to government in the form of various taxes. To measure the cost of schooling, we follow Kane and Rouse (1999) and assume the direct costs equal $8,000 per academic year. This figure includes tuition paid by the students plus the subsidies from state and local governments. We assume that students pay about 20 percent or $1,500 of this direct cost through their tuition, with taxpayers paying the remaining amount. For the calculations in panel A, we estimate the opportunity cost of schooling to equal one-half of the costs implied by the "in-school" estimates reported in tables 3a and 3b in Jacobson, LaLonde, and Sullivan (2004). In panel B, we make the indicated alternative assumptions about the opportunity cost of retraining. All figures in panel B are the social internal rates of return. All private internal rates of return are larger than those shown in columns 1 and 3. Finally, we assume that the welfare cost associated with the taxes raised to subsidized community college schooling equals 50 percent of the subsidy or $3,250.

$3.05, respectively. These lower figures reflect primarily their shorter remaining work lives. Of course, even the figures for older workers suggest that training was a good investment from the perspective of the worker.

The results of our cost–benefit analysis are less impressive from the perspective of society. The difference between the two sets of results in panel A come about because community college schooling is heavily subsidized by taxpayers and because the welfare costs of taxation incorporated in our calculations are large. Taking account of the costs and benefits to society lowers our estimates of the net benefits of retraining. For older male workers, total societal benefits are only about one-third greater than costs. For older female workers, benefits are nearly 50 percent greater than costs.[12] By contrast, our calculations indicate that the social benefit–cost ratios are substantially

larger when younger displaced workers acquire retraining, especially younger females.

As discussed above, there is uncertainty about the true extent to which displaced workers forego earnings to attend community college. Thus, we present evidence under three alternative scenarios. These are that true opportunity costs are zero, that they are equal to 50 percent of what we estimated, and that they are equal to what we estimated. As table 3 shows, our estimates of the net benefits and the IRR of retraining are quite sensitive to these assumptions.

Finally, we observe that our conclusions about the returns to retraining also are sensitive to the type of courses completed by displaced workers. So far, we have based our net benefit and IRR calculations on the assumption that displaced workers complete the same mix of more quantitative and less quantitative courses observed in our Washington State sample.

However, as we noted, the more quantitative courses had per-period impacts that were two to five times larger than the per-period impacts of the less quantitative courses. For older male workers, this difference in per-period impacts implies that the social IRR from one academic year of more quantitative courses equals about 8 percent. This figure compares favorably with conventional estimates of the internal rates of return to schooling.[13]

By contrast, the IRR from a similar investment in less quantitative courses is negative. This finding suggests that policymakers might consider shifting resources from supporting less quantitative to more quantitative courses of study. It also suggests that providing appropriate oversight and counseling to displaced workers considering retraining may be very valuable. In Washington State during the early 1990s, about one-half of the credits completed by male displaced workers and nearly two-thirds of the credits completed by female displaced workers were in courses teaching less quantitative subject matter. This raises the question of whether community colleges should steer older displaced workers toward more quantitative vocational and academic subject areas. Similarly, would WIA or TAA programs, which rely on community college retaining, be more productive if participants were given better information about the likely earnings effects of the more and less quantitative courses?[14]

Conclusion

The previous literature on assistance for displaced workers indicates that they can benefit from a variety of employment and training services, and our research on Washington State workers indicates that, on average, those who complete community college courses around the time of their job loss derive significant net benefits. These gains are especially large for displaced workers who are able to focus their retraining on quantitative vocational and academic subject matter.

Policymakers should, however, be cautious in drawing lessons from this research. Other things being equal, displaced workers who make the effort to acquire training are likely to be those who expect the largest impact from training. For most of these displaced workers, the research we surveyed strongly suggests that both the private and social benefits of retraining are likely to exceed the costs. However, if policymakers were to substantially increase the subsidy for community college retraining, they would tend to induce participation disproportionately by individuals who expect less dramatic impacts from retraining.

The net gains from training such individuals would, therefore, be smaller and possibly even negative.

Even if it were the case that individuals induced to participate in retraining by increased public subsidies experienced the same gains as those who already participate, it is not clear that increasing subsidies is the best policy. If an investment in retraining is optimal from the point of view of society, it is very likely also optimal from the point of view of the individual considering retraining.[15] Why then should such investments require subsidies? There are two arguments. First, displaced workers may be liquidity constrained. That is, it may be optimal in the long run for workers to invest in retraining, but in the short run they may be unable to pay for training either from their own funds or by securing a loan. The second is that publicly subsidized retraining is a form of insurance against the risk of job loss, given that private markets do not allow workers to insure against this risk.

If the rationale for subsidized retraining is that displaced workers are liquidity constrained, an obvious alternative to straight subsidies would be to provide them with publicly guaranteed loans. Such an alternative would likely serve to finance the same investments with less public expenditure. Eliminating some of the subsidy would also lessen the possible inefficiency of workers' electing training when it is a positive net benefit from their perspective only with subsidies. Policymakers might also use WIA funds to selectively award income stipends (as loans or grants) to displaced workers who show promise in completing course work in high-return fields.

Many displaced workers experience long-term earnings losses that far exceed the losses due to the initial period of unemployment and that in total amount to a significant portion of their lifetime earnings. Because benefits are paid only while workers are unemployed, the current unemployment insurance is not designed to insure against this type of risk. Moreover, because it is difficult to verify that job loss is unavoidable, private markets cannot provide insurance against such risk, and given the magnitude of the shock in many cases, it is unreasonable to expect workers to accumulate large enough buffer-stock savings to reduce the welfare cost of the lack of job loss insurance. Thus, there may be a role for publicly provided insurance against job loss.

While the provision of publicly provided retraining may be one legitimate form of insurance payout, it may not always be the optimal one. Indeed, for workers late in their careers and with still substantial marketable skills, it is very unlikely to be the optimal form of assistance. Cash compensation is likely more

efficient in many, perhaps most cases. In our 1993 book, *The Cost of Worker Dislocation*, we discussed how the unemployment insurance system might be improved by the addition of a system of wage insurance for experienced workers. Under such a system, worker and firm contributions to UI trust funds would be used to replace a portion of the difference between earnings on pre- and post-displacement jobs, as well as paying benefits during periods of joblessness as they currently do. We argue that wage insurance is attractive because relatively small sums would be required to be put aside each year while workers are employed and the cost would be widely distributed across high-tenure workers whose probability of displacement is very low in any given year, but would cover an event, should it occur, that is very costly per person. Litan and Kletzer (2001) have also proposed such programs. The 2002 amendments to the TAA include wage insurance provisions for older workers.

However, TAA benefits are limited to manufacturing workers displaced due to trade. Moreover, this provision of TAA has so far rarely been used, possibly because its existence is not widely known. In our view, a generally applicable program of wage insurance deserves serious consideration.

The pace of technological change shows no signs of slowing. And we have seen indications that broader segments of the work force may be subject to periodic major career interruptions. Therefore, issues of worker displacement are likely to continue to grow in public policy importance. Researchers and policymakers need to continue to search for innovative and cost-effective ways to return displaced workers to gainful employment, while ensuring that important developments (for example, in trade or technological innovation) that benefit the economy overall do not create undo hardships for those who may be adversely affected.

NOTES

[1] The actual cost of job loss to the workers is likely larger than 10 percent because previous studies indicated that had these workers not been displaced, their earnings would likely have grown modestly.

[2] We assume that these impacts are drawn from a probability distribution $F(\delta_i)$.

[3] The possibility that there are fixed costs associated with attending school during any given quarter also does not address the foregoing shortcoming of equation 1. Indeed, such costs make it more likely that trainees who enroll in one class will enroll in many classes. Suppose that older workers face higher fixed costs associated with going to school. In this case, we expect that among those who enroll, older workers complete more classes than their younger counterparts. However as we show below, this prediction is inconsistent with the participation patterns we observe in our data. Our data suggest that, all other things being equal, the fixed costs associated with acquiring retraining are relatively small and similar for older and younger displaced workers (JLS, 2003).

[4] This issue is different from the problem of Ashenfelter's dip in evaluations of training for economically disadvantaged persons (Ashenfelter, 1978; Heckman and Smith, 2004). In this case the commonly observed decline in earnings prior to training participation is thought to be transitory. In the case of displaced workers a significant and unknown fraction of the decline in earnings prior to entering training is permanent.

[5] Heckman and Smith (2004) use a similar decomposition to examine the determinants of training participation in programs operated under the Job Training Partnership Act.

[6] As shown by the bottom half of table 2, these patterns also hold for female displaced workers. But there are some modest differences in the results. First, among enrollees, older women are somewhat less likely to complete courses. Second, among those who complete at least one class, women 50 and over complete one to two fewer courses (or five to ten credits) than women under 50.

[7] See Ashenfelter (1978), pp. 54 and 56, tables 4 and 6. The base year for these estimates is 1961. The Consumer Price Index adjustment is taken from the 2004 *Economic Report of the President*, p. 353, table B-60.

[8] Not everyone offered the opportunity for services accepted the offer.

[9] A more detailed presentation of this analysis can be found in Jacobson, LaLonde, and Sullivan (2005).

[10] As noted above in the text, we have standardized these calculations to one academic year of schooling. As shown in table 1, the trainees in our sample acquired a little less than two-thirds of a year of schooling. Recall that earlier we found no evidence of diminishing impacts of community college credits for any of the four demographic groups. Thus, the average net benefit of retraining for our sample of displaced workers is approximately one-third less than the figures in table 3.

[11] The private IRR are larger for younger than for older displaced workers. Assuming the opportunity cost of retraining equals one-half the amount implied by the estimated "in-college" effects, we estimate that the private IRR for younger trainees ranges from 13.1 percent for younger men to 21.2 percent for younger women. For older trainees, our private IRR estimates range from 11.4 percent for older men to 15.7 percent for older women. If we alternatively assume that our "in-college" estimates reflect the opportunity cost of retraining, then our estimates range from 5.4 percent for older males to 9.4 percent for older females.

[12] The benefit–cost ratios that include the "just showing up" effect are somewhat larger: 1.34 for older males and 1.49 for older females.

[13] The 8.1 percent figure assumes the "just showing up" effect is not part of the per-period impact of community college schooling. When we include it in our calculation for older males, the IRR of more quantitative courses rises to 10.3 percent. We computed

these percentages under the assumption that the opportunity cost of retraining equaled one-half the cost implied by the "in-college" effects. Our social IRR figures for Group 1 courses are comparable to those reported for individuals in the population who complete between 12 and 14 years of schooling. See Heckman, Lochner, and Todd (2003), table 4. Their calculations also include consideration of tuition and tax payments.

[14]Unlike community colleges, WIA and, to a lesser extent, TAA programs require participants to assess the expected value of alternative training programs. These assessments are reviewed by case-management staff prior to issuing what amounts to training vouchers. This screening may be helpful in ensuring that participants obtain training relevant to entering fields with solid job opportunities.

[15]The only exception would be if retraining workers generates positive externalities for others. This might be the case if employers capture some of the gains from workers' higher productivity or if retrained workers are less likely to draw on other publicly provided social services.

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Understanding and addressing the challenges of job loss for low-wage workers

Steven Redfield

When it comes to the debate over job loss and related programs, America's low-wage workers seem to get little attention. Research and policy discussions about the impact of job loss on U.S. workers tend to focus on workers who have long work experience in skilled positions. In particular, research and programs often focus on the "displaced worker," defined as an employee who loses his or her job due to plant closures or relocation, insufficient work available, or positions or shifts being eliminated. In this era of technological change and global competition, the term conjures up images of high-tech jobs moved overseas and factory production workers increasingly replaced by automated processes. By definition, these workers are relatively "long tenured." The focus on experienced workers is repeated among those who conduct research on job loss. For example, although the U.S. Bureau of Labor Statistics (BLS) collects data on the full spectrum of displaced workers, it analyzes and publishes data only on those workers who held the job they were displaced from for at least three years. Many policy responses favor these workers as well. "Trade Adjustment Act" programs, "Rapid Response" initiatives, and high-tech training programs are all designed to meet the needs of this category of workers.

In reality, changes in the demand for workers, and the consequent job losses that occur, are found at all levels of the work force. For workers at the low end of the employment spectrum in terms of wages and skills, the consequences of losing a job are just as serious as for their skilled counterparts, while the support and options available to them are substantially more limited. The effects of job loss may be as much tied to the income level of the separated worker as any other factors. In this article, I review the statistics on job loss, showing that while short-tenured workers are actually the majority of those who experience job loss, little data are available about their economic circumstances or skill levels. I then describe the precarious economic status of these workers, the insufficiency of safety net programs for them, and the under-investment in training that might help them attain more reliably marketable skills. As a result, I argue that there is a need to provide the same research, analysis, services, and resources to low-wage workers as to high-paid workers. It is in our economic self-interest to reach out to this under-studied and under-served segment—for as the country looks ahead to shortages of skilled workers, the current low-paid work force will be a critical resource for future economic growth.

Displaced low-wage workers: The overlooked majority

Although little research has been done on job loss among low-wage workers, there is no doubt that the number of people in this group who are struggling with the consequences of losing their jobs is far greater than the number of experienced, displaced workers. From 2001 to 2003, 5.3 million "long-tenured" workers were displaced from jobs (jobs they had held for at least three years). However, an additional 6.1 million "short-tenured" workers were displaced during the same period.[1] And, with the broadest definition of "job loss" referring to anyone who did not leave a job voluntarily, there were 18.6 million layoffs or discharges in 2003 alone.[2]

Since BLS does not publish information about this group of workers, policymakers have no readily available information about who those workers are. Data collection for this largest group of workers comes from employer surveys and, therefore, includes no

Steven Redfield directs the programmatic work of the national STRIVE network of employment programs. He has managed non-profit programs meeting people's educational and economic needs for twenty years.

worker-specific information, such as the earnings or education levels of the workers who have lost their jobs. The absence of readily available information contributes to the difficulties of identifying, and ultimately addressing, the needs of low-wage workers who lose their jobs.

The current focus on workers with longer job stability and higher skill levels tends to minimize the discussion about three types of workers who are particularly hard hit by losing their jobs. These include some new entrants to the job market, workers with low education or skill levels, and, largely as a result of the first two characteristics, people working at low wages. Not surprisingly, younger workers are more recent entrants to the work force and have shorter tenure on their last job than older workers. In fact, for workers aged 25 to 34, the median job tenure is only 2.9 years.[3] Accordingly, nearly half of those workers would be excluded from the analyses of job loss that look only at jobs held longer than three years. Regardless of age, workers with less than a high school diploma have job tenures more than a year shorter than the overall median (3.8 years compared with the median of 4.9 years for all workers 25 years and older). Ten percent of the labor force, some 12.4 million people, do not have a high school credential.[4] And job tenure in lower-wage industries, such as retail trade and leisure and hospitality, is even shorter (median of 2.8 years and 2.0 years, respectively, compared with 4.0 years for all workers 16 years and older.) Many low-skilled workers are also, of course, low-wage earners. The average earnings for those without a high school credential was $18,800 in 2002; for those with no college-level education, it was $27,300.[5] These least educated groups of the labor force fall within the bottom two-fifths of income earners and, as a result, face unique challenges when they lose a job.

To deal with job loss, individuals turn to a variety of resources. First, they fall back on their own financial resources to get by until they find a new job. During their period of unemployment, they will also use whatever outside financial assistance is available to them, primarily the system of unemployment insurance (UI) and, secondarily, for the poorest workers, welfare. They need resources to find the next job, either through personal networks or structured job-search services. Finally, many will attempt to develop new skills, through higher education or targeted job training, in order to move out of a declining industry or to broaden the types of jobs they can qualify for. Unfortunately, for workers with lower pay, lower skills, and less experience, the personal and systemic resources available are far less adequate than for higher-income, more experienced workers.

The financial challenges of losing a low-wage job

Obviously, the fact of being in a low-income group alone exacerbates the economic hardships of job loss. With little chance to accumulate savings in low-wage jobs, low-income families have the lowest personal financial assets of any group to fall back on while they are unemployed. In 2001, the bottom one-fifth of families on the income scale had median family earnings of $10,300. One in four families in this category had no financial assets. Of the 75 percent who did, the median value of those financial assets was a mere $2,000. For the next one-fifth of families, at a median income of $24,400, 7 percent still reported no financial assets. For those with assets, their median value was only $8,000.[6] In fact, these numbers overstate the financial resources that a family might be able to draw on, because they include the value of life insurance and retirement accounts, neither of which can help weather the loss of income during a spell of unemployment.

As a result, most families in these lowest income brackets are living on the brink of crisis at the time of job loss. If a family cannot obtain financial assistance during a worker's period of unemployment, any savings they may have will be used up in only a few months on the basic expenses of food and shelter. Attempting to maintain health insurance for the family by paying for COBRA (Consolidated Omnibus Budget Reconciliation Act) insurance would be nearly impossible, given the 2003 average monthly premium of $776.[7] The risks of becoming homeless, foregoing essential medical care, or falling into exorbitant, long-term debt because of a medical emergency are very real.

Clearly, access to financial support after job loss is critical for these lowest-earning families, and yet, the two systems they might turn to—unemployment insurance or welfare—have serious limitations in their suitability for assisting them.

Unemployment benefits: For long-term workers only

The first place to turn for financial assistance in the face of job loss is the unemployment insurance system. Yet, in recent years, only 40 percent of unemployed individuals have been eligible for unemployment insurance benefits.[8] A primary reason for not receiving benefits is that the system is designed only for job loss that is related to an action of the employer, not of the employee. Voluntary quits and dismissals for cause are not covered. Unfortunately, making distinctions between voluntary quits and unavoidable job loss can be difficult when looking at the circumstances of some new entrants to the labor market,

particularly heads of households who start in low-skilled, entry-level jobs. These workers can face a number of circumstances that impede their ability to keep a job that are largely outside their control. Frequently, for example, new entrants to the work force with low skill levels take jobs that do not offer sick days, nor have they earned any vacation days in the first 90 days of employment. If a child becomes ill and cannot attend child care, a parent may be forced to stay home, putting her job at risk. If the worker loses her job as a result of her decision to stay home, she will not qualify for unemployment insurance.

Even if workers lose their jobs due to an employer's actions, they may still not be eligible for benefits. Reasons that workers do not qualify for benefits can include insufficient prior work experience and earnings, lack of work history in the time periods when eligibility is calculated, and lack of availability for full-time work.

All states require that workers have earned a specified minimum amount or worked a minimum number of hours in one calendar quarter before they become eligible for UI benefits.[9] While these amounts are set low enough that they include any full-time worker who worked for an entire calendar quarter, they can exclude the new entrant to the job market who might be laid off after only a few weeks of work. The rationale for these limits is that UI benefits are intended for those with a strong attachment to the work force; the result is to exclude the new worker from accessing benefits. In addition to a minimum total earning requirement, 40 states also require workers' earnings to be distributed over more than one calendar quarter, with a certain amount earned in at least one quarter other than the highest earning quarter.[10] This requirement places new entrants to the labor market at a further disadvantage, since, in these states, they have to have substantial earnings in at least *two* calendar quarters before they become eligible for UI benefits. An additional problem arises from the time period that states look at when calculating eligibility for benefits. Every state excludes earnings in the quarter in which the layoff occurs, since those earnings have not yet been reported by employers. As of June 2004, 33 states also excluded the quarter *prior* to the layoff quarter, a hold-over from an era before computerized wage reporting. This has the effect of excluding another fraction of new workers.

