

**NEW RESEARCH ON
UNEMPLOYMENT BENEFIT RECIPIENTS**

HEARING
BEFORE THE
SUBCOMMITTEE ON HUMAN RESOURCES
OF THE
COMMITTEE ON WAYS AND MEANS
U.S. HOUSE OF REPRESENTATIVES
ONE HUNDRED NINTH CONGRESS

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**NEW RESEARCH ON
UNEMPLOYMENT BENEFIT RECIPIENTS**

WEDNESDAY, MARCH 15, 2006

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON WAYS AND MEANS,
SUBCOMMITTEE ON HUMAN RESOURCES,
Washington, DC.

The Subcommittee met, pursuant to notice, at 10:34 a.m., in room B-318, Rayburn House Office Building, Hon. Wally Herger (Chairman of the Subcommittee) presiding.

[The advisory and revised advisory announcing the hearing follow:]

ADVISORY

FROM THE COMMITTEE ON WAYS AND MEANS

SUBCOMMITTEE ON HUMAN RESOURCES

FOR IMMEDIATE RELEASE
March 15, 2006
No. HR-6

CONTACT: (202) 225-1025

Herger Announces Hearing Regarding New Research on Unemployment Benefit Recipients

Congressman Wally Herger (R-CA), Chairman, Subcommittee on Human Resources of the Committee on Ways and Means, today announced that the Subcommittee will hold a hearing regarding new research on unemployment benefit recipients. **The hearing will take place on Wednesday, March 15, 2006, in room B-318 Rayburn House Office Building, beginning at 2:00 p.m.**

Oral testimony at this hearing will be from the U.S. Government Accountability Office (GAO). However, any individual or organization not scheduled for an oral appearance may submit a written statement for consideration by the Subcommittee and for inclusion in the printed record of the hearing.

BACKGROUND:

Unemployment Compensation (UC, sometimes also referred to as Unemployment Insurance or UI) is a State-Federal program under which benefits are paid to eligible laid-off workers who have a history of attachment to the workforce and have become unemployed through no fault of their own. Unemployment benefits are meant to provide partial, temporary wage replacement while the laid-off worker looks for a new job or awaits recall to his or her former position. United States Department of Labor (DOL) information indicates over \$33 billion in unemployment benefits was paid to nearly 8 million eligible workers in 2005.

Employment-related information collected by the DOL and the Bureau of Labor Statistics (BLS) include data on national and State unemployment rates, initial claims for unemployment benefits, average benefit amounts, and unemployment trust fund balances, among other program data. Despite the operation of UC dating back to the 1930s, however, far less information is available regarding the characteristics of individuals who receive UC benefits. A March 2005 GAO report, *Unemployment Insurance: Information on Benefit Receipt*, provided some information about individuals who receive unemployment benefits. Subsequently, the GAO completed additional analysis of data from the BLS National Longitudinal Survey of Youth, concentrating on factors associated with unemployment benefit receipt. The Subcommittee will review the GAO's latest findings about unemployment benefit recipients, which will be released at the hearing.

In announcing the hearing, Chairman Herger stated, "Although unemployment benefits have been paid since the Great Depression, surprisingly little is known about who collects benefits, how often, and for how long. This hearing will provide important data that will inform efforts to better serve all workers—especially those who have been laid off—as well as protect taxpayers and strengthen the economy for the long run."

FOCUS OF THE HEARING:

The hearing will focus on factors associated with unemployment benefit receipt, and specifically data provided in a new GAO report on this topic.

DETAILS FOR SUBMISSION OF WRITTEN COMMENTS:

Please Note: Any person(s) and/or organization(s) wishing to submit for the hearing record must follow the appropriate link on the hearing page of the Committee website and complete the informational forms. From the Committee homepage, <http://waysandmeans.house.gov>, select "109th Congress" from the menu entitled, "Hearing Archives" (<http://waysandmeans.house.gov/Hearings.asp?congress=17>). Select the hearing for which you would like to submit, and click on the link entitled, "Click here to provide a submission for the record." Once you have followed the on-line instructions, completing all informational forms and clicking "submit" on the final page, an email will be sent to the address which you supply confirming your interest in providing a submission for the record. You **MUST REPLY** to the email and **ATTACH** your submission as a Word or WordPerfect document, in compliance with the formatting requirements listed below, by close of business Wednesday, March 29, 2006. **Finally**, please note that due to the change in House mail policy, the U.S. Capitol Police will refuse sealed-package deliveries to all House Office Buildings. For questions, or if you encounter technical problems, please call (202) 225-1721.

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The Committee relies on electronic submissions for printing the official hearing record. As always, submissions will be included in the record according to the discretion of the Committee. The Committee will not alter the content of your submission, but we reserve the right to format it according to our guidelines. Any submission provided to the Committee by a witness, any supplementary materials submitted for the printed record, and any written comments in response to a request for written comments must conform to the guidelines listed below. Any submission or supplementary item not in compliance with these guidelines will not be printed, but will be maintained in the Committee files for review and use by the Committee.

1. All submissions and supplementary materials must be provided in Word or WordPerfect format and **MUST NOT** exceed a total of 10 pages, including attachments. Witnesses and submitters are advised that the Committee relies on electronic submissions for printing the official hearing record.
2. Copies of whole documents submitted as exhibit material will not be accepted for printing. Instead, exhibit material should be referenced and quoted or paraphrased. All exhibit material not meeting these specifications will be maintained in the Committee files for review and use by the Committee.
3. All submissions must include a list of all clients, persons, and/or organizations on whose behalf the witness appears. A supplemental sheet must accompany each submission listing the name, company, address, telephone and fax numbers of each witness.

Note: All Committee advisories and news releases are available on the World Wide Web at <http://waysandmeans.house.gov>.

The Committee seeks to make its facilities accessible to persons with disabilities. If you are in need of special accommodations, please call 202-225-1721 or 202-226-3411 TTD/TTY in advance of the event (four business days notice is requested). Questions with regard to special accommodation needs in general (including availability of Committee materials in alternative formats) may be directed to the Committee as noted above.



* * * CHANGE IN TIME * * *

ADVISORY

FROM THE COMMITTEE ON WAYS AND MEANS

SUBCOMMITTEE ON HUMAN RESOURCES

FOR IMMEDIATE RELEASE
March 13, 2006
No. HR-6 Revised

CONTACT: (202) 225-1025

Change in Time for Hearing Regarding New Research on Unemployment Benefit Recipients

Congressman Wally Herger (R-CA), Chairman, Subcommittee on Human Resources of the Committee on Ways and Means, today announced that the Subcommittee hearing regarding new research on unemployment benefit recipients, previously scheduled for 2:00 p.m. on Wednesday, March 15, 2006, in room B-318 Rayburn House Office Building, **will now be held at 10:30 a.m.**

All other details for the hearing remain the same. (See Human Resources Advisory No. HR-6, dated March 8, 2006).

Chairman HERGER. Good morning and welcome to today's hearing, where we will review findings in a new report by the U.S. Government Accountability Office, or the GAO. We welcome Dr. Sigurd Nilsen of the GAO, who will describe data uncovered about the individuals who collect unemployment benefits. As we all know, unemployment benefits provide assistance to workers laid off through no fault of their own. This is an important Government function, and this Committee has a long track record of providing needed assistance to workers, and thus, the U.S. economy.

In recent years this Committee has acted to provide needed emergency unemployment assistance. For example, following the 2001 recession and terrorist attacks, we created a special temporary extension benefits program that provided more than \$20 billion in Federal benefits to 8 million long-term unemployed workers. We also provided States with an unprecedented 8 billion in Federal funds to assist unemployed workers, which prevented tax hikes in 30 States, according to the GAO. Last fall, in the wake of Hurricane Katrina, we provided the Gulf States with 500 million to assist those laid off following that storm. Just 2 weeks ago, Congress acted to extend disaster unemployment benefits for another 3 months for those displaced by Hurricane Katrina and Rita.

Today's hearing takes a step back and examines unemployment benefits provided during the past generation to a broad swath of labor force. Many of the findings are surprising and will provide important background for future efforts to provide better services to unemployed workers. Perhaps the first thing we should find surprising is that we are learning about much of this data for the first time. Unemployment assistance has operated in every State since

the thirties, and in all that time, too little has been known about who actually collects unemployment benefits. That is why I asked GAO to assemble data about who collects unemployment benefits, for how long and why. Here are some of the key findings. First, laid-off workers who collect unemployment benefits are unemployed more than twice as long as their laid-off peers who do not collect unemployment benefits. Second, the strongest predictor of whether a laid-off worker will collect unemployment benefits is whether they collected those benefits in the past. Third, more eligible unemployed workers turn down unemployment benefits than collect them. Finally, we know very little about the effectiveness of job search, training and other reemployment services available to assist unemployment beneficiaries get back on the job.

Today we will explore this rich data set provided by the GAO, and pose a number of questions. This data is important because it offers a road map for designing a more pro-work and pro-worker reemployment system, and that is ultimately what unemployment benefits should be about, helping laid-off workers return to good jobs.

I want to thank Dr. Nilsen and his staff for their excellent work on this report, and I look forward to your testimony.

Without objection, each Member will have the opportunity to submit a written statement and have it included in the record at this point. Mr. McDermott, would you care to make a statement?

Mr. MCDERMOTT. Thank you, Mr. Chairman. You and I have served together and worked together for a long time, and I have no doubt about your character or what is in your thoughts. After listening to those opening remarks, I do have to express some serious doubts about the content of the agenda for this Committee, because it is really a question about whether we are going to show up and work for the working people of this country, all of the American people, especially those who have fallen on hard times through no fault of their own.

We let down every living American in the Gulf Coast with our response to Katrina and Rita. That is a fact. There is no doubt about it. We let them down the first day, the first week, the first month, and the first 6 months, and we are still letting them down. We have hotel evictions going on one hand, and empty FEMA trailers on another. We have Americans wondering if they will ever return to the place that they call home. We went down a couple weeks ago and saw the empty trailers lined up in nice, neat shiny rows, and not doing much except sitting there, sort of like the Congress. Despite my pleas, and the please of Mr. Rangel and Ms. Pelosi, the Republican leadership has decided months ago to watch it on television. When the Republicans could not deny it any longer, the response was pure PR, not good public policy. One political appointee was hung out to dry, Mr. Brown, in the middle of a flood. It seems a little bit ironic to hang out to dry in a flood.

The Americans living on the Gulf Coast wonder whether the Federal Government will show up and not just show off. Americans live in vulnerable cities across the country, including my Earthquake prone city of Seattle, and they stopped wondering, and now they are really worrying about what they are going to get from this country. If you cannot get it right in New Orleans, when you have

6 or 7 or 8 days warning, what on Earth will the bunch do when the next Earthquake strikes in Seattle, or San Francisco, or when the next hurricane hits the Gulf Coast in about 90 days?

Here we are today. Republicans claim they want to improve the unemployment insurance system. I hope that is valid. I hope they really mean that. We should all respect and value the work of the GAO, and I look forward to hearing the details of their report today. Let's try something new, yet old. Let's tell it like it is. We already have a wealth of information to guide us in this matter. For instance, we know from the most current data that only 35 percent of unemployed Americans actually receive unemployment benefits, only 35 percent. In other words, two out of three. Americans who are unemployed don't get a nickel or a dime or even a penny. They get nothing. Why? Well, the GAO has looked at this in the past, and the answer might be for the simple reason many Americans are shut out of getting unemployment benefits because the system is designed that way.

For example, some States do not count a laid-off worker's most recent wages when determining eligibility. Some States prevent an individual from getting any benefit when they try to get a new part-time job to replace the one that they have lost, and others prohibit a person from receiving benefits if they voluntarily quit a job to care for a sick child. These are systemic problems that we really need to address. My colleagues and I have suggested reforms. When they come from the Democratic side, they address an American problem, but the Republicans just refuse to join in on that kind of reform of the system. We also know these benefits are a lifeline, nothing more. Anybody who asserts that this is something people get on and stay because they don't have anything better to do, simply is not paying attention. On average, unemployment benefits replace less than one-half of workers' prior wages. At best, you are doubled over financially, but you are not on your knees.

In the best case, modest benefits help a family survive with the bare essentials while they get back on their feet, but in some States the benefits are too low to provide even a minimum level of assistance. That is true in the States most affected by Hurricane Katrina, Louisiana, Mississippi and Alabama. In these States the average unemployment benefit is less than \$200 a week. For a family of four, that is not even half the poverty level. The Democrats proposed a temporary increase in unemployment benefits for the disaster victims who lost their jobs and their homes and their belongings. Again, this Committee was quiet. Last but not least, we know that Americans hit by hurricanes are being hit by Federal funding cuts that will curtail access to reemployment services. People who lost their jobs, their homes and their belongings now can lose their hope as well, because the President's proposed budget continues the downward spiral. If Congress enacts the President's 2007 budget request, unemployment services will be cut again. These cuts will total \$2.2 billion since 2002.

Mr. Chairman, as I said, I don't question you. I do question the majority's commitment to the American people in a time of crisis. Americans who saw their jobs destroyed by a national disaster of ferocious winds deserve more than to see their recovery destroyed by a manmade political disaster of dead calm in the Congress. We

have the power to do good. It is our choice, Mr. Chairman. I urge you to make the Committee a force for good that no storm can impair, and with that, I thank you.

Chairman HERGER. I thank the gentleman, and our goal here in this Committee is certainly to help assist that are in need of it. I might, just in a short comment, brief comment: on October 2005 we did provide, through our Committee and through the Congress, \$500 million in Federal funds to help States pay regular and extended unemployment. Also, Congress has provided about \$100 billion for Katrina relief. Certainly there are some major problems there that we need to work and try to crack both for those that have been so devastated, and also to prepare ourselves, God forbid, for another great catastrophe should it happen. With that, before we move on to our testimony today, I want to remind our witness to limit our oral statements to 5 minutes. However, without objection, all the written testimony will be made a part of the permanent record. Our witness this morning is Dr. Sigurd Nilsen, Director of Education, Workforce and Income Security Issues at the U.S. Government Accountability Office. Dr. Nilsen, it is good to see you again. Please proceed with your testimony.

STATEMENT OF SIGURD R. NILSEN, Ph.D., DIRECTOR, EDUCATION, WORKFORCE AND INCOME SECURITY, UNITED STATES GOVERNMENT ACCOUNTABILITY OFFICE

Dr. NILSEN. Thank you, Chairman Herger, other Members of the Subcommittee. Thank you for the opportunity to discuss GAO's recent work on the Unemployment Insurance (UI) program. Today, I will discuss the results of three recent reports conducted at the request of Chairman Herger to assess first, the extent to which individual workers ever receive UI benefits, including the extent to which they receive benefits multiple times; Next, the types of workers who are more likely to receive UI benefits; and last, what is known about the extent to which beneficiaries receive reemployment services and their reemployment outcomes.

Much of what I will cover today is based on a unique analysis of 24 years worth of data on individuals' employment and unemployment experience. These individuals are now 37- to 45-years-old, so you can think of these people as younger baby-boomers, that are born between 1957 and 1964, and roughly speaking, we have information on the first half of their work lives. First, if I can point you to a pie chart we will put up here in a second. This shows that 85 percent, if you take the 39 percent, the 38 percent and the 9 percent, 85 percent of these workers that we are talking about experienced unemployment at least once between 1979 and 2002. Most of them, about three-quarters, the 39 percent plus the 38 percent, were eligible for UI benefits, but only about half of them, 38 percent, had ever received Unemployment Insurance benefits, and less than half of these, 17 percent, received it more than once. I might add that there is about 5 percent who received UI benefits over this 24-year period five times or more.

