# Layoffs and permanent job losses: workers' traits and cyclical patterns

Job losers were heavily concentrated among blue-collar workers in 1982; permanent losses, as opposed to layoffs, were higher during the latest recession than during any other economic downturn

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Layoffs are probably the most visible and, thus, the most widely recognized form of unemployment in the United States, as recessionary job cutbacks receive broad coverage in the media. It is, therefore, surprising that little empirical analysis, especially prior to the mid-seventies, was done on this group.<sup>1</sup> This stems, in part, from the fact that traditional theories of unemployment did not consider a distinction between layoffs and other types of unemployment—permanent separations, quits, and labor force entries and reentries—to be of significant importance.

This article discusses the "uniqueness" of persons on layoff as distinguished from those who have been permanently separated from their jobs. Data for each group are available back to 1967, when the "reason for unemployment" was first identified in the Current Population Survey (CPS), although they were not tabulated and published separately until 1976. Using these data, demographic and occupational and industry profiles of persons on layoff and those permanently separated are presented. Also, the cyclical variability in the number of workers on layoff relative to the number permanently separated, together with each group's job search and job change behavior and duration of unemployment, is examined to determine its role in shortrun and long-run unemployment patterns. For example, data show that, compared with prior recessions, a greater proportion of the increase in unemployment in the recent recession is attributable to workers who were permanently separated from their jobs. Layoff's, which were concentrated among factory workers, were also severe, but not much different from the deep 1973–75 economic downturn.

On the whole, workers permanently separated were more likely than those on layoff (of whom most were recalled) to change jobs and their duration of unemployment was longer. However, there was still a substantial amount of job search among those on layoff, as many either did not expect to be recalled in the near future or thought their chances were better elsewhere. This raises questions about the CPS layoff classification. Perhaps, the term "layoff" is somewhat ambiguous to respondents and may be interpreted by some to mean job termination.

In the CPS, unemployment status is ascertained primarily from a series of questions that determine, for persons not working, job search activity and availability.<sup>2</sup> For example, permanently separated workers are those who lost their last job or business (for example, they were fired, plant closed down, company moved, or there was a permanent reduction in staff), do not expect to be recalled, are actively looking for another job, and are currently available for work.

Persons on layoff, however, are determined from a sep-

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arate set of questions and are not required to meet the jobseeking test to be counted as unemployed. Respondents who did not work at all during the survey reference week are asked: "Did you have a job (or business) from which you were temporarily absent or on layoff last week?" Those giving affirmative responses are then asked to give the reason for their absence. Anyone who reports being laid off from a regular job is regarded as unemployed. Thus, laid-off workers are those who report layoff as the reason for absence from their regular job. Although the CPS definition of layoff is quite clear, the CPS layoff questions are subject to different respondent interpretations because inherent in the classification (but not specified in any question) is an expectation of recall to the job.<sup>3</sup> However, since a special CPS followup survey shows that most of the workers on layoff who reported that they did not expect to be recalled (those who may have been inappropriately classified as on layoff) were also looking for work, they would still have been counted as unemployed-permanently separated.

#### Profile of workers who lose jobs

On average, 2.1 million persons were classified as being on layoff in 1982, a little more than one-sixth of total unemployment and two-sixths of all job losers. Exactly who are they, and how do they differ from the 4 million workers who were permanently separated from their jobs? Does the likelihood of being laid off versus permanently separated differ across worker groups? For example, are demographic differences maintained within individual occupational and industry groups?

Age, sex, race. The age-sex composition of persons on layoff was similar to that of workers permanently separated in 1982: for every 100 laid-off workers, roughly 65 were men, 30 were women, and 5 were teenagers. (See table 1). Given that there are more men than women or teenagers in the labor force, one would expect men to predominate among persons who have lost jobs. However, the percentage of men suffering job loss was disproportionately high. Men accounted for only slightly more than half of the civilian labor force in 1982, and even less of total unemployment.

|                    |                          | Layoffs                               |  | Perm                     | nanent separa                         | tions  |
|--------------------|--------------------------|---------------------------------------|--|--------------------------|---------------------------------------|--|
| Characteristics    | Number (in<br>thousands) | Percent of<br>total unem-<br>ployment | Percent of<br>unem-<br>ployment in<br>each group | Number (in<br>thousands) | Percent of<br>total unem-<br>ployment | Percent of<br>unem-<br>ployment in<br>each group |
| Total, 16          |                          |                                       |  |                          |                                       |  |
| years and over     | 2,127                    | 100.0                                 | 22.4   | 4,141                    | 100.0                                 | 43.6   |
| Teenagers          |                          | 5.2                                   | 5.6  | 348                      | 8.4                                   | 17.6   |
| Men                | 1,394                    | 65.5                                  | 27.4   | 2,571                    | 62.1                                  | 50.5   |
| Women .            | 622                      | 29.2                                  | 17.2   | 1,222                    | 29.5                                  | 33.8   |
| White<br>Black and | 1,795                    | 84.4                                  | 21.8   | 3,154                    | 76.2                                  | 38.3   |
| other              |                          | 15.6                                  | 13.6   | 987                      | 23.8                                  | 40.5   |

Moreover, the trend over the past decade has shown a gradual widening between the proportions of layoffs accounted for by men and by women.

A greater percentage of unemployment among men than among women or teenagers was attributed to layoff. In 1982, for example, 27 percent of all unemployed men were on layoff, compared with 17 percent of women and 6 percent of teenagers. Similarly, a higher proportion of male unemployment was the result of being permanently separated from a job. The main reason was that industries traditionally staffed by men tend to be more cyclically sensitive than those staffed by women. In 1982, for example, 7 of 10 workers in the sensitive goods-producing sector were men 20 years and older. A much larger share of unemployment among women can be attributed to labor force reentry, whereas for youth, it is new entry.

Also, for men, duration of unemployment because of job loss was slightly longer than for women.<sup>4</sup> By far, teenagers' duration of unemployment was the shortest. Overall, and not surprisingly, the duration of unemployment for workers on layoff in 1982 was several weeks shorter than that for workers whose jobs were permanently terminated. (See table 2.)

Although black and other workers (hereafter referred to as black) are clearly overrepresented among total unemployment, this is not the case among those on layoff. Sixteen percent of persons on layoff in 1982 were black, near their 13 percent share of the labor force. This pattern has prevailed for more than a decade. On the other hand, blacks accounted for 24 percent of workers who were permanently separated—a figure that has worsened over time—comparable to their disproportionate share of unemployment overall.

Blacks were only slightly more likely than whites to suffer a permanent job separation in 1982. Unemployment attributable to layoff made up a smaller share of total black joblessness (14 percent) than white (22 percent). This is partially explained by the fact that the group most prone to layoff, men age 20 and over, accounts for a smaller share of overall black joblessness than white. Duration of unemployment from layoff as well as from a permanent job separation was longer for black than white workers. (See table 2.)

