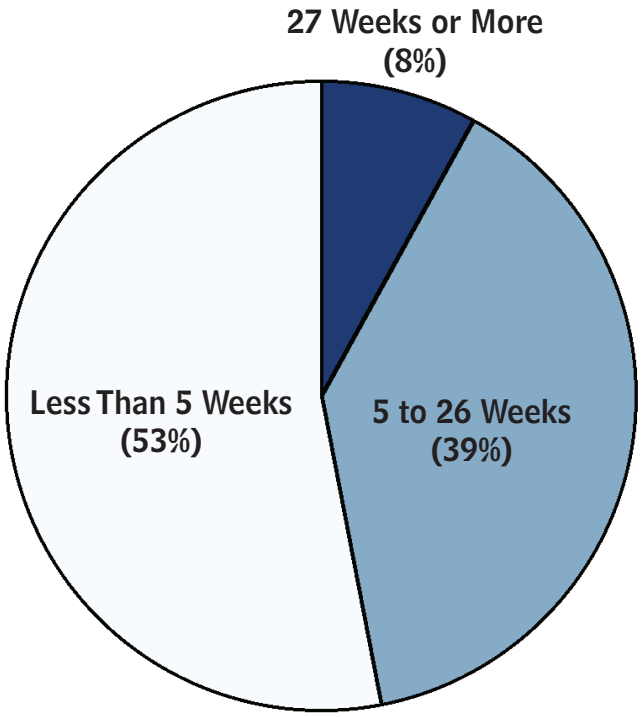
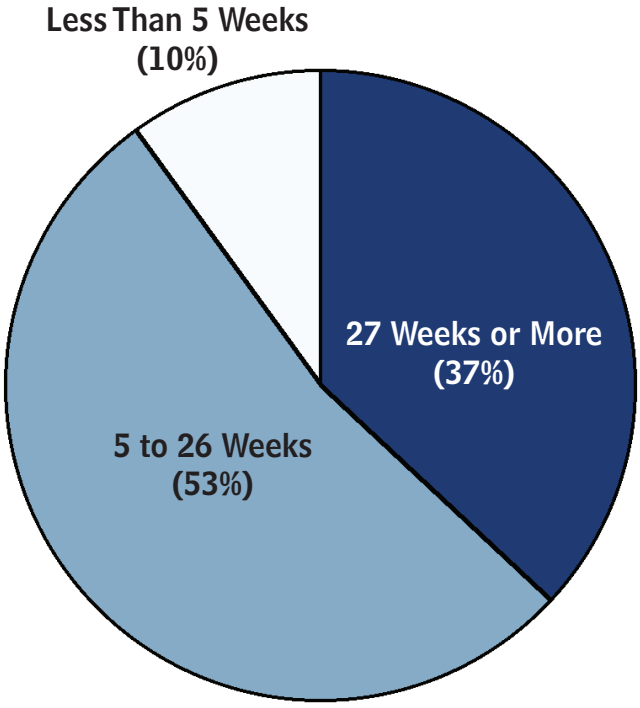
CONGRESS OF THE UNITED STATES
CONGRESSIONAL BUDGET OFFICE

Long-Term Unemployment

Few Spells of Unemployment Are More Than 26 Weeks . . .



But Those Spells Account for Much of the Time Spent Unemployed



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Long-Term Unemployment

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Notes

Unless otherwise indicated, all of the years referred to in this paper are calendar years.

Numbers in the text and tables may not add up to totals because of rounding.

Preface

Even in a strong labor market, many people become unemployed for short periods as they enter the labor force or change jobs. But some people take many months to find a job. Over the past several decades, the percentage of unemployment spells lasting more than six months has increased. Such long-term unemployment may result in serious problems for the unemployed individuals themselves as well as for the overall economy.

This Congressional Budget Office (CBO) paper—prepared at the request of the Chairmen of the House Budget and House Ways and Means Committees—uses data from a national survey to examine the extent to which unemployment is concentrated among workers who experienced spells lasting more than six months. It also examines the characteristics of those workers, their sources of income, and their subsequent activities. In keeping with CBO's mandate to provide objective, impartial analysis, this paper makes no recommendations.

Ralph E. Smith of CBO's Health and Human Resources Division wrote the paper. Susan Labovich and Alshadye Yemane assisted with data and tabulations. The paper benefited from comments by David Brauer, Molly Dahl, Matthew Goldberg, Keisuke Nakagawa, Robert Sunshine, Bruce Vavrichek, and Tom Woodward, all of CBO, as well as Paul Cullinan of the Brookings Institution, Thomas DeLeire of the University of Wisconsin, Lawrence Katz of Harvard University, and Stephen Wandner of the U.S. Department of Labor. (The assistance of external reviewers implies no responsibility for the final product, which rests solely with CBO.)

Christine Bogusz edited the paper, and Loretta Lettner proofread it. Ronald Moore produced drafts of the manuscript, and Maureen Costantino prepared the paper for publication and designed the cover. Lenny Skutnik printed copies of the report, Linda Schimmel handled the distribution, and Simone Thomas produced the electronic version for CBO's Web site (www.cbo.gov).

Peter R. Orszag
Director

October 2007

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Summary

Each year, millions of people become unemployed and find a job within a few weeks, while many others change jobs without any intervening unemployment. The flexibility of the labor market is generally considered a source of strength for the U.S. economy. Some people, however, remain jobless for many months. Those long-term unemployed workers account for a large portion of the total weeks of unemployment.

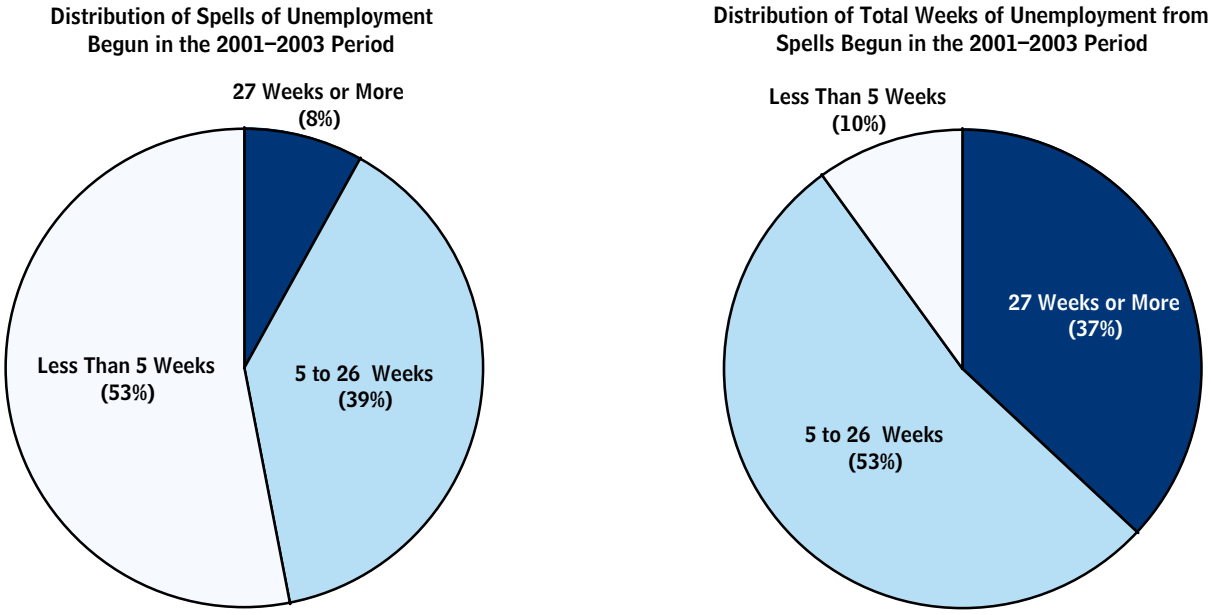
This paper examines the extent to which unemployment is concentrated among workers who are unemployed for more than six months. It also examines the characteristics of those long-term unemployed workers as well as their sources of income and subsequent activities. The analysis is largely based on data from the most recently completed panel available of the Census Bureau's Survey of Income and Program Participation, which covers people who experienced any unemployment during 2001, 2002, or 2003.

Key findings include these:

- Although fewer than one-in-ten of the unemployment spells of adults that began in the 2001–2003 period lasted more than half a year, those long-term spells accounted for 37 percent of all weeks of work lost by adults due to unemployment during that period (see Summary Figure 1). The share jumps to 44 percent when shorter spells of unemployment experienced by those same people are included.
- Spells of unemployment often ended with the job seekers leaving the labor force rather than taking a job. About 70 percent of the unemployment spells begun by adults during the 2001–2003 period ended with the individuals taking a job; 25 percent ended with them stopping their search; and the remaining spells were still in progress when the survey ended.
- Workers who never finished high school were not only more likely than other labor force participants to become unemployed, they also remained unemployed for a longer time. During the 2001–2003 period, although only one-in-ten adults in the labor force had not graduated from high school, one-in-six of the adults who experienced any unemployment and one-in-five of the adults who experienced a long-term unemployment spell did not have a high school diploma.
- A majority of the long-term unemployed received unemployment insurance benefits for at least part of the period in which they were unemployed, offsetting a portion of their lost earnings. Also, although a majority of the long-term unemployed had health insurance coverage while unemployed, the percentage lacking insurance during their spell was higher than it had been before those workers became unemployed.

Summary Figure 1.

Duration of Unemployment Spells Begun by People Age 25 and Older, 2001 to 2003



Source: Congressional Budget Office based on data from the 2001 panel of the Survey of Income and Program Participation.

Note: This figure is based on reports by respondents who began about 10,800 spells of unemployment during a three-year survey period that started in late 2000 or early 2001 and ended in late 2003.

Long-Term Unemployment

Introduction

The frequent occurrence of short spells of unemployment by people entering the labor force or changing jobs is characteristic of a dynamic economy: As new opportunities for workers and firms arise, temporary periods of unemployment may occur. Even in a strong labor market, some people will be unemployed. (People are defined as unemployed if they are not working, are available to work, and have recently made specific efforts to find a job or are expected to be recalled from a temporary layoff.)[1]

Recent statistics from the monthly Current Population Survey (CPS) illustrate the dynamics of unemployment. In 2006, an average of 7.0 million people age 16 and over were unemployed. The number of unemployed people declined throughout the year, falling from 7.3 million at the end of 2005 to 6.8 million at the end of 2006. Each month in that year, an average of 2.6 million people became unemployed (see Table 1).[2] The number of people leaving unemployment exceeded the number entering unemployment by an average of 40,000 per month (accounting for the overall drop of 500,000), which means that a slightly larger number of people who had been unemployed in the previous month must have either found a job or left the labor force.