Next, we wanted to know how those who received UI were different from those who didn't receive UI, even though they were all eligible. What we found was that a range of characteristics are associated with the likelihood of receiving UI benefits. Those more

likely to get Unemployment Insurance benefits were workers with higher earnings before they became unemployed. They were younger workers, more educated workers, women, married workers, workers with longer job tenure before they were laid off, and those living in areas with higher unemployment. In contrast to these findings, we found that a key UI program element, the weekly benefit amount, is not associated with the greater likelihood of receiving UI benefits.

Now for those who experienced multiple spells of unemployment. I have another graphic here we will put underneath that one that shows that prior UI receipt—I hope you can all see that—had a particularly strong effect on whether or not people were likely to receive UI benefits in subsequent periods of unemployment. For example, when workers experienced their first UI eligible period of unemployment, their likelihood of receiving UI is 33 percent. During a second UI eligible period of unemployment, the likelihood of receiving UI goes up to 48 percent for those who received UI the first time, but it drops to about 30 percent for those who did not receive UI in their first period of unemployment. Furthermore, as you can see, the likelihood that those UI eligible workers will receive UI benefits during successive periods of unemployment increases each time that they receive UI benefits and decreases each time they do not. Now, looking at the duration of unemployment, we found that unemployed workers, eligible for UI, but who did not receive it, were unemployed, as the Chairman said, for an average of 8 weeks, while an unemployed worker receiving UI was unemployed for an average of 21 weeks. In addition, longer periods of unemployment are associated with workers who are less educated, have lower earnings before they became unemployed, are women, are African-American workers, and are not union members.

Next, in light of the strong association we found between UI receipt and unemployment duration, it is important that unemployed workers who become UI claimants have access to reemployment services that will help facilitate their quick return to work. While almost all States now take UI claims remotely, that is, either over the telephone or over the Internet, many State UI directors told us that they felt the linkage between UI recipients and reemployment services has been strengthened recently. However, we don't have any national data to assess the success of these links. States engage some claimants in reemployment services directly through programs that identify certain groups who are targeted for assistance and particular States are required to target reemployment services to claimants who are likely to exhaust benefits. Such claimants are referred to reemployment services while they were still early in their claim. Despite States' efforts to design systems that link UI claimants to reemployment services, little is known about the extent to which claimants receive reemployment services or about the outcomes they achieve. Having data that show the degree to which reemployment services are reaching UI claimants is key to good program management and provides a first step toward understanding the impact of these programs. Yet we found that only 14 States routinely track the extent to which claimants received services from the broad array of federally funded programs that are designed to assist them, and even fewer, only six States,

track outcomes such as reemployment rate, average benefit duration and UI exhaustion rate.

Eleven States said that it was not possible to track claimants outcomes, and most States, 35 of them, said that it would be difficult to match this data because they are maintained in different data systems that were incompatible or hard to link. Last year we recommended that U.S. Department of Labor (DOL) consider the feasibility of collecting more comprehensive information on claimant services and outcomes. Labor has some new initiatives that will provide valuable information on the reemployment services of some UI claimants, but these efforts don't go far enough. None will allow for a comprehensive understanding of claimants' use of services, and the efforts will not move States closer to having the data they need to better manage their systems. Mr. Chairman, this completes my prepared statement. I would be happy to respond to any questions that you or Members of the Subcommittee may have at this time.

[The prepared statement of Mr. Nilsen follows:]

Statement of Sigurd Nilsen, Ph.D., Director, Education, Workforce, and Income Security Issues, U.S. Government Accountability Office

Mr. Chairman and Members of the Subcommittee:

Thank you for the opportunity to discuss GAO's recent work related to the Department of Labor's (Labor) Unemployment Insurance (UI) program, which has been a key component in ensuring the financial security of America's workforce for over 70 years. The UI program is a federal-state partnership designed to partially replace lost earnings of individuals who become unemployed through no fault of their own and to stabilize the economy in times of economic downturn. In fiscal year 2004, the UI program covered about 129 million wage and salary workers and paid about \$41 billion in benefits to nearly 9 million workers who lost their jobs. Despite the size and scope of this program, there has been only limited information about how often the program is accessed by individual workers over time, the types of workers who are most likely to receive benefits, or the extent to which claimants are receiving services that help them to become reemployed.

Today, I will draw upon the results of three recent reports we have completed that provide new information about the extent to which individual workers are being served by the UI program. In particular, I will discuss (1) the extent to which individual workers ever receive UI benefits, including the extent to which they receive benefits multiple times, (2) the types of workers who are more likely to receive UI benefits, and (3) what is known about the extent to which UI beneficiaries receive reemployment services and their reemployment outcomes.¹

To address the first and second questions, we analyzed data from the Bureau of Labor Statistics' (BLS) National Longitudinal Survey of Youth 1979 (NLSY79). The dataset contains very detailed information about the work and life experiences of a nationally representative sample of individuals who were born between 1957 and 1964. At the time of our analysis, the database contained over two decades' worth of information gathered from interviews conducted between 1979 and 2002, and covered a range of experiences, such as individuals' work histories, incomes, family composition, and education. To address the third question, we conducted telephone interviews with UI and workforce development officials in 50 states, sent a follow-up questionnaire to gather information on the strategies states use to collect data on UI claimants who receive reemployment services, interviewed state and local program officials in Georgia, Maryland, Michigan, and Washington, and interviewed Labor officials and other experts in the area of UI and reemployment services.

In summary, we estimate that while 76 percent of workers born between 1957 and 1964 experienced at least one period of unemployment during the first half of their working lives in which they would likely have been eligible for UI benefits, about

¹The three reports discussed in this testimony are Unemployment Insurance: Better Data Needed to Assess Reemployment Services to Claimants, GAO-05-413 (Washington, D.C.: June 24, 2005); Unemployment Insurance: Information on Benefit Receipt, GAO-05-291 (Washington, D.C.: Mar. 17, 2005); and Unemployment Insurance: Factors Associated with Benefit Receipt, GAO-06-341 (Washington, D.C.: Mar. 7, 2006).

38 percent actually received UI. Of those who received UI benefits, 44 percent received them more than once. Among workers who are eligible to receive UI benefits, those who are more likely to actually receive these benefits are younger, have higher earnings before becoming unemployed, have completed more years of education, or have already received UI benefits in the past than otherwise similar workers. The last factor—past experience with the UI program—has a particularly strong effect on the likelihood of receiving UI benefits. In addition, we found that unemployed workers tend to have longer periods of unemployment if they receive UI benefits, have completed fewer years of education, have lower earnings before they become unemployed, or if they do not belong to unions than otherwise similar workers. UI-eligible workers from certain industries—such as mining and manufacturing—are more likely than other workers to receive UI benefits. In the area of helping UI claimants return to work, we found that across states, UI claimants have access to a variety of reemployment services, and although most states accept UI claims remotely by telephone or Internet, states make use of UI program requirements to connect claimants with available services at various points in their claim. However, federal reporting requirements for states' UI programs and for federally funded employment and training programs do not provide a full picture of the services received or the outcomes obtained by all UI claimants, and few states monitor the extent to which claimants are receiving these services or outcomes for these claimants, in part because states' information systems have limited capabilities. GAO recommended that Labor, working with the states, consider collecting more comprehensive information on UI claimants' services and outcomes.

Background

The UI program was established by Title III of the Social Security Act in 1935 and is a key component in ensuring the financial security of America's workforce. The program serves two primary objectives: (1) to temporarily replace a portion of earnings for workers who become unemployed through no fault of their own and (2) to help stabilize the economy during recessions by providing an infusion of consumer dollars into the economy. UI is made up of 53 state-administered programs that are subject to broad federal guidelines and oversight. In fiscal year 2004, these programs covered about 129 million wage and salary workers and paid benefits totaling \$41.3 billion to about 8.8 million workers.

Federal law provides minimum guidelines for state programs and authorizes grants to states for program administration. States design their own programs, within the guidelines of federal law, and determine key elements of these programs, including who is eligible to receive state UI benefits, how much they receive, and the amount of taxes that employers must pay to help provide these benefits. State unemployment tax revenues are held in trust by Labor and are used by the states to pay for regular weekly UI benefits, which typically can be received for up to 26 weeks.

To receive UI benefits, an unemployed worker must file a claim and satisfy the eligibility requirements of the state in which the worker's wages were paid. Generally, states require that workers must have a minimum amount of wages and employment over a defined base period, typically, about a year before becoming unemployed, and have not already exhausted the maximum amount of benefits or benefit weeks to which they would be entitled because of other recent unemployment. In addition workers must have become unemployed for reasons other than quitting a job or being fired for work-related misconduct, and be able and available to work. In order to demonstrate that they are able to work and available for work and are still unemployed, claimants must submit a certification of continuing eligibility—by mail, telephone, or Internet, depending on the state—throughout the benefit period. This practice is usually done weekly or biweekly. States may continue to monitor claimant eligibility through an eligibility review program, in which certain claimants are periodically contacted to review their eligibility for benefits, work search activities, and reemployment needs.

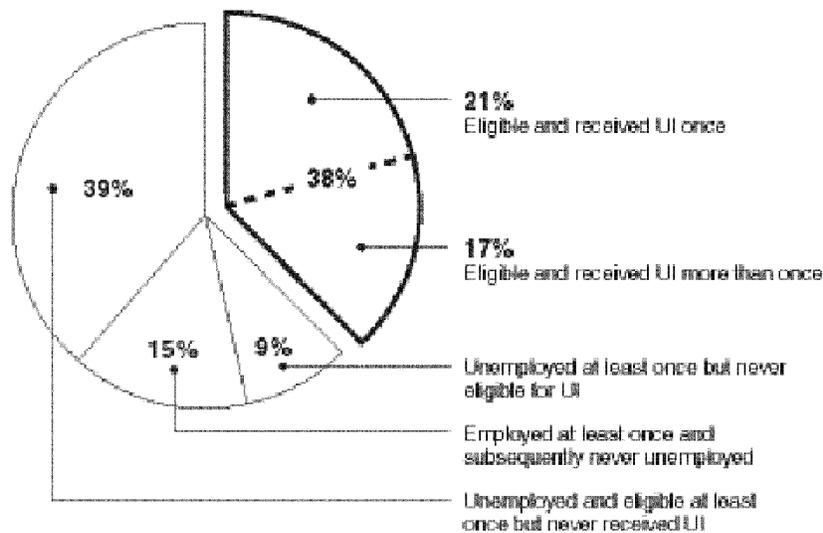
Since UI was established, there have been two major changes in the nation's workforce development system that have directly affected states' UI programs. Specifically, in November 1993, Congress enacted legislation amending the Social Security Act to require that each state establish a Worker Profiling and Reemployment Services (WPRS) system and implement a process typically referred to as claimant profiling. The claimant profiling process uses a statistical model or characteristics screen to identify claimants who are likely to exhaust their UI benefits before finding work. Claimants identified through this process are then referred to reemployment services while they are still early in their claim. For profiled claimants, participation in designated reemployment services becomes an additional requirement for continuing eligibility for UI benefits. The second major change was the enact-

ment of the Workforce Investment Act of 1998, which requires states and localities to bring together about 17 federally funded employment and training services into a single system—the one-stop system. State UI programs are mandatory partners in the one-stop system. Another mandatory partner is the federal Employment Service, established by the Wagner-Peyser Act in 1933 to link job seekers with job opportunities. The Employment Service has historically been colocated with state UI offices to facilitate UI claimants' access to federally funded labor exchanges, job search assistance, job referral, placement assistance, assessment, counseling, and testing.

Most Workers Experience Unemployment and Over a Third Receive UI at Least Once

On the basis of our analysis of data from the Bureau of Labor Statistics' National Longitudinal Survey of Youth 1979 (NLSY79), covering the 23-year period from 1979 through 2002, we found that 85 percent of a nationally representative sample of late baby boom workers—workers born between 1957 and 1964—had experienced unemployment at least once between 1979 and 2002. Workers who experienced unemployment were unemployed an average of five times over this 23-year period. Moreover, we found that of the 76 percent who were eligible for UI benefits at least once, 38 percent had ever received UI. (See fig. 1.) Of those who received UI benefits, 44 percent received them more than once; this represents about 17 percent of all of the workers in this age group.

Figure 1: UI Benefit Receipt and Estimated UI Eligibility among Workers Born between 1957 and 1964 (1979–2002)



Source: BLS analysis of NLSY79 data.

Note: Total does not equal 100 because of rounding.

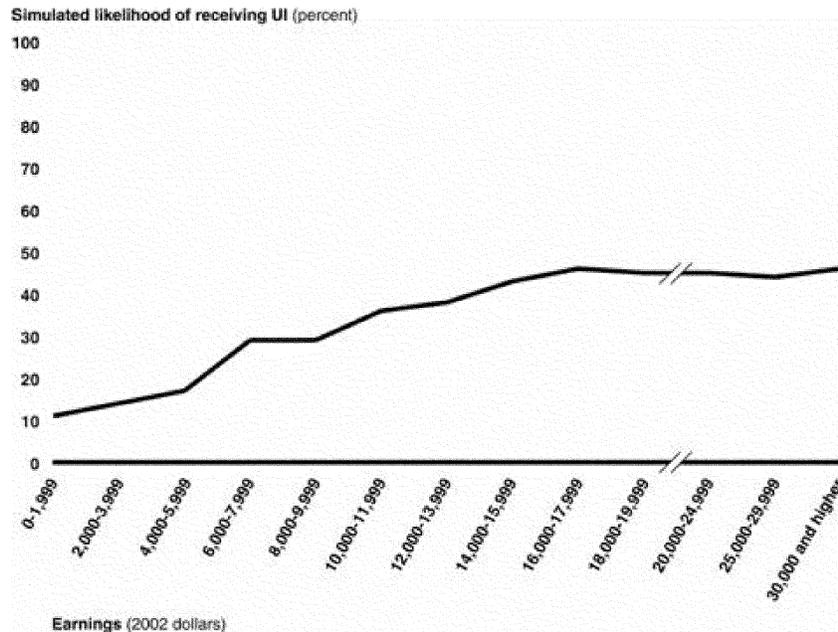
Some UI-Eligible Workers are More Likely to Receive UI Benefits than Others, or to Have Longer Periods of Unemployment

When all other worker characteristics have been controlled for, unemployed workers who are eligible for UI benefits are more likely to receive UI if they had higher earnings before they became unemployed, are younger, have completed more years of education, or if they have a history of past UI benefit receipt. In addition, we found that unemployed workers tend to have longer periods of unemployment if they receive UI benefits, have completed fewer years of education, had lower earnings before they became unemployed, or if they do not belong to unions. We also found that UI-eligible workers from certain industries are more likely than other workers to receive UI benefits, and that the strength of the relationship between previous UI benefit receipt and current UI receipt also varies by industry.