The cumulative effect of these policies means that someone who worked steadily for most of a year could be excluded from eligibility. For example, if a minimum-wage worker enters the labor force in early March and loses his job in late December of the same year, he would have worked for almost ten months. However, earnings in the months of October through December would not count in determining eligibility, since they would fall in the quarter when the job loss occurred. In 33 states, earnings in July through September would also be excluded. While earnings from April to June might be high enough to meet the minimum earnings requirement, the worker still might not qualify in states with a requirement for a certain amount of earnings to be in more than one quarter, since he worked for only one month at minimum wage between January and March. This individual, who by most reasonable standards is becoming permanently attached to the work force, would not qualify for benefits.

Another group of stable workers with substantial attachment to the work force are part-time workers. In most states, only workers available for full-time work can qualify for UI benefits, even if the job they lost was part-time. Part-time workers make up about 17 percent of the work force, but they are far from "marginal" workers. In fact, they average 36 weeks of work a year (compared with 48 weeks for full-time workers). Because of the restrictions on eligibility for part-time work, only 12 percent of part-time workers who lost their jobs received UI benefits in 2002.[11]

Welfare reform: Another hole in the low-wage worker's safety net

In the past, a significant group of low-skilled, low-wage workers turned to another system for financial help when they were unemployed but did not qualify for UI benefits—the welfare system. Welfare was often referred to as "the poor woman's unemployment insurance." Research has shown that the majority of people using Aid to Families with Dependent Children (AFDC), the system in place before the reforms of 1996, used welfare for short periods. These individuals were described as "cycling" between welfare and work. Research generally found that about half of welfare recipients would leave the system within a year. For example, in 1992, 55 percent of those who relied on AFDC stopped within 12 months, and 65 percent stopped within 20 months.[12] Typically, these workers relied on welfare when they were unable to find employment or when they could not work because of family responsibilities. Many also participated in vocational education, remedial education, or college coursework while they were unemployed and on welfare.

With this type of utilization of the welfare system, it was not surprising that welfare rolls climbed during recessions and fell during periods of economic growth.

During the past recession, however, for the first time since welfare was created, the rolls did not increase as the unemployment rate increased. In fact, from March 2001 through September 2003, welfare caseloads actually fell 3.7 percent across the country.[13] However, this does not mean that families' financial needs were in any way diminished during the recession. Instead, the trend is probably due to changes in the structure of the welfare system and in eligibility requirements. (The new system created in 1996 imposed limits on the total number of months an individual can receive welfare benefits in his or her lifetime and also imposed limits on the number of consecutive months someone can receive benefits. Waiting periods were permitted before benefits began for new applicants, and sanctions, in the form of reductions or cessation of benefit payments, were increased.) In 2003, more than one million people fell below the poverty level, the third consecutive year of increasing poverty rates. Another indicator of need has been the dramatic increase in use of food stamps, concurrent with the decline in welfare receipt. During the same period that welfare utilization fell 3.7 percent, food stamp cases increased 27 percent.[14]

It seems clear that in the past year unemployment insurance benefits have not substituted for use of welfare in providing economic assistance to the families who left welfare for work and then became unemployed. Fewer than 7 percent of poor children in single-mother families had mothers who received unemployment insurance in 2003, according to a review of government survey data by the Center on Budget and Policy Priorities. Moreover, utilization of welfare and unemployment benefits combined increased only one-third as much during the recession that began in 2001 as they did during the recession that began in 1990.[15]

Whatever the explanations that contribute to the diminished use of welfare, the numbers demonstrate that welfare is not serving as the safety net it once did in times of elevated unemployment. In part, this could be because people are concerned about using up their total of 60 months' life-time eligibility or they may have already exhausted their benefits. Another reason that people do not use welfare benefits when faced with unemployment is that a family's total assets cannot be more than a few thousand dollars in order to qualify (sometimes excluding all or a portion of one car), so the system does not provide short-term assistance for families who have tried to budget responsibly and create a degree of savings.

The lack of increased welfare caseloads would not be of concern if those who lost jobs simply found

another one and returned to work, but indicators are beginning to suggest that this is not the case. Preliminary research on welfare applicants in the years since welfare reform shows that in the months after applying for welfare benefits, those applicants remain worse off than former welfare recipients after they left the rolls, with fewer of the newer applicants having found employment.[16]

Although many former welfare recipients left welfare for work, they are especially prone to job loss during the first year of employment. A review of available research in 2001 found that only 40 percent to 60 percent of welfare leavers worked in all four quarters of the year after exiting welfare.[17] In a review of 15 studies conducted for the U.S. Department of Health and Human Services, the Urban Institute found that an average of only 37 percent of welfare leavers worked in all four quarters after leaving welfare.[18] (Since research looked at whether people worked, not whether they worked on a single job, the incidence of job loss is certainly higher, since some people who worked in every quarter would have lost jobs and found new ones.)

Unemployed welfare leavers are particularly vulnerable to the limitations of the unemployment insurance system. In the years following welfare reform, researchers attempted to estimate how many welfare leavers would be eligible for unemployment benefits when the next recession occurred. One review of the research concluded that no more than 20 percent of unemployed welfare recipients would be eligible for UI benefits in a recession,[19] considering all of the limitations on UI eligibility (reason for job loss, minimum earnings, and so on). Such estimates are not surprising, given the types of jobs and wages that welfare leavers typically start at. The fact that approximately one-third of welfare leavers in 1999 and 2002 who became employed worked part-time is another indicator of why significant numbers would not qualify for UI benefits. Looking exclusively at economic eligibility, in the late 1990s, almost half of the women who left welfare and lost jobs failed to meet the earnings requirements for unemployment insurance (compared with only 20 percent of women who had not previously been on welfare).[20]

Job training for low-wage workers: The missing link

Among low-skilled workers, some groups of people are likely to face particular obstacles in the pursuit of employment. Most jobs are not advertised and hiring is done through word of mouth referrals. Official, federally funded job centers receive announcements about only a small fraction of job openings.

Fewer than one in four job seekers use any official program in their job search.[21] As a result, those workers who come from families or communities that are isolated from the mainstream labor market are seriously disadvantaged in their efforts to reconnect to employment. People most prone to these difficulties are those who live in urban communities of concentrated poverty, individuals whose families have depended on welfare for several generations, and those in isolated rural communities. For people in these circumstances, finding any job, let alone a job that is likely to be stable, is a daunting undertaking—every bit as difficult as the struggles skilled workers face finding new jobs at wages comparable to their old ones.

The only way for adult workers in jobs at the lowest end of the labor force to gain a more stable place in the work force is by upgrading their skills. With more marketable skills, they have more employment options and can increase their chances of finding work by being qualified for more types of jobs. Jobs with higher skill levels pay more, and workers have a better chance of working more hours. Jobs above entry level are more likely to provide benefits like paid time off. The advantages of higher education and skills are evident in today's economy. In specifically examining how to create better work opportunities for former welfare recipients, the Center for Law and Social Policy confirmed that women with associate degrees earn more than women without a high school credential (more than twice as much), that workers with higher education credentials are less likely to be unemployed, and that unemployment spells are shorter for more educated workers. They also found better wage and employment outcomes in national and state research for welfare leavers who had job training or other postsecondary education than for those who did not participate in such programs.[22]

However, current levels of investment in adult job training do not come close to providing services for the numbers of adults in need of training. The federally funded job-training program for adults, the Workforce Investment Act (WIA), provided training for only 98,489 displaced workers in 2002.[23] At this annual rate, WIA funding could have trained a mere 3 percent of the 11.4 million people counted in the BLS's *Displaced Worker Survey* from 2001 to 2003. Unfortunately, while skill requirements for good-paying jobs are rising, the numbers trained through federal work force programs are declining: In 1998, more than 149,000 displaced workers were trained from this source of funds,[24] 50 percent more than the number trained in 2002. Funding for displaced worker training in federal fiscal year 2004 was authorized at 4 percent less than in 2002; and for 2005, it is set at 3 percent less than the 2002 amount.[25]

The other major system for adult work force education is the community college system. Public support of these institutions as a percentage of their funding sources has also declined. In 1980, state funding covered 70 percent of community college revenues; by 1996, state funds covered only 50 percent.[26] Tuition increases made up the difference, putting a much higher financial burden on the individual learner. This is especially onerous for the laid-off worker who is struggling to meet basic survival needs.

Another small source of job training funds comes from the "H-1B" visa program that allows foreign workers to come to the United States in fields where there is a documented shortage of skilled workers. A portion of the fees paid by employers who bring in these workers pays for the H-1B Technical Skills Training Grant Program, which focuses on training American workers in the fields in which there are shortages. In 2003, the U.S. Department of Labor awarded $108 million in grants under the H-1B training program,[27] which required an additional $79 million in matching funds from other sources. Yet these funds, like so many of the resources connected to job loss, are targeted to occupations requiring a bachelor's degree or comparable experience. That excludes the 40 percent of the American work force—49.6 million individuals—who have no college-level experience[28] and are at the lower end of the earnings' ladder.

Both the UI system and the welfare system create additional barriers to obtaining education or training during periods of unemployment. Many states exclude higher education from the list of allowable work-related activities for people on welfare. The federal welfare law excludes basic skills classes and preparation for the high school equivalency exam as work activities and limits states to engaging only 20 percent of welfare recipients in vocational training as a work activity. Many states require recipients to work at least 20 hours a week before permitting them to participate in education or training. For workers with families, in particular, these restrictions, coupled with inflexible training schedules for vocational programs and limited availability of child care, can effectively prevent them from attempting to get training at all. In the UI system, participation in a full-time education program most likely means that an individual is not available for full-time work and is therefore not eligible to collect benefits.

Designing policies that support low-wage workers

Policy changes in each of the areas discussed above could help mitigate the effects of job loss for low-income and low-skilled workers. Below, I present some key recommendations.

Unemployment insurance reform

A number of states have already made positive changes in the unemployment insurance system. Extending the use of the so-called alternative base period (which counts the most recently completed quarter), eliminating the requirement for distribution of earnings over multiple quarters, and providing benefits for permanent part-time workers would increase the number of new workers with legitimate attachment to the work force who can collect benefits and thus reduce their financial difficulties while unemployed. Allowing people to collect benefits while in job training would encourage skill development needed for a more educated work force.

Asset-accumulation programs

Policies are also being tested around the country to help low-income workers accumulate assets, one of the surest means of gradually defeating multi-generational poverty. "Individual development accounts" provide incentives and mechanisms for savings. Financial literacy education helps people begin planning, saving, and budgeting. Raising the asset limits for welfare eligibility would let people use welfare as the temporary assistance it is now intended to be, without wiping out their prospects for long-term economic stability.

Job-training and educational access for low-wage workers

At the same time, recognizing training and education as allowable, indeed desirable, activities for welfare recipients would increase the number of people acquiring skills for stable employment. Restoring funding for job training to the levels of the 1990s would begin to address the critical skill shortages that leave many workers marginally employed. There is a special need for programs that integrate basic skills in the context of vocational education to bridge the gap between low-skilled workers and college-level training. Improving the responsiveness of government employment centers to the needs of employers would increase the number of employers who look for workers through official channels, making more jobs available to workers with limited employment networks.

Of course, each proposed solution has a financial cost. At the very least, however, recognizing the unique plight of the low-wage workers affected by job loss should be the beginning point for discussions about what investment our society wants to make in their futures—and ours.

NOTES

[1] U.S. Department of Labor, Bureau of Labor Statistics (2004b), p. 1.

[2] U.S. Department of Labor, Bureau of Labor Statistics (2003), data.

[3] U.S. Department of Labor, Bureau of Labor Statistics (2004a), tables 1, 4, and 5.

[4] Stoops (2004), table B.

[5] See Stoops (2004), table C.

[6] Aizcorbe, Kennickell, and Moore (2003), tables 1 and 5.

[7] Kaiser Family Foundation (2004).

[8] U.S. Department of Labor, Employment and Training Administration (2004a), chart A.12.

[9] All data on state unemployment insurance provisions from Economic Policy Institute (2004), table A.

[10] The U.S. Department of Labor maintains annual updates on states' UI policies. State-by-state information can be found at http://workforcesecurity.doleta.gov/unemploy/laws.asp#StateLaw.

[11] National Employment Law Project (2004).

[12] U.S. Department of Health and Human Services (2004), table IND 8b.

[13] Rahmanou and Greenberg (2004), p. 4.

[14] See Rahmanou and Greenberg (2004).

[15] Fremstad, Parrott, and Sherman (2004).

[16] U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation (2001).

[17] Richer, Savner, and Greenberg (2001), p. 9.

[18] Acs and Loprest (2001), figure 3.1.

[19] Holzer (2000).

[20] Boushey and Wenger (2003).

[21] The Bridgespan Group (2002).

[22] Strawn (2004), pp. 1–3.

[23]Frank (2004), supplemental tables provided by the author.

[24]Frank, Rahmanou, and Savner (2003), program update, No. 1, p. 2.

[25]The Workforce Alliance (2005).

[26]Strauss (2001).

[27]U.S. Department of Labor, Employment and Training Administration (2004b).

[28]See Stoops (2004), table B.

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After the doors close: Assisting laid-off workers to find jobs

Randall W. Eberts

Introduction

During the past four years, more than five million long-term workers (those with at least three years of tenure with their employer) have lost their jobs through no fault of their own. Behind these numbers are people of many different backgrounds, many of whom face financial hardship and emotional pain due to their layoff. They include highly skilled computer technicians and low-skilled food service workers. They are young and old, male and female, African-American and white. Many have worked for the same employer their entire careers, and others have held jobs with multiple employers.

What can displaced workers do to find employment? The purpose of this article is to explore the steps that people typically take to find a job after being laid off. I examine how people search for jobs and what services and types of support are available to help job seekers find employment. I place considerable emphasis on publicly provided services, but recognize that the public employment service and training programs are but one means that workers use to connect with employers. I also consider what works and what doesn't work in helping workers find jobs and examine some current cutting-edge approaches.

The perspective offered in this article is that of an organization that both pursues research on worker displacement and administers programs to help displaced workers find employment. In addition to conducting research on ways to improve the reemployment of displaced workers, the Upjohn Institute is the administrative entity for the Kalamazoo/St. Joseph Michigan Works Area. In this role, the institute administers all of the federal and state employment programs for the two-county area of over 300,000 people.

Job loss

Losing one's job is often a traumatic experience. For many, a job represents more than a livelihood; it is closely linked to their identity and sense of self-worth and it often constitutes an important element of their social network. This is particularly true for those who have lost a job that they had held for many years. A plant closure or mass layoff can leave workers without a paycheck and without the social network that is essential in reconnecting with the work force. Therefore, in considering the process of becoming reemployed and the services that are available to assist in this process, it is important to recognize and deal with the emotions that laid-off workers need to overcome in getting back on their feet.

These emotions closely follow the typical grieving process one goes through after the death of a loved one. The immediate reaction to the news of a layoff, or impending layoff, is denial—"It can't happen to me." Denial delays the job search process, and typically the longer one waits to start searching for another job, the harder it is to find one. To help initiate the process, local work force agencies are required to make contact with businesses within 48 hours following notification of a layoff/shutdown and to set up procedures to help workers cope with the news and begin to find new jobs. More proactive agencies respond as soon as they get word, many times through informal channels and periodic visits with employers, that a layoff may occur. Yet, it is not uncommon for the prospective displaced workers to ignore the news and fail to show up for orientation and services. Only as the business's doors are closing do many workers begin to understand that they are about to lose their jobs and they need to take steps to find reemployment.

Randall W. Eberts is executive director of the W. E. Upjohn Institute for Employment Research. The author would like to thank Craig Schreuder and Robert Straits for their valuable comments and insights and Phyllis Molhoek for her assistance.

The second stage is grieving, which in many cases can lead to a protracted period of inaction or minimal search activity. One of the initial services offered to displaced workers is a workshop and at times individual counseling on understanding and coping with the grieving process, so that they can move on with their search effort and their lives. However, convincing dislocated workers to use these services can be difficult at times. The first step toward receiving these services is typically through the unemployment insurance (UI) system. To receive UI benefits, dislocated workers must enroll with the employment service and periodically contact employers or visit an employment service office, either in person or through its website, to look through job postings. For many workers, this may be the only step they take in looking for employment. Recognizing the tendency by some to procrastinate, the federal government initiated the Worker Profiling and Reemployment Services (WPRS) system, which identifies at the time of filing for UI those claimants who are most likely to exhaust their benefits and refers them to services right away.

After displaced workers recognize that their job has been eliminated and they will not be recalled to their old job, they must come to grips with the reality of the job market. Unfortunately, the reality is that they are unlikely to find a job that pays the same as the job they lost. In addition, they may find that they do not have the skills to qualify for many of the job openings. In the Kalamazoo area, for example, the quarterly earnings of workers three quarters after exiting the displaced worker program is 78 percent of the quarterly earnings three quarters before they entered the program. In addition, 65 percent found jobs in a different industry than the one they worked in before. Nonetheless, the important step at this point in the reemployment process is to engage in the search process in earnest.

Job search process

A successful job search process requires knowledge of available job prospects, the qualifications of the position, and the ability to communicate to employers the worker's qualifications and suitability for successfully filling vacancies. Many workers and employers can acquire the appropriate information when needed and understand the steps required to undertake a successful search. Yet, for some, accessing this information is more difficult. Obviously, it benefits all of society and the economy when everyone is afforded this information and assistance and job vacancies are filled with the best-qualified workers.

Job seekers pursue several methods when searching for employment. According to responses to the *Current Population Survey* (September 2001), a large proportion of displaced job seekers searched for jobs through informal methods: 65.7 percent of displaced job seekers contacted prospective employers directly, 54.5 percent sent out resumes and filled out applications, and 20 percent contacted friends and relatives. A smaller, but still significant, portion of displaced job seekers used more formal means: 27.1 percent contacted the public employment office, 12.2 percent relied on private employment agencies (such as the outplacement firm of Challenger, Gray, and Christmas, whose CEO contributed to this issue), 2.4 percent contacted the school or university employment center, and 3.6 percent checked union or professional registers.

Many of the informal contacts are made via the internet. Survey results show that 56.1 percent of all the unemployed looking for work have access to the internet. About one-third of the unemployed internet users submitted resumes or applied online, three-quarters researched potential employers, and nearly everyone searched online for job listings. Furthermore, unemployed job seekers who contact the public employment office are more likely to search for a job on the internet than those who do not use the public employment office (69 percent versus 53 percent) (Eberts and Holzer, 2004).

As workers consider the best methods to find jobs, employers must also determine how best to locate, recruit, and assess qualified workers. Holzer has conducted several studies that examine the methods employers use to recruit and hire (see Holzer, 1998, for example). He asked employers to list the methods that they recently used to search and which method generated the most recent hire. Not surprisingly, the survey results reveal several similarities in the way in which workers and employers search. As with job seekers, employers use direct contact most frequently to recruit and screen workers. Seventy-two percent of the establishments surveyed relied on direct walk-ins to find prospective workers. Informal referrals were the most frequently used method of recruiting workers, with 90 percent of employers relying on this method. In contrast, 30 percent of businesses surveyed relied on the state employment service office to find job candidates, and adding community agencies raises the percentage to around 50 percent of employers using public agencies (Eberts and Holzer, 2004).

When businesses were asked what method was used to recruit their most recent hire, they pointed more often to informal referrals (40 percent) and newspaper ads (28 percent). Businesses responded that only 2.6

percent of their most recent hires came through public employment offices. The responses varied by type of business and worker. The public employment agency was most successful in generating hires in white-collar jobs requiring no college education, for the largest establishments, and for the manufacturing sector. They were least successful for jobs requiring a college education, in small firms, and for public-sector workers (Eberts and Holzer, 2004).