*Industry*. The commonly held perception that job loss occurs most often in goods-producing industries was indeed borne out by the data for 1982. However, this was less the case than a decade earlier. Also, there were a number of differences among industrial groups, particularly among factory workers, as to the percentage of their unemployment that resulted from layoff.

In 1982, 51 percent of all layoffs and 28 percent of permanent job separations occurred in manufacturing industries; approximately two-thirds of each were in durable goods. Fifteen percent of those on layoff in 1982 were in the construction industry, 10 percent in trade, and 7 percent in

|  | Layoffs                             |                                     |                                      |                                    |                                     |                                     | Permanent separations                |                                      |                                      |                                     |                                      |                                     |
|--|-------------------------------------|-------------------------------------|--------------------------------------|------------------------------------|-------------------------------------|-------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|-------------------------------------|
| Duration   | Total                               | Men                                 | Women                                | Teenagers                          | White                               | Black<br>and<br>other               | Total                                | Men                                  | Women                                | Teenagers                           | White                                | Black<br>and<br>other               |
| Job losers:<br>Number (in thousands)   | 2,127<br>100.0                      | 1,394<br>100.0                      | 622<br>100.0                         | 109<br>100.0                       | 1,795<br>100.0                      | 332<br>100.0                        | 4,141<br>100.0                       | 2,571<br>100.0                       | 1,222<br>100.0                       | 348<br>100.0                        | 3,154<br>100.0                       | 987<br>100.0                        |
| Duration of unemployment:<br>5 to 10 weeks<br>11 to 14 weeks<br>15 to 26 weeks<br>27 weeks or more | 40.3<br>21.6<br>9.6<br>15.2<br>13.3 | 38.7<br>21.2<br>9.8<br>16.3<br>14.0 | 41.0<br>22.3<br>10.1<br>14.5<br>13.2 | 57.8<br>21.1<br>10.1<br>7.3<br>3.7 | 40.0<br>22.3<br>9.9<br>15.3<br>13.4 | 41.6<br>18.4<br>8.1<br>15.1<br>15.1 | 25.3<br>21.0<br>10.1<br>20.1<br>23.6 | 22.7<br>20.3<br>10.1<br>20.4<br>26.4 | 27.1<br>21.1<br>10.3<br>20.0<br>21.5 | 37.6<br>25.6<br>9.5<br>17.1<br>10.1 | 25.2<br>21.6<br>10.3<br>22.4<br>20.5 | 25.3<br>19.3<br>9.3<br>27.4<br>18.3 |
| Mean duration (weeks)  | 13.6                                | 14.2                                | 12.4                                 | 7.4                                | 12.5                                | 16.9                                | 19.7                                 | 21.2                                 | 18.7                                 | 12.6                                | 15.3                                 | 21.2                                |

services. Trade ranked a close second to manufacturing in permanent separations, followed by services, then construction. (See table 3.)

The proportion of layoffs and permanent job separations in the manufacturing industry has declined over the past decade, while services, trade, and government all increased. However, the goods industries—specifically manufacturing and construction—were, relative to their shares of total employment, still overrepresented by layoffs in 1982, while services and trade were underrepresented. The proportion of layoffs that occurred in the public sector was about equal to its share of total employment.

The layoff component of unemployment among service, trade, and government workers was still only around 10 percent each, compared with 40 percent among factory workers. Moreover, the likelihood of layoffs varied considerably among detailed manufacturing groups, perhaps related to the extent of their unionization because studies have shown that employment "adjustments through layoffs are substantially greater in unionized firms than comparable nonunionized firms."<sup>5</sup> The following tabulation shows the number and percent of unemployed workers on layoff in selected manufacturing industries in 1982, and the percent of each industry's employed wage and salary workers in labor organizations in May 1980:<sup>6</sup>

|                                 | Layoffs in               | Percent |                            |
|---------------------------------|--------------------------|---------|----------------------------|
|                                 | Number<br>(in thousands) | Percent | union workers,<br>May 1980 |
| Automobiles                     | 136                      | 63.3    | 61.2                       |
| Primary metals                  | 208                      | 59.9    | 58.4                       |
| Machinery, except<br>electrical | 286                      | 53.8    | 28.7                       |
| Apparel                         | 149                      | 47.0    | 25.1                       |
| Electrical equipment            |                          | 46.6    | 26.9                       |
| Other transportation            |                          |         |                            |
| equipment                       | 100                      | 46.0    | 42.2                       |
| Textiles                        |                          | 45.8    | 14.9                       |
| Food and kindred                |                          |         |                            |
| products                        | 171                      | 38.0    | 37.5                       |
| Fabricated metals               | 190                      | 37.8    | 36.1                       |

Layoffs were relatively most important in automobile manufacturing (65 percent) and primary metals (60 percent), and accounted for nearly 40 percent or more of joblessness in most manufacturing industries. These industries also had a large segment of workers in labor organizations. For example, autos and primary metals ranked high in both percent of unemployment that stemmed from layoffs and percent of their wage and salary work force that were in labor unions. Union membership was actually the highest in the nonmanufacturing railroad industry, 82 percent in May 1980: two-thirds of this industry's unemployment in 1982 was attributable to layoffs.

Surprisingly, permanent separations among wage and salary workers as a percent of each group's unemployment did not differ much across major industries. The range was from 54 percent in the construction industry to 41 percent in government, although this latter figure was much higher than in previous recessions.

*Occupation.* As might be expected, the distribution of layoffs is more concentrated across occupations than across industries. Seventy-five percent of the workers on layoff in 1982 were blue-collar, an overwhelmingly disproportionate figure, given that blue-collar employment accounted for only 30 percent of total employment. The heaviest concentrations of blue-collar workers on layoff were among nontransport operatives and craftworkers. (See table 3.) White-collar workers' share of unemployment stemming from layoffs was only 16 percent, half of which was clerical workers. Among workers who were permanently separated from their jobs, blue-collar workers' share was 55 percent, and white-collar workers', 30 percent. There has been very little change in the occupational distribution of either job-loser group over the past 10 years.