Estimates based on the CPS also suggest that, even in a period in which the labor market is generally healthy overall, a significant number of people take a long time to find a job. On average, about one-in-six unemployed people in 2006 (1.2 million) had already been unemployed for more than half a year. Few of the unemployed people under age 25, but one-in-five of the unemployed people age 25 or older, had been unemployed that long. Moreover, by the time they found a job or left the labor force, some of the individuals with shorter unemployment spells would have been unemployed that long as well.

Long-term unemployment may result in serious problems for the unemployed individuals themselves as well as for the overall economy. Previous studies by the Congressional Budget Office (CBO) and others have documented substantial variability in workers' earnings and in household income from one year to the next, some of which is associated with long-term unemployment.[3] People who are taking a long time to find a job are losing the opportunity to earn income, gain work experience, and, in

1. The Bureau of Labor Statistics uses those criteria to determine whether respondents to the Current Population Survey should be classified as unemployed. In that survey (in which the Census Bureau collects data on the labor force every month), respondents are asked about their activities during the week preceding the interview, and respondents who are unemployed provide information about how long they have been unemployed thus far. Respondents who did any paid work during the reference week (or were self-employed or worked in a family business) are classified as employed. Those not counted as employed or unemployed are classified as not in the labor force. About 60,000 households participate in the survey.

2. That estimate is based on the observation that, on average, 2.6 million people age 16 and over had been unemployed for less than five weeks, which is approximately one month. It understates the number of people who actually became unemployed to the extent that it misses people with very short-term spells who entered and left unemployment between the monthly surveys.

3. See Congressional Budget Office, *Trends in Earnings Variability Over the Past 20 Years* (April 17, 2007); Peter Gottschalk and Robert Moffitt, "Trends in the Transitory Variance of Earnings in the United States," *Economic Journal*, vol. 112, no. 478 (2002), pp. C68–C73; and Karen E. Dyan, Douglas W. Elmendorf, and Daniel E. Sichel, "The Evolution of Household Income Volatility" (draft, Brookings Institution, Washington, D.C., June 2007).

Table 1.

Number and Distribution of Unemployed People, by Age and Duration of Spells in Progress, 2006

Age	Total	Duration of Spells: Less Than 5 Weeks	5 to 26 Weeks	27 or More Weeks
		Thousands of People		
16 to 24	2,350	1,040	1,030	280
25 and Over	4,650	1,580	2,120	950
Total, 16 years and over	**7,000**	**2,610**	**3,150**	**1,230**
		Percentage Distribution		
16 to 24	100	44	44	12
25 and Over	100	34	46	21
Total, 16 years and over	**100**	**37**	**45**	**18**

Source: Congressional Budget Office based on 2006 annual averages of monthly Current Population Survey statistics reported by the Bureau of Labor Statistics, available at www.bls.gov/cps/cpsa2006.pdf.

some cases, receive health insurance and other nonwage benefits provided by employers.

Long-term unemployment can result from difficulties related to job seekers or potential employers or from the mechanisms that match supply to demand. For example, job seekers may not have the skills sought by employers in their labor market or may have unrealistic expectations; potential employers may not be hiring any new workers in their market; or unemployed workers may not know how to productively look for work. Long-term unemployment could also result from job seekers having less need to find a job quickly because of access to other sources of income, such as unemployment insurance (UI) benefits or income from a working spouse.

For the overall economy, long spells of unemployment can indicate lost output. Taking the responses to the CPS at face value, the lost output of someone who says that he or she had been available for work and had been seeking a job for more than half a year could be substantial. Responses to a survey should not always be taken at face value, though. For example, some respondents might have told census interviewers that they were available to start work at any time during a certain period, when in fact they might not really have been available to do so or might not have been seriously looking.

In addition, the end of a spell of unemployment does not always mean that an individual has found a job. Many spells end with the unemployed people no longer actively seeking work; that is, they leave the labor force.[4] It is difficult to determine the extent to which that outcome indicates that the people had not been actively seeking a job and the extent to which it indicates that they stopped looking out of discouragement because suitable jobs were not available for them. According to CPS data tabulated by the Bureau of Labor Statistics (BLS), in 2006 an average of 1.4 million people who were not in the labor force wanted to work, had searched for a job sometime in the previous year, and were available to work. However, only about 400,000 of those people indicated that they had stopped looking for work because of discouragement over job prospects; the rest had not looked for other reasons, such as problems with child care or transportation.

Over the past several decades, long-term unemployment as a percentage of total unemployment has been highly cyclical and generally increasing, as measured by the CPS

4. Estimates from the CPS indicate that almost half of the unemployment spells completed in 2003 ended with the individuals leaving the labor force rather than becoming employed. See Randy Ilg, "Analyzing CPS Data Using Gross Flows," *Monthly Labor Review* (September 2005), pp. 10–18.

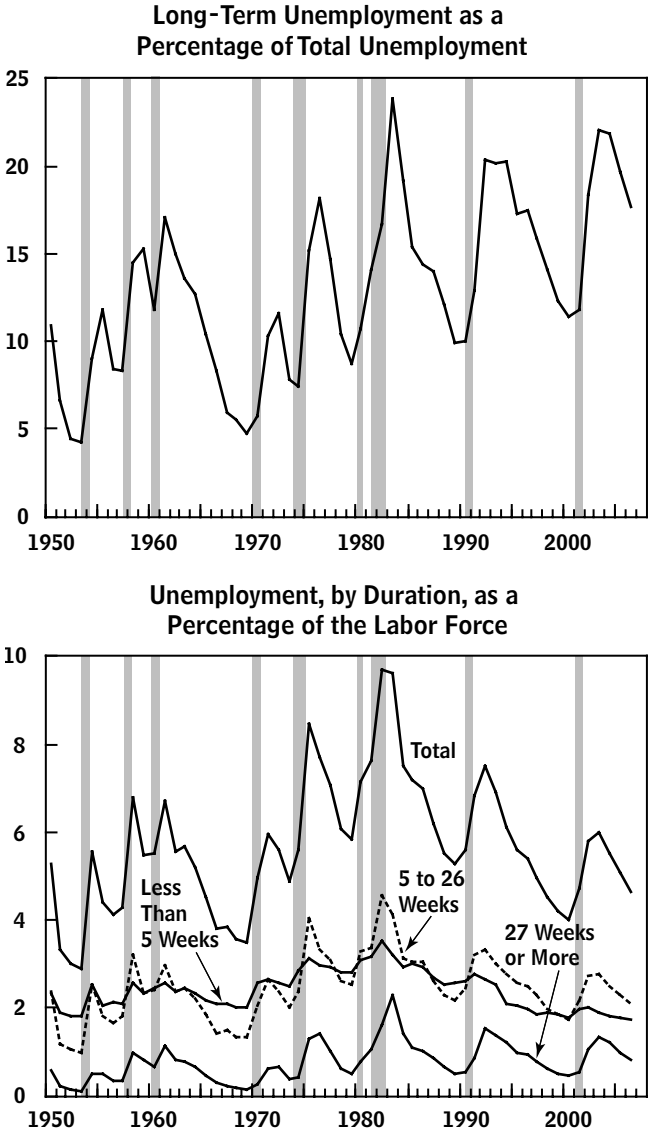
(see the upper panel of Figure 1).[5] About one-in-six workers who were unemployed in 2006 had been unemployed for 27 weeks or longer, even though the overall unemployment rate was low. In several earlier periods with relatively low unemployment rates (such as in the early 1970s), the percentage of unemployed people who had been unemployed for 27 weeks or longer was lower. Those statistics are incomplete in that they reflect the duration of unemployment spells that had not yet ended. That is, they are spells in progress, not completed spells. Nonetheless, it is likely that increases in the length of spells in progress were accompanied by increases in completed spells.

The rise in long-term unemployment as a percentage of total unemployment reflects a decline in the percentage of the labor force that became unemployed as well as an increase in unemployment duration. In an average month in 2006, 1.7 percent of the labor force had been unemployed for less than five weeks—a rough measure of the percentage of the labor force that had become unemployed during the month. That short-term unemployment rate is the lowest it has been for half a century (see the lower panel of Figure 1). Those statistics indicate that, apart from variations stemming from the ups and downs of the business cycle, people are less likely to become unemployed than in the past, but those who do become unemployed are more likely to remain unemployed for more than half a year.[6]

Figure 1.

Long-Term Unemployment and the Unemployment Rate, 1950 to 2006

(Percent)



Source: Congressional Budget Office based on annual averages of monthly Current Population Survey statistics reported by the Bureau of Labor Statistics.

Note: The duration of unemployment percentages in this figure depicts the duration of spells in progress, not completed spells. Vertical bars indicate periods of recession.

5. A major redesign of the CPS in 1994 may have reduced the estimated amount of short-term unemployment somewhat, but it is unlikely to have resulted in a substantial change in the series depicted in Figure 1. See Katharine G. Abraham and Robert Shimer, "Changes in Unemployment Duration and Labor Force Attachment," in Alan B. Krueger and Robert M. Solow, eds., *The Roaring Nineties: Can Full Employment Be Sustained?* (New York: Russell Sage Foundation, 2001), pp. 367–420.

6. Statistics from a separate set of questions in the CPS show that 9.3 percent of all people who worked or looked for work in 2005 experienced any unemployment in that year—a smaller percentage than in most of the previous half century. For the latest statistics, see Department of Labor, Bureau of Labor Statistics, *Work Experience of the Population in 2005,* USDL 07-0199 (February 9, 2007). A paper by Lawrence F. Katz and Alan B. Krueger that examined the strong performance of the labor market in the 1990s discussed the secular decline in the short-term unemployment rate and in the percentage of the labor force that had experienced any unemployment; see "The High-Pressure U.S. Labor Market of the 1990s," *Brookings Papers on Economic Activity*, vol. 1999, no. 1 (1999), pp. 1–87.

Many workers who lose their job are eligible for unemployment insurance benefits, which offset a portion of an eligible worker's lost wages. The duration of those benefits is generally limited to no more than 26 weeks, however, at which point recipients have exhausted their benefits.

The rate at which recipients exhaust their UI benefits has been gradually rising. In the years immediately after the 2001 recession, more than 40 percent of recipients of UI benefits had exhausted them—a rate that was higher than at any time in recent history. Since then, the exhaustion rate has fallen to about 35 percent, as the labor market has strengthened.[7] Although it is not surprising that the exhaustion rate would climb as job opportunities decline and fall as opportunities increase, the gradual long-term rise in the rate is hard to explain.