Certain Characteristics of UI-Eligible Workers Are Associated with Greater Likelihood of UI Receipt

We found that UI-eligible workers with certain characteristics are more likely to receive UI than otherwise similar UI-eligible workers. In particular, the likelihood of receiving UI tends to increase as the amount earned in the year before a worker became unemployed increases. (See fig. 2.) For example, a UI-eligible worker with earnings ranging from \$10,000 to just under \$12,000 in the year before becoming unemployed has a 36 percent likelihood of receiving UI, whereas a worker who earned roughly twice as much has a 45 percent likelihood of receiving UI.² The relationship between higher earnings and a higher likelihood of receiving UI benefits is also consistent with economic theory that predicts that workers with higher earnings prior to becoming unemployed will be more reluctant to accept lower reemployment wages and are therefore more likely to take advantage of UI benefits as a way to subsidize their job search efforts.³

Figure 2: Simulated Likelihood of Receiving UI Benefits for UI-Eligible Workers, by Prior Year Earnings



Source: Simulations based on GAO analysis of NLSY79 data.

Note: Simulations are for the average likelihood of receiving UI during first-time unemployment at different levels of earnings. The overall average likelihood of receiving UI during first-time unemployment is 33 percent. See appendix I of GAO-06-341 for methodology and estimation results.

We also found that the likelihood of receiving UI benefits among UI-eligible workers tends to be higher for younger workers, and lower for older workers. Specifically, simulations based on our analysis results show that the likelihood of receiving UI peaks at about age 25 and decreases thereafter. In fact, a 25-year-old unemployed worker who is eligible for UI is more than twice as likely to receive UI as an otherwise similar 40-year-old. This finding is contrary to previous studies that reported

²The average and maximum earnings for the unemployed workers in our sample are \$15,524 and \$597,950, respectively.

³For economic theory concerning the relationship between job search and unemployment insurance, see Dale T. Mortensen, "Unemployment Insurance and Job Search Decisions," *Industrial and Labor Relations Review*, vol. 30, no. 4 (1977).

that younger workers are less likely to receive UI benefits than older workers.⁴ However, these previous studies did not include as much information about workers' past unemployment and UI benefit receipt histories as our analysis. Therefore, because older workers have more previous unemployment and UI benefit receipt experience than younger workers, it is possible that our analysis controlled for the effect of these experiences more completely than previous studies, resulting in a more precise estimate of the effect of age. Although we are unable to explain why younger workers are more likely to receive UI benefits, it is possible that older workers, who have had more time to accumulate financial assets, may have more private resources available to help them cope with unemployment than younger workers.⁵ Or it may simply be the case that younger workers are less optimistic than older workers about how long it will take for them to become reemployed.

Another characteristic associated with a greater likelihood of receiving UI benefits is education. We found that UI-eligible workers who have completed more years of education are more likely to receive UI benefits than otherwise similar workers with fewer years of education. For example, a UI-eligible worker with the equivalent of a college education (16 years of schooling) when he or she becomes unemployed is almost one-fifth more likely to receive UI than a UI-eligible worker with a high school education (12 years of schooling).⁶ Although the effect of education on the likelihood of receiving UI benefits has been analyzed in other research, no significant education effect was found.⁷ Still, our result seems logical. That is, to the extent that workers with more education are also better able to obtain UI program information and to understand their states' requirements for filing claims and remaining eligible for benefits, they are also more likely to have successful benefit claims.

Other factors, including a worker's gender, marital status, job tenure, and the local unemployment rate, are also associated with UI benefit receipt. Controlling for all other characteristics among UI-eligible workers, we found that

- a woman is 29 percent more likely to receive UI benefits than a man,
- a married worker is 13 percent more likely to receive UI than an unmarried worker,
- a longer-tenured worker is more likely to receive UI—for example, a worker with 4 years of tenure at his or her most recent job is 12 percent more likely to receive UI than a worker with 1 year of job tenure, and
- being in an area with high unemployment raises the likelihood that an unemployed worker will receive UI—for example, a worker living in an area with an unemployment rate of 9 percent is 10 percent more likely to receive UI than a worker living in an area with an unemployment rate of 5 percent.

Our finding that women are more likely to receive UI benefits than otherwise similar men differs from the results of previous research, which generally found no statistically significant differences in the likelihood of receiving UI benefits for men and women. However, our analysis controls for more worker characteristics than these previous studies, and it is likely that we have more carefully isolated the effect of gender from that of other characteristics that are related to gender, such as workers' occupations and industries. Still, it is not immediately clear why women are more likely to receive UI benefits than men who are similar with respect to other observed characteristics. We are also unable to explain why married workers are more likely to receive UI benefits than otherwise similar unmarried workers.⁸ Our finding that workers with longer job tenure are more likely to receive UI benefits is consistent with previous research. This result seems logical if we consider that workers with longer job tenures are more likely to have acquired more employer-specific skills than workers with shorter job tenures. Because such specialized skills are not as easy to transfer to a new employer as less specialized skills, workers with more job tenure may expect to take longer to find a job where these

⁴See Rebecca M. Blank and David E. Card, "Recent Trends in Insured and Uninsured Unemployment: Is There an Explanation?" *The Quarterly Journal of Economics*, vol. 106, no. 4 (1991) and Brian P. McCall, "Repeat Use of Unemployment Insurance," in Laurie J. Bassi and Stephen A. Woodbury, editors, *Long-Term Unemployment and Reemployment Policies* (Stamford, Connecticut: JAI Press, 2000).

⁵See Jonathan Gruber, "The Wealth of the Unemployed," October 2001, *Industrial and Labor Relations Review*, vol. 55, no. 1.

⁶The average number of years of schooling completed by UI-eligible workers, at the time when they became unemployed, is 12 years.

⁷See Blank and Card.

⁸We specifically tested for the effect of spousal income on the likelihood of receiving UI to determine whether marital status was masking some underlying effect of additional family income, and found this not to be the case.

skills would be needed than a worker who has more generalized skills. Finally, our finding that workers living in areas with higher unemployment are more likely to receive UI benefits is probably due to the higher number of unemployed workers relative to available jobs, which may make workers more willing to apply for UI benefits as they engage in what are likely to be longer job searches.

In contrast to the findings already discussed, we found that a key UI program element, the weekly UI benefit amount that unemployed workers are entitled to, is not associated with a greater likelihood of receiving UI benefits. Specifically, we used our model estimates to simulate benefit increases of 10 percent and 25 percent, and a decrease of 10 percent, and found that these changes did not affect the likelihood of UI benefit receipt among eligible workers. This finding is also consistent with the work of others, who have found that increases in the weekly benefit amount have mixed, but generally small, effects on UI benefit receipt, after controlling for other factors.⁹ Taken together, these results suggest that UI benefit levels have modest effects on individuals' decisions about whether or not to receive UI benefits.

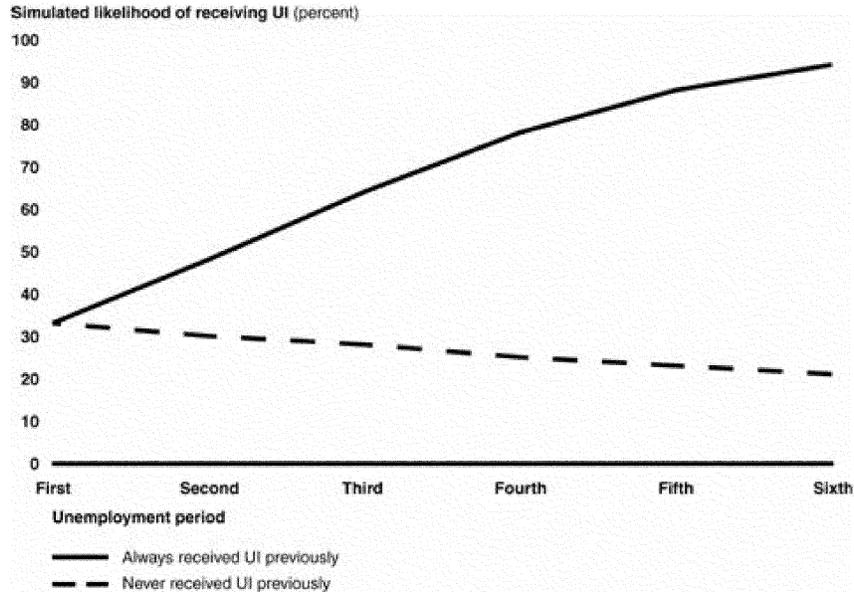
Unemployed Workers Who Received UI in the Past Are More Likely to Receive UI during Subsequent Unemployment

Of all the characteristics associated with UI benefit receipt, we found that one—past UI receipt—had a particularly strong effect on the likelihood of receiving UI benefits. (See fig. 3.) For example, when workers experience their first UI-eligible period of unemployment, their likelihood of receiving UI is 33 percent. During a second UI-eligible period of unemployment, the likelihood of receiving UI is 48 percent for workers who received UI during the first unemployment period, but only 30 percent for workers who did not receive UI. Furthermore, the likelihood that these UI-eligible workers will receive UI benefits during successive periods of unemployment increases each time that they receive UI benefits and decreases each time that they do not.¹⁰

⁹See David E. Card and Phillip B. Levine, "Unemployment Insurance Taxes and the Cyclical and Seasonal Properties of Unemployment," *Journal of Public Economics*, vol. 53, no. 1 (1994); Patricia M. Anderson and Bruce D. Meyer, "The Effect of Unemployment Insurance Taxes and Benefits on Layoffs Using Firm and Individual Data," NBER Working Paper No. 4960, National Bureau of Economic Research, Cambridge, Massachusetts (1994); and Robert H. Topel, "On Layoffs and Unemployment Insurance," *American Economic Review*, vol. 73, no. 4 (1983).

¹⁰As noted above, relatively few UI-eligible workers who receive UI benefits receive them multiple times. See GAO-05-291 for a more complete discussion of the incidence of repeat UI benefit receipt.

Figure 3: Simulated Likelihood of Receiving UI Benefits for UI-Eligible Workers during Successive Periods of Unemployment, by Past UI Receipt Status



Source: GAO simulations based on GAO analysis of NLSY79 data.

Note: Simulations are the average likelihood of receiving UI during a current unemployment period for two extreme cases: (1) workers who always received UI benefits during previous unemployment and (2) workers who never received UI during previous unemployment. The average likelihood of receiving UI during first-time unemployment for all UI-eligible workers is 33 percent. See appendix I of GAO-06-341 for methodology and estimation results.

This finding suggests that a worker's first unemployment experience has a lasting and self-reinforcing effect. To the extent that all workers know about the UI program and whether or not they are eligible to receive benefits, receiving or not receiving UI may be a personal choice. Such a choice might be based on workers' individual preferences, or may be related to other characteristics that were not captured in the NLSY79 data. On the other hand, if workers do not all have good information about UI, those who receive UI benefits may simply know more about the program than those who do not receive UI benefits, and their knowledge about the program may be improving each time they receive UI benefits.

Receiving UI Benefits, along with Other Factors, Is Associated with Unemployment Duration

We found that, overall, unemployed workers who receive UI benefits have longer unemployment duration than otherwise similar workers who do not receive UI benefits. Several other characteristics are also associated with unemployment duration. In particular, UI-eligible workers are more likely to experience longer unemployment duration if they have lower earnings before becoming unemployed or if they have completed fewer years of education. Other characteristics associated with longer unemployment duration include being African-American, or female, or not belonging to a union.

Our results with respect to unemployment duration are generally consistent with the results of other research. In particular, researchers have suggested that the association between higher earnings and shorter periods of unemployment may be due, in part, to the higher cost of unemployment for workers with higher earnings,

when compared to the cost for workers with lower earnings.¹¹ For example, the cost of unemployment can be measured in terms of lost wages. This cost is greater for workers with higher earnings, because they forego a higher amount of potential earnings in exchange for the time they can spend on unpaid activities, such as job search, home improvement, or recreation. Researchers have also suggested that the association between less education and longer periods of unemployment may be a result of workers with less education having fewer work-related skills.¹² Two possible explanations for the differences in employment outcomes for African-American workers include labor market discrimination, and limited access to social networks that may enable these workers to find jobs more quickly.¹³ Likewise, longer unemployment duration among female workers may be due to labor market discrimination, or to differences in how women value paid work versus nonemployment activities, relative to men.¹⁴

The associations between shorter unemployment duration and union membership, and to longer job tenure, may reflect the greater access that these workers may have to reemployment opportunities, through union hiring halls or through informal peer networks. It may also reflect a greater likelihood of being recalled to previous jobs.¹⁵

UI-Eligible Workers from Certain Industries Are More Likely to Receive UI and to Have Longer Periods of Unemployment

We found that first-time unemployed workers from mining and manufacturing are more likely to receive UI than workers from other industries. (See table 1.) For example, first-time unemployed workers from the manufacturing industry are about two-thirds more likely to receive UI benefits than workers from the professional and related services industry. We also found that the association between past and current UI benefit varies across industries. This effect is strongest for UI-eligible workers from the public administration sector, and weakest for workers from agriculture and construction.¹⁶

Table 1: Simulated Likelihood of Receiving UI Benefits during Different Periods of UI-Eligible Unemployment for Workers with Past UI Receipt, by Industry

Industry	Simulated likelihood of receiving UI benefits during current UI-eligible unemployment period, given past UI receipt (percent)		
	First unemployment period	Second unemployment period	Third unemployment period
Mining	46	57	69
Manufacturing	40	52	65
Public administration	37	68	91
Wholesale and retail trade	35	52	70
Agriculture, forestry, and fishing	34	42	50
Business services	31	48	66
Construction	31	40	51

¹¹ See Bruce D. Meyer, "Unemployment Insurance and Unemployment Spells," *Econometrica*, vol. 58, no. 4 (1990).

¹² See Karen E. Needels and Walter Nicholson, *An Analysis of Unemployment Durations Since the 1990–1992 Recession*, UI Occasional Paper 99–6, prepared for the Department of Labor, 1999.

¹³ See Antoni Calvo-Armengol, and Matthew O. Jackson, "The Effects of Social Networks on Employment and Inequality," *The American Economic Review*, vol. 94, no. 3, (2004) for a discussion of the effects of individuals' social networks on employment outcomes.

¹⁴ See Needels and Nicholson, and GAO, *Women's Earnings: Work Patterns Partially Explain Differences between Men's and Women's Earnings*, GAO-04–35 (Washington, D.C.: Oct. 31, 2003).

¹⁵ See Needels and Nicholson.

¹⁶ Although the association between past UI receipt and current UI receipt is statistically significant for all industries combined, differences in this association among industries were statistically significant only for public administration, agriculture, and construction.