Although blue-collar workers were three times as likely as white-collar workers in 1982 to suffer a job layoff, both groups were almost equally likely to be permanently separated from their jobs. The likelihood of job separation visa-vis layoff was higher, regardless of occupation.

|   |                          | Layoffs                          |   | Permanent separations    |                               |   |  |
|---|--------------------------|----------------------------------|---|--------------------------|-------------------------------|---|--|
| Occupation and industry                           | Number (in<br>thousands) | Percent of total<br>unemployment | Percent of<br>unemployment in<br>each occupation<br>or industry | Number (in<br>thousands) | Percent of total unemployment | Percent of<br>unemployment in<br>each occupation<br>or industry |  |
| Total job losers, 16 years and over<br>Occupation | 2,127                    | 100.0                            | 22.4  | 4,141                    | 100.0                         | 43.6  |  |
| White-collar workers.                             | 332                      | 15.6                             | 12.0  | 1,181                    | 28.5                          | 42.7  |  |
| Professional and technical workers.               | 73                       | 3.4                              | 12.7  | 253                      | 6.1                           | 43.7  |  |
| Managers and administrators                       | 41                       | 1.9                              | 9.9   | 214                      | 5.2                           | 57.4  |  |
| Cierical workers.                                 | 175                      | 8.2                              | 12.6  | 548                      | 13.2                          | 39.6  |  |
| Salesworkers.                                     | 42                       | 2.0                              | 10.8  | 166                      | 4.0                           | 42.8  |  |
| Blue-collar workers                               | 1,594                    | 74.9                             | 32.5  | 2,269                    | 54.8                          | 46.3  |  |
| Craftworkers                                      | 457                      | 21.4                             | 32.7  | 693                      | 16.7                          | 49.6  |  |
| Operatives, except transport                      | 760                      | 35.7                             | 37.4  | 841                      | 20.3                          | 41.4  |  |
| Transport equipment operatives                    | 136                      | 6.4                              | 30.3  | 225                      | 5.4                           | 50.1  |  |
| Nonfarm laborers                                  | 241                      | 11.3                             | 23.5  | 510                      | 12.3                          | 49.7  |  |
| Service workers                                   | 162                      | 7.6                              | 10.0  | 615                      | 14.9                          | 37.8  |  |
|   | 35                       | 1.6                              | 18.3  | 77                       | 1.9                           | 40.2  |  |
| Industry <sup>1</sup>                             |                          |                                  |   |                          |                               |   |  |
| Mining.   | 64                       | 3.0                              | 41.4  | 69                       | 1.7                           | 45.0  |  |
| Construction                                      | 315                      | 14.8                             | 30.6  | 552                      | 13.3                          | 53.5  |  |
| Manufacturing                                     | 1,089                    | 51.2                             | 39.3  | 1,154                    | 27.9                          | 41.7  |  |
| Durables  | 793                      | 37.3                             | 44.3  | 722                      | 17.4                          | 40.4  |  |
| Nondurables                                       | 296                      | 13.9                             | 30.1  | 433                      | 10.5                          | 44.0  |  |
| Transportation and public utilities               | 121                      | 5.7                              | 30.5  | 186                      | 4.5                           | 46.7  |  |
| Wholesale and retail trade                        | 222                      | 10.4                             | 10.8  | 888                      | 21.4                          | 43.0  |  |
| Finance, insurance, and real estate               | 19                       | 0.9                              | 6.8   | 126                      | 3.0                           | 45.6  |  |
| Services.   | 151                      | 7.1                              | 9.9   | 667                      | 16.1                          | 43.8  |  |
| Government  | 17                       | 3.5                              | 9.4   | 324                      | 7.8                           | 40.5  |  |

To determine if the observed differences in the likelihood of layoff among the major age-sex and racial groups were due to occupation or industry affiliation, the probability of layoff among each group in the same occupation or industry was examined. (See tables 4 and 5.) Generally, the concentration of worker groups in particular occupations and industries was crucial to the magnitude of their unemployment accounted for by layoffs. Among blue-collar workers in 1982, for example, the percentage of unemployment accounted for by layoff was nearly 35 percent for both men and women. The likelihood of unemployment attributable to layoff was also similar for men and women in other occupations. In other words, when occupations are examined individually, the probability of layoff among men being greater than that among women essentially disappears. Similarly, the layoff rate differentials by sex were much narrower in individual industries than for men and women overall. In the finance, insurance, and real estate industry, moreover, women were more likely than men to be laid off.<sup>7</sup> The black-white job-loss differential was, for the most part, unaffected by occupational and industry affiliation, although black workers in blue-collar occupations or in the goods sector were now noticeably more likely than white workers to suffer a permanent job separation. (See tables 4 and 5.)

## Cyclical variation in job losses

The rapid shift in recent years within the manufacturing industry towards high technology firms and those making synthetics may have exacerbated an already high risk among workers in metals-based industries to lose their jobs in a recession.<sup>8</sup> In other words, in addition to the historical shift from goods to services, the factory shift away from metalsbased industries will make it harder for unemployed workers formerly employed in these industries to reclaim their jobs.

Several factors—peak-to-trough changes, job search and job change propensity, recall rates, and duration of unemployment—were explored in an attempt to distinguish the pattern of job losses, both in the current economic downturn and in comparison to other contractions. Specifically, this analysis examines the cyclical variability of layoffs and permanent separations and describes the effect on short- and long-run *total* jobless rate patterns.

*Changes during a recession.* As one would expect, job loss accounts for a larger proportion of total unemployment during recessions, when employers are trying to reduce their costs in response to a slumping economy. In two previous studies, job-loser unemployment was found to be more cyclically sensitive than the other types of unemployment.<sup>9</sup> However, layoffs and permanent separations were not analyzed separately. A 1976 study which isolated the layoff component concluded that because layoffs increased as a proportion of total job losers between the peak and trough of each recessionary cycle, it was "the most cyclically sensitive component of the job-loser group and also more cyclical than any other categories of unemployed."<sup>10</sup>

Chart 1 compares the pattern of layoffs and permanent

separations as a percent of total unemployment over the 1968–82 period. The percentage of unemployment resulting from permanent separations averaged twice that resulting from layoffs. The gap narrowed considerably during recessions, however. The following tabulation shows the rise in job-loser unemployment as a percent of the increase in total unemployment for selected business cycles peak to trough:

|                             | Job losers |          |                       |  |
|-----------------------------|------------|----------|-----------------------|--|
|                             | Total      | Laid off | Permanently separated |  |
| December 1969-November 1970 | 60.0       | 22.9     | 37.1                  |  |
| November 1973–March 1975    | 72.6       | 35.3     | 37.3                  |  |
| January 1980–July 1980      | 82.3       | 46.3     | 36.0                  |  |
| July 1981–November 1982     | 84.5       | 31.4     | 53.1                  |  |

Layoffs as a factor in increases in joblessness during recessions have been somewhat more extensive since the mild 1969–70 contraction, the 1980 episode notwithstanding.<sup>11</sup> It is common practice for employers to lay off workers at the outset of a recession before resorting to more permanent employee cutbacks, hence, the shortness of the 1980 downturn resulted in an abnormally high proportion of layoffs relative to increases in total joblessness. Thus, in determining the long-run pattern of layoffs in recessionary periods, the 1980 episode was not considered. Among the major age-sex groups, men 20 years and over were usually most affected by layoffs: in the 1981–82 downturn, for example, more than a third of their unemployment increase was a result of layoffs. In light of seniority practices, women, whose job tenure is likely to be shorter than that for men, are laid off first. What eventually happens as recessions lengthen is that the number of layoffs among men catches, then surpasses, the number among women. Also, although joblessness increases stemming from layoffs were higher among white than black workers, the bulk of the layoffs among black workers occurred earlier in the 1981–82 recession.