Reemployment assistance and training

Employment service

The public employment service (ES) offers job search assistance to dislocated workers. In Michigan, these services are co-located with services provided through other government programs at local one-stop career centers. Services range from facilitated services, which require minimal staff time and include such assistance as demonstrating how to use the various resume-writing aids and how to search the job data banks, to mediated services, which involve more staff time and provide more in-depth assistance with resume preparation, job applications, and search techniques.

Access to these services typically begins when a dislocated worker files for UI benefits. Most states require all new claimants who are not employer-attached, which includes dislocated workers, to register with the state employment services. Claimants are also expected to document their work search effort and, in many states, this means providing the UI office with a minimum number of names of potential employers contacted for each claims week (O'Leary and Wandner, 1997).[1] Therefore, reemployment services offered at the employment service are an integral part of receiving benefits through the UI system.

Dislocated worker programs

Services provided through the ES are available to all job seekers. Services that are more specific to the needs of dislocated (or displaced) workers are provided through two programs: the Dislocated Worker Program (DWP) provided under the federal Workforce Investment Act (WIA) and the Trade Adjustment Assistance (Act)/North American Free Trade Act (TAA/NAFTA). The DWP provides work force investment activities that are designed to increase the employment, retention, earnings, and occupational skill levels of participants. The services are similar to those provided to participants of the WIA adult program, which serves disadvantaged adults. Activities include self-directed job search (core services); assessment and career planning, case management, individualized job development, and job placement (intensive services);

and occupational skills development and on-the-job training (training).

TAA/NAFTA is designed to assist workers who are adversely affected by international commerce. Eligibility is determined by the U.S. Department of Labor on employer- and plant-specific requests. The program provides an array of reemployment services similar to those offered under the DWP, with the bulk of the funding going to training, income support, and relocation, with several major differences. Duration for training and income support is much longer (upwards of 104 weeks) under TAA than under the DWP. In addition to reemployment services, TAA participants can receive reimbursement of some of their job search expenses and relocation costs and a health coverage tax credit.

The services offered through WIA are common to both dislocated worker programs. These services are typically provided at one-stop career centers, along with services offered through other government employment programs, including the ES. Partnering organizations such as community non-profit organizations may also be represented at that location. The purpose of co-locating these organizations in one place is to provide a comprehensive array of services to meet the multiple needs of individuals seeking reemployment.

Under WIA, services are categorized into three groups: core, intensive, and training. Core services are available to anyone who enters the one-stop career center. These services are typically self-service and include orientation to the job search process, initial assessment, and introduction to labor market information. Intensive services require more staff involvement, and individuals must be referred for this set of services. Intensive services are provided to eligible individuals who require more assistance in obtaining employment than is allowed for within core services alone. Based on federal WIA criteria, local work force investment area staff determine who is eligible and for what services. These services include assessment, counseling, guidance and case management, job development and placement services, retention services, and follow-up services. The final set of services, for those who have been unsuccessful in obtaining a job after receiving core and intensive services, is training services. An array of training services are available, including occupational skills training, on-the-job training, programs that combine work force training with related instruction, training programs provided by the private sector, skills upgrading and retraining, entrepreneurial training, job readiness training, dislocated worker education and literacy activities, and customized training. More than half of the participants of

TABLE 1			
Profile of exiters from Dislocated Worker Program			
	National PY2001	**Michigan PY2001**	**Michigan PY2003**
Number	129,969	4,720	4,966
Age	(- - - - - - - - - - - *percentage* - - - - - - - - - - -)		
Under 22	2.2	2.7	1.5
22–29	13.7	13.7	14.6
30–44	44.0	47.2	45.8
45–54	28.7	27.7	29.3
55 and over	11.4	8.6	8.8
Gender			
Female	49.9	44.9	52.0
Male	50.1	55.1	48.0
Race and ethnicity			
Hispanic	16.6	2.5	6.6
Asian	3.8	0.1	1.0
Black or African American	14.7	14.2	18.5
White	63.0	84.2	82.5
Veteran	10.4	9.5	8.6
Employed at registration	10.4	2.8	3.6
Employed at exit	80.2	88.8	88.5
Average pre-dislocation quarterly earnings			
None	13.4	10.7	33.6
$1–$2,499	8.5	17.9	17.7
$2,500–$4,999	20.6	24.3	18.0
$5,000–$7,499	23.2	21.8	15.7
$7,500–$9,999	15.5	12.6	8.8
$10,000 or more	18.8	12.5	6.1
Time of registration			
Before layoff	11.2	10.3	11.7
Within 8 weeks of layoff	37.5	39.7	28.2
Over 8 weeks after layoff	51.3	50.0	60.7
Single parent	11.7	16.4	17.5
UI status	67.3	62.7	77.4
Exhaustee	5.0	5.5	9.2
Highest grade completed			
Less than high school	12.5	6.1	7.6
High school graduate	47.4	53.9	51.0
High school equivalency	4.0	6.9	5.9
Some college	23.3	22.6	27.1
College degree	12.9	10.3	8.4

Note: PY indicates program year.
Source: Workforce Investment Act standardized record data (WIASRD) public use file.

laid off, or have received notice of termination or layoff from employment, be eligible for or have exhausted entitlement to unemployment compensation, and be unlikely to return to a previous industry or occupation. Table 1 provides statistics on the characteristics of participants in the DWP, both nationwide and in the state of Michigan for selected years. Nationally, participants are primarily high school graduates in their 30s and early 40s and white, with annual earnings of about $30,000 a year prior to losing to their job. Two-thirds have received unemployment compensation, only 5 percent have exhausted their benefits at the time they exit the program, and half wait more than eight weeks after being laid off before they register for the DWP.

Participants in Michigan's DWP have a similar profile. The Michigan records allow us to examine the changes in these characteristics during the past few years. The most notable changes are the increase in UI claimants, the increase in UI exhaustion rates, and the slight decline in the pre-dislocation quarterly earnings, all of which may reflect the protracted period of little job growth in the Michigan economy, particularly the continued losses of manufacturing jobs.

Dislocated worker services—Michigan

As shown in table 2, those enrolled in the DWP receive a variety of services, including core, intensive, and training services. The services are designed to address the needs of workers as they cope with the emotional aspects of losing a job, come to understand the realities of finding a new job, and take steps to obtain the training necessary to qualify for the jobs that employers are looking to fill. For instance, many dislocated workers may be experiencing a job loss for the first time in their careers. The job club and other group activities provide displaced workers with a support group, where they can share their concerns and experiences with others who are in similar situations. Counseling offers professional assistance in coping with job loss and in establishing the appropriate strategy to find another job. Counselors also assess the skills and aptitudes of the customer; they then help each participant to put together an action plan that lays out the steps that both the counselor

the DWP nationwide receive training, and only about 15 percent receive core services alone. Of those receiving training services, 90 percent receive occupational skills training, and only 6 percent receive basic skills training.

Participants of the DWP

For dislocated workers to receive intensive and training services under the Dislocated Worker Program, they must meet certain requirements. To establish eligibility, an individual must have been terminated or

TABLE 2	
DWP services, Michigan 2000–04	
Services	**Percent**
Core services	
Job referral	5.0
Information/basic assessment	49.6
General information	18.7
Group activities	2.3
Individual job development	27.8
Advanced job club	21.8
Advanced screened referrals	2.9
Classroom training	16.6
Intensive services	
Comp/specialized assessment	24.7
Individual employment planning	47.3
Short-term pre-vocational skills	5.4
Case management	57.6
Literacy activity	2.9
Training services	
On-the-job training	11.2
Occupational skills training	25.4
Follow-up	17.1

Source: WIASRD records.

and worker have agreed will address the needs of that person in finding a job. Assistance is available in learning how to write resumes, respond to job notices, interview effectively, use the internet to search for job openings, understand what employers expect in new hires, manage time, set goals, resolve conflict, and other personal workplace skills. If the customer is unsuccessful in finding a job after these services have been provided, then training may be recommended. As shown in table 2, upwards of 50 percent of participants in the DWP in Michigan receive some type of training. The choice of either on-the-job training, occupational skills training, or classroom training depends upon the needs assessment and the type of job the individual is seeking to qualify for, and rarely do participants receive more than one type of training within one enrollment period.

What works

Types of services

How successful are these services in helping dislocated workers find reemployment? The U.S. Department of Labor has conducted several experiments to help determine which of the various services, individually and in bundles, work best for job seekers. However, evaluations of dislocated workers per se have been quite limited. Furthermore, most rigorous evaluations estimate the net impact of specific services and not how the various services are integrated in order to provide the most effective service delivery system.

In general, these studies found that mandatory job search assistance was the most effective in getting displaced workers back to work, even more so when they received these services early in their spell of unemployment. The results on training were mixed, with more recent quasi-experimental studies showing more positive gains than the earlier experiments.

For dislocated workers, only two comprehensive studies have been conducted to date: the Texas Worker Adjustment Demonstration and the New Jersey Unemployment Insurance Reemployment Demonstration. Both operated in the mid-1980s and looked at the relative effects of two different broad combinations of services: mandatory job search assistance alone and job search assistance with training. To evaluate the effectiveness of these services, dislocated workers were randomly assigned to the two treatment groups and to a control group. The outcomes of participants in the treatment groups were compared with those of the control group. The Texas study found substantial earnings impacts for women but smaller and shorter-lived impacts for men. Women earned about $1,890 (34 percent) more in a one-year follow-up period by participating in the program, while men earned $1,108 (8 percent) more. For both men and women, the impacts diminished over time, and there was no evidence that adding training to job service assistance made any difference. However, the small number of people receiving training may have biased these results (Bloom, 1990; King, 2004).

The New Jersey experiment also yielded positive effects in the short run, but none were statistically significant (Corson and Haimson, 1995). The gains dissipated quickly and training had no added impact on earnings. Once again, the small number of participants in training may have affected the results. Results from other experiments show that training does have positive effects, but not necessarily for dislocated workers. The national evaluation of the Job Training Partnership Act (the federal work force development program prior to the Workforce Investment Act) found positive gains for on-the-job training, particularly for women. A study of training at community colleges in the state of Washington suggests that gains to displaced workers from training are substantial and may last for years (Jacobson, LaLonde, and Sullivan, 2002a, 2002b).

A recent evaluation of the WIA Dislocated Worker Program in seven states by the Upjohn Institute and the University of Texas also suggests that training can have positive effects over and above those found for job search assistance services (Hollenbeck, Schroeder, King, and Huang, 2004). Using administrative data and wage records, the quasi-experimental evaluation

found that not only does the combination of all services increase the employment rate and earnings of dislocated workers, but also training alone has a positive impact on both outcomes, a 6.2 percentage point increase in the percentage employed and a $406 increase in earnings over those not receiving training.

Time and place for delivering services

As stated before, displaced workers have difficulty at times coming to grips with the reality of losing a job they may have held for many years. Studies have shown that providing services to workers as soon as the layoff is announced is optimal. Waiting until the job has ended and the unemployment spell has lengthened is counterproductive (Leigh, 1989). Within 48 hours following notification of a layoff/shutdown, the local work force board is required to make contact with the business and begin to set up procedures to help workers cope with their job loss and start the job search process. More proactive employment agencies will contact businesses at the first sign that layoffs may be pending and begin to work with management and worker groups to set up the appropriate services. The services may range from on-site presentations of the services available through various government programs to the formation of committees that oversee the delivery of services, track the progress of dislocated workers in finding jobs, and create support groups. These committees, termed joint adjustment committees in some states, will be discussed in the next section.

It has also been shown that services are more effective if provided at the workplace. An important advantage of on-site adjustment assistance is that programs can be appropriately targeted to workers displaced by a plant closing or permanent layoff. Also, providing assistance at the workplace (or a location nearby) gives workers a place that they are familiar with and a sense that they are focused on work-related activities instead of simply receiving welfare or other assistance. Of course, on-site assistance requires the cooperation of management, which is not always forthcoming.

What's new

The basic services for dislocated workers—unemployment compensation, reemployment services, and training—have been in place for decades. The ways in which these programs are organized and the services delivered have changed slightly over time, but the basic approach is still much the same. For instance, the unemployment insurance system and the employment service have been in existence since the 1930s and over time they had become much more integrated, at least until recently. There is a growing disconnect between the UI system and the employment service. A number of states have implemented automated claims processing in which claimants can file either by phone or over the internet. Admittedly, this makes filing more convenient for the claimant and reduces staff time. However, it also distances workers from the services available at the employment service offices and reduces the likelihood that they will avail themselves of needed assistance. On the other hand, a recent evaluation showed that internet claim filers were more likely to visit the employment service website than in-person filers, since many states provide an immediate, automatic link between the UI filing website and the employment service website (Kenyon et al., 2003). Still, it is not clear if the web-based services are more or less effective than in-person services in which ES staff can provide assistance.

Another trend has been to place less emphasis on training, particularly classroom training, and focus more on finding a job first and then receiving training on the job, if available. Service delivery, particularly under WIA, has become more integrated and centralized at one-stop career centers. Some states, including Michigan, have integrated the employment service into the one-stop career centers. Also, attempts have been made to bring employers more directly into the work force development process through their representation on local work force investment boards, by attending more closely to the work force needs of businesses and engaging them in meaningful partnerships.

Reemployment bonuses

It has long been recognized that providing income support during a person's spell of unemployment, while essential for supporting the person and his/her family, may offer an incentive to prolong the search process. In the mid-1980s, the Upjohn Institute in collaboration with the Illinois Department of Employment and Security and the U.S. Department of Labor, conducted the first experiment to see whether a reemployment bonus would hasten the reemployment process without sacrificing earnings. A bonus of $500 was paid to claimants in the treatment group who started work at a full-time job within 11 weeks of filing their initial UI claim and who remained employed for at least four months. Results from the first experiment in Illinois provided encouraging results. Those receiving the bonus reduced their spell of UI benefit receipt by more than one week. Furthermore, the bonus was cost-effective for the UI system, resulting in savings of $2 for every $1 spent on bonuses (Spiegelman and Woodbury, 1987). Encouraged by these results, the U.S. Department of Labor sponsored two additional field experiments. In both experiments, bonus offers

reduced benefit payments, but the effects were more modest than in Illinois.

Still, incentives do work, and can be effective when combined with other program elements. For instance, the New Jersey Demonstration, mentioned in the previous section, found that combining reemployment bonuses with job search assistance further enhanced the effectiveness of reemployment services. Adding the bonus reduced the length of UI benefit receipt by another half week. Furthermore, subsequent analysis has shown that targeting the bonus to those identified to be most likely to exhaust benefits further increases its effectiveness (O'Leary, Decker, and Wandner, 2005).

Worker profiling and reemployment services

Concern over the possible disconnect between the UI system and job search assistance led to the establishment of the Worker Profiling and Reemployment Services (WPRS) system in 1994. The system identifies UI claimants who are likely to exhaust UI benefits and refers them to reemployment services as soon as possible after they file for benefits. The purpose of the program is to engage dislocated workers in the job search process as soon as possible. Many unemployed persons would wait until their 26 weeks of benefits were about to run out before they began to search for a job. Some did not realize how long it may take to find a new job, and others were still trying to overcome the emotional trauma of losing a job. WPRS identifies claimants who are likely to exhaust UI benefits through a simple statistical model that relates the past experience of UI claimants who did exhaust their benefits with their characteristics and the local labor market conditions. By 1996, all states had placed this system in operation.

An evaluation of WPRS in six states suggested that this system modestly shortened the duration of UI benefits by about half a week, with results statistically significant in all states but one. A separate study of the WPRS in Kentucky yielded much more dramatic results, probably due to the better evaluation design (Black et al., 2003). The study found that UI benefits were reduced by 2.2 weeks, earnings increased by $1,054 during the benefit year, and UI benefits were reduced by $143. Furthermore, an evaluation by the Upjohn Institute for the WPRS in Michigan revealed that employment service staff were delighted to be doing what they were trained to do—helping people find jobs (Eberts and O'Leary, 1996).

Frontline Decision Support System

The success of WPRS focused attention on the use of administrative tools to help target resources more effectively to meet the specific needs of customers and to customize information so that it is more relevant to an individual's circumstances. After developing the WPRS model for Michigan, the Upjohn Institute embarked on developing the Frontline Decision Support System (FDSS). FDSS consists of a set of tools that can help front-line staff make better decisions for all customers regarding the array of services provided in one-stop career centers. For dislocated workers, the Frontline Decision Support System offers them a systematic sequence of steps to move through the reemployment process from understanding their likelihood of returning to work in the same industry, to exploring job prospects in occupations that require similar skills and aptitudes, to accessing information about the earnings and growth in particular occupations, to understanding what reemployment and training services are likely to work best for them. The tools are based on statistical relationships between a customer's employment outcomes and his or her personal characteristics and other factors that may affect these outcomes. In short, they reflect the experiences of people with characteristics similar to those of the customer currently seeking assistance from the front-line staff person.

In 2002, the Georgia Department of Labor (DOL) incorporated FDSS into its existing operating system by developing a set of screens that generate and display the information produced by the various tools. Front-line staff at one-stop career centers accesses the FDSS screens by clicking on a tab on the opening page of the system website. Information about the customer that already resides in the Georgia Workforce System is automatically fed into the appropriate fields on the screen. Staff can enter missing data and then go through the various components of FDSS with the customer. It is also anticipated that many of the tools can be used in a self-service mode.

Feedback on the use of FDSS has been positive. Staff and customers appreciate that the system lays out a logical sequence of steps in finding a new job, which matches in many respects the stages that a dislocated worker goes through from job loss to job search and perhaps training. One staff person commented that his customers appreciate the "scientific" nature of the targeted information available through FDSS. Instead of offering his customers general statements about the likelihood of reemployment and job prospects, he can now point to direct evidence of how others with similar characteristics and experiences have fared in searching for reemployment. The system provides opportunities for the staff to go through "what if" scenarios with customers to show them, for example, the benefits of gaining more education on

reemployment. FDSS also changes the culture of the work force development agencies by using data, which heretofore was collected only for accountability and reporting purposes, to actually help customers make better decisions. The Georgia DOL discontinued supporting FDSS for several reasons, so it was not in place long enough to undergo a rigorous evaluation (Eberts and O'Leary, 2002).

The Upjohn Institute piloted a demonstration project at the Kalamazoo/St. Joseph, Michigan Works Agency that had some of the same components found in FDSS. While targeted at welfare recipients and not dislocated workers, the pilot used a statistical assessment model to determine the employability of participants enrolling in the program and then used this information to refer them to various service providers that the assessment tool indicated would likely meet their specific needs. A random assignment evaluation of the pilot revealed that targeting resources through this statistical assessment tool increased the job retention rate of participants by 25 percent over what was obtained when the participants were randomly assigned to service providers (Eberts, 2002). This result offers support for targeting resources to participants.

Personal reemployment accounts

The U.S. Department of Labor has recently funded several demonstration projects that incorporate reemployment bonuses and worker profiling of UI recipients into what they call personal reemployment accounts. Under this approach, those workers who are identified as likely to exhaust their UI benefits have the option to receive an account of upwards of $3,000, which they can use to purchase intensive and training services. If they find a job before receiving their thirteenth unemployment check, they can receive a bonus of 60 percent of what remains in the account and collect the remaining 40 percent if they remain employed for six months. This approach for the first time combines incentives, pricing, and targeting of services and is in the process of being piloted by several states. No formal rigorous evaluations have been conducted, but simulations based on past evaluations of the different elements of this approach suggest that the expected effects of services on employment and earnings may not be sufficient to entice many holders of the personal reemployment accounts to choose services over bonuses (O'Leary and Eberts, 2004).

Joint adjustment committees

Michigan's work force agencies, like agencies in several other states, stress the importance of fostering cooperation among the various parties involved with a layoff—management, workers, unions (if present), and government and non-government support organizations. To bring these parties together in meaningful dialogue and collaborative activities, they have fostered the formation of joint adjustment committees. The purpose of the committee is to provide information to the laid-off workers regarding future employment and training opportunities, to give guidance and support, and to enable them to make successful transitions.