Table 1: Simulated Likelihood of Receiving UI Benefits during Different Periods of UI-Eligible Unemployment for Workers with Past UI Receipt, by Industry—Continued

Industry	Simulated likelihood of receiving UI benefits during current UI-eligible unemployment period, given past UI receipt (percent)		
	First unemployment period	Second unemployment period	Third unemployment period
Finance, insurance, real estate	31	64	91
Transportation and public utilities	29	46	66
Entertainment and recreation services	26	45	67
Professional and related services	24	39	58
Personal services	23	38	56
All industries	33	48	64

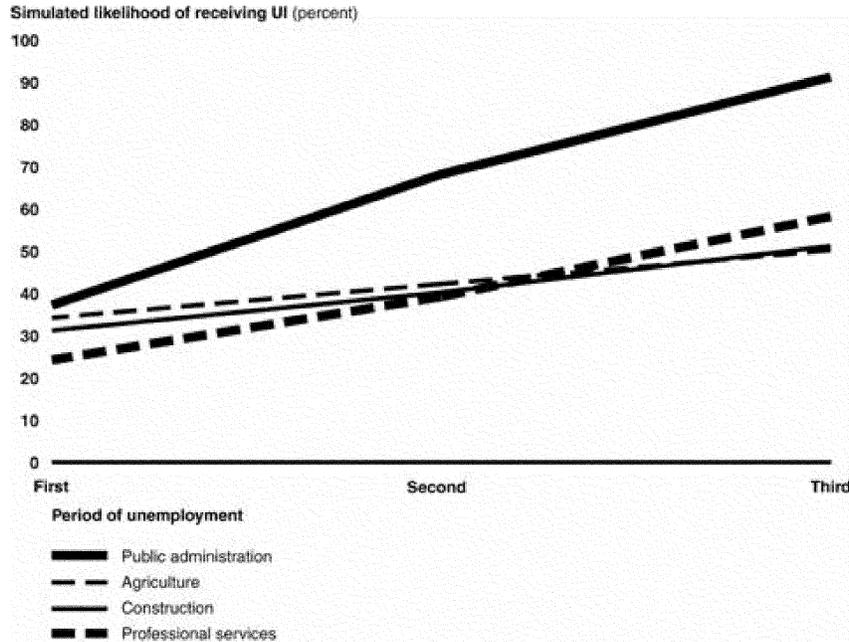
Source: Simulations based upon GAO analysis of NLSY79 data.

Note: Simulations are the average likelihood of receiving UI during a first unemployment period, a second unemployment period with UI receipt during the prior unemployment period, and a third unemployment period with UI receipt during both prior unemployment periods. The positive effect that each prior UI receipt has on the likelihood of current UI receipt is statistically significantly larger for the public administration industry relative to the professional and related services industry at the 95 percent confidence level, and smaller for the agriculture and construction industries. The simulations also incorporate the industry effects and the industry interactions with the number of prior periods of unemployment. See appendix I of GAO-06-341 for methodology and estimation results.

Workers experiencing their first period of unemployment did not have past UI receipt.

These results show that although UI-eligible workers in some industries are more likely to receive UI benefits when they experience unemployment for the first time, their likelihood of receiving UI benefits again when they become unemployed a second or third time is not necessarily higher than it is for workers from other industries. (See fig. 4.) For example, the likelihood of receiving UI benefits for workers from the manufacturing industry who are unemployed for the first time is relatively high—about 40 percent. This likelihood increases to 52 percent during a second period of unemployment for workers who have already received UI benefits, and 65 percent during a third period of unemployment for workers who received UI each previous time they were unemployed. By comparison, the increase in the likelihood of receiving UI between the first and third periods of unemployment is higher for most other industries, especially public administration. Specifically, the likelihood of receiving UI benefits for public administration workers who are unemployed for the first time is 37 percent. This likelihood increases to 69 percent during a second period of unemployment for workers who received have already received UI, and to 91 percent during a third period of unemployment for workers who received UI each previous time they were unemployed.

Figure 4: Simulated Effect of Past UI Benefit Receipt on the Likelihood of Receiving UI in Subsequent Periods of Unemployment, for Selected Industries



Source: Simulations based on GAO analysis of NLSY79 data.

Note: Simulations are the average likelihood of receiving UI during a first unemployment period, second unemployment period with UI receipt during the prior unemployment period, and a third unemployment period with UI receipt during both prior unemployment periods. The positive effect that each prior UI receipt period has on the likelihood of current UI receipt is statistically significantly larger for the public administration industry relative to the professional and related services industry at the 95 percent confidence level, and smaller for the agriculture and construction industries. The simulations also incorporate the industry effects and the industry interactions with the number of prior periods of unemployment. See appendix I of GAO-06-341 for methodology and estimation results.

Administrative unemployment insurance data have shown that repeat UI recipients tend to be from industries that are seasonal, such as manufacturing and construction. Our results, however, suggest that this is not because workers with past UI receipt from these industries are more likely to receive UI benefits when they are unemployed than otherwise similar workers from other industries. Rather, it may be that workers from such seasonal industries are unemployed more often on average than workers from other industries, or that a larger proportion of unemployed workers from such industries have collected UI previously.

In light of the strong association we found between UI receipt and unemployment duration, it is important that unemployed workers who become UI claimants have access to reemployment services that will help facilitate their quick return to work. However, the shift towards states' accepting UI claims remotely has raised concerns that some UI claimants may not be receiving enough information on reemployment services or timely assistance to help them find a job, and little is known about whether states have policies in place to help unemployed workers quickly become reemployed.

A Variety of Reemployment Services Are Available to Help UI Claimants Get Jobs, but Little Information Exists to Determine the Extent to Which Workers Use Them

In our review of states' efforts to facilitate reemployment of UI claimants, we found that across states, UI claimants have access to a variety of reemployment services, and although most states accept UI claims remotely by telephone or Internet, states make use of UI program requirements to connect claimants with available services at various points in their claims. However, despite states' efforts to design systems that link UI claimants to reemployment services, little data are available to gauge the extent to which claimants are receiving these services or the outcomes they achieve. Federal reporting requirements for states' UI programs and for federally funded employment and training programs do not provide a full picture of services or outcomes, and few states monitor the extent to which claimants are receiving these services or outcomes for these claimants, in part because of limited information systems capabilities.

Although Some federally Funded Reemployment Services Are Universally Accessible, Most Serve Targeted Groups of Workers

UI claimants in all states have access to the range of Wagner-Peyser funded employment services and to Workforce Investment Act (WIA) funded core services that are available to all job seekers through the one-stop system. Such services include labor exchange services in all states, whereby claimants can access job listings and information on their state's labor market trends using the Internet. Officials in many states said that claimants also have access to online labor exchange, or job matching services as well as other self-assessment services. One-stop centers in all states make computers available on-site, and most states provide access to self-help software, such as aptitude tests, computer tutorials, or job search guidance, at the centers. Claimants also have access to a variety of staff-assisted reemployment services through the one-stop system. Officials most often mentioned that claimants were likely to be offered

- job search assistance;
- résumé assistance;
- job matching, referral, and placement services;
- orientation to services;
- referral to WIA or other partners;
- initial or general needs assessment;
- counseling; and
- interview assistance.

In addition to states' Employment Service and WIA core services, the WIA Adult and Dislocated Worker programs provide for additional levels of services to qualified workers. Intensive services include activities that require greater staff involvement than core services, and may include services such as comprehensive assessment and case management. Intensive services are available to adults and dislocated workers who have received at least one core service and are unable to find a job or have a job that does not lead to self-sufficiency. Training services, such as occupational skills or on-the-job training, are available on a more limited basis, typically to claimants who have received at least one intensive service but who are still unable to obtain or retain employment. Additional training assistance for workers who are laid off as a result of international trade is available through the Trade Adjustment Assistance (TAA) program, although the amount of funds available for training is limited by statute.

States Use Program Requirements to Connect Claimants with Available Services

Although all UI claimants can access the range of reemployment services through the one-stop system at any time, UI requirements often provide the context for states' efforts to link claimants to reemployment services. Specifically, all federally approved state UI programs require that claimants be able and available to work. To meet these conditions, 44 states require that UI claimants register with the state's Employment Service in order to be eligible for UI benefits. In addition, 49 states impose a work search requirement as a condition for continuing UI eligibility, and claimants must document that they are meeting their state's work search requirement in a number of ways. Most commonly, claimants are required to keep a log of work search activities that may be subject to review, or they must certify that they are able and available to work through the process of filing for a continuing claim.

These work registration and work search requirements often serve to link claimants to reemployment services. The process of registering for work with the state's labor exchange, for example, may bring claimants into an Employment Service office or one-stop center where reemployment services are delivered. Officials in nearly two-thirds of the 44 states where claimants are required to register for work told us that coming into an Employment Service office or one-stop center is either a required part of the process or one of the options claimants have for completing their registration. Officials in close to a third of the states with this requirement told us claimants are registered with the labor exchange when they file their initial UI claim.

Some states also use their processes for monitoring compliance with the work search requirement to direct claimants to reemployment services. Officials in 39 of the 49 states that require claimants to actively seek employment told us that telephone or in-person interviews with claimants may be used to monitor compliance with this requirement. In over two-thirds of these states, officials told us that some information on job search strategies or reemployment services is provided during the interview.

States also engage some claimants in reemployment services directly through programs that identify certain groups for more targeted assistance. In particular, states target reemployment services to claimants who are identified through federally required claimant profiling systems—a process that uses a statistical model or characteristics screen to identify claimants who are likely to exhaust their UI benefits before finding work. Claimants identified through this process are then referred to reemployment services while they are still early in their claim. Although profiled claimants can access the services available to all job seekers through the one-stop system, participation in the services they are referred to is mandatory. State officials most often identified orientation and assessment as services that profiled claimants were required to receive. In addition, many officials told us that the services profiled claimants received depended on their individual needs following an assessment, the development of an individual plan, or the guidance of staff at a one-stop center. While failure to report to required reemployment services can result in benefits being denied, states vary in the conditions that prompt denying benefits.

From 2001 through last year, states made use of Labor's Reemployment Services Grants to fund these services.¹⁷ Although these grants are no longer available, officials in the majority of the states we interviewed told us their states had been using the Reemployment Services Grant funds to hire staff to provide reemployment services. Some states have also used these grants to direct reemployment services to claimants beyond those who have been profiled and to support other enhancements in the provision of reemployment services to claimants.

Little Information Exists to Provide a Complete Picture of Reemployment Services for Unemployment Insurance Claimants

Despite states' efforts to design systems that link UI claimants to reemployment services, little is known about the extent to which claimants receive reemployment services or about the outcomes they achieve. Although states must meet a number of federal reporting requirements for their UI and employment and training programs, none of these reports provides a complete picture of the services received or the outcomes obtained by UI claimants, and only recently has Labor begun to require that states provide information on the reemployment outcomes of UI claimants. We also found that few states monitor the extent to which claimants are receiving these services, and even fewer monitored outcomes for these claimants at the time of our review, largely because of limited information systems capabilities.

As discussed earlier, UI claimants may access federally-funded reemployment assistance from the Wagner-Peyser Employment Service, WIA Adult or Dislocated Worker programs, and, if they are laid off because of trade, TAA. To monitor the performance of these programs, Labor does require states to meet a number of reporting requirements, but these reports are submitted on a program-by-program basis, and none of these reports provide a complete picture of the services received or the outcomes obtained by all UI claimants.

Reporting requirements for the Wagner-Peyser funded Employment Service are similarly limited. States are required to provide quarterly reports that include summary information on the numbers of Employment Service participants who received specified services, or who obtained particular outcomes, and breaks out this informa-

¹⁷ Reemployment Services Grants, provided to ensure that UI claimants would receive necessary services to become reemployed, were provided to states annually from 2001 through 2005. No appropriation was made for these grants in fiscal year 2006, and no further appropriation has been requested for fiscal year 2007.

tion by several demographic categories, and whether or not the participant was a UI claimant. However, these reports only contain information on individuals who are registered with the Employment Service, and although anyone who receives services funded by Wagner-Peyser must be registered with the Employment Service, not all UI claimants receive Wagner-Peyser funded services.

WIA and TAA reporting requirements also do not provide a complete picture of claimant services and outcomes. Although WIA tracks several performance measures directly related to outcomes for Adults and Dislocated Workers, including job placement, job retention, and wage gain or wage replacement, these records do not contain information for UI claimants who are not registered under WIA. Furthermore, many individuals served under WIA—particularly those who receive only self-directed services—are not registered or tracked for performance and are, therefore, not reflected in any of the WIA data. Similarly, for the TAA program, Labor requires states to submit participant data files on all who exit the program each quarter, but the reports are limited to those claimants served by TAA.

Having data that show the degree to which reemployment services are reaching UI claimants is key to good program management and provides a first step toward understanding the impact of these programs. However, knowing how many claimants may be accessing reemployment services and the type of outcomes they may be achieving has proven difficult for state and local officials.

We found that only 14 states go beyond the federal reporting requirements to routinely track the extent to which claimants receive services from the broad array of federally funded programs that are designed to assist them. Of the remaining 36 states that do not routinely track claimant services, 4 told us it would not be possible for them to do so. In addition, 37 states reported that tracking UI claimants who receive reemployment services was somewhat or very difficult, while only 6 states said it was not at all difficult. States most often told us that tracking claimant services across multiple programs was made difficult by the fact that reemployment services and UI claimant data were maintained in separate data systems—systems that were either incompatible or difficult to link.

While relatively few states routinely track claimants' services, even fewer track outcomes. Only 6 states go beyond the federal reporting requirements to routinely monitor any outcomes for UI claimants who receive reemployment services—outcomes such as reemployment rate, average benefit duration, and UI exhaustion rate. Eleven states reported that it would not be possible to calculate any of the outcomes for these claimants. The issues states cited in tracking outcomes across programs for UI claimants were similar to those for tracking use of services. Officials from 35 states told us that tracking one or more outcome measures was made difficult by the fact that reemployment services and UI claimant data were maintained in different systems that were either incompatible or difficult to link.

Labor has some initiatives that may begin to shed light on claimant services and outcomes, including modifying its performance measures to require states to track a reemployment rate for their UI claimants—defined as the percentage of UI claimants who are reemployed within the quarter following their first UI payment. Labor is also developing a system to consolidate reporting on performance for Labor's Employment and Training Administration (ETA) programs. This system—ETA's Management Information and Longitudinal Evaluation (EMILE) system—would consolidate performance reporting across a range of Labor programs including WIA, Employment Service, and TAA. Current plans do not include incorporating UI reporting into EMILE.

Last year, we recommended that the Department of Labor work with states to consider the feasibility of collecting more comprehensive information on UI claimants' services and outcomes. Although Labor generally agreed with our findings, Labor commented that current and planned data collection efforts would provide sufficient information to policy makers. While Labor's new initiatives, in combination with current reporting requirements, will provide valuable information on the reemployment activities of some UI claimants, these efforts will not allow for a comprehensive, nationwide understanding of claimants' participation in the broad range of reemployment services designed to assist them. Furthermore, these efforts will not move states in the direction of having the data they need to better manage their systems.

Mr. Chairman, this completes my prepared statement. I would be happy to respond to any questions you or other Members of the Subcommittee may have at this time.

Unemployment Insurance: Factors Associated with Benefit Receipt. GAO-06-341. Washington, D.C.: March 7, 2006.

Trade Adjustment Assistance: Most Workers in Five Layoffs Received Services, but Better Outreach Needed on New Benefits. GAO-06-43. Washington, D.C.: January 31, 2006.

Workforce Investment Act: Labor and States Have Taken Actions to Improve Data Quality, but Additional Steps Are Needed. GAO-06-82. Washington, D.C.: November 14, 2005.

Unemployment Insurance: Better Data Needed to Assess Reemployment Services to Claimants. GAO-05-413. Washington, D.C.: June 24, 2005.

Unemployment Insurance: Information on Benefit Receipt. GAO-05-291. Washington, D.C.: March 17, 2005.

Trade Adjustment Assistance: Reforms Have Accelerated Training Enrollment, but Implementation Challenges Remain. GAO-04-1012. Washington, D.C.: September 22, 2004.

Workforce Investment Act: States and Local Areas Have Developed Strategies to Assess Performance, but Labor Could Do More to Help. GAO-04-657. Washington, D.C.: June 1, 2004.