What really set the most recent recession apart from its predecessors, however, was the larger number of permanent separations. In the three downturns prior to the 1981 episode, the rise in unemployment as a result of permanent separations was about 37 percent. In contrast, more than half the rise in unemployment in the 1981–82 recession was a result of workers being permanently separated from their jobs. Of course, a partial explanation for this phenomenon could be that workers on layoff, after a lengthy wait for recall, perceived that their job was indeed lost and thus began the search for another one, therefore moving into the permanent separation category. Still, in total, job losers accounted for 85 percent of the increase in unemployment in the 1981–82 recession, higher than in any other recession since unemployment data by reason have been collected.

Job search and job change. Although the foregoing statistics clearly indicate the cyclical nature of job-loser unemployment, they do not provide any information about the search activity or likelihood of a job change among job losers. David Lilien noted that the speed at which job search-

|                                    |       | Perce   | nt of total uner | nployment |                 | P    | ercent of u | nemployment in | each occu    | pation             |
|------------------------------------|-------|---------|------------------|-----------|-----------------|------|-------------|----------------|--------------|--------------------|
| Job losers                         | Men   | Women   | Teenagers        | White     | Black and other | Men  | Women       | Teenagers      | White        | Black and<br>other |
| Layoffs, total                     | 100.0 | 100.0   | 100.0            | 100.0     | 100.0           | 27.4 | 17.2        | 5.6            | 21.8         | 13.6               |
| White-collar workers               | 10.2  | 28.5    | 12.0             | 16.1      | 13.0            | 15.3 | 11.1        | 5.3            | 12.8         | 8.5                |
| Professional and technical workers | 3.2   | 4.7     |                  | 3.7       | 2.4             | 15.7 | 10.3        | 5.5            | 14.0         |                    |
| Managers and administrators        | 2.3   | 1.3     | 0.9              | 2.1       | 1.2             | 12.4 | 5.7         | 10.0           | 14.0         | 7.4                |
| Clerical workers                   | 3.4   | 19.5    | 7.4              | 8.3       | 7.8             | 20.0 | 12.1        | 5.2            | 34.8         |                    |
| Salesworkers                       | 1.4   | 3.1     | 3.7              | 2.1       | 1.5             | 12.2 | 11.2        | 6.5            | 34.0<br>11.1 | 8.7<br>9.8         |
| Blue-collar workers                | 83.6  | 57.6    | 63.9             | 75.8      | 71.1            | 33.8 | 35.3        | 15.7           | 34.8         | 23.5               |
| Craftworkers.                      | 30.1  | 3.7     | 12.0             | 23.2      | 12.3            | 33.9 | 28.4        | 16.9           | 34.4         | 21.8               |
| Operatives, except transport       | 30.5  | 48.5    | 30.6             | 35.1      | 39.5            | 39.8 | 37.0        | 21.9           | 40.1         | 28.3               |
| Transport equipment operatives     | 8.9   | 1.4     | 2.8              | 6.7       | 4.8             | 31.4 | 29.8        | 13.6           | 32.7         | 19.3               |
| Nonfarm laborers                   | 14.1  | 4.0     | 18.5             | 10.7      | 14.8            | 26.3 | 27.4        | 10.6           | 25.5         | 18.2               |
| Service workers                    | 4.4   | 12.7    | 19.4             | 6.5       | 13.6            | 12.6 | 10.3        | 5.8            | 10.5         | 8.9                |
| Farmworkers                        | 1.6   | 1.1     | 4.6              | 1.5       | 2.4             | 23.8 | 16.6        | 9.8            | 17.9         | 19.0               |
| Permanent separations, total       | 100.0 | 100.0   | 100.0            | 100.0     | 100.0           | 50.5 | 33.8        | 17.6           | 38.3         | 40.5               |
| White-collar workers               | 19.7  | 49.7    | 19.2             | 30.5      | 22.2            | 54.5 | 38.2        | 27.1           | 42.6         | 43.1               |
| Professional and technical workers | 6.3   | 7.9     | 1.4              | 6.4       | 5.2             | 54.0 | 35.0        | 22.7           | 43.1         | 47.2               |
| Managers and administrators.       | 5.5   | 5.6     | 1.1              | 6.0       | 2.6             | 54.9 | 46.4        | 40.0           | 51.6         | 52.0               |
| Clerical workers                   | 4.7   | 31.3    | 12.3             | 13.3      | 12.9            | 52.1 | 38.4        | 40.0<br>28.1   | 44.5         |                    |
| Salesworkers                       | 3.5   | 4.8     | 4.3              | 4.7       | 1.7             | 58.5 | 34.9        | 24.2           | 44.5         | 42.5<br>33.3       |
| Blue-collar workers                | 67.8  | 29.2    | 48.7             | 55.0      | 54.0            | 50.5 | 35.2        | 38.7           | 44.5         | 53.1               |
| Craftworkers.                      | 24.4  | 2.8     | 8.9              | 18.6      | 10.7            | 50.7 | 42.0        | 40.3           | 44.5         | 56.4               |
| Operatives, except transport       | 19.4  | 23.1    | 16.9             | 19.6      | 22.5            | 46.8 | 34.7        | 39.1           | 39.4         | 47.9               |
| Transport equipment operatives .   | 8.1   | 0.8     | 2.6              | 5.6       | 5.3             | 52.3 | 31.0        | 40.9           | 47.5         | 62.7               |
| Nonfarm laborers                   | 15.8  | 2.6     | 20.3             | 11.3      | 15.5            | 54.5 | 35.2        | 37.8           | 47.3         | 56.9               |
| Service workers                    | 10.7  | 19.9    | 28.4             | 12.6      | 22.0            | 55.6 | 31.5        | 27.3           | 35.6         | 42.7               |
| Farmworkers                        | 1.9   | I 1.2 [ | 3.4              | 1.9       | 1.7             | 50.5 | 35.7        | 23.5           | 39.8         | 40.5               |