One part of the explanation for that rise, as well as for the rise in long-term unemployment, may be that an increasing share of job losses are permanent separations rather than temporary layoffs. According to research based on data from surveys conducted by the Census Bureau for the Department of Labor, the percentage of workers who are permanently separated from their job seems to have risen somewhat over the past two decades (adjusted for overall economic conditions).[8]

Moreover, research based on the same surveys indicates that the adverse consequences of losing a job because of slack work, a plant closing, or a position being abolished have increased. One study found that, on average, workers who lost a full-time job between 2001 and 2003 and found a new job by the time they were interviewed in 2004 earned about 17 percent less per week than they would have earned had they not been displaced.[9] That amount was roughly double the average loss in weekly earnings incurred by workers who were displaced in the late 1990s. The increase in the size of the average loss in earnings was especially large for better-educated workers. Finally, as the author of that study points out, those estimates understate the total economic losses incurred by workers because the estimates do not take into account workers' forgone earnings while they were unemployed and any losses in fringe benefits.

A previous CBO study also underscores the difficulties associated with some job transitions.[10] Examining unemployment insurance benefits provided to people who lost their job in the 2001 recession, the study found that the former recipients of UI benefits who went back to work within three months after their benefits ended were earning about 15 percent less than they had earned before they lost their job.

Concerns about long-term unemployment have generated a search for new ways of identifying and aiding unemployed workers most likely to remain unemployed for a long period. The federal/state unemployment insurance system—the main public program for unemployed workers—is not designed to deal with unemployment spells lasting more than six months. Moreover, because the program temporarily replaces a portion of workers' lost earnings, some job seekers have an incentive to stay unemployed longer than they would have otherwise. Early identification of individuals most likely to need help, job-search assistance, wage insurance, and retraining programs are among the approaches being used to shorten unemployment duration.

The remainder of this paper provides information about how long it took for spells of unemployment to end and about whether those spells ended because the individuals found a job or because they left the labor force. The information about completed spells is used to show that unemployment is highly concentrated among a small number of people who experience long spells of unem-

7. In the 12-month period ending in September 2007, 7.5 million workers began receiving unemployment insurance payments and 2.6 million recipients exhausted their benefits. Statistics on unemployment insurance are available from the Department of Labor at http://workforcesecurity.doleta.gov/unemploy/finance.asp.

8. Henry S. Farber, "What Do We Know About Job Loss in the United States? Evidence from the Displaced Workers Survey, 1984–2004," *Economic Perspectives,* Federal Reserve Bank of Chicago, vol. 29, no. 2 (2005), pp. 13–28. See also Erica L. Groshen and Simon Potter, "Has Structural Change Contributed to a Jobless Recovery?" *Current Issues in Economics and Finance*, Federal Reserve Bank of New York, vol. 9, no. 8 (August 2003). Women's increased attachment to the labor force may also have contributed to the overall increase in long-term unemployment; see Abraham and Shimer, "Changes in Unemployment Duration and Labor Force Attachment."

9. Farber, "What Do We Know About Job Loss in the United States?"

10. Congressional Budget Office, *Family Income of Unemployment Insurance Recipients* (March 2004). The people included in that analysis had received UI benefits for at least four consecutive months in 2001 or early 2002.

ployment. That finding underscores the potential payoff to the economy, as well as to the people themselves, of finding ways of reducing long-term unemployment.

The Extent to Which Unemployment Is Concentrated

Millions of people enter the labor force, leave the labor force, or change jobs each month without experiencing any unemployment.[11] Moreover, the extent of long-term unemployment in the United States appears relatively small in comparison with rates in many other countries.[12] Nonetheless, unemployment in recent periods was quite heavily concentrated among a small portion of the workers who experienced long spells of unemployment.

CBO estimated the degree of unemployment concentration by examining the experience of labor force participants during the three-year period covered by the most recently completed panel of the Survey of Income and Program Participation (SIPP) available, 2001 through 2003.[13] SIPP is a large, nationally representative longitudinal survey that is conducted by the Census Bureau. Every four months for several years, respondents are asked detailed questions about the activities and sources of income for members of their household, including which weeks they were employed or unemployed. For this analysis of SIPP data, CBO classified respondents as unemployed in weeks in which they were not working, were available to work, and either spent time looking for work or were waiting to be recalled from a temporary layoff. A spell of unemployment could begin or end if, in adjacent weeks, a respondent was either employed or not in the labor force (that is, neither employed nor unemployed).

The analysis answers two questions about long-term unemployment, both based on lengths of unemployment spells recorded during the 2001–2003 period: How many of the spells of unemployment that began during that period lasted at least 27 consecutive weeks? And what portion of all unemployment that was experienced during that period was accounted for by those long-term spells? Those questions differ from the ones that can be answered using estimates of unemployment duration reported each month by the BLS and cited in the previous section (see Box 1).

By focusing on long-term unemployment, this analysis does not directly address related issues concerning nonparticipation in the labor market. Several studies have documented an increase in the percentage of the nonelderly adult male population who withdraw from the labor force for long periods of time. Although those people are not counted as unemployed (because they are not actively seeking work), their nonemployment may result in serious problems for them as well as for the overall economy.[14] One source of that decrease in participation in the labor market appears to be an increase in the receipt of disability benefits.[15]

Most of the analysis reported in this paper is limited to respondents who were at least age 25 when the 2001 SIPP panel began and who worked in at least one week of the three-year period. The age restriction was imposed in order to focus on spells of unemployment that were not related to students seeking seasonal employment or transitioning from school to work. The employment restric-

11. A survey of nonfarm employers conducted each month by the Bureau of Labor Statistics indicates a considerable amount of turnover. In 2006, for example, employers reported that they hired about 59 million workers and that about 55 million workers left. That is, more than 40 percent of their workforce turned over during the year. See Department of Labor, Bureau of Labor Statistics, *Job Openings and Labor Turnover: January 2007,* USDL 07-0373 (March 13, 2007), Tables 11 to 14.

12. Each year, the Organization for Economic Cooperation and Development (OECD) publishes estimates of long-term unemployment for each of its 30 member countries. The OECD measures long-term unemployment as the percentage of unemployed people who have been unemployed for 12 months or more. In the most recent year for which data are available (2005 for most of the countries), the long-term unemployment rate was about 12 percent in the United States, compared with 33 percent for the OECD as a whole. Only 6 of the 30 countries in the OECD had a lower long-term unemployment rate than that of the United States. See *OECD Factbook 2007* (Paris: Organization for Economic Cooperation and Development, 2007), pp. 140–141.

13. The Census Bureau staggered the start of the three-year period so that the first month for about one-quarter of the respondents was January 2001; for the other respondents, the initial month was in late 2000. The final month (also staggered) was September, October, November, or December 2003.

14. See Chinhui Juhn, Kevin M. Murphy, and Robert H. Topel, "Current Unemployment, Historically Contemplated," *Brookings Papers on Economic Activity*, vol. 2002, no. 1 (2002), pp. 79–116.

15. See David H. Autor and Mark G. Duggan, "The Rise in the Disability Rolls and the Decline in Unemployment," *Quarterly Journal of Economics*, vol. 118, no. 1 (February 2003), pp. 157–205.

Box 1.

Measures of Unemployment

The question of how often long-term unemployment occurs can be answered different ways, depending on precisely which measure is being used. As shown below, similar-sounding measures can produce markedly different answers.

New Spells, Completed Spells, and Spells in Progress

Measures based on **new spells** can be used to answer questions such as, How many of the people who become unemployed are starting spells that will last longer than six months? (This measure is analogous to the statistic often cited from unemployment insurance administrative data: the fraction of new unemployment insurance recipients who exhaust their entitlement to benefits.)

Measures based on **completed spells** can answer questions such as, How many of the people unemployed at a point in time are in the midst of a spell that, when completed, will have lasted more than six months?

Measures based on **spells in progress** can answer questions such as, How many people who are unemployed have been so for more than six months? This is the most common measure of unemployment duration and the one reported each month by the Bureau of Labor Statistics, based on data from the Current Population Survey (a monthly survey of about 60,000 households conducted by the Census Bureau for the Bureau of Labor Statistics). Because this measure uses information about how long people unemployed in a month had *already* been unemployed, rather than about the total length of unemployment spells, it can be provided on a timely basis.

An Example

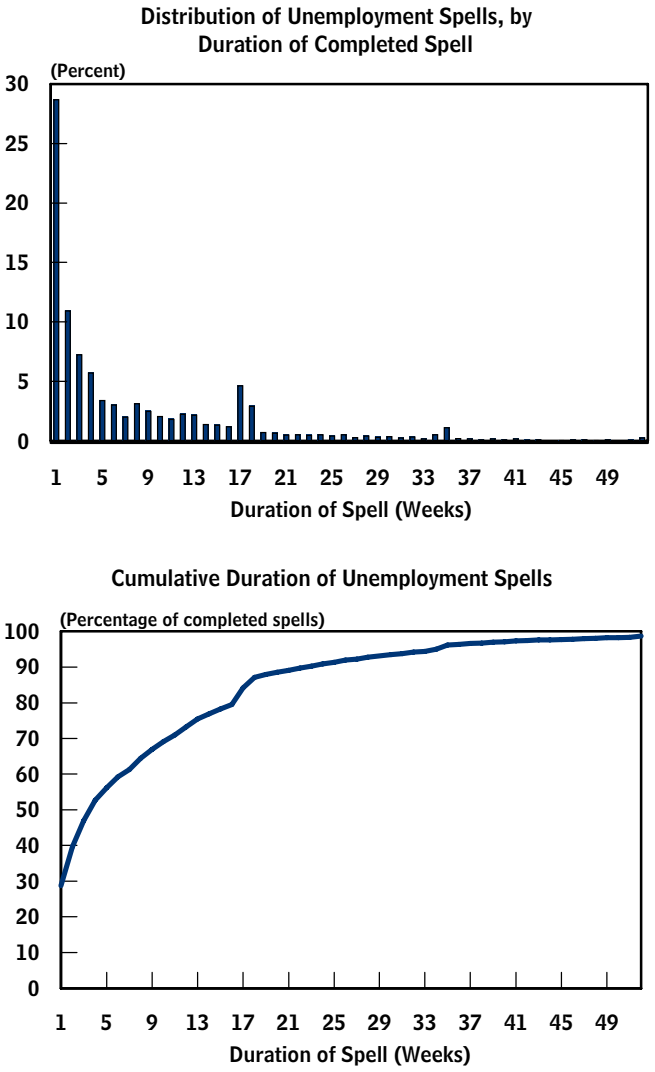
In this example, suppose the question is, How common is an unemployment spell lasting more than one month? Assume that in January, two people became unemployed; one of them takes one month to find a job or leave the labor force, and the other takes two months. In February, the process is repeated, with two people becoming unemployed, one of whom is unemployed for one month and the other for two months. In every month thereafter, the process repeats.