Workforce Training: Almost Half of States Fund Employment Placement and Training through Employer Taxes and Most Coordinate with Federally Funded Programs. GAO-04-282. Washington, D.C.: February 13, 2004.

Workforce Investment Act: One-Stop Centers Implemented Strategies to Strengthen Services and Partnerships, but More Research and Information Sharing Is Needed. GAO-03-725. Washington D.C.: June 18, 2003.

Multiple Employment and Training Programs: Funding and Performance Measures for Major Programs. GAO-03-589. Washington, D.C.: April 18, 2003.

Unemployment Insurance: Role as Safety Net for Low-Wage Workers Is Limited. GAO-01-181. Washington, D.C.: December 29, 2000.

[The GAO Report follows:]

United States Government Accountability Office

GAO

Report to the Chairman, Subcommittee
on Human Resources, Committee on
Ways and Means, House of
Representatives

March 2006

UNEMPLOYMENT INSURANCE

Factors Associated with Benefit Receipt



GAO-06-341



Highlights of GAO-06-341, a report to the Chairman, Subcommittee on Human Resources, Committee on Ways and Means, House of Representatives

Why GAO Did This Study

Unemployment Insurance (UI), established in 1935, is a complex system of 53 state programs that in fiscal year 2004 provided \$41.3 billion in temporary cash benefits to 8.8 million eligible workers who had become unemployed through no fault of their own. Given the size of the UI program, its importance in helping workers meet their needs when they are unemployed, and the little information available on what factors lead eligible workers to receive benefits over time, GAO was asked to determine (1) the extent to which an individual worker's characteristics, including past UI benefit receipt, are associated with the likelihood of UI benefit receipt or unemployment duration, and (2) whether an unemployed worker's industry is associated with the likelihood of UI benefit receipt and unemployment duration. Using data from a nationally representative sample of workers born between 1957 and 1964 and spanning the years 1979 through 2002, and information on state UI eligibility rules, GAO used multivariate statistical techniques to identify the key factors associated with UI benefit receipt and unemployment duration.

In its comments, the Department of Labor stated that while there are certain qualifications of our findings, the agency applauds our efforts and said that this report adds to our current knowledge of the UI program.

www.gao.gov/cgi-bin/getrpt?GAO-06-341.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Sigurd Nilsen at (202) 512-7215 or nilsens@gao.gov.

March 2006

UNEMPLOYMENT INSURANCE

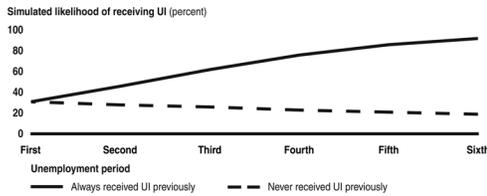
Factors Associated With Benefit Receipt

What GAO Found

Certain characteristics are associated with the likelihood of receiving UI benefits and unemployment duration. UI-eligible workers that GAO studied are more likely to receive UI benefits if they have higher earnings prior to becoming unemployed, are younger, have more years of education, or if they have a history of past UI benefit receipt when compared with otherwise similar workers. GAO found that past experience with the UI program has a particularly strong effect on the future likelihood of receiving UI benefits. However, some characteristics, such as receiving a higher maximum weekly UI benefit amount, are not associated with a greater likelihood of receiving UI benefits. UI-eligible workers who receive UI benefits have longer unemployment duration than workers with similar characteristics. Also, UI-eligible workers are more likely to experience longer unemployment duration if they have lower earnings before becoming unemployed or have fewer years of education. Other characteristics associated with longer unemployment duration include being African-American, female, or not belonging to a union. GAO found no relationship between past UI benefit receipt and subsequent unemployment duration.

UI-eligible workers from certain industries are more likely than similar workers in other industries to receive UI benefits and experience shorter unemployment duration. Specifically, GAO's simulations show that the likelihood of receiving UI benefits during a first period of unemployment is highest among workers from the mining and manufacturing industries. Furthermore, the likelihood of receiving UI benefits when unemployed increases with each previous period of UI receipt across all industries, and the most notable increase occurs in public administration. First-time unemployed workers from construction and manufacturing experience significantly shorter unemployment duration than workers from other industries.

Simulated UI Benefit Receipt Rates for UI-Eligible Workers during Successive Periods of Unemployment, by Past UI Receipt Status



Source: GAO simulations based on GAO analysis of NLSY79 data.

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Abbreviations

BLS	Bureau of Labor Statistics
BPE	base period earnings
CPI-U	Consumer Price Index for All Urban Consumers
CPS	Current Population Survey
HQE	high quarter earnings
NLSY79	National Longitudinal Survey of Youth 1979
OLF	out of the labor force
SIC	Standard Industrial Classification
SMSA	Standard Metropolitan Statistical Area
SOC	Standard Occupational Classification
UI	Unemployment Insurance
WBA	weekly benefit amount

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United States Government Accountability Office
Washington, DC 20548

March 7, 2006

The Honorable Wally Herger
Chairman, Subcommittee on Human Resources
Committee on Ways and Means
House of Representatives

Dear Mr. Chairman:

Unemployment Insurance (UI), established in 1935, is a complex system of 53 programs that provide temporary cash benefits to eligible workers who become unemployed through no fault of their own.¹ Eligibility for UI benefits, benefit amounts, and the length of time benefits are available are determined by state law, within broad federal guidelines. Benefits are financed through federal and state employer payroll taxes. In fiscal year 2004, employers paid about \$39.3 billion in UI taxes, and 8.8 million workers received UI benefits totaling \$41.3 billion.

Decades of program experience and administrative data have resulted in a firm understanding of the composition of UI caseloads and the overall cost of the program. However, this understanding of the UI program has been based on snapshots of the UI beneficiary population at any given time. Additional research has provided limited information on the types of workers who are likely to receive UI benefits and on how UI requirements and benefits affect individuals' movement into and out of the workforce, including how UI receipt affects the duration of unemployment. However, because of the difficulty of tracking the same workers over time, the circumstances that give rise to individual workers' use or nonuse of the UI program and how this may, in turn, affect individuals' patterns of unemployment over the course of their entire working careers are still not well understood.

In 2005, we reported on the results of our analysis of a unique database that tracked a single group of individuals over time.² Examining this

¹UI programs are administered by the 50 states, the District of Columbia, Puerto Rico, and the Virgin Islands.

²GAO, *Unemployment Insurance: Information on Benefit Receipt*, GAO-05-291 (Washington, D.C.: Mar. 17, 2005).

database, we found that 85 percent of a nationally representative sample of late baby boom workers (workers born between 1957 and 1964) had experienced unemployment at least once between 1979 and 2002. Workers who experienced unemployment were unemployed an average of five times over this 23-year period. Moreover, we found that of those who were eligible for UI benefits at least once, only 38 percent at some point received UI benefits. About half of the workers receiving UI benefits received them more than once. Finally, we reported that the rate at which unemployed workers received UI benefits varied across industries.

As Congress reviews the ability of labor programs to meet the needs of the workforce in the new century, it will be important to understand why fewer than half of workers eligible for UI benefits receive them and the other half do not, as well as what factors cause workers in some industries to seek benefits multiple times over the course of their careers. In this context, you asked us to determine (1) the extent to which characteristics of individual workers, including a history of past UI benefit receipt, are associated with the likelihood of UI benefit receipt and unemployment duration, and (2) whether an unemployed worker's industry is associated with UI benefit receipt or unemployment duration.

To answer these questions, we analyzed data from the National Longitudinal Survey of Youth 1979 (NLSY79). This survey provides information that is not typically available from other data sources. The dataset contains information from ongoing periodic interviews with a nationally representative sample of individuals who were born between 1957 and 1964. At the time of our analysis, the database contained information from interviews conducted between 1979 and 2002. There were 12,686 individuals in the sample in 1979. The survey provides a wide range of detailed information about these individuals, including their work histories, income, family composition, and education. Using the dataset, we analyzed a single birth cohort over time; therefore, our findings do not represent the experience of workers of all ages during this time period.

Using this survey information and information on states' UI program eligibility rules for each year from 1978 through 2002,³ we estimated

³We considered an individual to be UI-eligible if that individual experienced an involuntary job loss, reported receiving a minimum amount of wages over a minimum period of time as defined by the state where the individual lived, and was actively looking for new employment. Our method of estimating eligibility tends to overestimate the number of UI-eligible individuals. For a more complete discussion of our methodology, see appendix I.

whether individuals from the sample were eligible for UI benefits following a job separation. We identified 5,631 workers who met the conditions for UI eligibility—a group that we refer to as “UI-eligible workers”—who collectively experienced 15,506 separate periods of unemployment during the study period (1979-2002).

We used a multivariate statistical model to identify the key factors associated with UI benefit receipt and unemployment duration for our subsample of UI-eligible workers. The model allowed us to isolate the effect of a particular characteristic by statistically controlling for a number of other characteristics. In this report, we refer to the results for individual characteristics in comparison with “otherwise similar workers.” By this phrasing, we intend to show that we have controlled for all other characteristics that may be related to the characteristic being studied. For example, the test of the effect of age on benefit receipt was conducted while controlling, for example, for earnings and education—two characteristics that are correlated with age. In addition, we modeled UI benefit receipt and unemployment duration together to control for the likely correlation that exists between these two outcomes.

To illustrate how changes in different characteristics affect the likelihood of UI receipt and unemployment durations, we used the results of our multivariate statistical model to simulate how changes in observable characteristics affect the likelihood of UI receipt and unemployment duration. The simulated results are calculated from our statistical model estimates, holding selected characteristics constant, as noted throughout the report. For example, to understand how changes in workers’ education affect their likelihood of receiving UI benefits, we set the number of years of education at the same value for all workers in our sample and then used the model estimates to simulate the likelihood of UI receipt for each worker. We then calculated the average likelihood of receiving UI benefits. We repeated this process for different years of education. Unless otherwise noted, simulated likelihoods of UI receipt and simulated unemployment duration are for workers experiencing unemployment for the first time. See appendix I for a more complete discussion of our methodology, including limitations of our analysis.

We assessed the reliability of the NLSY79 dataset and found it to be sufficient for our analysis. Our work was conducted from May 2005 through February 2006 in accordance with generally accepted government auditing standards.

Results in Brief

Certain characteristics are associated with the likelihood of receiving UI benefits and unemployment duration. Based on our analysis of workers during the first half of their working lives, UI-eligible workers are more likely than other workers to receive UI benefits if they have higher earnings, are younger or have more years of education, or, most notably, if they received UI benefits in the past. In particular, UI-eligible workers who received UI benefits before are more likely than other workers to receive UI benefits again and this likelihood increases each time they are unemployed and receive UI. Other factors, including a high local unemployment rate, increase the likelihood of receiving UI. UI-eligible workers who receive UI benefits have longer periods of unemployment than workers who do not receive benefits. Similarly, workers who have fewer years of education, lower earnings, or no union membership experience longer unemployment than workers who do not have these characteristics. Workers who received UI benefits in the past, however, were unemployed about as long as similar workers who had not received UI in the past.

UI-eligible workers from certain industries are more likely than other workers to receive UI benefits and experience shorter unemployment duration, although no clear industry trend emerged. Specifically, our simulations show that

- The likelihood of receiving UI benefits during a first period of unemployment is highest among workers from mining and manufacturing. Furthermore, the likelihood of receiving UI benefits when unemployed increases with each previous period of UI receipt across all industries, and the most notable increase occurs for workers from the public administration sector.
- The unemployment duration for first-time unemployed workers from construction and manufacturing is significantly shorter than the unemployment duration experienced by workers from other industries. While unemployment duration varies across all industries, this variation is not affected by whether workers were unemployed in the past, or whether they received UI in the past.

In its comments, the Department of Labor stated that, while there are certain qualifications of our findings, Labor applauds our efforts and said that this report adds to our current knowledge of the UI program. Labor also provided technical comments, which we incorporated where appropriate.

Background

The UI program was established in 1935 and serves two primary objectives: (1) to temporarily replace a portion of earnings for workers who become unemployed through no fault of their own and (2) to help stabilize the economy during recessions by providing an infusion of consumer dollars into the economy. UI is made up of 53 state-administered programs that are subject to broad federal guidelines and oversight. In fiscal year 2004, these programs covered about 129 million wage and salary workers and paid benefits totaling \$41.3 billion to about 8.8 million workers.

Federal law provides minimum guidelines for state programs and authorizes grants to states for program administration. States design their own programs, within the guidelines of federal law, and determine key elements of these programs, including who is eligible to receive state UI benefits, how much they receive, and the amount of taxes that employers must pay to help provide these benefits. State unemployment tax revenues are held in trust by the Department of Labor (Labor) and are used by the states to pay for regular weekly UI benefits, which typically can be received for up to 26 weeks. During periods of high unemployment, the Extended Benefits program, funded jointly by states through their UI trust funds and by the federal government through the Unemployment Trust Fund, provides up to 13 additional weeks of benefits for those who qualify under state program rules. Additional benefits, funded by the federal government, may be available to eligible workers affected by a declared major disaster or during other times authorized by Congress.

To receive UI benefits, an unemployed worker must file a claim and satisfy the eligibility requirements of the state in which the worker's wages were paid. Although states' UI eligibility requirements vary, generally they can be classified as monetary and nonmonetary. Monetary eligibility requirements include having a minimum amount of wages and employment over a defined base period, typically, about a year before becoming unemployed, and not having already exhausted the maximum amount of benefits or benefit weeks to which they would be entitled because of other recent unemployment. In addition to meeting states' monetary eligibility requirements, workers must satisfy their states' nonmonetary eligibility requirements. Nonmonetary eligibility requirements include being able to work, being available for work, and becoming unemployed for reasons other than quitting a job or being fired for work-related misconduct. In all states, claimants who are determined to be ineligible for benefits are entitled to an explanation for the denial of benefits and an opportunity to appeal the determination.

Since UI was introduced, researchers and those responsible for overseeing the program have monitored the size, cost, and structure of the program and its effects on individuals' movement into and out of the workforce, including which types of workers receive UI benefits. Much of what is known about the dynamics of the UI program has been based on snapshots of the UI beneficiary population at any given time. Labor regularly gathers UI program data from the states, including each state's eligibility requirements, employers' UI tax rates, program revenues and costs, and numbers of claims received and approved. An extensive amount of research has been devoted to the effect of UI benefit receipt on unemployment duration. Specifically, researchers have found that receiving UI benefits increases unemployment duration. Much of this research is focused on measuring how changes in the amount of UI benefits increase the amount of time that an unemployed worker takes to find a new job.⁴ Although much is known about UI caseloads and about the relationship between UI benefits and unemployment duration, less is known about the patterns of UI receipt among individual workers over their entire working careers.

What is known about the patterns of UI benefit receipt over an extended period for individual workers comes from a few studies that are fairly limited in scope. In one study, researchers analyzed 1980-1982 survey data and found that among unemployed workers who were eligible for UI, younger or female workers were less likely to receive UI benefits, while union workers, workers from large families, or those with more hours of work from their previous jobs were more likely to receive UI.⁵ In another study, using UI administrative data from five states, researchers found that between 36 and 44 percent of UI claims from 1979 to 1984 were from workers who had received UI benefits more than once and that middle-aged workers and workers with higher earnings were more likely to be repeat UI recipients.⁶ Another study, based on survey data from the NLSY79, found that 16 percent of young adults had received UI benefits

⁴Alan B. Krueger and Bruce D. Meyer, "Labor Supply Effects of Social Insurance," NBER Working Paper 9014 (Cambridge, Massachusetts: National Bureau of Economic Research, 2002).