For example, when a meat-packing plant with 300 employees closed in Kalamazoo, the Kalamazoo/ St. Joseph, Michigan Works agency quickly formed a joint adjustment committee with four representatives from management, three from the local union, three from the work force agencies, and a neutral chair who acted as facilitator. The committee met weekly to assess the needs of workers, track their progress in the transition, and coordinate the activities. In addition to the services offered through the Michigan Works agencies, as listed in previous sections, the committee provided activities for the families of displaced workers in order to promote peer support, a job fair to try to match workers with employers in the area, surveys and interviews with employees to get their feedback, job clubs for support and sharing of job leads, and individual resume writing sessions for each employee.

Sectoral employment alliances

In recent years, non-government organizations have attempted to engage employers more directly in work force development activities (Giloth, 2004). One of these efforts aimed at encouraging business leaders to become members of work force investment boards, under the Workforce Investment Act. The boards oversee the administration of employment services. Nonetheless, there is growing concern that WIA does not go far enough in engaging businesses or in forming partnerships with other entities, such as community colleges and technical schools.

Dislocated workers can benefit from more direct involvement of businesses by using an employer's informal networks with other employers to provide more targeted information about job prospects. Employers also have direct knowledge of the qualifications of their employees, for each occupational group and for each individual, which can be helpful in referrals to other employers.

Sectoral employment initiatives have increased in recent years. Initially started by a handful of non-profit agencies in the late 1980s to help save jobs in declining industries in specific locations, these initiatives have gained support from foundations and government agencies. In Kalamazoo, a consortium of

institutions of higher education and local foundations was created in the late 1990s to form clusters of businesses that would identify and address work force and other problems related to conducting business in the area. These clusters formed networks that provided key information about the needs of businesses and also fostered closer cooperation with the work force system. This collaboration led to greater communication among the key parties, which indirectly helped provide better information about job prospects, the work force, and training needs of businesses. By helping businesses find solutions to their workplace problems and partnering with a range of service providers, sectoral employment initiatives also help displaced workers find jobs.

While as yet there are no rigorous evaluations of the sectoral employment programs that use random assignment or comparison groups, evaluations of programs that engage businesses in training show positive results. Analyses of the California Employment Training Panel and the Minnesota Employment and Economic Development program suggest that employer involvement in the training process is critical in supplying marketable skills (Leigh, 1989, and Moore et al., 2003).

Conclusion: What remains to be done?

While the steps that displaced workers must take to find reemployment are seemingly straightforward—recognition, assessment, search, and, if necessary, retraining—successful execution of these steps requires the coordination of services and a strong network of information and support. Those who are successful typically have a strong network of information about job prospects, know how to write resumes and interview effectively, have a support group to help them through the emotional trauma they and their families experience as a result of job loss, and have the financial resources to weather a spell of unemployment until they find a good job match.

Government programs to help dislocated workers find jobs have many but not all of the elements required for successful and timely reemployment. The employment service and the dislocated worker programs provide an effective array of services for assisting with the job search process, as evaluations have shown. Training is less effective, but the recent emphasis on sectoral employment initiatives suggests that closer linkages with business could help make training more relevant and, consequently, help prepare workers qualify for the jobs that businesses need filled. The major issue with services, per se, is that there are not enough available to meet the needs of displaced workers. Federal funds for employment and training activities for displaced workers remained flat from 2000 to 2003, even though the number of displaced workers has grown considerably.[2]

Two elements need particular attention in order to improve the system of services to assist dislocated workers. The first is bona fide integration of services and the second is a better support network. WIA made strides in integrating the various services to meet the needs of the customer. Still, this integration has not gone far enough and, in some cases, it is beginning to erode. Services funded through federal programs still have separate funding streams, so there is little flexibility in providing the mix of services that are needed at the state and local levels. Lack of funding is also eroding the agencies' ability to coordinate services at the one-stop career centers. Funds to cover infrastructure expenses at the state and local level are not sufficient to match the costs of providing such space, and some states have been forced to close one-stop centers. Also, the growing disconnects between ES and UI only exacerbate the situation. Furthermore, collaboration among programs and service providers requires funding, and such funds are not available. Another issue is performance standards. WIA programs are driven by performance goals that are negotiated at the state level. However, the various programs that dislocated workers turn to for assistance are governed by different and at times conflicting regulations; for example, some training providers qualify under one program but not another.

Creating support networks is also critical in improving services to dislocated workers. Activities sponsored by joint adjustment committees represent a step forward, such as job clubs and group workshops, community-building activities for the families of laid-off workers, and job fairs to link workers and potential employers. Although helpful, these attempts are limited and short-lived. More effort is needed to sustain these networks and include more support groups. Often, non-profit organizations can provide more in-depth assistance and should be linked more closely to the network provided by the government programs.

Also, businesses need to be more engaged with the local work force agencies in order to provide guidance in the types of skills they are seeking and information about job prospects. Another role that could be expanded is that of job developers. Job developers work closely with businesses to determine what skills they are seeking to hire, and in the case of smaller firms even help management develop a human resource plan so that they can project at least six months ahead the types of workers they anticipate hiring. Training

typically takes six months, and the lag time is important if businesses expect workers to be trained in the skills they need at the time they need them.

The relationship between businesses and their workers is also changing, which affects the delivery of services to laid-off workers. The recent trend in using temporary staffing agencies to supply workers to businesses, particularly within the manufacturing sector, poses problems for laid-off workers in qualifying for the Dislocated Worker Program. Although estimates are murky, the number of workers under contract with temporary staffing agencies is sizable and growing (Estevão and Lach, 1999; Segal and Sullivan, 1997). Under the eligibility requirements for the Dislocated Worker Program, a worker is eligible if he or she is unlikely to return to a previous industry or occupation. However, a staffing agency worker is hired by the staffing agency, not the company in which they are working. The eligibility test, therefore, is with respect to the staffing agency and not the business in which they actually worked. Since they typically remain under contract with the staffing agency even after the company in which they worked no longer needs their services, they are not considered "unlikely to return to their industry or occupation."

Yet, the lack of work because of this closure or cutback affects the temporary help worker as much as the direct hire worker. Therefore, eligibility requirements for the Dislocated Worker Program and other programs in place to assist displaced workers should take this new work arrangement into consideration.

Also missing to a large extent from government programs is a worker advocate, who can vouch for the qualifications of workers and intervene on their behalf if conflicts arise with management. Current programs have case managers, but their large caseloads usually do not allow them the time to effectively work on behalf of customers who need their help.

Returning displaced workers to meaningful jobs as quickly and effectively as possible yields significant benefits to workers, firms, and the economy. The current public work force system provides an array of services to assist those who have lost their job. These services, for the most part, have been shown to be effective in reducing the time between jobs. Adding the elements mentioned above and strengthening the collaboration and involvement of the various partners can contribute to the development of a more integrated work force system that focuses on meeting the comprehensive needs of each individual customer.

NOTES

[1]In Michigan, the Unemployment Agency refers UI claimants to employment services for assistance in meeting their UI work-test requirements through registration of their resumes in the Michigan Talent Bank (MTB) and through periodic updates. The UI referral card is stamped and the initial MTB registration is printed, stamped, and certified by designated ES staff.

[2]According to the *Current Population Survey's Displaced Worker Survey* conducted by the U.S. Bureau of Labor Statistics, the number of displaced workers rose from 3,266,000 in 2000 to 3,957,000 in 2002, the date of the last survey.

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Return on investment of high-quality outplacement programs

John A. Challenger

Introduction

Corporate executives and shareholders seem to take it as an article of faith that reductions in force and the savings they generate are a necessary evil when earnings numbers are declining. Others start a priori with the fact that downsizing is wrong because of the damage inflicted on individuals, communities, and society. In their ardor to take action before year-end or to demonstrate that the human costs outweigh the profitability of downsizing actions, both shareholder agents and worker advocates push aside the imperative to develop fiscally pragmatic solutions to mitigate the effects. They fail to look at job loss as a mental health and education/training policy issue that must be addressed by individuals, organizations, and government, each with self-interest and "skin in the game."

Like other health care issues, the questions of what works and who pays for the services are in dispute. The personal reemployment account (PRA) plan[1] seeks to harness the individual's motivation to take appropriate career actions when unemployed, but is too expensive and the monies are likely to be misspent. Effective retraining and community college programs are even more costly and only correct for unskilled and perhaps some semi-skilled workers. Companies that conduct downsizing actions, however, do have compelling financial reasons to develop a more complex understanding of the damage and costs to the organization and to assist discharged workers and managers in bridging to a new job.

Organizations that utilize high-quality outplacement in downsizing programs receive a return on investment (ROI) that far exceeds the costs of a poorly managed or simplified plan. Unfortunately, many companies have weakened their outplacement programs in order to reduce costs. In addition, many human resources consulting firms offer outplacement programs of inferior quality with very limited services that will not produce the results described here.

We use the words "high-quality outplacement" throughout this article to describe the comprehensive outplacement programs that will have a substantial impact on individual job searches and company financial health after a downsizing event. Such high-quality programs would include proactive mental health and counseling support for discharged workers, plus tailored coaching in job finding skills and technical/administrative services. These programs *dramatically lower the duration of unemployment and maximize the utilization of an individual's experience and skills in the next job*.

By investing in high-quality outplacement services for affected employees, companies will significantly cut the total costs of a downsizing action by reducing overlooked losses in absenteeism, unemployment insurance, health care insurance premiums, turnover, and litigation. As companies become more adept at measuring the total costs of their layoff actions, corporate self-interest will increase utilization of high-quality outplacement programs.

Making the right decision

In today's market and economy, organizational change is unavoidable. "Restructuring" and "downsizing" have become a necessary and indispensable part of business language, leaving many employees distrustful of management and many employers facing the huge losses in productivity that can come with organizational change. In fact, left unaddressed, the hidden costs of organizational change from both discharged and remaining employees consistently outstrip the

John A. Challenger is chief executive officer of global outplacement firm Challenger, Gray & Christmas, Inc.

savings gained from reductions in personnel. Studies show that absenteeism and turnover among remaining employees increase after downsizing, translating into lost productivity, lower stock prices, and lower profitability. Moreover, companies face tremendous costs from dismissed employees in the form of prolonged health insurance premiums and unemployment insurance costs, as well as potentially crippling litigation costs.

With employees anticipating organizational change and being more likely to take action in response, companies can no longer afford to ignore the psychological and financial effects of layoffs on both the individuals who were dismissed *and* those who remain. Thus, out of "restructuring" and "downsizing" has come "outplacement," taking care of employees by bridging them successfully out of the company rather than leaving them to fend for themselves. Usually, an outside firm is hired to work with the discharged employees, helping them find new jobs more quickly. However, these job-finding methods vary widely between outplacement providers—services offered range from merely having facilities available for clients to conduct their own job searches to guiding them through the process with one-on-one counseling and support. In recent years, demand for high-quality outplacement services has eroded as it has been commoditized, greatly reducing its impact. A comprehensive outplacement program makes an enormous difference in employee behavior, reduces the duration of worker unemployment, and improves company productivity and profitability.

Investing in well-being

High-quality outplacement further mitigates the risks to productivity from the hidden costs of organizational change by ensuring that all parties come to terms with the downsizing process. Laid-off workers, once they are able to cope with their job loss, find new jobs more quickly. Remaining employees, seeing that their former coworkers are being taken care of, trust that they will be treated fairly as well. Management, spared from lawsuits and general distrust, can rest easy knowing that they provided for employees at every step of the way. High-quality outplacement is an investment—in relations with former employees, in the trust of current employees, in the reputation of the company—and the return on investment of "real outplacement impact" can be even larger than the financial returns on investment.

From a purely financial perspective, it may seem counterintuitive that investing in the welfare of ex-employees will help profits, especially because the reason for downsizing is to improve productivity by

cutting costs. Financial executives may ask, "Why should I spend more money on discharged employees and dip into the savings from letting them go?" Yet the answer is not as subjective as one might think: Companies should invest because it helps the overall bottom line—high-quality outplacement minimizes the extra costs that come along with downsizing.

In the downsizing process, the savings from maintaining fewer employees is far from the only change in costs. For instance, the remaining employees' decrease in morale following a downsizing means more sick days, lower productivity, and higher turnover. Not only is the productivity loss extremely large—hiring temporary substitutes, paying employees for time away from the office—but the costs of both replacing employees that leave and training their new substitutes add up quickly. On top of that, discharged employees continue to incur costs after termination. Companies continue covering health insurance premiums while former employees are looking for new jobs. Moreover, the longer the duration of unemployment, the higher unemployment tax rate the company will have to face. And perhaps the biggest potential hit to a company's budget is when former employees who feel that they were unfairly treated sue for wrongful termination, resulting in substantial costs even if the case is dismissed or settled out of court. If the company goes to trial and loses, the financial impact increases exponentially as these cases tend to award plaintiffs colossal sums in lost salary and punitive damages.

Philosophy of high-quality outplacement

If the right type of outplacement services can lower costs by so much, what exactly is meant by "high-quality outplacement"? That is, what sets this apart from many of the minimal services being offered in the marketplace today? The answer is best described as the health club analogy. Imagine that in January, a health club offers you a three-month membership, giving you unlimited access to their facilities for a lump-sum fee. By March, your resolve to work out has faded away, and the gym is completely empty, leaving you no closer to your ideal body and leaving the health club with nobody to care for. Many outplacement companies operate in the same way, merely providing facilities with job-hunting resources that clients may use as long as they maintain their resolve. In this way, the outplacement firms dump the burden of responsibility for job-hunting onto the terminated employees themselves—if the ex-employees are still without jobs, it is because they have not been using the available facilities. Without guidance and support in first coping with job loss and then managing the job search,

clients walk away feeling frustrated at the process and still bitter toward their former employer.

In contrast, high-quality outplacement can calm tensions and minimize conflict from the very beginning of the downsizing process. From pre-termination planning, to on-site presence at the day of termination, to follow-up counseling and support throughout the job-search process, providers of high-quality outplacement shoulder the responsibility of reaching out to the client from beginning to end. Clients are guided through the process with resume development aid and ad sourcing and answering services. More importantly, high-quality outplacement strives to improve the fundamental attitudes of these employees who have had to cope with job loss. With constant encouragement, interviewing practice, and regular counseling sessions, one-on-one counselors relieve clients' fears and help them develop important job-finding skills. Clients, having accepted their former employer's circumstances and decisions, are coached through the process—not only reducing the job search time, but improving the kind of jobs they find and giving them the tools necessary to move ahead in their careers.

Thus, the difference between high-quality outplacement and nominal outplacement is one of foresight. High-quality outplacement is a financial investment in the well-being of past, present, and future employees, and therefore, it is an investment in morale, productivity, and profits. Many less comprehensive forms of outplacement simply fulfill a requirement. Choosing a more nominally "cost-efficient" outplacement provider allows companies to alleviate guilt and maintain their reputation by appearing to provide for employees who have been let go. Yet this facade does not hold up for long. Former employees can sue, which may damage the company culture as well as having financial implications. Remaining employees may keep in touch with their former coworkers and worry about being unfairly treated themselves. All of this fosters an unhealthy work environment, which deters potential employees from wanting to join the company in the future.

How high-quality outplacement helps: Survivors

High-quality outplacement minimizes the potential hidden costs by addressing the psychological concerns of both discharged employees and remaining employees (survivors) from the very beginning of the downsizing process. Handling the termination day properly is critical to maintaining the trust and morale of surviving employees, as well as avoiding conflict with terminated employees.

Having lost some of their fellow coworkers, surviving employees often experience decreased morale, causing lower productivity. In a 2001 survey of 759 workers who had survived a layoff, 46 percent of respondents reported that morale had decreased.[2] This unpleasant environment in the workplace causes companies to lose high-potential employees they meant to retain, as disgruntled surviving employees seek new jobs. Makawatsakul and Kleiner (2003) cite a 1995 survey of employees at downsized organizations, in which 50 percent reported decreased company loyalty and 37 percent reported decreased job satisfaction. While the effects of a decrease in morale are not easy to quantify, it is clear that the negative reaction to downsizing affects a company's bottom line. According to a Finnish study of downsizing, the sickness absence rate was more than two times as high after major downsizing than after minor downsizing, and the risk of health problems, as indicated by medically certified sickness absence and other indicators, was at least twice as great after major downsizing as after no downsizing.[3]

The reaction of surviving employees depends heavily on how fairly they perceive their former coworkers to have been treated—that is, the more unfairly they believe terminated employees have been treated, the greater insecurity they will have about their own jobs. In an environment of frequent organizational change, job insecurity has become a sizable problem. In a 1991 survey of 909 firms that had been through downsizing, 70 percent of retained employees were afraid of losing their jobs. Asked if they still trusted their organization after downsizing, 31 percent said they did not.[4] This is because those who have survived a major downsizing feel both relieved and angry at the injustice of the situation. "Survivor's syndrome" leaves retained employees feeling as stressed as those who were let go—job insecurity, with the added guilt of being spared while some coworkers were not.

The potential costs of lower morale and increased stress due to job insecurity and survivor's syndrome after downsizing are high. According to Tangri (2003), "Stress costs American businesses more than $300 billion annually in lost productivity, absenteeism, accidents, employee turnover, and medical, legal and insurance fees, and workers' compensation awards. This is more than 15 times the cost of all strikes combined." However, even this figure does not capture all the indirect costs, such as the effect of employee turnover on stock prices and profitability.

Jude Rich of Sibson Consulting, Princeton, NJ, in a 2002 article for *Financial Executive Online,* cited the example of an unnamed, large hotel chain ex-

periencing annual employee turnover of 60 percent, which cost the company $350 million annually from hiring and training replacements; lower productivity during ramp-up time for new employees; and reduced occupancy rates, due to poor guest satisfaction levels. He proposed that if the hotel's turnover were cut in half, to 30 percent, stock prices could increase by nearly 25 percent. He further estimated that if turnover could be cut to 15 percent, stock prices would increase almost 50 percent. Tangri (2003) estimates that in a retail stock brokerage firm, profitability would increase by 2 percent for every 1 percent reduction in turnover.

But what does all of this mean in terms of productivity dollars? Tangri (2003) cites *The Third Annual Industry Week Census of Manufacturers*, which surveyed data from over 1,750 manufacturing plants (see table 1). Productivity at plants with turnover of less than 3 percent was 66 percent higher than it was at plants with turnover of more than 20 percent.

Thus, even a small decrease in turnover rates means more profits, and high-quality outplacement can mitigate turnover by dealing with its roots. With pre-termination planning, outplacement representatives help the company present its downsizing decision in the best possible way, so as to minimize job insecurity and distrust among employees. On the day of termination, counselors are present on-site to help affected employees cope, leaving a much calmer picture of the downsizing for everyone involved. Afterwards, surviving employees see that their former coworkers are being taken care of, lessening the fear of being unfairly treated at termination that would drive them to find new jobs.

How outplacement helps: Discharged employees

Though handling the concerns of the remaining employees is extremely important to a downsizing company's future profitability, in terms of post-termination costs to the company, dealing with the psychological issues of the discharged employees is perhaps even more important. The former employees may be angry and could file wrongful termination lawsuits, leading to huge costs and bad press for the former employer. As organizational change becomes more prevalent, ex-employees become more eager to choose litigation. A 1998 *USA Today* article cited Edgewater Holdings, a Chicago insurance company offering wrongful termination coverage, which estimated that more than 50,000 wrongful termination cases were filed in 1997. Of these, 24,000 wrongful termination cases were filed in federal court, up 77 percent from 1993.[5] Besides the direct costs of jury awards and at-

TABLE 1	
Impact of productivity on turnover	
Turnover %	**Productivity per worker**
Less than 3	$200,000
3–5	153,000
6–10	150,000
11–15	130,000
16–20	125,000
More than 20	120,000
Source: Tangri (2003).	

torney fees, lawsuits cost a firm in productivity dollars as management spends time preparing a defense. According to a study by Dertouzos and Karoly (1992) of The Rand Corporation, these "indirect effects of wrongful termination doctrines are 100 times more costly than the direct legal costs of jury awards, settlements, and attorney fees." The best solution, then, would be to understand employees' motivations for filing and address those issues.