The answer to the question about the occurrence of unemployment lasting more than one month—that is, the portion of unemployment spells of that duration—would be one-half, two-thirds, or one-third, depending on which measure was used:

- **New spells:** One of the two spells that began in February would last more than one month, although a survey taken in that month would not provide that information.
- **Completed spells:** Two of the three people showing up as unemployed in February were in spells that would last more than one month. (One was already in the second month and one had just begun a two-month spell.) Equivalently, two-thirds of the person-months (a unit of one month's activity by one person) of unemployment in that month resulted from people in long spells. That is the measure emphasized in this paper.
- **Spells in progress:** A survey taken in February, for example, would show that three people were unemployed, only one of whom had been unemployed for more than one month.

Figure 2.

Duration of Unemployment Spells, 2001 to 2003



Source: Congressional Budget Office based on data from the 2001 panel of the Survey of Income and Program Participation.

Notes: This figure is based on reports by respondents who began about 10,800 spells of unemployment during a three-year survey period that started in late 2000 or early 2001 and ended in late 2003. About 1 percent of those spells lasted more than 52 weeks; they are not depicted in the figures but are included in the calculations reported in the text.

The relatively large percentages at weeks 17, 18, 34, and 35 are almost certainly the result of a shortcoming in SIPP responses known as "seam bias" (see Appendix A).

tion was imposed to screen out reported unemployment spells by a small number of people who may not really have been seeking employment, as was suggested by their lack of employment at any time in three years. The SIPP database and CBO's analysis of it have several limitations, none of which are likely to alter the qualitative findings of the analysis (see Appendix A).

Even though the 2001–2003 period was a time of considerable upheaval in the labor market—including a recession and the aftermath of the September 11, 2001, terrorist attacks—about 75 percent of the people age 25 and older who worked during that period did not experience any unemployment. That is, they either were employed every week or, when they were not working, were not looking for a job. But some people among the 25 percent who did become unemployed during those three years were unemployed for substantial amounts of time. (The key results concerning the extent of unemployment concentration were found for the late 1990s as well, except that, in that period of falling unemployment, the duration of unemployment spells was generally shorter. See Appendix B for details.)

Estimates of Unemployment Spells

During the three years covered by the 2001 SIPP panel, workers who were at least age 25 when the panel began experienced roughly 62 million spells of unemployment. That number is based on the nearly 11,000 unemployment spells recorded among participants in the survey and is adjusted using population weights provided by the Census Bureau. Although that large a number of spells over just three years may seem high, it is consistent with data from a separate survey (see Appendix A).[16]

Duration. A large portion of those nearly 11,000 unemployment spells ended quickly (see the upper panel of Figure 2). In particular, three-in-ten of the spells lasted

16. A previous paper based on the 2001 SIPP panel estimated about half that number of spells (29.4 million) for people age 25 or older, but that estimate was based on a monthly variable that did not include many short unemployment spells. To be included in the previous paper's estimate, an individual had to be jobless for an entire month and had to have spent at least one week laid off or looking for work. Based on the weekly variable, roughly half of the spells lasted less than one month. See Alfred O. Gottschalck, *Dynamics of Economic Well-Being: Spells of Unemployment, 2001–2003,* Current Population Reports, P70-105 (Bureau of the Census, March 2006).

only one week, and another one-in-ten was over in two weeks.[17]

CBO used information on the duration of each spell to estimate the cumulative distribution of spell completions—that is, the percentage of unemployment spells that had been completed within a specified time. About half of the unemployment spells were over in less than five weeks, as many of the newly unemployed found a job fairly quickly or left the labor force; more than 90 percent of the spells had ended by the twenty-sixth week, leaving only 8 percent lasting 27 weeks or more (see the lower panel of Figure 2).

Even though only a small portion of the spells were long term, however, they accounted for a large portion of the total amount of unemployment recorded during the 2001–2003 period. CBO estimates that the 8 percent of spells that were long term accounted for 37 percent of all weeks of unemployment (see Table 2). By contrast, even though about half of all spells ended in less than five weeks, they accounted for only 10 percent of all weeks of unemployment.

Those estimates mean that, on average, at any given point during the three-year period, 37 percent of the unemployed adults were in the midst of spells that would last 27 weeks or more. That number is much larger than what is found in the duration statistics reported each month by the BLS because those statistics reflect only the length of the unemployment spells in progress, not the completed spells.[18]

That finding is important because it underscores the extent to which the losses from unemployment—both to the individuals who become unemployed and to the overall economy, in terms of lost output—may be much more heavily concentrated among the long-term unemployed than is suggested by the statistics on the duration of spells in progress reported each month.

By definition, longer spells must account for a disproportionate share of all weeks of unemployment. What is noteworthy is that such a high percentage of spells ended quickly and that the remainder lasted so long. The average spell duration of 9.3 weeks could have resulted from a constant exit rate of about 11 percent per week (rather than a much higher initial exit rate followed by a lower rate after the first few weeks). Had everyone had the same probability of exiting unemployment each week, only 5 percent of the spells would have lasted 27-plus weeks and those long-term spells would have accounted for only about 19 percent of all weeks of unemployment—about half their actual share.

The fact that some people exit unemployment quickly and others take much longer stems from multiple causes. Some of the differences in spell duration among workers probably result from either the circumstances that led to

Table 2.

Unemployment Spells of People Age 25 and Over, by Duration, 2001 to 2003

		Duration of Spells		
	Total	Less than 5 Weeks	5 to 26 Weeks	27 or More Weeks
Percentage of Spells	100	53	39	8
Average Duration of Spells (Weeks)	9.3	1.8	12.6	42
Percentage of Total Weeks of Unemployment	100	10	53	37

Source: Congressional Budget Office based on data from the 2001 panel of the Survey of Income and Program Participation.

Note: The sample on which this table is based consists of about 10,800 unemployment spells that began during a three-year survey period that started in late 2000 or early 2001 and ended in late 2003. The respondents were age 25 or older at the beginning of the period. About 69 percent of those spells ended with the unemployed person becoming employed; 26 percent ended with the person leaving the labor force (that is, no longer looking for work); and the remainder ended with the person still unemployed in the final week of the survey period.

17. The apparent exceptions—the relatively large percentages of unemployment spells lasting 17, 18, 34, or 35 weeks—are almost certainly the result of a shortcoming in SIPP responses known as "seam bias." In brief, because respondents are interviewed every four months, changes in employment status tend to be disproportionately reported as having occurred between four-month (17- or 18-week) intervals.

18. Based on data from the CPS, about 22 percent of the spells in progress by unemployed people age 25 and over in 2002 had lasted 27 or more weeks. Estimates based on the SIPP indicate that a smaller percentage of the spells in progress in that year had lasted that long.

Table 3.

Unemployment Spells of People Age 25 and Over, by Employment Status Immediately Before and After the Spells, 2001 to 2003

Employment Status	Percentage of All Spells	Percentage of Spells Within Category
Employment Before Spell	72	100
Spell ended with employment	57	78
Spell ended with exit from labor force	11	15
Spell ongoing	5	6
Not in Labor Force Before Spell	28	100
Spell ended with employment	12	42
Spell ended with exit from labor force	15	52
Spell ongoing	2	5
All	100	n.a.

Source: Congressional Budget Office based on data from the 2001 panel of the Survey of Income and Program Participation.

Notes: The sample on which this table is based consists of about 10,800 unemployment spells that began during a three-year survey period that started in late 2000 or early 2001 and ended in late 2003. The respondents were age 25 or older at the beginning of the period.

n.a. = not applicable.

their unemployment or the workers' characteristics. For example, those who exit quickly include workers who become unemployed because their employers temporarily lay them off and then recall them or because they are in industries, such as construction, in which workers frequently change jobs with short intervening spells of unemployment. Likewise, some people enter the labor force to test the market and quickly leave. Those whose unemployment spells are much longer include job seekers who have characteristics that make them less desirable to potential employers (such as the lack of a high school diploma) or who are searching for work in labor markets with relatively few job openings.

An additional explanation is that job seekers' attractiveness to potential employers declines the longer they are unemployed.[19] For example, in the absence of better information, employers could interpret the fact that someone has already been unemployed for over a month as an indication that there is something wrong with them that other potential employers had spotted. Finding a job could take workers longer if their skills or informal job networks have deteriorated over time or if they are searching less intensively because of discouragement.

Although it is beyond the scope of this paper to estimate a causal model of why some people experience long-term spells of unemployment and others do not, the statistics provided in the remainder of the paper provide information about the circumstances leading to individuals becoming unemployed and the characteristics of the job seekers who remain unemployed for long periods.

Employment Status. Not all spells of unemployment begin with a worker leaving a job, nor do spells always end because the unemployed person found a job. Almost 30 percent of the spells begun during the 2001–2003 period started after the individual had entered or reentered the labor force rather than after he or she had been working in the week before the spell began (see Table 3).

Not surprisingly, unemployed people who recently had jobs were much more likely to end their unemployment spell with a job than were people who had entered (or reentered) the labor force. About 80 percent of the recently employed people had taken a job, compared with only about 40 percent of the labor force entrants and reentrants. That large difference could reflect the greater labor force attachment or employability of the people who recently worked. (Some of the difference could also

19. In practice, it is extremely difficult to distinguish between true state dependence and unmeasured heterogeneity. See Theresa J. Devine and Nicholas M. Kiefer, *Empirical Labor Economics: The Search Approach* (New York: Oxford University Press, 1991).

Table 4.

Unemployment Spells of People Age 25 and Over, by Duration and Employment Status Immediately Before and After the Spells, 2001 to 2003

(Percent)

Employment Status	Total	Duration of Spells			
		Less Than 5 Weeks	5 to 26 Weeks	27 or More Weeks	Average Duration (Weeks)
Employed Before Spell					
Spell ended with employment	100	60	34	6	7.3
Spell ended with exit from labor force	100	34	52	14	13.5
Not in Labor Force Before Spell					
Spell ended with employment	100	38	53	8	10.9
Spell ended with exit from labor force	100	64	30	7	7.8
All	100	53	39	8	9.3

Source: Congressional Budget Office based on data from the 2001 panel of the Survey of Income and Program Participation.

Note: The sample on which this table is based consists of about 10,800 unemployment spells that began during a three-year survey period that started in late 2000 or early 2001 and ended in late 2003. The respondents were age 25 or older at the beginning of the period. About 600 of those spells had not yet ended at the conclusion of the survey period; the duration of those spells up to the end of the survey period are included in the "All" row but not shown separately.

reflect the sometimes thin line between being unemployed and being outside the labor force.)