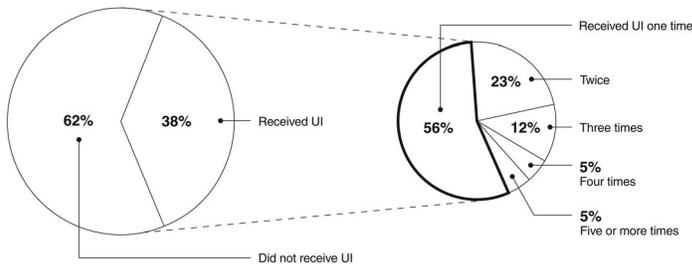
⁵Rebecca M. Blank and David E. Card, "Recent Trends in Insured and Uninsured Unemployment: Is There an Explanation?" *The Quarterly Journal of Economics*, vol. 106, no. 4 (1991).

⁶Bruce D. Meyer and Dan T. Rosenbaum, "Repeat Use of Unemployment Insurance," NBER Working Paper 5423 (Cambridge, Massachusetts: National Bureau of Economic Research, 1996), p. 20.

more than once between 1978 and 1991 and that as many as 46 percent of those who received UI were repeat recipients.⁷ This study also found that workers who were women or Hispanic or whose fathers had more years of education were less likely to become repeat recipients than workers who were men or non-Hispanic or whose fathers had fewer years of education.

In 2005, we analyzed the NLSY79 to determine the extent to which individual workers received UI benefits during their early working lives.⁸ We found that 38 percent of workers born between 1957 and 1964 received UI at least once between 1979 and 2002, with almost half of these individuals receiving UI benefits more than once. (See fig. 1.) We also found that the rate at which unemployed workers received UI benefits varied across industries, but we did not control for any of the other factors that may have helped to explain this variation.

Figure 1: Incidence of UI Benefit Receipt from 1979 through 2002, for Workers Born between 1957 and 1964



Source: GAO analysis of NLSY79 data.
 Note: Sampling errors were within plus or minus 5 percentage points at the 95 percent confidence level.

⁷See Brian P. McCall, "Repeat Use of Unemployment Insurance," in Laurie J. Bassi and Stephen A. Woodbury, editors, *Long-Term Unemployment and Reemployment Policies* (Stamford, Connecticut: JAI Press, Inc., 2000).

⁸GAO-05-291.

Certain Characteristics Are Associated with UI Benefit Receipt and Unemployment Duration

Earnings, age, education, and most notably past UI benefit receipt are all associated with the likelihood of receiving UI benefits for UI-eligible workers. Education, earnings, and union membership, and current UI benefit receipt, are associated with unemployment duration.

Unemployed Workers with Higher Earnings, Younger Workers, Workers with More Education, or Those Who Received UI in the Past Are More Likely to Receive UI Benefits

Unemployed workers are more likely to receive UI benefits if they have higher earnings prior to becoming unemployed, are younger or have more years of education, or have a history of past UI benefit receipt, when compared to workers with similar characteristics.⁹ We found that past experience with the UI program has a particularly strong effect on the future likelihood of receiving UI benefits. In addition, UI-eligible workers are more likely to receive UI when the local unemployment rate is high. However, some characteristics, such as the weekly UI benefit amount that a worker is eligible to receive, are not associated with a greater likelihood of receiving UI benefits.

Unemployed Workers Who Have Higher Earnings or Are Younger or Have More Years of Education Are More Likely to Receive UI

Unemployed workers who have higher earnings or are younger or who are more educated are more likely to receive UI benefits than otherwise similar workers. With respect to earnings,¹⁰ our simulations show that the likelihood of receiving UI tends to increase as the amount earned in the year prior to becoming unemployed increases (see fig. 2). For example, a UI-eligible worker with earnings between \$10,000 and \$11,999 in the year before becoming unemployed has a 36 percent likelihood of receiving UI, whereas a worker who earned roughly twice as much (between \$20,000 and \$24,999) has a 45 percent likelihood of receiving UI.¹¹ The likelihood of receiving UI is lowest among workers with the lowest earnings (i.e., less

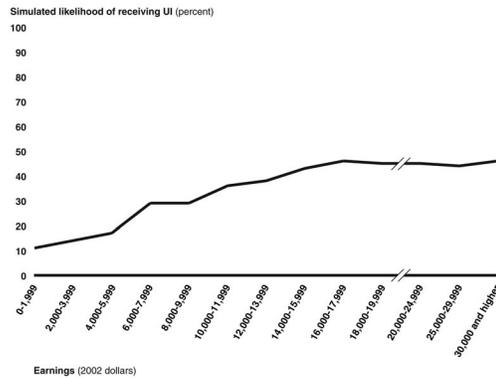
⁹The results described in this report are statistically significant at the 95 percent confidence level, unless otherwise noted. For a complete list of findings from our multivariate statistical model of the key factors associated with UI benefit receipt, see table 8 in appendix I.

¹⁰Earnings refers to base period earnings, which we define as the amount of earnings received during the first four of the last five full calendar quarters before a worker becomes unemployed. This definition is consistent with the time frame states generally use to determine eligibility.

¹¹The average and maximum earnings for the unemployed workers in our sample are \$15,524 and \$597,950, respectively.

than \$10,000 in the year before becoming unemployed). There is generally little difference in the likelihood of receiving UI among workers earning \$18,000 or more.

Figure 2: Simulated Likelihood of Receiving UI Benefits for UI-Eligible Workers, by Prior-Year Earnings



Source: Simulations based on GAO analysis of NLSY79 data.
 Note: Simulations are for the average likelihood of receiving UI during first-time unemployment at different levels of earnings. The overall average likelihood of receiving UI during first-time unemployment is 33 percent. See appendix I for methodology and estimation results.

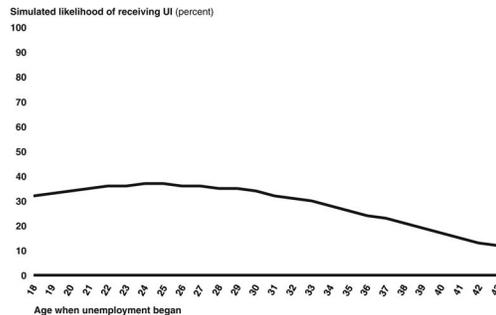
This result confirms our 2000 finding that low-wage workers are less likely to receive UI benefits than workers with higher earnings even when they have worked for the same amount of time.¹² Our current result also controls for other worker differences, such as which industries the workers were employed in or whether they were ineligible for benefits, which we had not previously been able to rule out as explanations for the variation in likelihood of receiving UI. The relationship between higher

¹²GAO, *Unemployment Insurance: Role as Safety Net for Low-Wage Workers Is Limited*, GAO-01-181 (Washington, D.C.: Dec. 29, 2000).

earnings and a higher likelihood of receiving UI benefits is also consistent with economic theory that predicts that workers with higher earnings prior to becoming unemployed will be more reluctant to accept lower reemployment wages and are therefore more likely to take advantage of UI benefits as a way to subsidize their job search efforts.¹⁵

Concerning age, our simulations show that the likelihood of receiving UI peaks at about age 25 and decreases thereafter (see fig. 3). More specifically, a 25-year-old unemployed worker who is eligible for UI is more than twice as likely to receive UI as an otherwise similar 40-year-old unemployed worker.

Figure 3: Simulated Likelihood of Receiving UI Benefits for UI-Eligible Workers, by Age



Source: Simulations based on GAO analysis of NLSY79 data.
 Note: Simulations are the average likelihood of receiving UI during first-time unemployment at different ages. The overall average likelihood of receiving UI during first-time unemployment is 33 percent. See appendix I for methodology and estimation results.

¹⁵For economic theory concerning the relationship between job search and unemployment insurance, see Dale T. Mortensen, "Unemployment Insurance and Job Search Decisions," *Industrial and Labor Relations Review*, vol. 30, no. 4 (1977).

Previous studies have found that younger workers are less likely to receive UI benefits than older workers.¹⁴ However, these previous studies did not include as much information about workers' past unemployment and UI benefit receipt histories as our current analysis. Therefore, because older workers have more of this experience than younger workers, it is possible that our analysis has controlled for the effect of this past experience more completely than these previous studies, resulting in a more precise estimate of the effect of age. We are unable to explain why younger workers are more likely to receive UI benefits than otherwise similar older workers. However, it is possible that older workers, who have had more time to accumulate financial assets, may have more private resources available to help them cope with unemployment than younger workers.¹⁵ Alternatively, younger workers may be less optimistic about how long it will take for them to become reemployed.

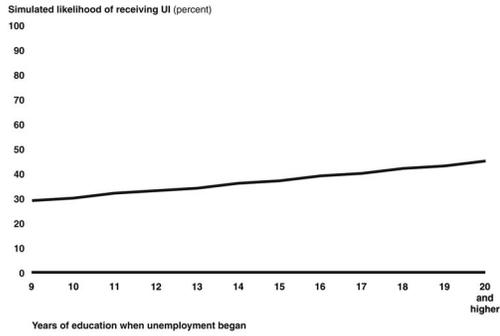
Unemployed workers with more years of education are more likely to receive UI benefits than otherwise similar workers with fewer years of education. Specifically, our simulations show that the likelihood of receiving UI increases for each additional year of schooling that a UI-eligible worker has completed before becoming unemployed (see fig. 4). For example, a UI-eligible worker with a college education (one who has completed 16 years of schooling) when he or she becomes unemployed is almost one-fifth more likely to receive UI than a UI-eligible worker with a high school education (12 years of schooling).¹⁶

¹⁴See Blank and Card, and McCall.

¹⁵See Jonathan Gruber, "The Wealth of the Unemployed," October 2001, *Industrial and Labor Relations Review*, vol. 55, no. 1.

¹⁶The average number of years of schooling completed by UI-eligible workers, at the time when they became unemployed, is 12 years.

Figure 4: Simulated Likelihood of Receiving UI Benefits for UI-Eligible Workers, by Education Level



Source: Simulations based on GAO analysis of NLSY79 data.

Note: Simulations are the average likelihood of receiving UI during first-time unemployment at different education levels. The overall average likelihood of receiving UI during first-time unemployment is 33 percent. See appendix I for methodology and estimation results.

Although the impact of education on the likelihood of receiving UI benefits has been analyzed in other research, this research found no significant education effect.¹⁷ However, to the extent that workers with more years of education are better able to access and understand UI program rules, they may also be more likely to know when they are entitled to benefits and to have the information that they need to file successful benefit claims.

Other factors, including gender, marital status, job tenure, and the local unemployment rate are also associated with UI benefit receipt. Controlling for all other characteristics among this UI-eligible group,

- a woman is 29 percent more likely to receive UI benefits than a man,

¹⁷See Blank and Card, p. 1185.

-
- a married worker is 13 percent more likely to receive UI than an unmarried worker,
 - a longer tenured worker is more likely to receive UI—for example, a worker with 4 years of tenure at his or her most recent job is 12 percent more likely to receive UI than a worker with 1 year of job tenure, and
 - being in an area with high unemployment raises the likelihood that an unemployed worker will receive UI—for example, a worker living in an area with an unemployment rate of 9 percent is 10 percent more likely to receive UI than a worker living in an area with an unemployment rate of 5 percent.

Our finding that women are more likely to receive UI benefits than otherwise similar men differs from the results of previous research, which generally found no statistically significant differences. Nevertheless, our analysis controls for more worker characteristics than these previous studies, and it is likely that we have more carefully isolated the effect of gender from that of other characteristics related to gender, such as workers' occupations or industries. It is not immediately clear why women are more likely to receive UI benefits, however. We are likewise unable to explain why married workers are more likely to receive UI benefits than otherwise similar unmarried workers.¹⁵

Our findings on job tenure are consistent with previous research. However, the higher likelihood of UI benefit receipt associated with more years of job tenure is likewise difficult to explain. It might be that workers with longer job tenures have acquired more skills that are not as easy to transfer to another employer, relative to workers with less job tenure, and anticipate longer job searches.

The higher likelihood of receiving UI benefits among workers living in areas with higher unemployment is likely due to the higher number of unemployed workers relative to available jobs, which may make workers more willing to apply for UI benefits as they engage in what are likely to be longer job searches.

In contrast to our findings above, a key UI program element, the weekly UI benefit amount that UI-eligible workers are entitled to, is not associated

¹⁵We specifically tested for the effect of spousal income on the likelihood of receiving UI to determine whether marital status was masking some underlying effect of additional family income, and found this not to be the case.

Unemployed Workers Who Received UI in the Past Are More Likely to Receive UI during Subsequent Unemployment

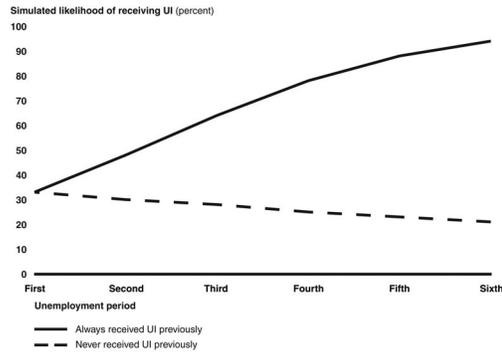
with a greater likelihood of receiving UI benefits. Using our model estimates, we simulated increases in weekly UI benefit amounts of 10 percent and 25 percent and a decrease of 10 percent and found that these changes had no effect on the likelihood of UI benefit receipt. This finding is consistent with the work of others, who have found that increases in the weekly benefit amount have mixed, but generally small effects on UI benefit receipt.¹⁹ Collectively, these results suggest that UI benefit levels have modest effects on individuals' decisions about whether or not to receive UI benefits, after controlling for other factors.

Unemployed workers who have received UI benefits during a prior period of unemployment are more likely to receive UI benefits during a current period of unemployment than otherwise similar workers who never received UI benefits (see fig. 5). For example, when workers experience their first UI-eligible period of unemployment, their likelihood of receiving UI is 33 percent. During a second UI-eligible period of unemployment, the likelihood of receiving UI is 48 percent for workers who received UI during the first unemployment period but only 30 percent for workers who did not receive UI. Furthermore, the likelihood that these UI-eligible workers will receive UI benefits during successive periods of unemployment increases each time that they receive UI benefits and decreases each time that they do not.²⁰

¹⁹See David E. Card and Phillip B. Levine, "Unemployment Insurance Taxes and the Cyclical and Seasonal Properties of Unemployment," *Journal of Public Economics*, vol. 53, no. 1 (1994); Patricia M. Anderson and Bruce D. Meyer, "The Effect of Unemployment Insurance Taxes and Benefits on Layoffs Using Firm and Individual Data," NBER Working Paper No. 4960, December 1994; and Robert H. Topel, "On Layoffs and Unemployment Insurance," *American Economic Review*, vol. 73, no. 4 (1983).

²⁰As noted above, relatively few UI-eligible workers who receive UI benefits receive them multiple times. See GAO-05-291 for a more complete discussion of the incidence of repeat UI benefit receipt.

Figure 5: Simulated Likelihood of Receiving UI Benefits for UI-Eligible Workers during Successive Periods of Unemployment, by Past UI Receipt Status



Source: GAO simulations based on GAO analysis of NLSY79 data.