Some former employees may file wrongful termination claims simply for economic reasons—the prospect of being without steady income is frightening and the potential awards are quite substantial. According to Jury Verdict Research, Horsham, PA, the median compensatory jury-award for employment-practice liability cases, which includes wrongful termination claims, rose 18 percent in 2003 to $250,000. A 2000 study of 996 recently discharged or laid-off workers in Ohio found that those who said they suffered a great deal of financial hardship were nearly three times as likely to file lawsuits as those who said they suffered no financial hardship.[6] High-quality outplacement may help companies avoid this type of lawsuit by shortening the job search, so clients get back on the payroll sooner and avoid financial hardship.

However, ex-employees are more likely to file a wrongful termination suit not over a desperate need for money, but over their dignity. It is not so much the fact that they face a period without steady income, but that the company put them in such a humiliating position. The same Ohio study found that "of the respondents who felt they had been treated with 'very much' dignity and respect at the time of their dismissal, *.4 percent reported filing claims,* whereas of those who said they had 'not at all' received respectful and dignified treatment, 15 percent reported filing claims." Moreover, the study found that wrongful termination claims were filed by less than one-fiftieth (1.8 percent) of those who felt that they were given a very complete explanation of the reason they were losing their jobs, whereas claims

were filed by nearly one-fifth (19.5 percent) of those who reported being given no explanation at all.

High-quality outplacement minimizes the lawsuits from this cause as well. Pre-termination planning ensures that companies carry out the downsizing in an open and straightforward way, so both terminated and remaining employees feel informed and treated with respect. Moreover, counselors present on-site on the day of termination immediately help employees cope with the job loss, so that their last impression of the company is more positive.

Most importantly, high-quality outplacement guides discharged employees through the job search process and prepares them for future job changes. Clients are matched with an individual counselor who serves as a point of contact, supplier of advice, and source of motivation. With a personal coach encouraging them, clients explore their own strengths, "skill" themselves up, reshape career paths, and move on more successfully to their next positions. Professional resume writers/marketers prepare their resumes, which are then sent out to jobs all over the nation through an ad-sourcing service. They practice and sharpen interview skills. They find equivalent or better jobs—fast.

Studies show that addressing psychological needs helps former employees find jobs faster. Clay (1998) cites research by psychologist and University of Texas professor James W. Pennebaker, Ph.D., who conducted a study among 63 laid-off engineers, for whom he was hired to help cope with the job loss. One group wrote out their deepest feelings about the layoff, another group wrote on an emotionally neutral topic, and a third group did no writing at all. After eight months, with the same number of phone calls having been made and the same number of resumes sent out, 52 percent of the expressive writing group had found jobs, while 20 percent of the two control groups had found jobs. High-quality outplacement works because it allows clients first to come to terms with their psychological needs and second to start the job search process, rather than dumping their feelings of betrayal and anxiety into the job hunt.

Quantifying the costs

What does high-quality outplacement really mean for a company's bottom line? Even based on rough estimates using conservative figures, I believe that high-quality outplacement is worth the financial investment.

Unemployment insurance taxes

To cushion the impact of job loss, unemployment insurance provides workers who have lost their jobs through no fault of their own with payments for a given amount of time or until they find new employment. The precise system of unemployment insurance tax is implemented by the state and so varies widely across states and by industry. However, many are based on periodic reassessments of a company's "experience rating," calculated from layoff rates and benefits collected. The state unemployment insurance tax is usually structured like a zero-sum game, so that all the money a company's employees collect in benefits from the state pool is eventually paid back in taxes. That is, the more former employees tap into the unemployment insurance fund, the higher the tax rate the company will face in the future. Thus, the faster that discharged employees become reemployed, the fewer the benefits collected, and the lower the company's tax hike.

Health insurance premiums

Cutting reemployment time also saves companies the cost of continued health insurance coverage for discharged employees—a cost that is growing steadily. According to a Kaiser Family Foundation report, Claxton et al. (2003), monthly premiums for employer-sponsored health insurance rose 13.9 percent between spring of 2002 and spring of 2003, marking the third consecutive year of double-digit premium increases. The Kaiser study found that employers providing health insurance coverage in 2003 paid an average of $2,875 per single-person plan and $6,656 for each family plan.[7] Companies that continue to provide health insurance to discharged employees clearly have an interest in helping former workers find new positions as quickly as possible.

Health costs are a factor when considering the downsizing survivors, as well. Kivimaki et al. (2000) found that survivors of a major downsizing exhibited a marked deterioration in health condition. Of course, more health-related problems mean higher premiums. Companies that provide outgoing workers with high-quality outplacement may find that the stress and other health issues among the remaining employees are also lessened.

Absenteeism

For the private sector in 2003, the average absence rate, according to the U.S. Bureau of Labor Statistics, was 3.2 percent, excluding "personal days, holiday, labor dispute, and other reasons."[8] Kivimaki (2000) suggested that average absence rates may increase by 2.3 times after a major downsizing. Again, this increased absenteeism is a response to the perceived unfair treatment of former coworkers. High-quality outplacement

may reduce this job insecurity and stress. On-site presence at termination and helping former employees find jobs faster serve to further relieve the worries of surviving employees. Assuming that high-quality outplacement can cut this increase in absenteeism after downsizing by one-third, this saves $552 per $50,000 employee and $2,760 per $250,000 executive.

Turnover

The cost of turnover is absolutely huge, because it encompasses pre-separation costs (the employee pursuing the job hunt while at work), separation costs (exit interview and administrative costs), vacancy costs (hiring a temporary substitute), recruitment costs (advertising, interviewing, deliberation time), and finally training and orientation costs (instruction manuals, coaching, decreased productivity at first). As turnover increases after downsizing due to job insecurity, stress, decreased company loyalty, and decreased job satisfaction, these costs skyrocket.

Litigation

This is becoming an increasing problem for downsizing companies, as more and more former employees decide to file suit and more and more juries rule in their favor. Consider the following costs: Average attorney fees are $250,000 if the case goes to trial and $95,000 if the case settles prior to trial.[9] Although only 4 percent of civil lawsuits go to trial and 96 percent settle,[10] the average cost to settle an employment lawsuit in 2003 was $300,000.[11] Thus, depending on the outcomes, lawsuits filed by former employees may cost the employer anywhere from just the loss of time in preparing a defense to upwards to $456,794 if the case goes to trial and the jury rules in favor in the employee. Outplacement can greatly decrease the probability of former employees filing lawsuits by calming tensions on the day of termination and inspiring affected individuals with realistic hope for the future.

In the Lind et al. (2000) study of terminated Ohio workers, 8.1 percent of those who had received no help at all filed claims, while 2.8 percent of employees who said they had been given a great deal of help filed claims. High-quality outplacement may decrease these odds even further. Taking into account the probabilities of filing suit, going to trial, and then winning or losing the case, the average litigation risk without outplacement is around $1,490,000, while the average risk with some outplacement is around $514,000 and the average risk with high-quality outplacement is only $92,000.[12]

Overall costs

Table 2 describes the costs with and without high-quality outplacement for a company of 1,000 employees at an average salary of $50,000 that must let 100 employees go. Table 3 describes the costs for a company of 1,000 employees that must let ten of 50 executives go (salaries of $250,000), assuming 26 weeks of severance and benefits.

Both tables clearly show that high-quality outplacement can greatly reduce the hidden costs of organizational change, having a significant impact on a company's bottom line.

The right choice

Though all outplacement providers offer a healthy solution to the uncertain economy of today, there most certainly are differences in the types of services provided. Nominal outplacement fulfills a requirement but leaves employees feeling frustrated, helpless, and bitter toward the former employer. While this may cost less initially, the backlash from angry ex-employees and dissatisfied surviving employees can outweigh all the savings. High-quality outplacement, on the other hand, presents an all-encompassing approach to the job search that improves clients' lives from the

TABLE 2			
Costs for company of 1,000, laying off 100 employees			
Contributing factors	Cost without outplacement	Cost with high-quality outplacement	Savings
Unemployment insurance	$540,000	$360,000	$180,000
Health insurance, 12 wks	150,484	150,484	0
Health insurance, 20 wks	250,807	173,893	6,914
Absenteeism	1,380,000	883,200	496,800
Turnover	4,250,000	2,430,000	1,820,000
Wrongful termination lawsuits	1,487,624	91,829	1,395,795
Total (20 wks)	7,908,431	3,938,922	3,969,509

Note: Costs for company laying off 100 employees, at an average salary of $50,000.
Source: See note 12.

TABLE 3			
Costs for company of 1,000, laying off ten executives			
Contributing factors	**Cost without outplacement**	**Cost with high-quality outplacement**	**Savings**
Unemployment insurance	$270,000	$180,000	$90,000
Health insurance	27,171	17,389	9,782
Absenteeism	306,667	196,267	110,400
Turnover	945,000	540,000	405,000
Wrongful termination lawsuits	353,387	21,814	331,573
Total	1,902,225	955,470	946,775

Note: Costs for company laying off ten of 50 executives go (salaries of $250,000), assuming 26 weeks of severance and benefits.
Source: See note 12.

inside out. Given the tools to continue to be successful in their careers, most clients find comparable or better positions, leaving them with fewer hard feelings toward their former employer.

Providers of high-quality outplacement services understand each company's culture, objectives, and needs, just as they strive to understand each client's beliefs, goals, and aspirations. Throughout the entire process of downsizing, these providers push for the smoothest transition possible by avoiding the potentially dangerous costs of a mishandled staff reduction. However, ultimately, the company undergoing restructuring chooses which outplacement provider to use. With an understanding of the possible effects of downsizing, companies have the opportunity not only to recognize, but also to combat the hidden costs of organizational change by doing what is right both fiscally and morally. Investment in the right quality of outplacement services helps returns on profits, human capital, and community relations.

NOTES

[1] Proposed by Congress, a personal reemployment account provides certain eligible individuals currently receiving unemployment insurance (UI) benefits, or some UI exhaustees, with a special worker-managed account of up to $3,000 (the exact amount to be determined by the state) to purchase intensive reemployment, training, and supportive services.

[2] See Knowledge Systems and Research and Anderson (2001).

[3] See Kivimaki et al. (2000).

[4] Houston (1992).

[5] See Jones (1998).

[6] See Lind et al. (2000).

[7] See Claxton et al. (2003).

[8] U.S. Bureau of Labor Statistics (2004).

[9] See Workplace Compliance Training Services (2003).

[10] See Ostrom and Kauder (1994).

[11] See Shroeder (2003).

[12] Monetary figures and tables 2 and 3 based on extrapolation of data related to the propensity to file lawsuits (Lind et al., 2000), the effect of offering outplacement on filing suit (DBM, 2003), the percentage of suits going to trial (Ostrom and Kauder, 1994), jury outcomes (John, 1996), attorney fees (Employment Law Learning Technologies, 2002), settlement costs (Shroeder, 2003), and average/median jury awards (Jury Verdict Research, 2004).

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A lawyer's perspective on planning a reduction in force

Kenneth D. Schwartz

Introduction

Any assessment of the consequences of "job loss" must include an understanding of the legal context in which it occurs. This article provides a broad overview of that context relative to some key legal considerations in a reduction in force (RIF). In light of these key considerations, I then describe a practical approach to planning a RIF from a lawyer's perspective.

Greatly complicating the lawyer's approach to RIF planning is the "lottery" mentality in contemporary culture, whereby individuals who sue their former employer believe that a certain jackpot awaits them. In addition, many people seem unwilling to accept personal responsibility for their own unsuccessful job performance that leads to job loss. Even for employees who perform their jobs well, too many seem unwilling to accept the notion that in this economic system even good or excellent performers lose their jobs without a law necessarily being violated in the process.

The judicial system is not engaged in an academic endeavor to weigh and test theories in order to discover ultimate truths. Lawyers, judges, and juries have very limited time, money, and information to make important judgments that are often based on testimony from individuals with faded memories about past events. A jury must then decide whether it is more probable than not (at least 51 percent certain) that the former employee's termination violated a law.

Few life events are more devastating, emotionally and financially, than losing a job. This fact necessarily colors a lawyer's perspective on assessing potential liabilities associated with job loss. If a lawsuit proceeds to trial, jurors may have jobs, may have lost jobs, or may have family and friends who have lost jobs or may lose their jobs. Most people can at least conceive of facing a potential job loss and can imagine themselves in a situation similar to the plaintiff who lost a job. Therefore, an employer forced to defend a claim that a termination decision was unlawful must consider the emotions and perspectives of a potential jury that might judge the claim and award monetary damages if it concludes a law was violated.

Some surveys of potential jurors have indicated that an employer forced to defend a discrimination claim is at a disadvantage before ever entering the courtroom. One survey conducted by the Minority Corporate Counsel Association and DecisionQuest[1] revealed that more than 75 percent of white males, who are usually regarded as most supportive of corporations, report distrusting corporations due to events such as the Enron scandal. Further, 85 percent of the survey respondents indicated a belief that large corporations hide information about their products until they are caught by the government or in a lawsuit, and 75 percent of respondents indicated a belief that managers and senior executives are more likely to perjure themselves than lower-level employees.

Another DecisionQuest survey in conjunction with the *National Law Journal*[2] indicated that close to half of the survey respondents disagreed with the statement that most big companies treat all employees fairly and only 29.8 percent of agreed with the statement. Overall, 42.3 percent of respondents agreed that older workers and minorities are the first to lose their jobs in a layoff, although only 18 percent of the white respondents agreed with the statement. More than two-thirds (67.4 percent) of the respondents felt that race discrimination and gender discrimination are still present at many companies.

Kenneth D. Schwartz is a shareholder in the law firm of Duvin, Cahn & Hutton in Cleveland, Ohio. Mr. Schwartz represents employers nationally in discrimination and wrongful discharge litigation. He is also labor and employment law counsel to the Center for Human Resource Management at the University of Illinois.

How do employers respond to a system of complex employment laws that are applied in a costly and challenging judicial context? They try to plan in advance so that they have the best possible chance to stay out of court or to win the hearts and minds of a judge and jury if necessary. To understand how this goal can be accomplished, one must first have a fundamental framework of some of the legal claims employers can face, and the following two sections address some key legal issues in that framework. The fourth section then provides an overview of an approach to planning for and conducting a RIF.

Selected non-discrimination issues when confronting layoffs

General overview

Anti-discrimination laws now span a myriad of protected classes under federal, state, and local laws. Title VII of the Civil Rights Act of 1964[3] (Title VII) prohibits discrimination on the basis of race, color, religion, sex, and national origin. The Age Discrimination in Employment Act of 1967[4] (ADEA) prohibits discrimination against employees age 40 or older. The Americans with Disabilities Act of 1990[5] (ADA) and the Rehabilitation Act of 1973[6] (which covers federal contractors) prohibit disability discrimination. The Equal Pay Act[7] prohibits gender-based wage discrimination, and the Pregnancy Discrimination Act[8] prohibits pregnancy-based discrimination. These federal laws also prohibit retaliation against individuals who oppose unlawful conduct or who engage in other "protected" activities, such as filing an administrative charge of discrimination or participating in a government investigation. Numerous state and local laws mirror these federal prohibitions and also prohibit other types of discrimination, such as discrimination on the basis of sexual orientation, marital status, source of income, arrest records, and others.[9]

A number of strategies exist to avoid lawsuits or to place the employer in the best possible position to defend against a lawsuit. The legal framework in which a lawyer approaches employment decisions during a RIF guides these strategies. Generally, a plaintiff can prove that her employment was terminated due to unlawful discrimination via three types of claims: disparate treatment, disparate impact, and pattern-and-practice claims, each of which is described in the following sections.

Disparate treatment

A disparate treatment claim at first blush seems simple. It is a claim that an employee within a protected class was treated differently than an employee not in the protected class, and the reason for the different treatment is alleged to be intentional discrimination based on the employee's protected class. The methods of proving disparate treatment, however, are not always so straightforward.

Direct evidence may be the easiest way to prove discrimination (or at least the easiest way to obtain a jury trial). Direct evidence includes facts that prove discriminatory animus toward the plaintiff without resorting to inferences or presumptions.[10] Some courts also regard direct evidence as including circumstantial evidence, so long as the additional requirement is met that the evidence reflect directly on animus and the employment decision being challenged.[11] Derogatory comments that reflect bias are the most common type of direct evidence, such as a supervisor referring to an older employee as "no spring chicken" and stating that he would not advance in the company because of his age,[12] or a supervisor stating that the employee (later plaintiff) is "getting close to retirement" and thus the supervisor did not "want to spend time or energy on her."[13]

Not all derogatory comments, however, support discrimination claims. Ambiguous statements that are susceptible to a non-discriminatory interpretation might not support a claim. Other statements, even if not ambiguous, might not be connected directly to the plaintiff if the statement was not made in connection with the termination decision or was too remote in time or context relative to the plaintiff. Examples of such statements include generally referring to older workers as "old timer dinosaurs" but not referencing the plaintiff specifically,[14] or referring to an employee as "burned out" and not able to change "old ways" in the face of new management's change directives.[15] Likewise, comments by co-workers or managers not involved in the decision affecting the plaintiff are not relevant, unless the individuals had some influence on the decision.[16]

Direct evidence cases usually get the headlines, because a surreptitious tape recording or an electronic mail message tends to provide greater shock value for the press. In the overwhelming majority of cases, however, no direct evidence exists. Without direct evidence, a plaintiff must resort to an "indirect method" of proving intentional discrimination. This method was endorsed by the Supreme Court in *McDonnell Douglas Corp. v. Green*.[17]

The first step in the *McDonnell Douglas* indirect method of proof is for the plaintiff to establish a *prima facie* case of discrimination. The *prima facie* case consists of proving that 1) the plaintiff is a member of a protected class, 2) he suffered an adverse employment action, 3) he was at least minimally qualified to perform the

job in question, and 4) a less qualified person not in the protected class received the job.[18] To be "similarly situated" for purposes of comparison in proving a discrimination claim, the comparators (that is, the employees against whom the plaintiff is comparing his own situation) must be substantially identical to the plaintiff in all relevant respects within the context of the employment decision at issue.[19] Importantly, in the age discrimination context, the plaintiff can compare herself to an individual who is within the protected class of age 40 or older, so long as the comparator is "substantially younger" than the plaintiff. At least one federal court of appeals has adopted what appears to be a bright-line rule that an age difference of six years or less fails to establish a *prima facie* case.[20]

If a *prima facie* case is established, the second *McDonnell Douglas* step is for the employer to articulate a legitimate, non-discriminatory reason for its decision.[21] In a RIF context, legitimate non-discriminatory reasons for an individual's layoff may include cost-cutting considerations, performance, or the necessity for particular skills and abilities, among other reasons. It is important to note that courts usually will not second-guess an employer's decision about when it needs, or does not need, to conduct a RIF for economic reasons unless other evidence of discrimination exists.[22]

After the employer articulates its reasons for the RIF and termination decision, the third step of the *McDonnell Douglas* indirect method of proof is for the plaintiff to prove that the employer's articulated reason for the layoff decision is a pretext for discrimination, that is, the reason is phony and the real reason is unlawful discrimination.[23] Plaintiffs bear a heavy burden of proof in an economically motivated RIF, because courts tend to recognize that such RIFs often result in qualified employees losing their jobs even in the absence of discrimination.[24] Selecting employees for layoff based on performance or skill and ability has been sustained if the rating system used to make the layoff decision is job-related and the selection criteria are applied consistently.[25] Quantitative measures such as sales results or productivity have also been upheld as nondiscriminatory reasons for layoff.[26] Furthermore, when an entire job position or function is eliminated so that no comparison to other similarly situated individuals can be made, a discrimination claim may fail.[27] An employer is under no obligation to transfer employees whose job positions have been eliminated, but if it does so, the transfer decisions must be based on non-discriminatory criteria.[28]

When an employer lays off a protected class member based on a reasonable belief that the individual is less qualified than the person retained, courts are generally not willing to recognize a discrimination claim. A plaintiff cannot rely on her own subjective belief that she is better qualified than individuals retained in the RIF. Courts generally refrain from substituting their own judgment for the employer's judgment in reviewing layoff decisions in a RIF.[29]

A plaintiff faces a particularly significant obstacle in establishing pretext when the decision-maker and the plaintiff are members of the same protected class, such as when both are black, both are women, or both are approximately the same age.[30] Such a defense, however, is not airtight, and many courts recognize that a "same group" inference does not, standing alone, foreclose a plaintiff's claim.[31] Another significant obstacle to the plaintiff's claim is the situation where the decision-maker both hired *and* fired the plaintiff within a relatively short period (from six months to two years). In these circumstances, courts are generally not willing to infer discrimination, and the plaintiff's claim may never reach a jury.[32]

Courts have generally held that an employee's high cost due to salary and benefits can be a reasonable factor other than age on which to base a layoff decision in a reduction of force. Thus, replacing workers with less costly employees should not violate the ADEA if the result is the layoff of older workers. These courts have determined that seniority and wage rates are analytically distinct from age, although this subject remains controversial and may implicate a disparate impact discrimination claim.[33]

Disparate impact claims

Discrimination can be established without direct or indirect circumstantial evidence of discriminatory motive via the "disparate impact" theory of liability. The "disparate impact" theory of liability involves a claim that an otherwise neutral policy, practice, or selection criterion adversely affects a protected class of individuals. Taking into account the possibility of a disparate impact claim is a mandatory consideration for any employer engaged in a RIF.