The unemployment spells that ended with either an individual who had been working going back to work or with someone who had been out of the labor force withdrawing again were generally shorter than the other spells (see Table 4). The spells that began with a worker losing or leaving a job and ended with that worker leaving the labor force were the spells most likely to last 27 weeks or more.

Most of the long-term unemployment spells in which the job seekers had worked immediately before becoming unemployed (rather than having been out of the labor force) appear to have resulted from job loss, rather than from the workers quitting their jobs. That finding is based on limited information provided by survey respondents who had not worked at all during the entire four-month period since they had previously been interviewed.[20] Comparable information about the circumstances leading to shorter-term unemployment spells is not available from the SIPP.

Much of the concern about unemployment in recent years has been focused on "displaced" workers—those who lost their job permanently because their employer closed or moved, there was insufficient work for them to do, or their position was abolished. Every other year (in January or February) a set of questions about displaced workers is added to the Current Population Survey.[21] The most recent displaced-worker survey took place in January 2006, asking respondents about jobs they lost in the preceding three years. Estimates from that survey provide additional evidence that unemployment is heavily concentrated among a relatively small group of job seekers (see Box 2).

Estimates of Total Unemployment

In one sense, the estimate that about one-third of all weeks of unemployment during a three-year period were associated with long-term spells understates the degree to which unemployment was concentrated among the workers who experienced those spells. Many of the workers

20. Respondents were asked the main reason they had not worked. Some of the options probably reflected job loss (for example, respondents were unable to find work or had been laid off). Other options appeared to reflect voluntary decisions (for example, respondents were not interested in working, were retired, or were caring for children).

21. The displaced-worker survey began in 1984. See Department of Labor, Bureau of Labor Statistics, *Worker Displacement, 2003–2005,* USDL 06-1454 (August 17, 2006).

Box 2.

The Duration of Joblessness Among Displaced Workers

In the January 2006 supplement to the Current Population Survey, displaced workers were defined as those who had become permanently separated from their job because their employer closed or moved, there was insufficient work for them to do, or their position was abolished. When displaced workers who subsequently found a new job were asked, "After that job ended, how many weeks went by before [you] started working again at another job?," the responses indicated that even though some displaced workers found another job quickly, many experienced a lengthy period of joblessness. (The term "joblessness," rather than "unemployment," is used here because the responses do not distinguish between periods in which the respondents were actively seeking work and periods in which they were not.)

One-quarter of the reemployed workers who had lost their job in 2003 were jobless for at least 27 weeks. They accounted for 70 percent of all person-weeks (a unit of one week's activity by one person) of joblessness incurred by reemployed workers (see the table, below).

Moreover, the workers who had been jobless for the longest time were most likely to incur a large reduction in weekly earnings when they did return to work. Overall, about one-quarter of the reemployed workers who had lost a full-time job and were subsequently working in a full-time job had weekly earnings that were at least 20 percent below those of their old job. But about two-fifths of the workers who had been jobless for 27 or more weeks experienced that large a loss.

Joblessness and Reemployment of Displaced Workers, 2003

Duration of Joblessness (Weeks)	Percentage of Reemployed Displaced Workers	Average Duration of Joblessness (Weeks)	Percentage of Person-Weeks of Joblessness
Zero	10	Zero	Zero
1 to 4	25	2.5	3
5 to 26	40	14.5	27
27 or More	25	57.2	70
Total	**100**	**20.9**	**100**

Source: Congressional Budget Office based on data from the January 2006 Current Population Survey.

who experienced long-term spells also had at least one other (usually shorter) spell. Viewed from the perspective of total unemployment experienced, the workers who had at least one long-term spell of unemployment were responsible for an even larger share of the total weeks of unemployment than is indicated by the long-term spells themselves.

Approximately 32 million of the 130 million people who were age 25 or older in 2001 and in the labor force at some time during the 2001–2003 period had at least one spell of unemployment. On average, the ones who experienced any unemployment had about two spells.[22]

Almost three-quarters of the group who had at least one unemployment spell were unemployed for no more than 26 weeks (see Table 5).[23] Those people were unemployed for an average of about 10 weeks (not necessarily consec-

22. As reported in the previous section, about 62 million distinct spells of unemployment were identified during the three-year period covered by the 2001 SIPP panel.

23. The sample for Table 5 includes spells of unemployment that were already under way in the first week of the survey. As a result, it includes more weeks of unemployment, especially long-term unemployment, than do the tables on spells. It might also include some people who never worked.

Table 5.

Total Unemployment Experience of People Age 25 and Over, 2001 to 2003

Group	Percentage of Total Group	Average Number of Weeks Unemployed	Percentage of Total Weeks of Unemployment
Unemployed at Any Time During the Three-Year Period	100	20.4	100
Unemployed for up to 26 Weeks During the Three-Year Period	73	10.1	36
Unemployed for 27 or More Weeks During the Three-Year Period	27	48.7	64
Including a long-term spell	16	55.5	44
Not including a long-term spell	11	38.2	20

Source: Congressional Budget Office based on data from the 2001 panel of the Survey of Income and Program Participation.

Note: The estimates presented in this table are for people who were at least age 25 at the beginning of a three-year survey period that started in late 2000 or early 2001 and ended in late 2003.

utively). In all, they accounted for just over one-third of all weeks of unemployment experienced by people age 25 or older.

In sharp contrast, the remaining one-quarter of the unemployed people incurred a total of at least 27 weeks of unemployment during the entire period, accounting for almost two-thirds of all weeks of unemployment. Some of them had a number of relatively short spells that totaled up to 27 or more weeks. They accounted for 11 percent of all the people who had any unemployment and 20 percent of all weeks of unemployment.

Particularly striking is the group whose members had experienced at least one of the long-term unemployment spells described in the preceding section. They accounted for 16 percent of all the people who experienced any unemployment (about 5 million of the 32 million people). Counting all of their weeks of unemployment—that is, the weeks from the shorter spells, as well as the long-term spell—they were responsible for 44 percent of all weeks of unemployment recorded during the three-year period. The next section of the paper takes a closer look at the characteristics of those people.

Characteristics of the Long-Term Unemployed and Sources of Support

The preceding section showed that even though a small percentage of the adults who became unemployed during a recent period remained unemployed for more than half a year, they accounted for a large share of the number of weeks of work lost because of unemployment. This section briefly describes the people who experienced such long-term unemployment and their sources of support, including health insurance coverage, while they were not working. That information may be relevant to policymakers as they develop and consider proposals for identifying unemployed workers most likely to take a long time to find a job, helping them find new jobs faster, or providing them with additional support while they remain unemployed.

Characteristics

Unemployment rates are persistently higher among some groups than others. For example, the unemployment rate of adults who did not graduate from high school has long been more than double that of adults with a college degree. One group can have a higher unemployment rate than another group because its members become unemployed more frequently, remain unemployed longer, or both. Analysis of the data from the 2001 panel of the SIPP provides a way of identifying those differences.

Education. As a person's level of educational attainment increases, his or her likelihood of experiencing unemployment decreases. That negative relationship is clearly shown in the data. Among labor force participants who were age 25 or older in 2001, 37 percent of the individuals who had not graduated from high school were unemployed at some point, which was double the incidence of unemployment among college graduates (see Table 6).

Table 6.

Unemployment Experience of Labor Force Participants Age 25 and Over, by Characteristic, 2001 to 2003

Characteristic	Percentage of Labor Force Participants Who Experienced Any Unemployment	Percentage of Unemployed People With At Least One Long-Term Spell
Educational Attainment		
Less than high school	37	20
High school graduate	27	17
Some postsecondary	25	14
College graduate	18	15
Sex		
Male	24	17
Female	26	15
Marital Status		
Married male	20	16
Unmarried male	31	20
Married female	23	12
Unmarried female	31	19
Race/Ethnicity		
Non-Hispanic White	23	14
Non-Hispanic Black	33	21
Hispanic	31	19
All	25	16

Source: Congressional Budget Office based on data from the 2001 panel of the Survey of Income and Program Participation.

Note: The estimates presented in this table are for people who were at least age 25 at the beginning of a three-year survey period that started in late 2000 or early 2001 and ended in late 2003.

Moreover, among the people who experienced any unemployment, those with fewer years of education were much more likely to have experienced many weeks of unemployment, including a long-term spell.

Marital Status. Men and women who were married were less likely to have experienced any unemployment and, if they did, were less likely to have remained unemployed for a long time than were unmarried men and women. Only about one-in-five of the married men and women were ever unemployed during the three-year period of the survey, compared with almost one-in-three of the men and women who were not married. Moreover, married men and women who experienced any unemployment were less likely to have had a long-term spell than were unmarried men and women. Married women had an especially small likelihood of having a long-term unemployment spell.

Ethnicity. Black and Hispanic labor force participants were much more likely to have been unemployed than were non-Hispanic whites. Moreover, higher percentages of them had at least one long-term spell of unemployment.

The preceding differences among groups in their likelihood of experiencing any unemployment or at least one long-term unemployment spell result in some striking differences between the characteristics of the long-term unemployed and the characteristics of the overall adult labor force (see Table 7). In particular, although individuals who did not graduate from high school constituted only 10 percent of the adult labor force, they accounted for 16 percent of the people who experienced any unemployment and 20 percent of the people who had at least one long-term unemployment spell. In contrast, there were almost three times as many college graduates in the

Table 7.

Distribution of Labor Force Participants and Unemployed People Age 25 and Over, by Characteristic, 2001 to 2003

Characteristic	Percentage of Labor Force	Percentage of Participants With Any Unemployment	Percentage of Participants With At Least One Long-Term Spell
Educational Attainment			
Less than high school	10	16	20
High school graduate	30	33	34
Some postsecondary	31	31	27
College graduate	29	21	20
Sex			
Male	51	49	52
Female	49	51	48
Marital Status			
Married male	36	29	28
Unmarried male	15	19	24
Married female	31	29	22
Unmarried female	18	23	26
Race/Ethnicity			
Non-Hispanic White	74	67	59
Non-Hispanic Black	11	14	19
Hispanic	10	13	15
All	100	100	100

Source: Congressional Budget Office based on data from the 2001 panel of the Survey of Income and Program Participation.

Note: The estimates presented in this table are for people who were at least age 25 at the beginning of a three-year survey period that started in late 2000 or early 2001 and ended in late 2003. Race/ethnicity categories do not sum to 100 percent because of missing information and excluded categories.

labor force, yet they accounted for the same share of individuals with long-term unemployment.