Note: Simulations are the average likelihood of receiving UI during a current unemployment period for two extreme cases: (1) workers who always received UI benefits during previous unemployment and (2) workers who never received UI during previous unemployment. The average likelihood of receiving UI during first-time unemployment for all UI-eligible workers is 33 percent. See appendix I for methodology and estimation results.

This finding suggests that a worker's first unemployment experience has a lasting and self-reinforcing effect. To the extent that workers know about the UI program and whether or not they are eligible, receiving or not receiving UI benefits may be a personal choice based on unobserved worker characteristics or preferences. Alternatively, if workers do not have good information about UI, those who receive UI benefits may know more about the UI program than those who do not receive UI, and their knowledge about the program could make it easier to apply for and receive benefits during a subsequent period of unemployment.

Receiving UI Benefits, along with Other Factors, Is Associated with Unemployment Duration

Overall, unemployed workers who receive UI benefits have longer unemployment duration than otherwise similar workers who do not receive UI benefits.²¹ Several other characteristics are also associated with unemployment duration. Specifically, UI-eligible workers are more likely to experience longer unemployment duration if they have lower earnings before becoming unemployed or have fewer years of education. Other characteristics associated with longer unemployment duration, after controlling for other factors, include being African-American or female or not belonging to a union. We found no relationship between past UI benefit receipt and subsequent unemployment duration.

Receiving UI Benefits Is Associated with Longer Unemployment Duration

Whether or not an unemployed worker receives UI during a specific period of unemployment has the strongest effect on how long that period of unemployment is likely to last. Overall, UI-eligible workers who receive UI benefits during a period of unemployment remain unemployed for about 21 weeks on average, whereas otherwise similar workers who do not receive UI remain unemployed for about 8 weeks. This result is consistent with economic theory that predicts that receiving UI benefits reduces the costs associated with unemployment and allows workers to engage in longer job searches.²² That is, an unemployed worker who receives UI benefits faces less pressure to accept the first job offer they receive and can search longer for a more desirable job than an unemployed worker who does not receive UI. Another possible explanation for the strong association between UI receipt and longer unemployment duration may be that workers who expect to experience longer unemployment may be more likely to apply for UI than those who expect to return to work quickly.

Unemployed Workers with Lower Earnings and Less Education Tend to Have Longer Unemployment Duration

Unemployed workers with lower earnings tend to have longer unemployment duration than otherwise similar workers with higher earnings. This finding holds for workers who are receiving UI benefits, and for workers who are not receiving UI benefits. Specifically, our simulations show that UI-eligible workers who receive UI benefits and have relatively high earnings (\$30,000 and higher) in the year prior to becoming unemployed have unemployment duration that is as much as

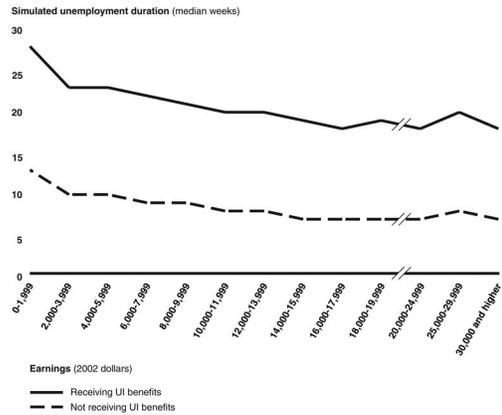
²¹For the parameter estimates of these and other variables included in our multivariate statistical model of the key factors associated with unemployment duration, see table 9 in appendix I. The variables reported here are those that were statistically significant at the 95 percent confidence level.

²²See Mortensen.

9 weeks shorter than workers with earnings that are below \$16,000.²³ The results are similar for UI-eligible workers who do not receive UI benefits (see fig. 6).

²³The average prior-year earnings amount for this sample is \$15,524.

Figure 6: Simulated Unemployment Duration for UI-Eligible Workers, by Prior-Year Earnings and UI Receipt Status



Source: Simulations based on GAO analysis of NLSY79 data.
 Note: Simulations are the median duration of unemployment during first-time unemployment. Overall average duration is 21 weeks for UI-eligible workers receiving UI benefits and 8 weeks for UI-eligible workers not receiving UI benefits. See appendix I for methodology and estimation results.

Our result is consistent with other research that has found that higher previous earnings tend to reduce unemployment duration.²⁴ Researchers have suggested that the association between higher earnings and shorter unemployment duration may be due, in part, to the higher cost of unemployment for workers with higher earnings, relative to the cost for workers with lower earnings.²⁵ Specifically, the cost of unemployment in

²⁴See Karen E. Needels and Walter Nicholson, *An Analysis of Unemployment Durations Since the 1990-1992 Recession*, UI Occasional Paper 99-6, prepared for the Department of Labor, 1999, p. 94.

²⁵See Bruce D. Meyer, "Unemployment Insurance and Unemployment Spells," *Econometrica*, vol. 58, no. 4 (1990), p. 771.

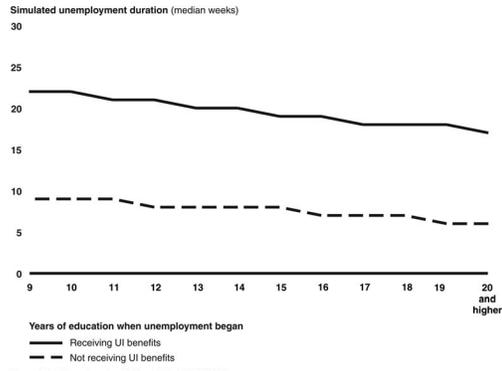
terms of lost wages is greater for workers with higher earnings, because they forego a higher amount of potential earnings in exchange for the time they spend on unpaid activities, such as job search, home improvement, or recreation.

Our model estimates also indicate that unemployed workers who have more education tend to have shorter unemployment duration than otherwise similar workers with less education. For example, simulations show that on average, UI-eligible workers with a 4-year college education (16 years of schooling) who receive UI benefits remain unemployed about 2 weeks less than workers with a high school education (12 years of schooling).²⁶ (See fig. 7.) The results are similar for UI-eligible workers who do not receive UI benefits. This finding is consistent with past research indicating that less education is associated with longer unemployment duration, because workers with less education have fewer work-related skills.²⁷

²⁶The average number of years of schooling completed by UI-eligible workers, at the time when they became unemployed, is 12 years.

²⁷Needels and Nicholson, p. 6.

Figure 7: Simulated Unemployment Duration for UI-Eligible Workers, by Education Level and UI Receipt Status



Source: Simulations based on GAO analysis of NLSY79 data.

Note: Simulations are the median duration of unemployment during first-time unemployment. Overall average duration is 21 weeks for UI-eligible workers receiving UI benefits and 8 weeks for UI-eligible workers not receiving UI benefits. See appendix I for methodology and estimation results.

Unemployed workers' race or ethnicity, gender, union membership status, and length of most recent job tenure are also associated with unemployment duration. Specifically, simulations show that UI-eligible workers who are African-American or women, who do not belong to labor unions, or who have less years of job tenure before becoming unemployed tend to have longer unemployment duration than otherwise similar workers. As seen in table 1, these associations exist whether or not workers receive UI benefits.

Table 1: Simulated Unemployment Duration for UI-Eligible Workers by Current UI Receipt Status and Other Characteristics

Worker characteristics	Unemployment duration (median weeks)	
	Receiving UI benefits	Not receiving UI benefits
Race or ethnicity		
White	19	8
Hispanic	21	8
African-American	25	11
Gender		
Male	20	8
Female	22	9
Union membership status		
Union member	19	8
Not a union member	21	9
Tenure at most recent job^a		
10 years	20	8
1 year	21	8
Overall average duration	21	8

Source: Simulations based on GAO analysis of NLSY79 data.

Note: Simulations are the median duration of unemployment during first-time unemployment. See appendix I for methodology and estimation results.

^aSimulated decreases in median weeks of unemployment are less than 1 week per additional year of tenure at most recent job, regardless of whether workers received UI or not.

Our findings are generally consistent with prior research. In particular, longer unemployment durations have been found to be associated with being African-American, female, or not belonging to a union.²⁸ Two possible explanations for the differences in employment outcomes for African-American workers include labor market discrimination, and limited access to social networks that may enable these workers to find jobs more quickly.²⁹ Likewise, longer unemployment duration among female workers may be due to labor market discrimination, or to

²⁸See Needels and Nicholson.

²⁹See Antoni Calvo-Armengol, and Matthew O. Jackson, "The Effects of Social Networks on Employment and Inequality," *The American Economic Review*, Vol. 94, No. 3, (2004) for a discussion of the effects of individuals' social networks on employment outcomes.

Unemployment Duration Is Not Associated with Past UI Receipt	<p>differences in how they value paid work versus nonemployment activities, relative to men.²⁹ Likewise, the associations between shorter unemployment duration and union membership or longer job tenure may reflect the greater access of these workers to reemployment opportunities than otherwise similar workers or because of a greater likelihood of being recalled to their previous jobs.³¹</p> <p>Past UI receipt has no significant effect on subsequent unemployment duration. Although receiving UI during a current period of unemployment is associated with longer unemployment duration, past UI receipt does not affect current unemployment duration. Specifically, simulations show that unemployment duration tends to decrease by about the same amount (typically, 1 week or less) from one unemployment period to the next, regardless of whether a worker received UI benefits in the past or not, and regardless of whether or not the worker receives UI benefits in the current period.</p>
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Certain Industries Are Associated with UI Benefit Receipt and Unemployment Duration

Unemployed workers in certain industries are more likely to receive UI benefits and experience shorter unemployment duration than otherwise similar workers from other industries. Simulations show that first-time unemployed workers from mining and manufacturing are more likely to receive UI than workers from other industries. Moreover, the strength of the association between past and current UI benefit receipt varies across industries. The increase in the likelihood of receiving UI from one unemployment period to the next is highest for public administration and is lowest for agriculture and construction. Furthermore, simulations indicate that UI-eligible workers from industries with higher proportions of unemployment periods that result in UI receipt are no more likely to become repeat UI recipients than workers from other industries. With respect to unemployment duration, UI-eligible workers from construction and manufacturing have shorter unemployment duration than workers from other industries.

²⁹See Needels and Nicholson, and GAO, *Women's Earnings: Work Patterns Partially Explain Differences between Men's and Women's Earnings*, GAO-04-35 (Washington, D.C.: Oct. 31, 2003).

³¹See Needels and Nicholson. We did not control for the likely effect of an expected job recall.

Unemployed Workers from Mining and Manufacturing Are More Likely to Receive UI Benefits

Unemployed workers from mining and manufacturing are more likely to receive UI than otherwise similar workers from other industries. For example, first-time unemployed workers from the manufacturing industry are about two-thirds more likely to receive UI benefits than workers from the professional and related services industry (see table 2). Although UI-eligible workers from mining are more likely to receive UI benefits than workers from other industries, just 2 percent of the unemployment periods that result in UI benefit receipt come from the mining industry. (See fig. 8.)³²

Table 2: Simulated Likelihood of Receiving UI Benefits for UI-Eligible Workers from Different Industries

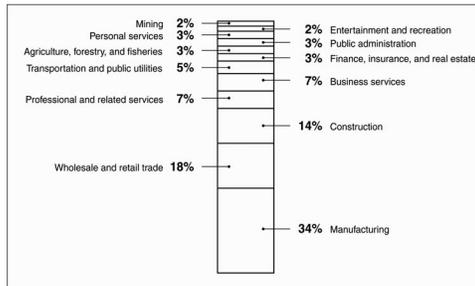
Industry	Simulated likelihood of receiving UI benefits (percent)
Mining	46
Manufacturing	40
Public administration	37
Wholesale and retail trade	35
Agriculture, forestry, and fishing	34
Business services	31
Construction	31
Finance, insurance, and real estate	31
Transportation and public utilities	29
Entertainment and recreation services	26
Professional and related services	24
Personal services	23
All industries	33

Source: Simulations based upon GAO analysis of NLSY79 data.

Note: Simulations are the average likelihood of receiving UI during first-time unemployment for workers from different industries. The parameter estimates for the mining, manufacturing, public administration, wholesale and retail trade, agriculture, forestry, and fishing, business services, and construction industries are statistically significant relative to the professional and related services industry at the 95 percent confidence level. See appendix I for methodology and estimation results.

³²The percentages in table 2 and figure 8 are not comparable. The percentages in table 2 represent an individual worker's likelihood of receiving UI when UI-eligible unemployment occurs, whereas the percentages in figure 8 compare the relative proportions of unemployment spells with UI benefit receipt coming from different industries.

Figure 8: Distribution of All Periods of UI Benefit Receipt across Industries



Source: GAO analysis of NLSY79 data.
 Note: Total does not equal 100 percent due to rounding.

The Relationship between Past and Current UI Receipt Is Strongest for Public Administration

Unemployed workers who have received UI benefits in the past are more likely to receive UI benefits during a current period of unemployment than otherwise similar workers who never received UI benefits, across each industry (see table 3). However, the increase in the likelihood of receiving UI benefits associated with past UI benefit receipt is not the same across all industries. Specifically, this effect is strongest for workers from public administration and is weakest for workers from agriculture and construction.³³

³³Although the association between past UI receipt and current UI receipt is statistically significant for all industries combined, differences in this association among industries were statistically significant only for public administration, agriculture, and construction.

Table 3: Simulated Likelihood of Receiving UI Benefits during Different Periods of UI-Eligible Unemployment for Workers with Past UI Receipt, by Industry

Industry	Simulated likelihood of receiving UI benefits during current UI-eligible unemployment period, given past UI receipt (percent)		
	First unemployment period ^a	Second unemployment period	Third unemployment period
Mining	46	57	69
Manufacturing	40	52	65
Public administration	37	68	91
Wholesale and retail trade	35	52	70
Agriculture, forestry, and fishing	34	42	50
Business services	31	48	66
Construction	31	40	51
Finance, insurance, real estate	31	64	91
Transportation and public utilities	29	46	66
Entertainment and recreation services	26	45	67
Professional and related services	24	39	58
Personal services	23	38	56
All industries	33	48	64

Source: Simulations based upon GAO analysis of NLSY79 data.

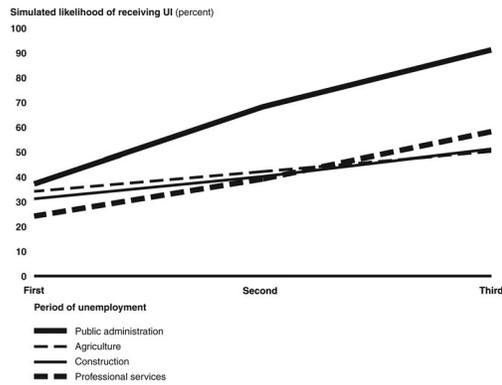
Note: Simulations are the average likelihood of receiving UI during a first unemployment period, a second unemployment period with UI receipt during the prior unemployment period, and a third unemployment period with UI receipt during both prior unemployment periods. The positive effect that each prior UI receipt period has on the likelihood of current UI receipt is statistically significantly larger for the public administration industry relative to the professional and related services industry at the 95 percent confidence level, and smaller for the agriculture and construction industries. The simulations also incorporate the industry effects and the industry interactions with the number of prior periods of unemployment. See appendix I for methodology and estimation results.

^aWorkers experiencing their first period of unemployment did not have past UI receipt.