The disparate impact theory of liability in the employment context was first recognized by the Supreme Court in *Griggs v. Duke Power Co.*[34] The Supreme Court held that Duke Power could be held liable under Title VII for race discrimination based solely on statistical evidence. Duke Power required that entry-level job applicants have a high school diploma and achieve a satisfactory test score on an exam administered during the application process, but these requirements resulted in a statistically significant screening-out of black applicants. Furthermore, Duke

Power was unable to show that the high school diploma and test score were job related and necessary for the business. As a result, the court held that the statistical evidence supported Title VII liability even without direct or indirect evidence of racial animus.

It is essential that employers assess whether or not a RIF will have a statistically significant disparate impact on a protected class before finalizing layoff decisions. If a disparate impact is identified, steps might be taken to eliminate the statistical disparity or to validate the RIF selection criteria as being job-related, consistent with business necessity, and applied consistently. A disparate impact analysis involves a statistical comparison of a relevant work force population against an appropriate, comparable group. A generally accepted legal principle is that a statistical analysis showing a difference of more than plus or minus two or three standard deviations indicates that a disparate impact likely is not by chance and might be motivated by unlawful discrimination.[35] Where standard deviations are in the range of one to three, courts have been more skeptical of reaching a conclusion that the statistics, standing alone, support a claim of unlawful discrimination.[36] Furthermore, courts recognize that probative statistics normally can be generated only if the numbers involved are sufficiently large to be susceptible to a proper statistical analysis.[37] On the other hand, courts have recognized the "inexorable zero," in which a small sample size will not inhibit a finding of discrimination when faced with a zero or near-zero selection rate of individuals in the protected group.[38]

Using statistics as evidence in lawsuits involves a battle of the experts, with lawyers trying to "spin" their own experts' analyses to convince a judge or jury that discrimination likely did or did not occur. Judge Posner, of the Seventh Circuit Court of Appeals, described at least one court's view of standard deviation analysis as court evidence as follows:

> The 5 percent [significance] test is arbitrary; it is influenced by the fact that scholarly publishers have limited space and don't want to clog up their journals and books with statistical findings that have a substantial probability of being a product of chance rather than of some interesting underlying relation between the variables of concern. Litigation generally is not fussy about evidence; much eyewitness and other nonquantitative evidence is subject to significant possibility of error, yet no effort is made to exclude it if it doesn't satisfy some counterpart to the 5 percent significance test. A lower significance level may show that the correlation is spurious, but may also be a

result of "noise" in the data or colinearity (correlation between independent variables, such as sex and weight); and such evidence, when corroborated by other evidence, need not be deemed worthless. Conversely, a high significance level may be a misleading artifact of the study's design; and there is always the risk that the party's statistical witness ran 20 regressions, one and only one of which supported the party's position and that was the only one presented, though, in the circumstances, it was a chance result with no actual evidentiary significance. ... It is for the judge to say, on the basis of the evidence of a trained statistician, whether a particular significance level, in the context of a particular study in a particular case, is too low to make the study worth the consideration of judge or jury.[39]

A critical aspect that must be considered to establish the validity (and persuasiveness) of a disparate impact analysis is the use of proper comparative groups. It may be appropriate to review pre- and post-RIF work force statistics on a company-wide basis, location basis, departmental basis, or decision-maker basis. Relevant work force comparisons might also consist of all similarly situated employees whose retention or layoff is governed by the same decision-maker(s). Often, several relevant work force possibilities exist for analysis, and an employer planning a RIF would be wise to assess a potential disparate impact in all groupings that might reasonably be subject to challenge.

In addition, timing may be a factor to consider. Ongoing layoffs over a period of months may result in a cumulative disparate impact that may not be revealed in a simple before-and-after snapshot analysis of a particular layoff.[40] On the other hand, a longer time frame might also work to an employer's advantage if the average age of the work force has stayed the same or increased, for example.

A further complicating factor is that the Supreme Court recognized in *Watson v. Fort Worth Bank and Trust*[41] that the disparate impact theory of liability encompasses both subjective and objective decision-making. And, a statistical analysis of a neutral policy should not be assessed at the "bottom line." Instead, a plaintiff must identify the specific aspect of the decision-making process that can be properly separated for statistical analysis and that has a disparate impact on the protected group.[42] For example, if layoffs are based on a combination of factors, such as attendance and performance, each weighted equally, members of a protected group may allege a disparate impact with respect to either criterion.

The existence of a statistically significant disparate impact on a protected class does not mandate a finding of unlawful discrimination, however. An employer can still defend its actions by proving that the challenged policy or criterion "is job-related for the position in question and consistent with business necessity."[43] After an employer meets its burden of production and articulates a legitimate nondiscriminatory reason for the layoff, the plaintiff must respond to the specific reasons given by the employer for the layoff decision.[44]

In the disparate impact context, where employee performance is assessed based on subjective standards (such as judgments about "teamwork" or "positive attitude"), courts also tend to evaluate the checks instituted by an employer on managers' discretion. These checks should be built into the selection process and should include training. Another check is whether or not decision-makers are diverse in terms of their demographic make-up, whether they rely on evaluations that are validated, and the extent to which initial decisions are reviewed by established committees or higher levels within the organization.[45] If these checks do not exist, a court may be less willing to accept the employer's business justification defense for its selection criteria that caused a disparate impact and instead allow a jury to decide whether the defense should be accepted.

Clearly, a generic "cookie-cutter" approach to a statistical analysis of a RIF is dangerous. An employer must be cognizant that the potential for insignificant statistical results could be significant if the data are combined in a different manner. Further complicating a disparate impact analysis is that all employees are rarely equal in terms of the likelihood they could be selected for layoff. In almost every RIF, some employees might be considered indispensable, which then calls into question whether they should be included in any comparative statistical analysis. The challenge, therefore, is to conduct a statistical analysis at an organizational level that is legally relevant, which is usually the level where the decisions are actually made so that comparable employees can be identified and compared.

The availability of the disparate impact theory of liability in age discrimination cases is very important to consider in the RIF context. On March 30, 2005, the United States Supreme Court issued its decision in *Smith v. City of Jackson*[46] and held that ADEA plaintiffs can assert disparate impact age discrimination claims. Until this decision, many courts had determined that disparate impact claims were not available under the ADEA. The *Smith* case is extremely important in the RIF context, because ADEA claims tend to predominate in RIFs. However, while opening the door for

potentially more and broader ADEA claims, the court simultaneously established hurdles that do not necessarily exist for plaintiffs in Title VII disparate impact claims. The court made it clear that disparate impact claims under Title VII and the ADEA are different in key respects.

First, the *Smith* court held that ADEA disparate impact claims are more narrow than Title VII disparate impact claims, because an ADEA plaintiff must identify a *specific* test, requirement, or practice that causes a disparate impact. A generalized policy or practice will not suffice. At issue in *Smith* was a city's decision to raise starting salaries by a set amount of money, which in turn increased older and more senior employees' pay by the same amount of money. However, the percentage increase was less for older (more senior) employees as an overall percentage of their pay. The U.S. Supreme Court characterized this pay raise as a generalized policy that was not sufficiently specific to support an ADEA disparate impact claim. After *Smith*, there is sure to be substantial litigation over whether a test, requirement, or practice is sufficiently "specific" as a matter of law.

Second, the *Smith* Court determined that the city's reasons for instituting the pay raise in the manner that it chose were reasonable. Unlike Title VII, the ADEA specifically allows employers to take actions based on "reasonable factors other than age."[47] The court determined that the city's method of raising starting salaries and the resulting effect on other salaries was based on a reasonable plan. Furthermore, the court made it clear that an ADEA plaintiff has the burden to *disprove* the reasonableness of the factors that the employer used to make employment decisions (whereas this burden is not on a plaintiff in a Title VII disparate impact claim). In light of courts' usual deference to employers' business judgments, this proof hurdle may be particularly challenging for most ADEA plaintiffs to overcome. The *Smith* case, therefore, also highlights the importance for employers to plan their RIFs in advance in order to adequately evaluate and document the reasonableness of the business judgments being used for initiating the RIF and for making employment selections.

This much is clear about the potential for a disparate impact claim: A potential plaintiff might literally troll through the employer's work force looking for some combination of data that can produce a statistically significant result. Moreover, even if a disparate impact claim under the ADEA is not viable as a matter of law, statistical disparities may still be acceptable evidence in a disparate treatment case. Thus, any comprehensive assessment of the adverse effects of RIF selections can generate a large array of statistical

results, likely even statistically significant results, and a dizzying array of potential employment decisions to check, recheck, and validate.

Pattern and practice claims

When allegations of disparate treatment relate to an entire class of individuals, a plaintiff might claim that a pattern-and-practice of discrimination exists. In such a case, the plaintiff combines his own allegations of disparate treatment with allegations that show discrimination is a "standard operating procedure" for the employer. To support this claim, more than isolated instances of discrimination must be shown, although it is also not necessary to show discrimination against every class member. Gross statistical disparities might suffice to raise an inference of discrimination, but substantial anecdotal evidence of discriminatory acts must be produced to maintain a pattern-and-practice claim.[48]

Other legal considerations in a reduction in force

Leaves of absence

The Family and Medical Leave Act of 1993 (FMLA) requires employers to provide up to 12 weeks of unpaid leave during a 12-month period for employees to care for a newborn child, a newly adopted child, a spouse, child or parent with a serious health condition, or the employee's own serious health condition.[49] Several states have even more stringent leave requirements.[50] The FMLA forbids discrimination against employees who have taken a family or medical leave or who are on such a leave.[51] Employees are entitled to return to their jobs at the end of their FMLA leaves, or they must be restored to an equivalent position with equivalent employment benefits, pay, and other terms and conditions of employment.[52] However, nothing in the FMLA entitles an employee to "any right, benefit, or position to which the employee would have been entitled had the employee not taken the leave."[53] This proviso should insulate employers from attack under the FMLA when terminating the employment of an employee on FMLA leave during a RIF, provided that the employer can support its contention that the employee would have been selected for layoff if he had been at work instead of on FMLA leave.[54]

The Americans with Disabilities Act

The ADA prohibits discrimination against individuals because of their disabilities and requires an employer to reasonably accommodate an employee's disability if the employee can perform the essential functions of his job with such an accommodation.[55] The ADA prohibits selecting an employee for layoff due to a desire to avoid making or continuing a reasonable accommodation. In fact, the reasonable accommodation obligation under the ADA contemplates job restructuring, including modified work schedules and other special arrangements that would allow the employee to perform his job.[56] Therefore, in the midst of a RIF, an employer may be required to engage in an interactive process with a disabled employee to determine whether he can continue to perform his job, a new job, or a new combination of job duties. Furthermore, if an immediate or very near-term contribution is critical to the company's operations, an employee's leave of absence that might have been reasonable before the RIF might not be reasonable after implementation of the RIF.[57] However, it is still critical to engage the employee in an interactive process to determine the continued leave restrictions; and sometimes in the midst of the hectic pace of RIF planning, an employer may neglect to do so.

WARN Act

In any significant job loss action instituted by an employer, one eye should always be focused on The Worker Adjustment and Retraining Notification Act (WARN).[58] WARN requires that covered employers provide to unions, non-union affected employees, and certain government officials 60-days written notice before a covered "mass layoff" or "plant closing." A mass layoff or plant closing occurs when a sufficient number of employees suffer an "employment loss" over a relevant period (either 30- or 90-day rolling periods).

An employment loss is an involuntary termination (other than for cause), a layoff of more than six months, or a reduction in work hours of more than 50 percent during each month of any six-month period.[59] A plant closing occurs when there is a permanent or temporary shutdown of a single site of employment, or one or more facilities or operating units within a single site of employment, with 50 or more employees suffering an employment loss during a 30-day period. A mass layoff occurs when, during a 30-day period, at least 50 employees suffer an employment loss and the number of affected employees also constitutes at least 33 percent of a single site's employees. If 500 or more employees are affected over a 30-day period, a mass layoff occurs regardless of whether the 33 percent threshold is met.[60]

However, significant employment losses often do not occur in discreet 30-day time frames. Thus, under WARN, employment losses for two or more groups of employees at a single site of employment may be aggregated over a 90-day period to establish a plant closing or mass layoff if, and only if, each group, standing alone, would be insufficient by itself

to constitute a plant closing or mass layoff and only if the layoffs are part of the same actions and causes (and are not an attempt by the employer to evade the requirements of WARN).[61]

From these statutory rules for aggregating employment losses, clearly one of the practical challenges of complying with WARN is the ability of an employer to anticipate the timing and number of employment losses without inadvertently, or unavoidably, triggering WARN's notice requirements. Finance and operations executives might not take into account WARN's requirements in their planning processes, especially if they are unaware of the potential to aggregate job losses over a long period. The financial effect of inadvertently triggering WARN can be significant (a successful plaintiff can obtain up to 60 days of lost pay and benefits and attorney's fees).[62]

Some narrow exceptions or exemptions from notice are allowed under WARN. For example, an employment loss does not occur when the closing or layoff is the result of a relocation or consolidation of part or all of an employer's business and, prior to the closing or layoff: 1) the employer offers to transfer the employee to a different site of employment within a reasonable commuting distance with no more than a six-month break in employment; or 2) the employer offers to transfer the employee to any other site of employment regardless of distances with no more than a six-month break in employment, but only if the employee accepts the transfer within 30 days of the offer or of the closing or layoff, whichever is later.[63] The uncertainties in this exception include defining a "reasonable commuting" distance, which may vary depending on location conditions and customs. Also, because of the time in which an employee has to accept a transfer outside of a reasonable commuting distance, a prudent employer might give the individual a WARN notice just in case it has misjudged the reasonableness of commuting distances or is otherwise unsure about the employee's acceptance of the transfer offer.

WARN also contains limited exceptions for a "faltering company" and for "unforeseeable business circumstances."[64] Under these exceptions, the employer can provide less than 60 days notice, but must still provide as much notice as is practicable. The "faltering company" exception applies if, at the time notice would be required, the employer is actively seeking capital or business which, if obtained, would have enabled the employer to avoid or postpone a shutdown; but, the employer must reasonably and in good faith believe that giving WARN notice would preclude the employer from obtaining the capital or business. The "unforeseeable business circumstances" exception also

allows less than 60 days notice where the WARN event is caused by circumstances that were not reasonably foreseeable to the employer.[65] The burden of proof, however, is on the employer to prove that the event causing the employment losses was truly unforeseeable to a reasonable employer in the same situation.

Waiver and release agreements

A key strategy for any employer engaged in a RIF and desiring to avoid litigation necessarily includes providing severance pay to employees terminated in a RIF, in exchange for their signing an agreement not to sue the employer. In a RIF context, age discrimination claims predominate and pose the most potential for serious liability exposure for employers. Therefore, it is important to understand the statutory requirements for obtaining a waiver of federal age discrimination claims.

The Older Workers Benefit Protection Act (OWBPA)[66] took effect on October 16, 1990, as an amendment to the ADEA. OWBPA provides that an individual may not waive her rights under the ADEA unless the waiver is "knowing and voluntary." Under OWBPA, the waiver is knowing and voluntary if it meets the following conditions: 1) it is a written agreement that can be readily understood by the employee; 2) the waiver specifically refers to a waiver of rights arising under the ADEA; 3) the employee must receive consideration (value) in addition to what she is already entitled to; 4) the waiver is limited to rights or claims arising as of, or prior to, the effective date of the agreement; 5) the individual is advised in writing to consult with an attorney before signing the agreement; 6) the employee is provided at least 21 days to consider the agreement; and 7) after signing the agreement, the individual has at least seven days to revoke her signature (assent).[67]

If the waiver is offered in connection with an exit incentive or employment termination program offered to a group or class of employees (which usually includes a RIF), additional conditions must be met. Individuals must be given at least 45 days to consider the waiver agreement. The employer also must inform each individual in writing and in a manner that can be understood by the average person as to: 1) any class, unit, or group of individuals covered by such program, any eligibility factors for such program, and any time limits applicable to such program; and 2) the job titles and ages of all individuals eligible or selected for the program and the ages of all individuals in the same job classification or organizational unit who are not eligible or selected for the program.[68]

The information about groups, eligibility factors, job titles, and ages in the 45-day OWBPA waiver agreement

is calculated to allow an employee (and his lawyer) to determine whether he could have at least a colorable age discrimination claim, either disparate treatment or disparate impact.[69] If the information provided to the employee is incomplete or flawed, the waiver may not be valid. Of course, employers desire to avoid lawsuits and thus may try to construct the informational attachments to an OWBPA release so as to comply with the law while not serving as a ready guide for a plaintiff desiring to pursue litigation. Affected employees who sign releases and desire to have them invalidated may attack the substance or scope of the information provided in the release in order to have it voided. Relevant considerations include whether the employer used the titles and classifications before the layoffs; whether the titles and classifications were used in assessing or choosing workers for layoff; and whether the titles and classifications were meaningful to the average worker in his or her understanding of the workplace and layoff process.

Another difficult aspect of the attachments and information required for a 45-day OWBPA release is determining the appropriate group of affected employees to disclose in the attachment to the waiver agreement. Regulations require disclosure of the employees selected and not selected (and their ages) in the "decisional unit."[70] However, the precise decisional grouping is often difficult to define when there are multiple layers of decision-making involved. An example of the potential difficulty posed by this regulation is *Griffin v. Kraft General Foods, Inc.*[71] In this case, Kraft decided to shut down a plant in Georgia and lay off all of the workers. Kraft, however, only disclosed the job titles and ages at the affected plant. A plant in another state was part of the "decisional unit" because both plants were reviewed, but the Georgia plant was selected. The court held that because "job classification" and "organizational unit" are not limited to a single plant, individuals in the same job classification or organizational unit may include employees at other plants in the same company.