Sources of Income

Most workers in the midst of a long-term spell of unemployment in the 2001–2003 period had other sources of income. In the fourth month of their spell, about half of the unemployed workers were living in families in which at least one other person worked and about half were receiving unemployment insurance benefits (see Table 8).[24] In addition, some of the unemployed workers who did not receive UI benefits in that month did receive benefits in other months. Separate tabulations (not shown in the table) indicate that more than 60 percent of the people who had long-term unemployment spells received UI benefits in at least one month of their spell; that group included almost three-quarters of the people who had been employed immediately before their unemployment spell began.

Much of the interest among policymakers in long-term unemployment has focused on unemployed workers who lost their jobs, rather than workers who voluntarily left them or recently entered (or reentered) the labor force. A previous CBO paper examined the role that UI benefits play in helping unemployed workers maintain their family income during periods without earnings and what happens to those workers and their families after their

24. The information in this section refers to income reported for the fourth full month following the month in which the long-term spell began.

Table 8.

Major Sources of Family Income During a Long-Term Unemployment Spell, 2001 to 2003

Source of Income	Percentage Receiving Income from Source	Average Monthly Amount (Dollars)	
		For Recipients of Source	For All Individuals
Earnings of Relatives	51	3,180	1,630
Unemployment Insurance Benefits	51	1,010	510
All Sources	91	2,910	2,640

Source: Congressional Budget Office based on data from the 2001 panel of the Survey of Income and Program Participation.

Note: The sample on which this table is based consists of about 850 unemployment spells that began during a three-year survey period that started in late 2000 or early 2001 and ended in late 2003. Each spell lasted at least 27 consecutive weeks. The respondents were age 25 or older at the beginning of the period. Income reported in this table is for the fourth full month following the month in which the spell began.

entitlement to UI benefits ends.[25] That paper did not include people who were in long-term unemployment spells who did not receive UI benefits.

As found in the previous paper, workers in the midst of a long-term spell of unemployment generally incurred a substantial reduction in their family income, compared with their income in the month before the spell began—both while they were unemployed and after they returned to work or left the labor force (see Figure 3). Following the end of their unemployment spell, those people who returned to work were, on average, earning roughly 20 percent less per month than they had been before the spell began.[26] Consequently, their average family income was about 10 percent lower. For people who had not returned to work, their monthly income was, of course, much lower.

Sources of Health Insurance Coverage

The majority of people under age 65 obtain their health insurance through either their own employer or their spouse's employer. For that reason, many policymakers have been concerned about unemployment jeopardizing health insurance coverage and have enacted legislation designed to help unemployed workers retain their coverage. The Consolidated Omnibus Budget Reconciliation Act of 1986 (COBRA) generally requires firms with 20 or more employees to continue offering coverage to certain terminated workers for a maximum of 18 months.[27] Firms may charge their former employees the full group premium for that coverage plus 2 percent for administrative costs. The relatively high cost of those premiums, compared with the smaller amount workers generally pay while employed, probably deters many unemployed workers from participating, however.[28]

The people who experienced long-term unemployment between 2001 and 2003 were less likely to have had health insurance coverage than were other adults even before their long-term spell began. In the month prior to the beginning of their spell, 30 percent of those people lacked health insurance—roughly double the rate for nonelderly adults in the overall population. Most of the people with insurance obtained it through an employer

25. Congressional Budget Office, *Family Income of Unemployment Insurance Recipients.*

26. The lower monthly earnings do not necessarily indicate a lower wage rate. Another explanation could be that the individuals may not have worked as many hours during the month after their spell ended.

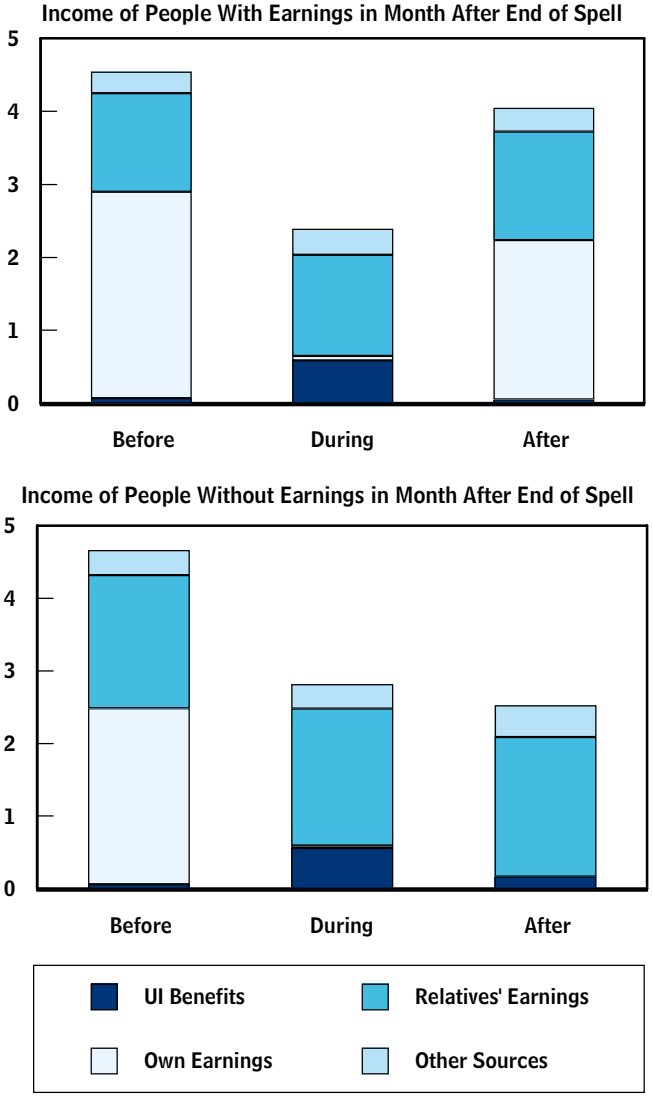
27. To qualify for coverage through COBRA, workers must have voluntarily or involuntarily terminated their employment for reasons other than gross misconduct. Additional information about eligibility and terms is provided by the Department of Labor at www.dol.gov/ebsa/faqs/faq_consumer_cobra.html.

28. A recent survey of employers estimated the average annual premiums for employer-sponsored health insurance in 2007. For family coverage, the premium is $12,106, with workers paying $3,281of that amount; for individual coverage, the premium is $4,479, with workers paying $694. See the Kaiser Family Foundation and Health Research and Educational Trust, *Employer Health Benefits 2007* (Menlo Park, Calif.: The Henry J. Kaiser Family Foundation, 2007).

Figure 3.

Average Monthly Family Income Before, During, and After a Long-Term Unemployment Spell, 2001 to 2003

(Thousands of dollars)



Source: Congressional Budget Office based on data from the 2001 panel of the Survey of Income and Program Participation.

Notes: This figure is based on reports by respondents who began long-term spells of unemployment during a three-year survey period that started in late 2000 or early 2001 and ended in late 2003 and who had earnings in the month before the spell began.

UI = unemployment insurance.

(see Table 9). The share of people without health insurance rose to about 40 percent during their spell of unemployment, as many no longer received coverage through their employer; increases in other coverage offset only a small portion of the lost employer-sponsored coverage. In the month after their spell ended, the percentage of people without insurance continued to be higher than it had been before their spell began.

Employer-sponsored health insurance was the main source of coverage for people in long-term unemployment spells who had been working immediately before they became unemployed (see Figure 4). Before becoming unemployed, about 25 percent of the people with jobs lacked health insurance.[29] In the midst of their unemployment, nearly 40 percent were uninsured, as the percentage with employer-sponsored insurance fell. One month after their unemployment spell ended, coverage increased for the people who went back to work but remained lower for those who were still jobless.

Strategies for Reducing Long-Term Unemployment

The analysis of what happened to adults who became unemployed in recent years suggests two main findings: First, the majority of adults who become unemployed either find a job or leave the labor force in less than a month; second, the small percentage of them who remain unemployed for long periods account for a large share of total unemployment.

Those findings present opportunities and challenges for policymakers seeking to help unemployed workers. If the newly unemployed workers who are going to have the most difficulty finding a job can be identified and provided with effective assistance early on, the potential for reducing the amount of time lost to unemployment is large. Success in such an undertaking could benefit the workers themselves as well as the overall economy. The experience of trying to provide such assistance to unemployment insurance recipients, however, illustrates the difficulties involved.

The various strategies undertaken or proposed to reduce the time that UI recipients take to find their next job

29. About 40 percent of the people who had not been working immediately before becoming unemployed lacked health insurance.

Table 9.

Sources of Health Insurance Coverage Before, During, and After a Long-Term Spell of Unemployment, 2001 to 2003

(Percent)

Source of Coverage	Month Before Spell Began	During Spell	Month After Spell Ended
Employer	54	40	42
Other Coverage	15	18	20
Uninsured	30	41	37

Source: Congressional Budget Office based on data from the 2001 panel of the Survey of Income and Program Participation.

Note: The sample on which this table is based consists of about 850 unemployment spells that began during a three-year survey period that started in late 2000 or early 2001 and ended in late 2003. Each spell lasted at least 27 consecutive weeks. The respondents were age 25 or older at the beginning of the period. Health insurance coverage during spell is for the fourth full month following the month in which the spell began. In a few cases, the health insurance coverage was not known; those spells are not included in the percentage distributions in this table.

mainly involve offsetting incentives to prolong unemployment that are inherent in the UI program itself and providing access to information about job vacancies, job-search assistance, counseling, and other employment-related services. (The federal government also funds training and education programs that can help workers acquire new skills, thereby increasing participants' employment opportunities and earnings.[30] Although those programs can reduce the likelihood that their participants will incur future spells of long-term unemployment, that is usually not their immediate purpose.)

30. Those programs include training authorized by the Workforce Investment Act of 1998 and educational assistance through Pell grants and subsidized student loans. For an examination of federally funded training programs, see Christopher J. O'Leary, Robert A. Straits, and Stephen A. Wandner, eds., *Job Training Policy in the United States* (Kalamazoo, Mich.: W. E. Upjohn Institute for Employment Research, 2004). The impact of community college schooling on the subsequent earnings of displaced workers is examined by Louis Jacobson, Robert LaLonde, and Daniel G. Sullivan in "Estimating the Returns to Community College Schooling for Displaced Workers," *Journal of Econometrics*, vol. 125 (2005), pp. 271–304.