|   | Percent of total unemployment      |                                    |                                     |                                     |                                    | Percent of unemployment in each industry |                                      |                                      |                                      |                                      |
|---|------------------------------------|------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|--|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| Job losers  | Men                                | Women                              | Teenagers                           | White                               | Black and other                    | Men                                      | Women                                | Teenagers                            | White                                | Black and<br>other                   |
| Layoffs, total  | 100.0                              | 100.0                              | 100.0                               | 100.0                               | 100.0                              | 27.4                                     | 17.2                                 | 5.6                                  | 21.8                                 | 13.6                                 |
| Mining.<br>Construction<br>Manufacturing.<br>Durables.<br>Nondurables | 4.3<br>20.7<br>49.4<br>41.2<br>8.2 | 0.3<br>2.1<br>58.8<br>31.7<br>27.1 | 0.9<br>13.0<br>31.5<br>20.4<br>12.0 | 3.5<br>15.8<br>50.6<br>37.1<br>13.5 | 0.6<br>9.9<br>55.1<br>38.6<br>16.6 | 43.6<br>32.2<br>42.7<br>48.0<br>27.4     | 30.2<br>23.4<br>36.4<br>38.3<br>34.4 | 12.5<br>17.3<br>22.2<br>28.2<br>17.3 | 42.6<br>32.4<br>41.5<br>46.6<br>31.9 | 20.0<br>20.7<br>31.1<br>35.5<br>24.1 |
| Transportation and public utilities                                   | 7.2<br>7.4<br>0.4<br>4.9<br>2.2    | 3.1<br>13.4<br>2.1<br>11.8<br>6.6  | 1.9<br>33.3<br>10.2<br>3.7          | 5.8<br>10.7<br>0.9<br>6.7<br>2.9    | 5.4<br>9.0<br>0.9<br>9.6<br>7.2    | 33.9<br>13.4<br>6.0<br>12.3<br>9.9       | 23.2<br>9.8<br>7.9<br>9.3<br>11.0    | 10.5<br>8.1<br>6.1<br>3.3            | 32.3<br>11.5<br>7.1<br>10.7<br>10.5  | 23.0<br>7.7<br>5.2<br>7.8<br>7.6     |
| Permanent separations, total  | 100.0                              | 100.0                              | 100.0                               | 100.0                               | 100.0                              | 50.5                                     | 33.8                                 | 17.6                                 | 38.3                                 | 40.5                                 |
| Mining.<br>Construction<br>Manufacturing.<br>Durables<br>Nondurables  | 2.4<br>19.0<br>28.4<br>19.5<br>8.9 | 0.4<br>2.2<br>29.8<br>15.7<br>14.0 | 0.9<br>10.3<br>17.5<br>8.0<br>9.2   | 2.0<br>14.4<br>27.6<br>17.4<br>10.2 | 0.5<br>9.8<br>28.7<br>17.4<br>11.2 | 44.4<br>54.6<br>45.2<br>41.8<br>54.8     | 57.6<br>49.3<br>36.3<br>37.5<br>35.0 | 37.5<br>44.4<br>39.9<br>35.9<br>42.7 | 43.8<br>52.0<br>39.9<br>35.9<br>42.7 | 67.3<br>61.6<br>48.2<br>47.9<br>48.8 |
| Transportation and public utilities                                   | 5.8<br>17.5<br>2.3<br>13.0<br>6.6  | 2.4<br>25.5<br>4.9<br>22.3<br>10.1 | 2.3<br>36.4<br>2.0<br>16.9<br>9.2   | 4.6<br>22.5<br>3.2<br>14.9<br>6.0   | 4.1<br>17.8<br>2.5<br>20.1<br>13.6 | 50.0<br>58.3<br>62.7<br>60.3<br>55.3     | 35.6<br>36.6<br>37.8<br>34.7<br>33.0 | 42.1<br>28.6<br>31.8<br>33.0<br>26.2 | 45.4<br>42.5<br>44.5<br>42.1<br>38.7 | 52.5<br>44.9<br>50.9<br>48.6<br>43.3 |

ers find new jobs and the speed at which firms recall layoffs are major cyclical causes of variations in unemployment.<sup>12</sup> That is, duration of unemployment is also an important consideration to cyclical variability, and it was usually longer for unemployed workers who were permanently separated than for those who were laid off. Thus, in this regard, the laid-off workers' contribution to the cyclical variability of joblessness is not apt to be as great as that for workers who were permanently separated. However, the fact that recall may be fairly likely for those on layoff does not imply that they fail to engage in job search and, subsequently, may change jobs.

As noted earlier, persons on layoff are not asked in the CPS if they had been looking for work during the prior 4 weeks, a key question in determining whether persons are unemployed. However, such information was collected in the Methods Development Survey<sup>13</sup>—a small experimental survey of the Bureau of the Census that was designed to test alternative questions and refinements that might be introduced into the CPS questionnaire at a future date. The cumulative monthly results over the April 1981 to December 1982 period are shown in the following tabulation of the percent of those on layoff who looked for work:

|   | Total                        | Men                          | Women                        |
|---|------------------------------|------------------------------|------------------------------|
| Total, 16 years and over  | 58.0                         | 65.2                         | 47.3                         |
| 16–19 years   | 56.1                         | 20.0                         | 72.7                         |
| 20 years and over         20-24 years         25-54 years         55 years and over | 58.1<br>70.0<br>56.9<br>38.5 | 66.7<br>72.1<br>67.7<br>47.1 | 45.5<br>64.7<br>40.5<br>20.0 |

looked for work at some point during the 4-week period prior to their being surveyed. This was much higher than the 10-percent estimated by Martin Feldstein in his 1975 study of those on layoff who searched for work during the week preceding the survey.<sup>14</sup> But it was lower than the 83percent from the 1973 Job Finding Survey<sup>15</sup> who said they looked for work at some time before they either returned to their old job or obtained a new job. Two-thirds of men age 20 and over on layoff looked for work, and they were more likely than women or teenagers to have done so. Among all adults on layoff the likelihood of job search decreased with age (although this was not as visible among men). For example, the proportion of persons age 20-24 on layoff who searched for work was nearly twice the proportion for those 55 years and over.<sup>16</sup> If, in fact, most workers on layoff are recalled before

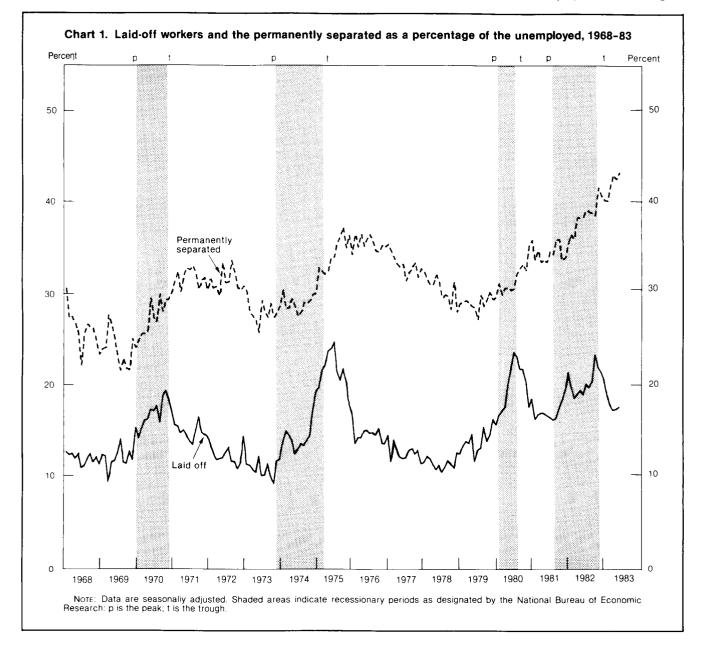
Fifty-eight percent of the persons reported as laid off