Putting the law to work—A practitioner's approach to planning a reduction in force

In light of the legal principles discussed above, it is essential to involve a lawyer in the RIF-planning process from its inception. The lawyer can help analyze and develop the facts and tone of the entire RIF in a confidential, privileged context and with the goal of avoiding litigation. Even if litigation cannot be avoided, a knowledgeable and experienced lawyer should be able to identify potential litigation risks and to develop ways to reduce or eliminate the risks to the employer.

Reasons for the RIF

Foremost, the RIF must be a legitimate employment action in order to take advantage of favorable case law deferring to employer judgments and opinions. The employer must identify the reasons for the RIF and should document the validity of these reasons. This documentation may be used later in a governmental proceeding or in court to prove that the employer's actions were justified and not discriminatory. Some of the more common reasons for a RIF include: reduction in production; exiting a product, service, or business; closure, consolidation, or relocation of operations; restructuring, combining, or realigning to streamline or eliminate departments, functions, jobs, or management layers; a general need for cost savings; and automation, technology change, and efficiency efforts.

The public relations of a RIF can be very important from a lawyer's point of view (both external and internal communications). The official and unofficial communications about the RIF can be discovered in related litigation by plaintiffs. Plaintiffs may try to use these communications to attack the legitimacy of the employer's actions if there is conflict between the substance of the communications and the reasons articulated during litigation for the RIF or position eliminations. A jury may eventually read the company's communications about the RIF, and any statements that seem harsh or uncaring may be held against the employer by the jury when determining liability and damages. Further, sound employee relations demand a credible communication effort. Too often, employees sue their employers because they are surprised, confused, or hurt by a decision they do not understand. Therefore, an employer should anticipate the need for communication with employees at various stages of the RIF process and ensure accuracy of the communications.

RIF guidelines

Guidelines for the RIF are a crucial aspect of avoiding and defending against litigation. RIFs are usually not common occurrences in most companies. Therefore, existing policy manuals and handbooks may contain outdated guidelines for a RIF that need updating. These documents also may provide information about employee expectations that should be factored into the RIF plans. Where guidelines do not exist, are not in effect, or need to be changed, the employer should establish separate written guidelines to govern the RIF process. The guidelines are vital to explaining and justifying each termination or other employment decision.

The guidelines should list the criteria for employment decisions, and these criteria should be prioritized (either by corporate mandate or by each decision-maker)

and documented. The prioritized criteria should reflect the performance, skills, and abilities desired for the restructured organization and for any newly created or consolidated job positions. Then, the employer should determine which employees' performance, skills, and abilities will or will not be needed and document the reasons why. In some cases, indispensable skills and abilities may trump performance rankings. When this occurs, it will be important to communicate to employees the criteria used for making decisions; otherwise, employees may resent the decision, consider it to be unfair, and resort to legal actions against the company.

Past performance evaluations should always be reviewed when making the RIF selections. Any validity issues with the evaluations—such as supervisor bias, lack of explanations for ratings, or all employees being ranked exactly the same—should be noted. Where evaluations do not exist or have validity problems, other documents on which performance can be assessed should be identified relative to the RIF selection criteria.

In analyzing past performance reviews and performance rankings during a RIF, the most common management mistake is characterizing performance in a conclusory fashion (for example, "satisfactory" or "succeeds"). Instead, managers must document, describe, or explain the facts supporting their conclusions. When the conclusions are based on subjective judgments, objective facts supporting the judgments should be documented and described as much as possible. Judges and juries are often very skeptical of subjective judgments, and when no or conflicting supporting information is provided an employer has a greater liability risk.

Because RIFs often negatively affect employees whose performance is otherwise acceptable, the question of intra-corporate transfers is often raised in an effort to keep a good employee. Early in the RIF planning process, an employer should decide if it will allow such transfers because doing so may create opportunities for other affected employees to claim that they should have been considered for a possible transfer or allowed to transfer too. When the person who was not transferred is in a protected class, the employer faces additional exposure to discrimination claims. Each transfer during a RIF must be scrutinized within the legal frameworks outlined in the previous sections. Often, allowing transfers during a RIF complicates an already complex process, and therefore many employers simply decide not to allow transfers even though a potentially valuable employee asset may be lost.

Planning, selection, and implementation procedures

An effective strategy for avoiding or winning RIF-related litigation is to use a high-level committee to review decision-making. Such a committee might provide a greater check on fairness by including persons other than direct management in the decision-making process. These committees also can be diverse and thus might provide a different and valuable perspective on direct supervisors' decisions. Potential jurors also might view such a committee positively when determining either liability or potential damages in a lawsuit. And, there may be a potential advantage to having several witnesses supporting the RIF selection decisions instead of a single decision-maker (particularly if the single decision-maker can be accused of bias).

At least one member of the review committee should be a human resources professional, who can ensure that the committee reviews all necessary information and applies the relevant criteria uniformly. The committee's members also should receive some training in equal employment opportunity laws and company policies in this regard. The committee should be exposed only to relevant information in terms of the selection guidelines. For example, inappropriate references in personnel files, appraisals, and other documents can be eliminated. Committee members also can be insulated from information on age, race, sex, or other protected status information. For the employer that decides to use a review committee, substantive minutes of deliberations and results must be maintained. It is virtually impossible to reconstruct the deliberations months or years after the fact. Faded and potentially conflicting memories may lack credibility and thus increase the risk of liability. For this reason, committee-generated notes and documents should be controlled and preserved with an eye toward possible disclosure in litigation.

Early in the planning process, the employer should determine which organizational units will experience position eliminations and by what percentage or number. It is important first to determine the specific positions—*not employees*—that will be eliminated. After deciding the new organizational structure, the selection criteria should be applied to determine which employees will be placed in the new organization and which will be selected for separation. Also as part of this process, individuals on leaves of absence and those who may need accommodations for disabilities should be identified, so that application of the selection criteria does not inadvertently displace such individuals without considering their legal rights.

To defend against a discrimination or wrongful discharge claim, documentation of the decision-making process is critical. Again, if a jury can see and feel the legitimate process, they are less likely to regard the employer as having acted in a discriminatory or arbitrary manner. But documentation can also sink the litigation ship. Documents that are erroneous, that conflict with the ultimate reasons for a decision, or that show bias pose major impediments to accomplishing the lawyer's goal of a RIF free of lawsuits (or at least free of major liabilities). A good way to prevent the "bad document" scenario is to utilize the attorney–client privilege.

The attorney–client privilege is a legal principle that shields from disclosure all communications to and from a lawyer when the communications are confidential and for the purpose of providing legal advice.[72] Communications and related documents that are subject to the attorney–client privilege cannot be discovered by the government or by plaintiffs in litigation. However, communications will not be privileged from disclosure if the privilege is waived by the person or entity seeking the legal advice. A waiver may be intentional or it may be via inadvertent disclosure of an otherwise privileged communication.

An example of a RIF-planning strategy relative to the attorney–client privilege is as follows: Decision-makers should complete a preliminary selection form for each affected position, listing the candidates, the person selected for layoff, and the reasons for the selection in accordance with established selection guidelines and criteria. The forms used by the decision-makers should not include any demographic information. Of extraordinary importance is that this form be issued and completed at the request of a lawyer and expressly for the purpose of the lawyer providing a legal opinion concerning the information on the form. This entire process must be kept confidential. The form and all communications associated with it should be labeled "privileged and confidential/prepared for consultation with counsel" and delivered to the employer's lawyers, including all drafts.

A lawyer, or a human resources representative acting for the lawyer, should then add demographic and protected class data, and note any special issues that might generate claims, such as recent FMLA leaves, disabilities, whistle-blowing activity, union organizing activity, recent harassment or other serious complaints, and complaints about supervisors and managers. The lawyer then analyzes the data for potential claims against the company. If potential claims are identified, they can be addressed and remedied in the confidential context of attorney–client communications. If

statistical disparities are identified, selection criteria can be evaluated to ensure they are job related and applied uniformly. Other criteria might also be explored to determine whether they can achieve the same business goals with a lesser impact on a protected group. If validated criteria are applied uniformly but still result in a statistically significant impact on a protected group, it is not necessary to change the decisions merely to eliminate the disparity, because the validation and auditing process should have confirmed that the underlying decisions were made on a non-discriminatory basis. In fact, manipulating the decision process merely to eliminate statistical disparities can result in reverse discrimination claims, that is, men claiming discrimination because women received preferential treatment or whites claiming race discrimination because blacks received preferential treatment. Such reverse discrimination claims are usually evaluated under the same legal standards as claims by minorities, women, and older workers.

A lawyer's review of the RIF decisions also should include identifying individuals who are more likely than others to initiate claims against the company. Decisions that negatively affect such individuals must be evaluated carefully in order to avoid or to win any potential litigation. This evaluation includes not only reviewing the legal merits of the employment decision, but also examining supporting documents, overall indicators of "fairness," the personality and potential bias of the decision-maker, and any corroborating views of supervisors and peers. Witness credibility is also evaluated (in the event a trial is required), as well as any past comments or complaints about either the decision-maker or the affected employee.

After the legal review, and after selections are finalized, decision-makers should complete a final selection form. This final form should contain the rationale for selections in accordance with the selection criteria. All relevant documentation should be included with the form, and any required reviews and approvals should be evidenced on the form. The final form will not be privileged, and will be the primary piece of evidence that the employer can use to defend the selection decision if faced with a lawsuit.

Finally, an often-neglected aspect of the RIF is the post-RIF time frame. Lawyers representing plaintiffs often focus on this time frame, searching for information that might indicate that the stated reasons for an employee's layoff are false. For example, if an employer contends that a position is eliminated, the plaintiff's lawyer might ask to review post-RIF hiring decisions. If the lawyer identifies new hires shortly after the RIF who essentially perform the plaintiff's

former duties, the lawyer may contend that the rationale for selecting the plaintiff was a sham and a pretext for discrimination. Likewise, an alleged justification for position eliminations—such as elimination of a product line or expected sales emphasis in particular products—might never materialize. When this happens, a plaintiff's lawyer might contend that the original justification was not truthful and was instead just a cover-up for discrimination. To avoid such claims, a prudent employer might impose a prohibition on hiring into positions that were vacated during a RIF. Also, when a RIF is due to cost-cutting, an employer should freeze hiring during and after a RIF for a significant period in order to avoid a claim that the cost-reduction justification for the RIF was a sham. If business needs require hiring at some level during or after the RIF, these business needs should be reviewed, justified, documented, and approved, with a focus on achieving the organization's business need without exposing it to potential lawsuits.

Conclusion

In addition to the issues addressed in this article, a host of other legal issues should be considered relative to reductions in force. Employers might consider voluntary exit incentive programs, which implicate an entirely different set of procedures, laws, and regulations, before instituting involuntary programs. Common law issues, such as claims that employment contracts are breached by the RIF or that an implied contract exists requiring "just cause" for a termination must be assessed. Non-competition and confidentiality concerns also play a significant role in protecting an employer's trade secrets and proprietary information during and after a work force restructuring. Additionally, union relations issues relative to contracting out, plant relocations, plant shutdowns, and general layoffs involve possible legal requirements that the employer bargain with a union about the business decision *before* implementing it and that the employer bargain with the union about the effects of the business decision.

The ability of human resource managers and day-to-day supervisors to comprehend and to apply a complex array of employment laws and regulations is limited. Courts are also challenged in their ability to grapple with unique employment scenarios and decisions in an ever-changing area of the law. Employment laws—statutes, regulations, and case law—have reached a level of complexity that makes it extremely difficult for employers and employees to understand their rights and obligations. When the result is litigation, one cannot help but believe that resources are unnecessarily wasted regardless of the outcome of a lawsuit.

Litigation is expensive and time-consuming, often taking years to resolve and costing tens or hundreds of thousands of dollars before achieving a resolution. Employers must pay for their own lawyers' time and expenses, and if a plaintiff prevails in a discrimination lawsuit, the employer faces monetary damages that can include an award of lost pay and benefits, compensatory damages for emotional pain and suffering, punitive damages, and payment of the plaintiff's attorney fees. Under Title VII and the ADA, compensatory and punitive damages are capped at $300,000 for large employers, and although no compensatory or punitive damages are allowed under the ADEA, lost pay can be doubled as a "liquidated" damages award if a willful violation of the act is found. However, many state laws contain no such limitations on monetary awards. Clearly, six- and seven-figure jury verdicts are a real threat to employers in our federal and state jury systems, and class action claims pose the potential for even larger awards. In addition, it is difficult to put a price tag on the time spent by corporate managers away from performing their job duties in order to deal with litigation.

The inefficiencies and costs associated with court litigation could be avoided in light of the U.S. Supreme Court's decisions that statutory discrimination claims can properly be submitted to binding arbitration and that private, mandatory arbitration agreements between employers and employees are valid under the Federal Arbitration Act (FAA).[73] However, under the FAA, state contract laws determine the validity of arbitration agreements (to the extent the laws are not conflicting with the FAA). Litigation related to the enforceability of arbitration agreements has resulted in different rulings among federal and state courts concerning the elements of a valid arbitration agreement. So far, many employers are still taking a wait-and-see approach to instituting arbitration programs until the law is clearer. Congress could follow the Supreme Court's lead and take the additional step of amending the FAA to preempt all state laws concerning arbitration and to provide for the development of a national common law on the enforceability of arbitration agreements instead of relying on varying state laws. Such an amendment might also include minimum statutory standards for an arbitration agreement to be knowing, voluntary, and binding.

Because private arbitration remains underutilized and subject to continuing suspicions about individuals' ability to vindicate important public rights in a private forum, another public policy response that might be explored is the development of a national administrative court system exclusively for employment claims.

Such a system could provide administrative judges who have expertise in employment law and the employer–employee relationship. The process could also be more efficient if the Equal Employment Opportunity Commission's (EEOC) investigatory powers were expanded so that an EEOC probable cause finding would be required as a prerequisite for an administrative hearing. And, appeals from an administrative decision could be allowed to the federal courts, but the courts should only have jurisdiction to review the decision under a limited "abuse of discretion" or similar deferential standard. Employees would give up jury trials for their claims, but their potential monetary remedies might be maintained and their claims could be resolved more expeditiously than in the current process. Further benefits for employers would be realized if this federal administrative system were coupled with federal anti-discrimination laws becoming the legal standard for the entire country, displacing (preempting) state laws on the same subject matters. The result could be more predictable—uniform laws applied in a more efficient administrative process.

For now, however, employers face the uncertainties of a jury system and laws that differ substantially among the states. After all the complex business and legal analyses are conducted, argued, and challenged, every employment lawyer knows that a jury's decision will likely be governed by whether it considers the termination decision to be fair. Does the law require fairness? No. Will the judge instruct the jury that it must decide the case based on fairness? No. But fairness and witness credibility will be the difference between winning and losing a trial.

Therefore, extraordinary attention should be given to the "tone" of the entire reduction procedure and how it is conducted. In general, well-planned, "humane" procedures create less liability (especially with juries). Outplacement assistance and the availability of counseling through employee assistance plans may also tend to defuse the emotional aspects of the reductions. Ultimately, the best long-range protection is provided by soundly conceived and well-administered performance appraisal and succession planning systems that are in place before a RIF is ever needed. These systems can provide valuable data for a later restructuring or reduction in force. Moreover, where such systems are in place, employees are much less likely to be surprised by their supervisors' opinions of their performance and thus less likely to be suspicious of the motives behind a layoff decision.[74]

[1]Minority Corporate Counsel–DecisionQuest Jury Survey for 2002, which can be obtained by contacting Bowne DecisionQuest at www.decisionquest.com/site/surveys.httm.

[2]*Id.* at 2001 National Law Journal–DecisionQuest Jury Survey.

[3]42 U.S.C. §§2000 *et seq.*; see also Reconstruction Statutes, 42 U.S.C. § 1981 (prohibiting race discrimination in the making and enforcement of contracts; applies to private work places).

[4]29 U.S.C. §§621 *et seq.*

[5]42 U.S.C. §§ 12101 *et seq.*

[6]29 U.S.C. §§701 *et seq.*

[7]29 U.S.C. § 206(d)(1).

[8]42 U.S.C. §§ 2000e(k), 2000e-2(a)(1).

[9]See, for example, California Fair Employment and Housing Act, Cal. Govt. Code § 12900 *et seq.*; Illinois Human Rights Act, 775 ILCS 5/1-101 *et seq.*; New Jersey Human Rights Act, Title 10, Ch. 3 §10:3-1 and Ch. 5, §10:5-1 *et seq.*; The Ohio Civil Rights Act, 41 ORC § 4112 *et seq.*

[10]*Johnson v. Kroger Co.*, 319 F.3d 858 (6th Cir. 2003).

[11]*Taylor v. Virginia Union Univ.*, 193 F.3d 219 (4th Cir. 1999).

[12]*DiCarlo v. Potter*, 358 F.3d 408 (6th Cir. 2004).

[13]*Schaffner v. Hispanic Hous. Dev. Corp.*, 76 F. Supp.2d 881 (N.D. Ill. 1999).

[14]*See Hammer v. Ashcroft*, 383 F.3d 722 (8th Cir. 2004); *Dockins v. Benchmark Communications*, 176 F.3d 745 (4th Cir. 1999).

[15]*Perry v. St. Joseph Regional Medical Center*, 110 Fed. Appx. 63 (10th Cir. 2004).

[16]*See Yates v. McDonnell Douglas*, 255 F.3d 546 (8th Cir. 2001).

[17]411 U.S. 792 (1973).

[18]*Id.* at 803; see also *Gonzolez v. Ingersoll Milling Mach. Co.*, 133 F.3d 1025 (7th Cir. 1998); *Marzano v. Computer Sciences Corp.*, 91 F.3d 497 (3rd Cir. 1996).

[19]See, for example, *Patterson v. Avery Dennison Corp.*, 281 F.3d 676 (7th Cir. 2002).

[20]*Grosjean v. First Energy Corporation*, 349 F.3d 332 (6th Cir. 2003).

[21]*McDonnell Douglass*, 411 U.S. at 802; *Texas Dept. of Comm. Affairs v. Burdine*, 450 U.S. 248, 256 (1981).

[22]See, for example, *LeBlanc v. Great American Insurance Company*, 6 F.3d 836, 847 (1st Cir. 1993) ("courts may not sit as super personnel departments, assessing the merits—or even the rationality—of employers' nondiscriminatory business decisions."). See also *Jones v. Unisys Corp.*, 829 F.Supp. 1281, 1286 (Dist. Utah 1993) ("... difficult business decisions had to be made by a company facing serious economic problems. ... [T]he court is

without authority to act or second guess such decision."), *affirmed* 54 F.3d 624 (1995); *c.f. Wexler v. White's Fine Furniture*, 317 F.3d 564 (6th Cir. 2003) (suggesting that the business judgment rule does not necessarily preclude evidence about the reasonableness of the employer's business decision).

[23]*Reeves v. Sanderson Plumbing Products, Inc.*, 530 U.S. 133 (2000).

[24]*Wilson v. Firestone Tire and Rubber Company*, 932 F.2d 510, 517 (6th Cir. 1991); see *Ritter v. Hill 'N Dale Farm, Inc.*, 231 F.3d 1039 (7th Cir. 2000) (rejecting plaintiff's arguments that others should have been laid off instead of him).