Unemployment Insurance and Related Programs

The UI program is by far the largest public program offering assistance to unemployed workers. Authorized by the Social Security Act of 1935, the program is intended to ease labor-market transitions by providing temporary income support for workers who lose their job and are looking for work. Because the amount of benefits provided by the program automatically increases in periods of high unemployment, the UI program also can help to dampen cyclical fluctuations in aggregate income.

The federal government pays to administer the program, funds benefits for certain groups of unemployed workers, and provides general guidelines and some restrictions on how states may operate their UI programs. Each state sets eligibility requirements for UI benefits, determines the duration and amount of regular benefits, and specifies the payroll taxes that fund those programs. The outlays and revenues of the state programs are recorded in the federal budget. CBO estimates that outlays for UI benefits will total about $35 billion in fiscal year 2008. Nearly all of that amount will go to unemployed workers for benefits under the regular program, which generally limits the duration of benefits to no more than 26 weeks over a one-year period.[31] A second level of UI benefits, jointly funded by the federal and state governments, is available in states with unemployment rates that exceed certain thresholds; CBO estimates that few workers will receive benefits through that program in 2008.

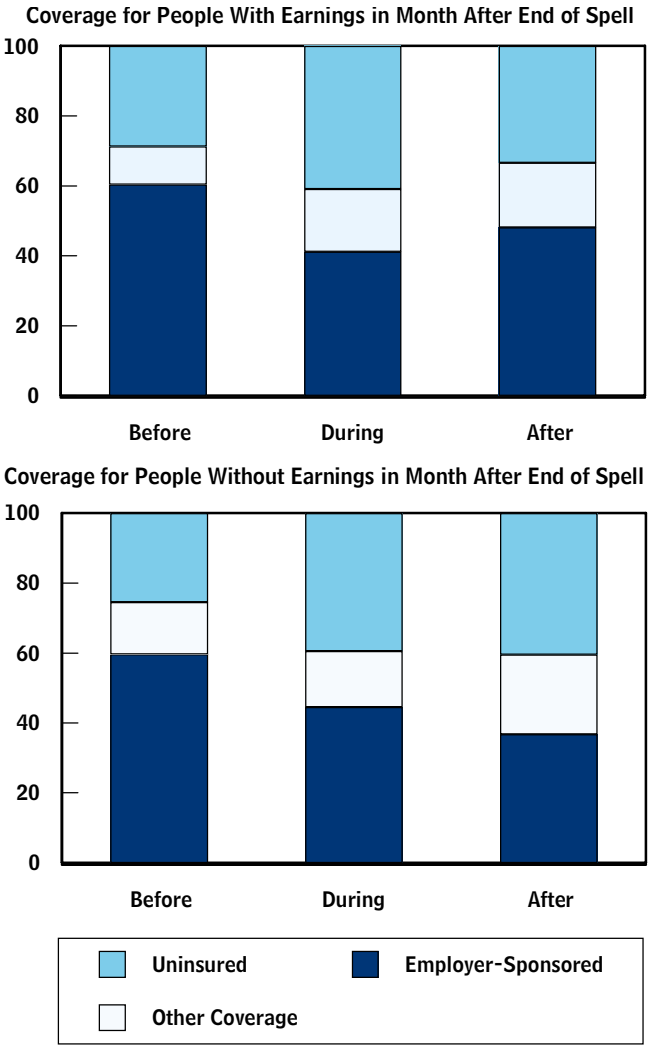
Although the UI program provides partial earnings replacement to unemployed workers while they are looking for new jobs or awaiting recall from a temporary layoff, it is not designed to avert long-term unemployment or to help people after they are no longer eligible for benefits. In recent years, more than one-third of the unemployed workers who received UI benefits exhausted their entitlement to those benefits. (UI benefits are not available to unemployed individuals who are new entrants to the labor force or to previously employed workers who

31. CBO estimates that about 8 million workers will begin receiving regular UI benefits in 2008. On average, they will receive $287 per week for 15.4 weeks.

Figure 4.

Health Insurance Coverage Before, During, and After a Long-Term Unemployment Spell, 2001 to 2003

(Percent)



Source: Congressional Budget Office based on data from the 2001 panel of the Survey of Income and Program Participation.

Note: This figure is based on reports by respondents who began long-term spells of unemployment during a three-year survey period that started in late 2000 or early 2001 and ended in late 2003 and who had earnings in the month before the spell began.

did not have a specified amount of employment and earnings in a recent year.[32])

The availability of cash benefits while unemployed can increase a recipient's duration of unemployment, although the magnitude of that effect is uncertain.[33] To ascertain whether UI recipients are actually seeking work—and to aid them in their job search—recipients (other than those who have been temporarily laid off) are generally required to register with public employment offices and to go on job interviews. Those offices provide free listings of job openings and job seekers. In addition, the offices may offer career counseling, job-search assistance, and referrals to job training and other employment-related services. Job seekers need not be UI recipients (or even have previously been employed) to use those services; the majority of participants are not.

A small fraction of workers who lose their job are also eligible for benefits under the Trade Adjustment Assistance (TAA) program. That program is designed to help workers who lose their job as a result of increased imports or a shift in production out of the United States. Cash benefits are available to eligible workers who receive training, but only after they have exhausted their UI benefits. Legislation enacted in 2002 expanded eligibility for the program and provided displaced workers with a refundable tax credit for a portion of their health insurance premiums. (The 2002 amendments also provided a subsidy, described below, to eligible workers who accept jobs that pay less than the ones that they lost.)

Additional Strategies

Persistently large numbers of long-term unemployed workers—especially UI recipients who exhaust their ben-

32. Under each state's UI laws, eligibility for benefits depends on a worker's employment experience in a preceding "base period," which usually consists of four consecutive calendar quarters. To qualify for benefits, claimants must have earned a specified amount of wages, worked a certain number of weeks, or met some combination of earnings and employment requirements during the base period. Additional requirements concerning how workers became unemployed and their availability to work also apply.

33. See, for example, Stephen A. Woodbury and Murray A. Rubin, "The Duration of Benefits," and Paul T. Decker, "Work Incentives and Disincentives," in Christopher J. O'Leary and Stephen A. Wandner, eds., *Unemployment Insurance in the United States: Analysis of Policy Issues* (Kalamazoo, Mich.: W. E. Upjohn Institute for Employment Research, 1997), pp. 211–320.

efits—have helped to spur the search for additional strategies to reduce long-term unemployment.

Worker Profiling and Reemployment Services. Legislation enacted in 1993 requires states to screen new UI claimants, identify the ones most likely to exhaust their benefits, and refer them to reemployment services. If those profiled UI recipients do not participate in the services, they can be disqualified for benefits. The federal Department of Labor assisted states in developing statistical tools used to identify which claimants were most likely to exhaust their benefits.

One widely cited study of profiling, as it was implemented in Kentucky, found a reduction in UI receipt resulting from the participation requirement itself.[34] That is, some people who were called in to participate in reemployment services appear to have decided not to continue receiving UI benefits rather than participate. But whether profiling generally has been successful in providing services that have led to participants finding new jobs sooner than they otherwise would have is not yet known.[35]

Reemployment Bonuses. A second approach to reducing long-term unemployment that has received considerable attention is to provide financial inducements for newly unemployed workers to search for work more intensively or to accept job offers that they might otherwise have rejected. That approach was tested in several experiments conducted in the 1980s and 1990s in which UI recipients were provided with bonuses if they found new jobs within a specified period. Several evaluations found that such financial inducements did result in shorter durations of UI receipt. They also found that when those bonuses were combined with job-search assistance, their impact was larger.[36] A subsequent analysis suggested that targeting eligibility for reemployment bonuses toward UI claimants with an above-average likelihood of exhausting their entitlement to UI benefits would further add to their effectiveness.[37]

Wage Insurance. A third approach that has been available on a very limited basis is known as "wage insurance." Wage insurance subsidizes a fraction of the difference between the wage a worker earns in a new job and the wage he or she was earning in the old job for a limited time.

The premise on which wage insurance proposals are based is that many of the workers who lose their job, especially workers who have been with the same employer for many years, are unlikely to find a new job that pays as well as the one that they lost. (Estimates of earnings losses discussed earlier in this paper support that premise.) Even though unemployment insurance provides workers with temporary income support while they search for a new job, it does not compensate them for the possibly permanent reduction in their earnings that resulted from the loss of their previous job. Wage insurance proposals aim to induce those workers to accept lower-paying jobs—which some workers might have been reluctant to take, perhaps in the hope that they would be able to get their old job back or that they would eventually be able to find a job at a similar pay level—as well as to compensate them for their loss in earnings.

One wage insurance proposal would provide eligible displaced workers who found a lower-paying job within 26 weeks of displacement with half of the difference between the weekly earnings in their new and old jobs for up to two years.[38] Unlike the experiments with bonuses, in

34. Dan A. Black and others, "Is the Threat of Reemployment Services More Effective than the Services Themselves? Evidence from Random Assignment in the UI System," *American Economic Review*, vol. 93, no. 4 (September 2003), pp.1313–1327.

35. Government Accountability Office, *Unemployment Insurance: More Guidance and Evaluation of Worker-Profiling Initiative Could Help Improve State Efforts*, GAO-07-680 (June 2007).

36. For a summary of the experiments and their results, see Bruce D. Meyer, "Lessons from the U.S. Unemployment Insurance Experiments," *Journal of Economic Literature*, vol. 33, no. 1 (March 1995), pp. 91–131. For a recent review of other techniques for reducing the duration of UI receipt, see Christopher J. O'Leary, "State UI Job Search Rules and Reemployment Services," *Monthly Labor Review* (June 2006), pp. 27–37.

37. See Christopher J. O'Leary, Paul T. Decker, and Stephen A. Wandner, "Cost-Effectiveness of Targeted Reemployment Bonuses," *Journal of Human Resources*, vol. 40, no. 1 (Winter 2005), pp. 270–279.

38. See Lori G. Kletzer and Robert E. Litan, *A Prescription to Relieve Worker Anxiety,* International Economics Policy Brief 01-02 (Washington, D.C.: Institute for International Economics, 2001). See also a recent proposal by Jeffrey R. Kling to substantially restructure the unemployment insurance system in *Fundamental Restructuring of Unemployment Insurance: Wage-Loss Insurance and Temporary Earnings Replacement Accounts,* Hamilton Project Discussion Paper 2006-05 (Washington, D.C.: Brookings Institution, September 2006).

which all unemployed workers who took a new job within a specified period would receive the money, job seekers under the wage insurance proposal would only qualify for subsidies if their new job paid less than their old one. In that way, the subsidies would, in effect, compensate the unemployed workers for a portion of the financial loss they incurred when their old jobs were abolished.