If, in fact, most workers on layoff are recalled before finding an acceptable job prospect, their search efforts are largely irrelevant in determining duration of unemployment spells. Rather, duration would be determined primarily by the firm's recall policy.<sup>17</sup> About 75 percent of the respondents in the CPs are common in consecutive months. Therefore, it is possible to gain some perspective on the magnitude of the number of workers on layoff likely to change jobs by comparing their labor force status from one month to the next.<sup>18</sup> This was done via a matching of the labor force status of persons in June 1976 who were reported as job losers in May.<sup>19</sup> For this purpose, a change in detailed industry attachment (3-digit level) between the 2 months represented a job change.<sup>20</sup> The following illustrates the May-to-June flow of job losers.

|  | Laid off | Permanently separated |
|--|----------|-----------------------|
| Percent unemployed in May and<br>employed in June<br>Unemployed in May and employed in | 29.8     | 20.9                  |
| June, by job change status (percent distribution):                                     |          |                       |
| Total  | 100.0    | 100.0                 |
| Job change   | 37.1     | 66.5                  |
| No job change  | 62.8     | 33.5                  |

Thirty percent of those on layoff in May and 21 percent of those permanently separated found employment in June. Two-thirds of those permanently separated changed jobs, whereas only slightly more than a third of those on layoff actually changed jobs—most returned to their old jobs.<sup>21</sup>

*Recall rates*. Because a recessionary increase in joblessness usually involves a larger proportion of permanent separations than layoffs, and because separations are twice as likely as layoffs to involve a job change (often a time-consuming process), separations contribute more than layoffs to the short-run variation in unemployment. However, because it is not known if either job-loser group's likelihood of recall or proclivity towards changing jobs has changed over time, it is not possible to say definitively whether their influence on the short-run variation in unemployment has changed.



For example, a decrease in the probability of recall could lead to longer duration of layoff employment which, in turn, would heighten the cyclical contribution of layoffs. Data from the Bureau of Labor Statistics Labor Turnover Survey, although not available subsequent to 1981,<sup>22</sup> are used here to examine the trend in recalls from layoffs, while CPs data are used to examine trends in duration of layoffs.

For manufacturing, communications, and selected mining industries, employers report the number of new hires and other accessions to their payrolls as well as the number of quits, layoffs, and other separations during the month. Each type of turnover action is totaled for the month and expressed as a rate per 100 employees. Layoffs are defined as "suspensions from pay status (lasting or expecting to last more than 7 consecutive calendar days), initiated by the employer without prejudice to the worker."<sup>23</sup>

To determine how many of those in the manufacturing industry were recalled to their jobs, Feldstein computed a rehire rate—the ratio of other accessions to layoffs. This ratio averaged 85 percent over the 1960–75 period, leading to the conclusion that "the vast majority of those laid off in manufacturing are ultimately rehired by their original employers, although in some cases they take jobs elsewhere in the interim."<sup>24</sup> But, what is the recent trend in rehires?

Beginning in January 1976, a separate column for recalls was added to the labor turnover questionnaire mailed to establishments. Recalls were defined as "permanent and temporary additions to the employment rolls of persons specifically recalled to a job in the same establishment of the company following a period of layoff lasting more than 7 consecutive days."<sup>25</sup> A comparison of a recall-to-layoff ratio (recall rate) using these new data with the rehire measure developed by Feldstein is presented in table 6. Interestingly, over the 1976–81 period, the recall rate averaged 72 percent, considerably lower than the rehire rate average of 96 percent

 Table 6. Labor turnover rates in the manufacturing industry, 1968–81

| Year  | (1)<br>Layoffs                                | (2)<br>Total<br>accessions                    | (3)<br>New<br>hires                           | (4)<br>Rehires <sup>1</sup><br>(23)           | (5)<br>Rehire<br>rate <sup>1</sup><br>(4 ÷ 1)        | (6)<br>Recalls                         | (7)<br>Recall<br>rate<br>(6 ÷ 1)             |
|---|---|---|---|---|--|--|--|
| 968<br>969<br>970<br>971<br>972<br>973<br>974 | 1.2<br>1.8<br>1.6<br>1.1<br>0.9<br>1.5        | 4.6<br>4.7<br>4.0<br>3.9<br>4.5<br>4.8<br>4.2 | 3.5<br>3.7<br>2.8<br>2.6<br>3.3<br>3.9<br>3.2 | 1.1<br>1.0<br>1.2<br>1.3<br>1.2<br>0.9<br>1.0 | 0.92<br>0.83<br>0.67<br>0.81<br>1.09<br>1.00<br>0.67 |  |  |
| 975<br>976<br>977<br>978<br>979<br>980<br>981 | 2.1<br>1.3<br>1.1<br>0.9<br>1.1<br>1.7<br>1.6 | 3.7<br>3.9<br>4.0<br>4.1<br>4.0<br>3.5<br>3.2 | 2.0<br>2.6<br>2.8<br>3.1<br>2.9<br>2.1<br>2.0 | 1.7<br>1.3<br>1.2<br>1.0<br>1.1<br>1.4<br>1.2 | 0.81<br>1.00<br>1.09<br>1.11<br>1.00<br>0.82<br>0.75 | 1.0<br>0.9<br>0.7<br>0.7<br>1.1<br>1.0 | 0.70<br>0.82<br>0.78<br>0.64<br>0.65<br>0.63 |

and the same percentage as those on layoff in one month who had been recalled 2 weeks later as reported in a special CPS followup in July 1982.<sup>26</sup> Again, although still quite high, not as many workers on layoff return to their original jobs as previously thought.

Both the recall and rehire rates have declined in recent years. However, the rehire rates in the recessionary periods were similar, perhaps an indication that the likelihood of job change among workers on layoff was also similar.

*Duration*. An *increase* in the duration of unemployment for those on layoff could be viewed as a *decreased* likelihood of recall, which could eventualy necessitate a job change. Therefore, an examination of the long-run trend of duration on layoff might also yield some insight into whether the probability of laid-off workers changing jobs has increased or decreased. That is, a trend towards longer duration on layoff might reflect a heightened tendency to change jobs. Also, the longer the unemployment spell of job losers, the greater the probability that a higher overall jobless rate will result in the long run.