[25]See, for example, *Goldman v. First National Bank*, 985 F.2d 1118-19 (1st Cir. 1993) (The least qualified employee may be laid off in a RIF even if he previously received regular pay increases and commendations.).

[26]See, for example, *Staples v. Pepsi-Cola General Bottlers Incorporated*, 312 F.3d 294, 300 (7th Cir. 2002).

[27]See *Gould v. Kemper Nat'l Ins. Cos.*, 880 F.Supp. 527, 535 (N.D. Ill. 1995).

[28]*Oxman v. WLS-TV*, 12 F.3d 652 (7th Cir. 1993); *Godfredson v. Hess & Clark, Inc.* 173 f.3d 365, 374 (6th Cir. 1999) (no general obligation to transfer older workers); *c.f. Ercegovich v. Goodyear Tire & Rubber Co.*, 154 F.3d 344, 351 (6th Cir. 1998) (ADEA violation where younger employees transferred by employer, but older employee-plaintiff not transferred).

[29]See, for example, *Turner v. North American Rubber, Inc.*, 979 F.2d 55, 60 (5th Cir. 1992) ("the ADEA should not be a vehicle for judicial second-guessing of business decisions . ... The ADEA was intended to protect older workers from discrimination, not to tenure them."); and *Branson v. Price River Cole Co.*, 853 F.2d 768, 772 (10th Cir. 1988)("[C]ourts are not free to second-guess and employer's business judgment . ... it is the perception of the decisionmaker which is relevant, not the plaintiff's perception of herself.").

[30]See, for example, *Elrod v. Sears, Roebuck & Co.*, 939 F.2d 1466, 1471 (11th Cir. 1991) and *Love v. Alamance County Board of Education*, 757 F.2d 1504, 1509 (4th Cir. 1985) (noting that the "heavy presence of women and blacks" on the selection committee was significant to the issue of sex and race discrimination; a judgment for employer *affirmed*); *Wright v. National Archives and Record Service*, 609 F.2d 702 (4th Cir. 1979) (finding no Title VII violation because all five of the evaluators, three of whom were African American, agreed that Wright was not qualified).

[31]See, for example, *Wexler*, *supra*; *Strauch v. American Coll. of Surgery*, 301 F. Supp.2d 839, 849 (N.D. Ill. 2004); see also *Waldron v. SL Industries*, 56 F.3d 491 (3rd Cir. 1995) (reversing summary judgment for the employer because the fact that the plaintiff was age 61 at the time of hire and 63½ when promoted did not create a presumption of non-discrimination in favor of the employer).

[32]See, for example, *Wexler*, *supra*.

[33]*Allen v. Diebold, Inc.*, 33 F.3d 674 (6th Cir. 1994); See also *Thomure v. Phillips Furniture Co.,* 30 F.3d 1020 (8th Cir. 1994); *Bialas v. Greyhound Lines*, 59 F.3d 759 (8th Cir. 1995); and *Bay v. Times Mirror Magazines*, 936 F.2d 112, 117 (2nd Cir. 1991) ("[T]here is nothing in the ADEA that prohibits an employer from

making employment decisions that relate an employee's salary to contemporaneous market conditions ... and concluding that a particular employee's salary is too high.").

[34] 401 U.S. 424 (1971).

[35] See *Hazelwood School District v. United States*, 433 U.S. 299, 308-309 at note 14 (1977) (stating that only when the difference between the success rate and workforce availability is greater than two or three standard deviations while employment practices be suspect). See, for example, *Benson v. Tacco, Inc.*, 113 F.3d 1203 (11th Cir. 1997) (allowing certain plaintiffs to proceed with RIF-based discrimination claims based on standard deviations of 3.04 with 0.002 probability); *Barnes v. GenCorp*, 896 F.2d 1457 (6th Cir. 1990) (finding that a *prima facie* case was established by statistics that showed the percentage of employees at age 52 and over discharged in a RIF fell beyond three standard deviation from the hypothesized random result; the 48 and over group came close to three standard deviations; the court recognized that these statistics were based on a presumption that skills are distributed evenly by age).

[36] See, for example, *EEOC v. Federal Reserve Bank*, 698 F.2d 633, 647-48 (4th Cir. 1983), reversed on other grounds, 467 U.S. 867 (1984); *EEOC v. Western Electric Co.*, 713 F.2d 1011, 1018 (4th Cir. 1983) (advising extreme caution in drawing conclusions from standard deviations in the range of 1–3).

[37] *Fisher v. Wayne Dalton Corp.*, 139 F.3d 1137 (7th Cir. 1998); *Fallis v. Kerr-McGee Corp.*, 944 F.2d 743 (10th Cir. 1991) (finding statistical sample too small to raise a jury question as to the layoff in which only ten percent of the 42 geologists under age 40, but 33 percent of the nine geologists over age 40 were laid off).

[38] See *Teamsters v. United States*, 431 U.S. 324, 342, n. 23 (1977).

[39] *Kadas v. MCI Systemhouse Corporation*, 255 F.3d 359, 362 (7th Cir. 2001).

[40] See *Hazelwood School District v. United States*, 433 U.S. at 309 (finding that extended time frame statistics are preferable to a snapshot analysis because the work force composition evolves continually over the years).

[41] 487 U.S. 977, 990-91 (1988).

[42] See *Connecticut v. Teal*, 457 U.S. 440, 442 (1982); 42 U.S.C. § 2000e-2(k).

[43] 42 U.S.C. § 2000e-2(k)(1)(A)(I).

[44] *Barnes v. GenCorp, Inc.*, 896 F.2d 1457, 1468-69 (6th Cir. 1990).

[45] See, for example, *Meacham v. Knolls Atomic Power Laboratory*, 381 F.3d 56 (2nd Cir. 2004) (affirming employer's liability in part because it was confronted with disparate impact before implementing layoffs and did not review or validate the decision-making process properly).

[46] – U.S. –, No. 03-1160, 2005 WL 711605 (March 30, 2005).

[47] 29 U.S.C. § 623(f)(1) ("It shall not be unlawful for an employer ... to take any action otherwise prohibited ... where the differentiation is based on reasonable factors other than age. ...").

[48] *International Brotherhood of Teamsters v. United States*, 431 U.S. 324, 339-43 (1977); *Lopez v. Metropolitan Life Ins. Co.*, 930 F.2d 157, 160 (2nd Cir 1991) (statistics standing alone not sufficient).

[49] 29 U.S.C. § 2601 *et seq.*

[50] See, for example, *Connecticut Family Leave Act,* Conn. Gen. Stat.§ 31-51cc (providing for up to 16 weeks of leave in a 24-month period).

[51] *Hodgens v. General Dynamics Corp.*, 144 F.3d 151, 160 (1st Cir. 1998).

[52] 29 U.S.C. § 261(a)(1); 29 C.F.R. § 825.214.

[53] 29 U.S.C. § 2614(a)(3)(B).

[54] 29 C.F.R. § 825.216(a)(i); See *Ilhardt v. Sara Lee Corp.*, 118 F.3d 1151, 1157 (7th Cir. 1997) (applying regulation to an individual laid off while on maternity leave).

[55] 29 U.S.C. §§ 12101 *et seq.*

[56] 29 C.F.R. § 1630.2(o).

[57] *Matthews v. Commonwealth Edison Co.*, 128 F.3d 1194 (7th Cir. 1997).

[58] 29 U.S.C. Section 2101 *et seq.*

[59] *Id.* at §§ 2101, 2102.

[60] 29 U.S.C. §§ 2101(a)(2) and (3).

[61] *Id.* at § 2102(d).

[62] *Id.* at § 2104.

[63] *Id.* at § 2101(b)(2).

[64] *Id.* at §§ 2102(b)(1), (2) and (3).

[65] *Id.*

[66] 29 U.S.C. §§ 626(f).

[67] *Id.*

[68] *Id.* at § 626(f)(1)(H).

[69] *Raczak v. Ameritech Corp.*, 103 F.3d 1257, 1260 (6th Cir. 1997).

[70] 29 C.F.R. § 1625(f)(3).

[71] 62 F.3d 368, 373 (11th Cir. 1995).

[72] *Hickman v. Taylor*, 329 U.S. 495, 511 (1947) (discussing legal standards for attorney–client privilege in a corporate investigation; also discussing attorney-work product protection, which renders confidential documents that reflect the fact or opinion work product of attorneys when litigation is anticipated).

[73] See *Circuit City Stores, Inc. v. Adams*, 532 U.S. 105 (2001); *Gilmer v. Interstate/Johnson Lane Corporation*, 500 U.S. 20 (1991); Federal Arbitration Act, 9 U.S.C. §§ 1 *et seq.*

[74] The views expressed in this article are solely those of the author. Many of the descriptions and principles set forth herein are generalized due to publishing constraints.

Public policy and downsizing decisions

Peter Cappelli

Introduction

It may be easy to forget now, but in the 1980s, there was an intense fascination in the U.S. with Japanese management systems, especially with employee management. The combination of lifetime employment, internal advancement, and related practices produced a high commitment system in Japan that was the envy of U.S. employers and the topic of endless seminars offering advice to firms in the U.S. A popular joke at the time described how three businessmen, one French, one American, and one Japanese, had been convicted of something especially bad and were being granted their last request before being executed. The French businessman asked to hear the French national anthem. He heard it and was taken out and shot. Then the Japanese businessman was asked what he wanted. "I'd like to hear one more time a lecture about the superiority of the Japanese management system." Then the American jumped up and said, "Wait. Shoot me first."

Since then, so thoroughly has the Japanese system been supplanted as the model by U.S. practices that people now tell the same joke in Japan, this time with the Japanese manager asking to be shot before the American businessman hears his last request of a lecture about the advantages of U.S.-style restructuring. Around the world, the ability to use layoffs to restructure companies is presented as the cutting edge in competitive practices, based in part on testimonials from U.S. employers and especially U.S.-based multinational companies.

Arguably the only exception to the hegemony of U.S.-style restructuring is in Europe, where it is claimed that the flexibility that companies need to respond to changing business demands can be achieved inside the firm. These arguments describe a kind of "functional flexibility" created by cross-functional work systems and related work practices, as well as the use of contingent labor that represents an alternative to "numerical flexibility" achieved by layoffs and hiring. While there is no doubt that functional flexibility can be useful to firms, there is also evidence that they use numerical and functional flexibility as complements, not substitutes.[1] In the U.S., for example, the use of contingent work, especially temporary help and leased employees, has grown along with the incidence of downsizing.

Data from the U.S. Bureau of Labor Statistics' *Displaced Worker Survey* show that many employers now say that their layoffs are driven by something other than what had been the more typical declines in the volume of business.[2] In my experience watching companies, the most common reasons for layoffs now are attempts to meet profitability targets imposed within the corporation or by its owners. One can think of these efforts as an attempt to redraft the firm's production function: achieve lower average costs by using fewer people in an effort to raise residual profits.

The interest in cutting workers as a means of improving productivity has been accelerated and formalized recently through the introduction of what is known as workplace planning software. These are computer-based models that help employers estimate employment needs by job and skill level. Arguably the most sophisticated of these software packages, so-called workplace optimization software, are explicitly designed to ensure that employers know when they can start cutting workers if business falls off and when they need to start hiring them back when business improves. The "optimization" aspect comes from the reduction in excess employees that the firm might otherwise be carrying when business turns down, as well as the missed

Peter Cappelli is the George W. Taylor Professor of Management at the Wharton School of the University of Pennsylvania and Director of Wharton's Center for Human Resources. He is also a research associate at the National Bureau of Economic Research.

opportunities it might be able to capture if it was fully staffed at the point when business picked up again.

Policy issues associated with greater ease of layoffs

There is no doubt that U.S. employers have pushed for and taken advantage of greater ability to lay off workers when business reasons make it expensive to retain them. The range of business reasons for layoffs spans business cycles, corporate restructurings of all kinds (for example, mergers and acquisitions, changes in organizational structure, disposal of operations), new technologies that alter skill requirements, and assorted factors that raise worker productivity. It seems to be easier in terms of both lack of legal and regulatory constraints and social norms to lay off workers in the U.S. than in any other developed country in the world. States' employment policies seem to be designed to attract companies to their region by making it easier for them to dismiss old workers and hire new ones.[3] But it is still hard to argue with employers that say that greater ability to lay off workers would reduce their operating costs and make it easier for them to restructure and adjust more quickly to changing markets. It is also hard to argue with the notion that greater ease in laying off workers reduces employers' concerns about hiring. Supporters of easing the remaining restrictions on laying off workers sometimes say that doing so would encourage hiring, per se, but of course that is not literally true: Constraints on the ability to dismiss are an additional cost, a variable or per worker cost, that restrains the interest in hiring, and reductions in those costs reduce the disincentives on employers that otherwise have a need to hire.

Holding aside the fact that layoffs impose enormous costs on employees, it would seem to be the case that allowing firms to lay off workers is good for firms and, as a result, possibly good for the economy in the long run.[4] Of course, arguments like these can easily become tautological in that anything that firms say is good for them can be seen a priori as good for business and for the economy as a whole. In the context of layoffs, the picture gets more complicated when one considers general equilibrium issues. More specifically, the fallacy of composition—what is in the interest of a single firm may not be in the interests of all firms considered collectively—may well come into play in the context of layoffs.

Consider, for example, the effects of work force optimization programs that encourage employers to cut jobs sooner in a downturn. Certainly a firm doing so will benefit from cutting unnecessary costs. But will these practices exacerbate downturns in the business cycle by encouraging firms to cut more workers more quickly? The point of these new programs is to do precisely that. Can they, for example, turn what might otherwise be a modest slowdown in the economy into something more severe as workers are tossed out of jobs and consumption begins to fall? At least conceptually, the answer would seem to be yes, although we have no idea what level and speed of layoffs would be required to make that happen.

Rehiring and retention

The fact that firms can more easily cut workers when they are no longer needed creates problems when firms decide to rebuild, expand, or otherwise hire workers back. Before the 1980s, layoffs were virtually always business cycle related and temporary. When business revived, firms would rehire their laid-off employees. Unemployment insurance and supplemental unemployment insurance benefits provided typically through union contracts offered a financial cushion during the period of layoff. Now, layoffs are much more likely to be permanent, because the causes are much less likely to be temporary. Because layoffs are no longer based on seniority and the causes no longer are limited to business cycles, the jobs that are vacated are not just entry-level jobs but likely span the spectrum of skills and experience.

Once the layoffs are completed and firms need to rehire for existing lines of business or move into new ones, they are unlikely to want their old workers back since job requirements may have changed and the laid-off workers by this point have moved on. Because the firms need to hire across the spectrum of skills and experience, it is unlikely that they can meet their skill requirements by hiring inexperienced entry-level workers. Indeed, anecdotal evidence suggests that most employers want applicants with a minimum of three to five years of experience who have been doing roughly similar work to what is required in their new position.

Where can employers find such applicants? Some may have been laid off and be looking for work, but employers have no particular preference for these applicants. Most people who are hired into new jobs leave old ones. The biggest source of these new hires is other employers. When employers hire from competitors, they create retention problems for each other. Voluntary turnover, therefore, seems to be related to layoff-driven, involuntary turnover, albeit with a time lag.[5] Retention is the biggest labor market concern that employers report. Even the difficulty in finding good candidates for jobs could be mitigated if employers did not have so many retention-related vacancies to fill.

If layoffs contribute to retention problems, then a simple solution might seem to be that employers

worried about retention should cut back on layoffs to reduce the need to hire later. The problem with this view is that retention problems are in fact driven by externalities created by other employers. The decision by other employers to restructure creates the need to hire from the outside to fill new vacancies, and that outside hiring drives retention problems at the original employer. Another obvious solution is to raise wages to a level that will prevent employees from leaving. To do so, however, may mean raising wages significantly to match the level of the most desperate employer in an increasingly broad and well-informed labor market. When employees are not identical and when knowledge of a competitor's systems is important, it is quite likely that the value of a current employee to an outside competitor may be considerably greater than what the original employer can afford.

Why are retention problems an issue for the economy? They do more than simply add recruiting and hiring costs and contribute to frictional unemployment. They break down internal labor markets and the mutual investments associated with them. Internal labor markets provide a means for employers to screen internal candidates for new positions, as well as a means for recouping investments in employees, both general and firm-specific investments. Voluntary turnover reduces the average tenure over which an employer can recoup those investments. While an employer may have the incentive and ability to offer employees a premium to retain their firm-specific skills, employees may quit before those skills are acquired. And few skills turn out in practice to be truly firm-specific. Indeed, the most highly desirable candidates may be ones with the most detailed knowledge and experience with a competitor's practices, because they provide competitive intelligence as well as the ability to perform the job.

There are no simple ways to calculate the costs associated with these employee retention issues. Estimates of employee turnover, which capture part of the costs of retention, vary widely. Several experts in human resource accounting suggest at least the equivalent of one year of compensation for each employee who has to be replaced. In jobs where firm-specific human capital is involved, the costs can be dramatically higher. Even a modest increase in voluntary turnover can therefore amount to a sizable cost increase for employers.

Employer concern about retention issues has resurfaced now that employers have begun to expand hiring again. My sense is that much of the current concern about "labor shortages" in the face of a reasonably high national rate of unemployment stems from retention problems that are increasing the need to hire. Employers' concerns about retention would

be even greater if they could accurately assess the complete costs associated with employee turnover and hiring. The complication for employers is that their own control over employee tenure is severely limited. They do not see a connection between their own decisions to lay off employees and their subsequent retention problems.

When we think about public policy, however, it is important to make those connections clear. Policies that make it easier for employers to dismiss workers also contribute to retention problems through the logical chain of restructure-dismissal-rehire-voluntary quits. Therefore, it remains an empirical question as to whether increasing the ease with which employers can lay off workers is truly in the firms' own interest.

Finally, the greater ability of employers to lay off workers and the subsequent retention problems this generates have affected the balance of power between employers and employees. Employers appear to have gained dramatically more control and influence over their employees during periods when they are restructuring, but especially during downturns in the economy when employees everywhere, not just those at the bottom of the seniority distribution or those in failing companies, fear the pink slip. Karl Marx's notion of the "reserve army of the unemployed" providing a threat to employees who still have jobs seems to be alive and well, because employers in periods of downturns are both able and willing to require increased working hours and work effort among those who remain on the job.

On the other hand, in periods of economic expansion and tighter labor markets, the shoe is on the other foot as employers watch their employees hop to opportunities at other firms, typically for wage increases. In part, employees may move to other firms out of resentment about how they were treated during the economic downturn. It may be as much of a push as it is a pull. Whatever the reason, retention falls as talent walks out the door. In my experience, human resource departments are now more concerned about retention than they are about handling layoffs. Having a booming economy, something one would think would be terrific for firms, is no longer an unmitigated good, and a recession now has much more of a silver lining for them, at least from the perspective of the human resources department. For employees, economic downturns are now much more catastrophic, because more workers are laid off more quickly with less chance of being rehired, while those who remain employed find their employment conditions worsening. But upturns are now much more advantageous, as employers bid not only for entry-level help, as they have in the past, but also for experienced workers.

NOTES

[1]For a description, see Cappelli and Neumark (2004).

[2]Interesting analyses with these data can be found in Farber (2003).

[3]The website of the National Governors' Association, www.nga.org, Social, Economic, and Workforce Division provides information on state-level policies concerning layoffs, training, and other hiring-related subsidies.

[4]The interests of employees obviously run in the opposite direction. Balancing those interests is a question of priorities and values, a political question of considerable importance but one that is beyond the scope of this article to address.

[5]Further, employee layoffs, especially if they are handled poorly, may cause some employees to begin to search for new jobs at other firms for fear that their own jobs may be cut. In this sense, layoff decisions can contribute directly to retention problems at the same firm.

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