A version of wage insurance was tested in five cities in Canada in the mid-1990s. In that experiment, unemployment insurance claimants who found a new lower-paying full-time job within six months could receive an earnings supplement of 75 percent of their earnings loss (up to a cap) for up to two years. Researchers found that the earnings supplement appeared to have little impact on how quickly participants found new jobs. Its major effect was to partially compensate workers for the wage losses that they incurred.[39]

An amendment to the Trade Adjustment Assistance program enacted in 2002 offers a version of that plan for certain workers age 50 or older who are certified as eligible for TAA benefits. If those workers accept a new job that pays less than the one that they lost, the federal government will pay them half of the difference in wages for up to two years.[40] Thus far, few people have taken the subsidy and no information is yet available about its effectiveness.[41]

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39. Howard Bloom and others, "Testing a Financial Incentive to Promote Re-employment Among Displaced Workers: The Canadian Earnings Supplement Project (ESP)," *Journal of Policy Analysis and Management*, vol. 20, no. 3 (2001), pp. 505–523.

40. Eligible workers age 50 or older who obtain new full-time employment at wages of less than $50,000 within 26 weeks of their separation may receive half of the difference between the old and new wages (up to $10,000 paid over a period of up to two years).

41. Government Accountability Office, *Trade Adjustment Assistance: Changes to Funding Allocation and Eligibility Requirements Could Enhance States' Ability to Provide Benefits and Services,* GAO-07-701 (May 2007).

APPENDIX

A

Data and Methodology

Most of the estimates reported in this paper are based on data from the 2001 panel of the Survey of Income and Program Participation (SIPP). SIPP is a longitudinal survey of the population of the United States that has been conducted by the Bureau of the Census since the mid-1980s. Each panel comprises a nationally representative sample of households selected by the bureau and interviewed every four months for up to four years.

The 2001 panel of the SIPP is the most recently completed panel available.[1] That survey provided information about respondents' activities during a period that began in one of the last three months of 2000 or in January 2001; the final month was 36 months later (that is, in September, October, November, or December 2003). Key findings were replicated using data from an earlier panel (see Appendix B).

Responses to detailed questions about when each person worked or looked for work enabled census staff to determine each person's labor force status (employed, unemployed, or not in the labor force) week by week. The Congressional Budget Office (CBO) used those data to construct a string of weekly observations for each person who was age 16 or older when first interviewed. Demographic characteristics of respondents—such as their age, educational attainment, and marital status—were based on information provided in the initial interview. Census-provided longitudinal weights were applied to the data so that the respondents represented the overall U.S. civilian noninstitutionalized population.[2]

The analysis focused on respondents who were age 25 or older at the start of the survey. Of the approximately 23,000 respondents in that age group who were in the labor force, 5,600 experienced at least one spell of unemployment. In total, about 10,800 spells of unemployment were identified. That is, about one-quarter of the labor force participants during the 2001–2003 period experienced any unemployment; those who were unemployed had an average of almost two spells.[3] Each spell was categorized by its length (number of consecutive weeks of unemployment), how it began (whether the respondent was employed or not in the labor force in the week immediately before the spell), and how it ended (whether the respondent was employed or not in the labor force in the week immediately after the spell).

For most of the analysis, the relevant unit is the spell, not the person. Thus, a person with two unemployment spells will show up twice in the data. The contribution of each new spell to the total number of person-weeks (a unit of one week's activity by one person) of unemployment during the three-year observation period equals the length of that spell. (Because about 6 percent of the spells were still in progress in the final week of the three-year period, the length of those spells is understated.)

Limitations

The SIPP database and CBO's analysis of it have several limitations, none of which are likely to alter the qualitative findings. Two limitations may be particularly important. First, the distinction between being unemployed and not being in the labor force is not always sharp. Some

1. The subsequent SIPP panel was begun in 2004. Thus far, the Census Bureau has released detailed data from the first four waves of interviews. (Each wave covers four months.) See www.bls.census.gov/sipp_ftp.html#sipp04.

2. Almost half of the respondents who provided information in the initial interview did not provide data in at least one subsequent period and therefore were excluded from CBO's analysis. The Census Bureau's longitudinal weights are intended to adjust for attrition.

3. About 53 percent of those who were unemployed had one spell of unemployment, 23 percent had two spells, 10 percent had three spells, and most of the others had four, five, or six spells.

weeks in which respondents were not actively seeking a job might have been erroneously reported as weeks of unemployment, and some weeks in which respondents were looking for work might have been reported as weeks not in the labor force. Such errors could result in longer reported spells for some respondents and shorter spells for others.

Second, changes in employment status are not always reported correctly. Some respondents, rather than accurately reporting the specific week in which a change occurred, evidently tell interviewers that they had no change in employment status during an entire four-month reference period and then report being in a different employment status at the beginning of the next four-month period. That "seam" problem is evident in the relatively large numbers of unemployment spells reported to last exactly four or eight months.

Comparison with Estimates Based on the Current Population Survey

As discussed in the main text, CBO estimates that workers who were age 25 or older at the start of the 2001 SIPP panel experienced about 62 million spells of unemployment over a three-year period (based on about 10,800 spells among respondents to the survey). That number of spells over a three-year period means that, on average, about 1.7 million people age 25 or older became unemployed each month, according to SIPP data. Two estimates derived from the monthly Current Population Survey (or CPS, a survey of about 60,000 households conducted by the Census Bureau for the Bureau of Labor Statistics) are consistent with at least that large a number.

The first estimate is of the number of people who had been unemployed for less than five weeks. The Bureau of Labor Statistics (BLS) reported that during the 2001–2003 period, an average of 1.7 million people age 25 or older had been unemployed for less than five weeks. Because that time frame roughly approximates one month, the measure provides an estimate of the average number of people who became unemployed each month. However, that CPS-based estimate would not include some very short-term spells that began and ended between the monthly interviews. Had those spells been included, the CPS would have indicated even more unemployment spells than were identified in the SIPP.

A separate measure derived from the monthly CPS, though not regularly published, provides a further indication that the large number of unemployment spells estimated from the SIPP is credible. Because about three-quarters of the households in the CPS sample in one month are in the sample again in the following month, it is possible to link responses in pairs of successive months to produce "gross flow" estimates. In principle, then, the CPS can be used to directly estimate monthly flows into and out of unemployment. In practice, however, a number of difficulties have prevented regular publication of those estimates. A particular concern has been that the net changes in employment and unemployment from one month to the next derived from the gross-flow data often do not match the net changes from the full CPS sample.[4]

Based on unpublished gross-flow data that were adjusted by BLS staff to be more consistent with the full CPS sample, a recent study estimated that in 2003 an average of 4.0 million people age 16 or older became unemployed each month, with about half of the inflows from employment and the rest from outside the labor force.[5] Somewhat fewer people became unemployed in the two preceding years. The estimates provided in that study suggest that over the entire 2001–2003 period, roughly 130 million spells of unemployment occurred among people age 16 or older. That estimate is about 40 percent larger than the 92 million spells CBO estimates on the basis of the SIPP data (30 million spells for labor force participants who were ages 16 to 24 at the beginning of the panel and 62 million spells for participants age 25 or older). One reason that the gross-flow estimates are higher may be the tendency of classification errors in monthly series to magnify gross-flow estimates.

4. BLS staff and other researchers have been working on improving the gross-flow data. See, for example, Harley J. Frazis and others, "Estimating Gross Flows Consistent with Stocks in the CPS," *Monthly Labor Review* (September 2005), pp. 3–9. In 1979, a national commission recommended that priority be given to improving the gross-flow data so that they could be published on a regular basis; see Final Report of the National Commission on Employment and Unemployment Statistics, *Counting the Labor Force* (1979), p. 5.

5. Randy Ilg, "Analyzing CPS Data Using Gross Flows," *Monthly Labor Review* (September 2005), pp. 10–18.

APPENDIX

B

Long-Term Unemployment in the Late 1990s

The estimates of the concentration of unemployment that were presented in the main body of this report were based on data from the 2001 panel of the Census Bureau's Survey of Income and Program Participation (SIPP), which covers the 2001–2003 period. In interpreting those estimates, one issue is whether the concentration of unemployment among a small group of long-term unemployed workers was the result of circumstances unique to that period.

To examine the robustness of the estimates from the 2001 panel, the Congressional Budget Office compared the key findings with a similar analysis of data from the previous panel of the SIPP, which began in 1996 and ended three years later. During that period, the unemployment rate declined from about 5.5 percent (in early 1996) to 4.4 percent. By comparison, the respondents in the 2001 panel became unemployed during a period in which the unemployment rate was rising—from about 4.0 percent at the beginning of the period to nearly 6.0 percent in late 2003. The findings from the analyses reflect those differences: About 10 percent fewer adult workers experienced any unemployment in the earlier period (22 percent versus 25 percent), the average duration of the unemployment spells was shorter, and a much smaller percentage of spells lasted at least 27 weeks (see Table B-1).

Nonetheless, the qualitative results concerning the concentration of unemployment are similar for both periods, which shows that the main findings reported in this paper were not unique to the 2001–2003 period. In the earlier period (like in the later period), the small percentage of unemployment spells that lasted at least 27 weeks accounted for a large percentage of all of the weeks of unemployment. Only 4 percent of the spells that began in 1996, 1997, and 1998 were long term, yet they accounted for almost one-quarter of total unemployment. Moreover, taking into account the additional unemployment some of those workers experienced from other spells, the workers with long-term spells incurred about one-third of all unemployment.

Table B-1.

Comparison of Estimates of Unemployment Concentration Based on the 1996 and 2001 Panels of the Survey of Income and Program Participation

	1996 Panel	2001 Panel
Percentage of Workers Age 25 and Older Who Experienced Any Unemployment	22	25
Average Duration of All Spells (Weeks)	7.4	9.3
Workers Who Experienced at Least One Spell of Unemployment That Lasted at Least 27 Weeks, as a Percentage of Workers With Any Unemployment	11	16
Percentage of Unemployment Spells That Lasted at Least 27 Weeks	4	8
Percentage of All Weeks of Unemployment Accounted for by Spells That Lasted at Least 27 Weeks	23	37
Percentage of All Weeks of Unemployment Accounted for by Workers Who Had at Least One Spell of Unemployment That Lasted at Least 27 Weeks	34	44

Source: Congressional Budget Office based on data from the 1996 and 2001 panels of the Survey of Income and Program Participation.

Note: The estimates presented in this table are for people who were at least age 25 at the beginning of the survey period. The sample from the 1996 panel consists of people who provided sufficient information for nine consecutive four-month waves beginning in early 1996. The sample from the 2001 panel consists of respondents to nine consecutive four-month waves beginning in late 2000 or early 2001.