Below are estimates of mean duration (in weeks) of unemployment for laid-off and permanently separated workers, 1968–82:<sup>27</sup>

| Year | Layoffs | Permanent separations |
|------|---------|-----------------------|
| 1968 | 7.1     | 11.2                  |
| 1969 | 6.8     | 10.4                  |
| 1970 | 7.5     | 12.3                  |
| 1971 | 10.3    | 16.4                  |
| 1972 | 10.8    | 16.9                  |
| 1973 | 7.8     | 13.9                  |
| 1974 | 7.5     | 13.7                  |
| 1975 | 14.1    | 19.5                  |
| 1976 | 14.5    | 21.6                  |
| 1977 | 11.0    | 19.3                  |
| 1978 | 8.9     | 15.8                  |
| 1979 | 7.9     | 14.5                  |
| 1980 | 11.5    | 12.7                  |
| 1981 | 12.4    | 18.0                  |
| 1982 | 13.6    | 19.7                  |

The mean durations of unemployment among both groups of job losers in the 1981–82 downturn and the later stages of the 1973–75 recession were similar, but were longer than in the mild 1969–70 recession. Actually, the duration of unemployment resulting from layoffs was slightly shorter in the recent downturn than in the mid-1970 episode. Thus, although it is very unlikely that the "job change" behavior of either group changed perceptibly over the past 10 years, their tendency to change jobs may now be higher than 15 years ago.

In summary, layoffs accounted for close to the same percentage of the total increase in unemployment in the current recession as in the 1973–75 episode, while the likelihood of changing jobs remained roughly the same in both periods. Therefore, it is reasonable to assume that the contribution of layoffs to the short-run variability of unemployment also did not change. Over the longer run, however, the contribution may have grown, especially if allowance is made for the possibility that some workers on layoff, after a time, considered themselves permanently separated. In contrast, job loss from permanent separation made up a much greater share of the overall rise of unemployment in the current recession than in previous downturns. Thus, it is clear that the contribution of workers permanently separated to the short-run variability of unemployment also rose. Moreover, given the greater percentage increase in unemployment accounted for by workers who were permanently separated from their jobs in the recent recession and their longer duration of unemployment, it will probably be more difficult for the overall jobless ratio to fall to prerecession levels.

#### Are layoffs overstated?

The fairly substantial amount of job search on the part of persons on layoff reported in the Methods Development Survey and the apparent significant number who do not return to their old jobs raise some questions about the classification of layoff in the regular CPS. If workers who say they are on layoff are searching for work, are they also expecting to be recalled to their jobs, a prerequisite to the layoff classification? If they do not expect to be recalled, is the official classification of layoff overstated?

As discussed earlier, to determine the extent that persons who reported themselves on layoff did not expect to be recalled, a special follow-up survey of the unemployed in July 1982 was conducted 2 weeks subsequent to the CPs interview week. In this survey, respondents who were initially reported as on layoff were asked directly, "Do you eventually expect to be called back to the job from which you were on layoff?" Preliminary results revealed that nearly a fourth of those still on layoff at the time of the follow-up survey did *not* expect to be recalled, and most of them had looked for work in the prior 4 weeks. That is, whereas they may not actually have been on layoff, they still would have been classified as unemployed. This suggests that the term "layoff" has different meanings as far as the unemployed are concerned and includes, for some, job termination. It

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<sup>1</sup>Martin Feldstein, "The Importance of Temporary Layoffs: An Empirical Analysis," *Brookings Papers on Economic Activity*, No. 3, 1975, pp. 725-44, was among the first to recognize the importance of the layoff component of unemployment. It was followed by: Thomas F. Bradshaw and Janet Scholl, "The Extent of Job Search During Layoff, *Brookings Papers on Economic Activity*, No. 2, 1976, pp. 515-26; Martin Feldstein, "The Effect of Unemployment Insurance on Temporary Layoff Unemployment," *American Economic Review*, December 1978, pp. 834-46; David M. Lilien, "The Cyclical Pattern of Temporary Layoffs in United States Manufacturing," *Review of Economics and Statistics*, February 1980, pp. 24-31; Kenneth Burdett and Dole T. Mortensen, "Search, Layoffs, should be kept in mind that these results are based upon a single month's observation, and a period of testing would have to be done to determine if they would hold up consistently.

The labor force classification of persons on layoff differs among industrial nations because of differences in labor market practices and in degrees of job attachment. For example, many, if not most, workers on layoff in European countries and in Japan, because of work contracts, are virtually certain to be recalled to their jobs and, thus, are classified as *employed*.<sup>28</sup> The Eighth International Conference of Labor Statisticians, under the auspices of The International Labor Office, specified in 1954 that only persons on layoff without pay are to be included among the unemployed. Recently, a study of the statistical treatment of layoffs commissioned by the Organization for Economic Cooperation and Development promulgated, for the purposes of international comparison, the following set of "building blocks" relating to persons on layoff:<sup>29</sup>

| -   | 0                      | n of person on<br>who—                |
|---|------------------------|---------------------------------------|
|   | Looked<br>for work     | Did not look<br>for work              |
| Date of recall:<br>Specified<br>Not specified | Employed<br>Unemployed | Employed<br>Not in the<br>labor force |

According to this line of reasoning, only persons on layoff who had looked for work *and* did not have a specific recall date would be considered unemployed; all those with a specific recall date would be considered employed. These modifications were discussed at the Thirteenth International Conference of Labor Statisticians held in Geneva in October 1982 but were not adopted (except for a provision that offers some leeway for countries to adopt their own measurement of layoff depending upon national practice).<sup>30</sup> But in view of recent testing that places some doubt as to the interpretation and measurement of layoff, the United States is contemplating the addition of "job search" and "expected recall date" questions to the CPS at some future date and, thus, may be firming up the measurement and concept.

and Labor Market Equilibrium," *Journal of Political Economy*, August 1980, pp. 652–72; James L. Medoff, "Layoffs and Alternatives under Trade Unions in U.S. Manufacturing," *American Economic Review*, June 1979, pp. 380–95; and Francine D. Blau and Lawrence M. Kahn, "Causes and Consequences of Layoffs," *Economic Inquiry*, April 1981, pp. 270–96.

<sup>2</sup>See How the Government Measures Unemployment, Report 505 (Bureau of Labor Statistics, 1976).

<sup>3</sup>Current Population Survey Interviewers Reference Manual, CPS-250 (Bureau of the Census, January 1980), pp. D5-38.

<sup>4</sup>The CPS measure of duration of unemployment reflects the current duration of an "in-progress" spell of unemployment, not a "completed" spell. For more information, see Norman Bowers, "Probing the issues of unemployment duration," *Monthly Labor Review*, July 1980, pp. 23–32.

<sup>----</sup>FOOTNOTES------

<sup>5</sup>Medoff, "Layoffs and Alternatives," p. 380.

<sup>6</sup> Earnings and Other Characteristics of Organized Workers, May 1980, Bulletin 2105 (Bureau of Labor Statistics, September 1981).

<sup>7</sup>When controlling for both industry and occupation simultaneously, Martin Feldstein found that not only was the male/female layoff differential reduced but it was actually reversed, women having a significantly higher layoff rate than men. However, he expressed surprise over the size of the differential and thought that it may have reflected an overadjustment for occupation and industry attachment. Feldstein, "The Effect of Unemployment Insurance," p. 841.

<sup>8</sup>Richard E. Caves, "The Structure of Industry," in Martin Feldstein, ed., *The American Economy in Transition* (Chicago, University of Chicago Press, 1980), pp. 501–45.

<sup>9</sup>Curtis L. Gilroy, "Job losers, leavers, and entrants: traits and trends," *Monthly Labor Review*, August 1973, pp. 3–15.

<sup>10</sup>Thomas F. Bradshaw and Janet L. Scholl, "Workers on layoff: a comparison of two data series," *Monthly Labor Review*, November 1976, pp. 29–33.

<sup>11</sup> An examination of actual trough to peak changes in the number of layoffs relative to changes in the number of unemployed for the same dates yields the following: May 1969 to September 1971, 24.7 percent; October 1973 to June 1975, 40.5 percent; June 1978 to July 1980, 54.0 percent; and July 1981 to September 1982, 39.5 percent. The extent of layoffs relative to total unemployment in the 1973–75 and 1981–82 recessions was similar.

<sup>12</sup>Lilien, "The Cyclical Pattern of Temporary Layoffs," p. 24.

<sup>13</sup>The data on layoffs are from Phase III and IV covering the April 1981 to December 1982 period. The sample size each month was approximately 800 persons (200 respondents leave and 200 others enter the sample each month yielding an approximate cumulative sample size of 4,000 over the sample period) drawn from four areas—Chicago, Scranton, San Antonio, and rural Georgia.

<sup>14</sup>Feldstein, "The Importance of Temporary Layoffs," p. 732.

<sup>15</sup>Reported and described in Bradshaw, "The Extent of Job Search," pp. 517–18.

<sup>16</sup>A related question in the literature (Feldstein, "The Importance of Temporary Layoffs," pp. 744-45) has to do with whether nonsearchers on layoff are concentrated in high-wage industries. Unfortunately, such information was generally not available from Methods Development Survey data. However, it is possible to gain some insight into this issue from regular monthly CPS data. Individuals on layoff can be classified into two groups: those with a definite date of expected recall within 30 days are classified as on "temporary layoff," while all others are classified as on "indefinite layoff." It is assumed that those on indefinite layoff would be more likely than those on temporary layoff to search for work. Some support for this assumption is available from Methods Development Survey data. Remember, one factor that sets persons on temporary layoff apart from those on indefinite layoff is that the former must have a definite expected recall date. In the Methods Development Survey, persons on layoff were asked if they had a specific date to return to work. Nearly 70 percent of those on layoff without a specific recall date had looked for work, as opposed to 45 percent for those with a specific recall date. The examination of temporary versus indefinite layoff data, or the assumed nonsearchers versus searchers, by detailed industry revealed the following. First, each industry was classified as high- or low-wage based upon whether its average hourly wage was higher or lower than the average for all industries. If the assertion about nonsearchers in high-wage industries was correct, then one would expect that the percentage of those on temporary layoff in highwage industries would be greater than their percentage in all industries. Actually, the percentages were relatively the same, one-fourth. Thus, it does not appear that nonsearching while on layoff is a function of wages.

<sup>17</sup>Lilien, "The Cyclical Pattern of Temporary Layoffs," p. 25.

<sup>18</sup> Using the Current Population Survey as a Longitudinal Data Base, Report 608 (Bureau of Labor Statistics, 1980).

<sup>19</sup> A readily available May–June 1976 CPS match file was the reason this time period was chosen. Eighty-five percent of the job losers in May who also would have been sampled in June were matched: 352 persons on layoff and 929 other job losers.

<sup>20</sup>Under this definition, 14 percent of the workers employed in May were employed in a different job in June. Of course, some of this "job change" could have been the result of reporting errors; that is, the respondent does not actually change jobs but, because of recording or coding error, the detailed industry category is different in successive months. However, in 1982, Wesley Mellow and Hal Sider compared 4,523 CPs respondents' description of their jobs with that provided by the employer and found a fairly high level of agreement (84 percent) in worker and employer responses to industry affiliation at the 3-digit level. (See Wesley Mellow and Hal Sider, "Accuracy of Response in Labor Market Surveys: Evidence and Implications," Journal of Labor Economics, forthcoming.) Assuming that 84 percent of the May-June 1976 job changes were actually job changes and not the result of reporting errors, the job mobility rate would drop a little to 12.5 percent. A study designed specifically to measure job mobility in 1961 found that 10 percent of the number who worked shifted from one employer to another during that year. See Gertrude Bancroft and Stuart Garfinkle, "Job Mobility in 1961," Monthly Labor Review, August 1963, pp. 897-906.

<sup>21</sup> It should be noted that CPS data do not indicate if persons on layoff actually returned to their previous jobs, but only that there was a change in labor force status between measurements. However, a special followup survey of the unemployed in July 1982 that was taken 2 weeks after the reference week found that, of the persons who had been reported on layoff initially but were working in the followup, 72 percent had been called back to their previous job and 22 percent had found another job. The subsequent labor force status for a small percentage could not be identified. The 68-percent recall rate within 6 months for laid-off workers in the manufacturing industry estimated by David Lilien in "The Cyclical Pattern of Temporary Layoffs in U.S. Manufacturing" (Ph.D dissertation, Massachusetts Institute of Technology, 1977) was also in line with the estimate here.

<sup>22</sup> With the publication of data for December and annual averages for 1981, the Bureau discontinued publication of labor turnover survey data. See Carol Utter, "Labor Turnover Survey Discontinued," *Employment and Earnings*, March 1982, p. 13.

<sup>23</sup> For a description of labor turnover concepts, see the Establishment Data section of "Explanatory Notes" in any issue of *Employment and Earnings* prior to February 1982.

<sup>24</sup> Feldstein, "The Importance of Temporary Layoff," p. 735.

<sup>25</sup>Carol Utter, "New Series on Recalls from the Labor Turnover Survey," *Employment and Earnings*, December 1977, pp. 10-11.

<sup>26</sup> See footnote 21 for detailed description of July followup survey.

<sup>27</sup> The mean duration of unemployment was estimated using the midpoints of the available duration of unemployment distribution categories: less than 5 weeks, 5 to 10 weeks, 11 to 14 weeks, 15 to 26 weeks, and 27 weeks and longer; 52 weeks was the assumed midpoint of the last category. Applying this method to 1982 annual average duration of total unemployment categories resulted in a mean of 15.4 weeks, very close to the actual mean of 15.6 weeks.

<sup>28</sup> Joyanna Moy and Constance Sorrentino, "Unemployment, labor force trends, and layoff practices in 10 countries," *Monthly Labor Review*, December 1981, pp. 3–13.

<sup>29</sup> Bernard M. Grais, Layoffs and Short-time Working in Selected Organization for Economic Cooperation and Development Countries (Paris, Organization for Economic Cooperation and Development, 1983).

<sup>30</sup> International Labor Organization, *Thirteenth International Conference of Labor Statisticians*, Geneva, ICLS/13/D11 (Final Version), October 18–19, 1982.