These results show that although UI-eligible workers in some industries are more likely to receive UI benefits when they experience unemployment for the first time, their likelihood of receiving UI benefits again when they become unemployed a second or third time is not necessarily higher than it is for workers from other industries. For example, the likelihood of receiving UI benefits for workers from the manufacturing industry who are unemployed for the first time is relatively high—about 40 percent. This likelihood increases to 52 percent during a second period of unemployment for workers who have already received UI benefits, and to 65 percent during a third period of unemployment for workers who received UI each time they were unemployed. By comparison, the increase in the likelihood of receiving UI between the first

and third periods of unemployment is higher for most other industries, especially public administration. Specifically, the likelihood of receiving UI benefits for public administration workers who are unemployed for the first time is 37 percent. This likelihood increases to 69 percent during a second period of unemployment for workers who have already received UI, and to 92 percent during a third period of unemployment for workers who received UI each time they were unemployed. (See fig. 9.)

Figure 9: Simulated Effect of Past UI Benefit Receipt on the Likelihood of Receiving UI in Subsequent Periods of Unemployment, for Selected Industries



Source: Simulations based on GAO analysis of NLSY79 data.

Note: Simulations are the average likelihood of receiving UI during a first unemployment period, second unemployment period with UI receipt during the prior unemployment period, and a third unemployment period with UI receipt during both prior unemployment periods. The positive effect that each prior UI receipt period has on the likelihood of current UI receipt is statistically significantly larger for the public administration industry relative to the professional and related services industry at the 95 percent confidence level, and smaller for the agriculture and construction industries. The simulations also incorporate the industry effects and the industry interactions with the number of prior periods of unemployment. See appendix I for methodology and estimation results.

Administrative unemployment insurance data have shown that repeat UI recipients tend to be from industries that are more seasonal, such as manufacturing and construction. Our results, however, suggest that this is

not because workers with past UI receipt from these industries are more likely to receive UI benefits when they become unemployed than otherwise similar workers from other industries. Rather, it may be that workers from such seasonal industries are unemployed more often on average than workers from other industries, or that a larger proportion of unemployed workers from such industries have collected UI previously.

**Unemployed Workers from
Construction and
Manufacturing Have Fewer
Weeks of Unemployment**

Unemployed workers from construction and manufacturing have shorter unemployment duration than otherwise similar workers from other industries. (See table 4.) Furthermore, simulations based on our model estimates show that differences in unemployment duration across industries exist whether or not UI benefits are received. Specifically, UI-eligible workers from construction who receive UI benefits have the fewest weeks of unemployment on average (17 weeks), when compared with workers from other industries. Likewise, UI-eligible workers from construction who do not receive UI benefits also have the fewest weeks of unemployment, on average (6 weeks).

Table 4: Simulated Unemployment Duration for UI-Eligible Workers, by Industry and UI Receipt Status

Industry	Simulated unemployment duration (median weeks)	
	Receiving UI benefits	Not receiving UI benefits
Construction	17	6
Mining	17	6
Business services	18	7
Manufacturing	19	7
Finance, insurance, and real estate	21	8
Wholesale and retail trade	22	9
Public administration	23	9
Professional and related services	24	10
Entertainment and related services	24	10
Personal services	24	10
Agriculture, forestry, and fishing	26	11
Transportation and public utilities	27	12
Overall average duration	21	8

Source: Simulations based upon GAO analysis of NLSY79 data.

Note: Simulations are the median duration of unemployment during first-time unemployment. The parameter estimates for the construction and manufacturing industries are statistically significant relative to the professional and related services industry at the 95 percent confidence level. See appendix I for methodology and estimation results.

Certain Occupations Are Associated with UI Benefit Receipt and Longer Unemployment Duration

The likelihood of receiving UI benefits varies across occupations, but generally not as much as it does across industries. Specifically, UI-eligible managers are about one-fifth more likely to receive UI than otherwise similar transportation equipment operators, and one-half more likely to receive UI than professional and technical workers (see table 5).

Table 5: Simulated Likelihood of Receiving UI Benefits for UI-Eligible Workers from Different Occupations

Occupation	Simulated likelihood of receiving UI benefits (percent)
Managers and administrators	39
Farmers, farm laborers, and foremen	38
Machine operators (nontransportation)	38
Craftsmen	35
Laborers (nonfarm)	34
Transportation equipment operators	33
Clerical and unskilled workers	33
Service workers (excluding private household)	28
Sales workers	28
Professional and technical workers	25
Overall average	33

Source: Simulations based upon GAO analysis of NLSY79 data.

Note: Simulations are the average likelihood of receiving UI during first-time unemployment for workers from different occupations. The parameter estimates for managers and administrators, farmers, farm laborers, and foremen, machine operators, craftsmen, laborers, transportation equipment operators, and clerical and unskilled workers are statistically significant relative to professional and technical workers at the 95 percent confidence level. See appendix I for methodology and estimation results.

UI-eligible workers who have received UI benefits in the past are more likely to receive UI benefits during a current period of unemployment than UI-eligible workers who never received UI benefits, across each occupation. Specifically, this effect is strongest for sales and service workers and weakest for transportation equipment operators and craftsmen (see table 6).³⁴

³⁴Although the association between past UI receipt and current UI receipt is statistically significant for all occupations combined, differences in this association among occupations were statistically significant only for sales and service workers, and for transportation equipment operators and craftsmen.

Table 6: Simulated Likelihood of Receiving UI Benefits during Different Periods of UI-Eligible Unemployment for Workers with Past UI Receipt, by Occupation

Occupation	Simulated likelihood of receiving UI benefits during current UI-eligible unemployment period, given past UI receipt (percent)		
	First unemployment period ^a	Second unemployment period	Third unemployment period
Managers and administrators	39	52	65
Farmers, farm laborers, and foremen	38	54	70
Machine operators (nontransportation)	38	50	62
Craftsmen	35	46	56
Laborers (nonfarm)	34	45	58
Transportation equipment operators	33	42	51
Clerical and unskilled workers	33	53	73
Service workers (excluding private household)	28	50	74
Sales workers	28	66	94
Professional and technical workers	25	39	56
Overall average	33	48	64

Source: Simulations based upon GAO analysis of NLSY79 data.

Note: Simulations are the average likelihood of receiving UI during a first unemployment period, a second unemployment period with UI receipt during the prior unemployment period, and a third unemployment period with UI receipt during both prior unemployment periods. The positive effect that each prior UI receipt period has on the likelihood of current UI receipt is statistically significantly larger for sales workers and service workers relative to professional and technical workers at the 95 percent confidence level, and smaller for transportation equipment operators and craftsmen. The simulations also incorporate the occupation effects and the occupation interactions with the number of prior periods of unemployment. See appendix I for methodology and estimation results.

^aWorkers experiencing their first period of unemployment did not have past UI receipt.

Unemployment duration also varies across occupations. UI-eligible professional and technical workers have longer unemployment duration than otherwise similar workers from other occupations. Specifically, professional and technical workers have unemployment duration that is 5 weeks longer than average for workers receiving UI and 3 weeks longer than average for workers not receiving UI (see table 7).³⁵ Past experience with UI benefit receipt has no significant effect on unemployment duration, regardless of a worker's occupation.

³⁵The largest differences between industries in median weeks of unemployment are 10 weeks for workers receiving UI and 5 weeks for workers not receiving UI.

Table 7: Simulated Unemployment Duration for UI-Eligible Workers, by Occupation and UI Receipt Status

Occupation	Simulated unemployment duration (median weeks)	
	Receiving UI benefits	Not receiving UI benefits
Craftsmen	16	6
Sales workers	18	7
Machine operators (nontransportation)	19	7
Transportation equipment operators	20	8
Laborers (nonfarm)	20	8
Service workers (excluding private household)	23	9
Managers and administrators	23	9
Clerical and unskilled workers	23	10
Farmers, farm laborers, and foremen	26	11
Professional and technical workers	26	11
Overall average duration	21	8

Source: Simulations based upon GAO analysis of NLSY79 data.

Note: Simulations are the median duration of unemployment during first-time unemployment for workers from different occupations. The parameter estimates for craftsmen and machine operators are statistically significant relative to professional and technical workers at the 95 percent confidence level. See appendix I for methodology and estimation results.

Concluding Observations

Although the UI program has existed for over 70 years and serves millions of workers each year, little is known about workers who receive UI benefits on a recurring basis or about workers who are eligible for UI benefits but never receive them. We found that UI-eligible workers during the first half of their working lives with certain demographic characteristics and from certain industries have a greater likelihood of receiving UI benefits multiple times and experiencing longer unemployment durations than otherwise similar workers. Although our results are generally consistent with past research, our analysis includes additional information about workers' past experiences that provides new insight into the factors that distinguish workers who receive UI benefits from those who do not. In fact, the single most important factor associated with eligible workers receiving benefits is whether or not they received benefits during previous unemployment, suggesting that a worker's perception of UI when they are faced with unemployment is key to whether that worker will ever use the program. Moreover, it does not

appear that previous UI recipients from industries where UI benefit receipt is more likely, such as construction and manufacturing, are any more likely to receive benefits if unemployed again than similar workers from other industries. Rather, it appears that workers from these industries are simply more likely to face the choice of whether or not to file for UI benefits more often than their counterparts in other industries. In addition, while the patterns for UI receipt and unemployment duration we identified for this group during the first half of their working lives may not change significantly as they enter the second half of their working lives, it remains to be seen whether the issues they face in the years leading up to their retirement will reshape their use of the UI program.

Agency Comments

We provided a draft of this report to Labor officials for their review and comment. Labor applauded GAO's efforts to determine the extent to which an individual worker's characteristics are associated with the likelihood of UI benefit receipt and with unemployment duration and noted that the study adds to current knowledge of the UI program, particularly with regard to the impact of past UI benefit receipt on current UI receipt. However, Labor also noted that there are several issues related to our methodology that may limit the utility of our findings for policymaking. While we agree that there are limitations inherent in our methodology, we believe that these limitations have been noted throughout the report, and that they do not compromise the overall validity of our results. Nevertheless, we have provided additional clarifications, as appropriate, to address Labor's technical comments.

As agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution of it until 30 days from its date. At that time, we will send copies of this report to relevant congressional committees, the Secretary of Labor, or other interested parties. We will also make copies available to others upon request. The report will be available at no charge on GAO's Web site at <http://www.gao.gov>. If you or members of your staff have any questions about this report, please contact me at (202) 512-7215. Other major contributors are listed in appendix III.

Sincerely yours,

A handwritten signature in black ink, reading "Sigurd R. Nilsen". The signature is written in a cursive style with a long horizontal stroke at the end.

Sigurd R. Nilsen, Director
Education, Workforce and
Income Security Issues

Appendix I: Analysis of UI Benefit Receipt and Unemployment Duration

Overview

We analyzed the factors affecting unemployment insurance (UI) benefit receipt by statistically modeling the determinants of UI benefit receipt and unemployment durations simultaneously. We model UI benefit receipt in conjunction with unemployment durations to allow for correlations that may exist between the two outcomes for a given individual. For example, an unemployed person anticipating a lengthy unemployment period might be more likely to receive UI benefits than a person expecting a short unemployment period. Alternatively, the receipt of UI benefits may lengthen an unemployment period by allowing an individual to spend more time looking for new employment. In addition, our model controls for a number of observable factors about each unemployed worker's situation, including recent employment experience, prior unemployment and UI benefit receipt experience, information about UI program factors, including benefit levels, and demographic characteristics. The model was developed and estimated by Dr. Brian McCall, Professor of Human Resources and Industrial Relations, University of Minnesota, under contract to GAO.

This appendix describes (1) the data used in the analysis, including how the data were prepared, (2) the econometric model that was estimated, (3) the results from two specifications of the econometric model, and (4) the limitations inherent in the analysis.

Data Used

We used the Bureau of Labor Statistics' (BLS) National Longitudinal Survey of Youth 1979 (NLSY79) for our analysis. The NLSY79 is an ongoing longitudinal survey of individuals who were between the ages of 14 and 22 in 1979, the first year of the survey.¹ A primary focus of the NLSY79 is on individuals' labor force patterns, and the data are collected at a very detailed level. This detail allows us to track the weekly employment, unemployment, and earnings histories of the individuals in the sample. The NLSY79 also contains less detailed information about individuals' UI receipt during unemployment.² The NLSY79 does not contain direct information about an individual's UI eligibility status, which is a function of previous employment and earnings, among other things, and varies by

¹NLSY79 data begin in 1978. Interviews for the NLSY79 were conducted annually until 1994, and biennially beginning in 1996. We used data through 2002, which were the most recent NLSY79 data available.

²UI receipt information is provided on a monthly basis in the NLSY79. Because this information is only given on a monthly basis, it cannot be used to accurately measure the number of weeks of UI receipt during unemployment.

**Appendix I: Analysis of UI Benefit Receipt
and Unemployment Duration**

state of employment.³ We estimate an unemployed individual's UI eligibility status using data that are available in the NLSY79.

There are three main reasons why the NLSY79 database provides the most suitable data for our analysis. First, the longitudinal nature and level of detail of the data allow us to control for an individual's history of unemployment and UI receipt, which is a major contribution of this work. Second, respondents were first surveyed at a young age, which reduces the likelihood that we do not observe periods of unemployment and UI receipt early in a person's working career. Third, the detailed data allow us to estimate an individual's UI eligibility status, allowing us to focus our analysis on unemployed individuals whom we estimated to be eligible for UI benefits while also reasonably controlling for differences in UI program rules across states. A few limitations to the NLSY79 database should be mentioned. First, the sample began with 12,686 individuals in 1979, but has decreased in size over time due to attrition.⁴ Second, the data are self-reported and thus subject to recall error. We assessed the reliability of the NLSY79 data by interviewing relevant BLS officials, reviewing extensive NLSY79 documentation, and performing electronic tests of the NLSY79 data for missing or corrupt information that might negatively affect our analysis. On the basis of these reviews and tests, we determined that the data were sufficiently reliable to be used in our analysis.

We considered using administrative state UI data as an alternative to the NLSY79. Although such administrative data could provide information about all UI recipients in a state, these data could not provide information about UI-eligible unemployed workers who did not receive benefits. Also, because these data are not designed for research purposes, there is limited information available about individuals that can be used to control for differences, such as demographic characteristics. Finally, there is also no nationally representative data source for administrative UI data.

For each individual in the NLSY79 database, we created a detailed weekly history of employment and unemployment, including whether UI benefits

³State UI programs determine eligibility using a number of criteria, including the following conditions: (1) the unemployment must be the result of a job loss that was not caused by the individual, (2) the individual must have earned a specified amount of money during the time preceding the unemployment, and (3) the individual must be actively looking for new employment.

⁴See Center for Human Resource Research, Ohio State University, *The National Longitudinal Surveys NLSY79 User's Guide*, prepared for the Department of Labor, 2002.

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were received during unemployment. Our definition of unemployment is not the strict definition used in the BLS's Current Population Survey (CPS). We define unemployment to include both the weeks in which an out-of-work person is looking for work (the standard CPS unemployment definition) and the weeks during which the individual reports being out of the labor force (OLF). We did require that an individual spend at least 1 week actively looking for work after a job loss to reduce the likelihood that the person had permanently left the labor force. Other research has addressed the effect that the UI program plays on the percentage of weeks of nonemployment that a person reports that he or she was looking for work.⁵

For each unemployment period experienced by an individual, we estimate the person's UI eligibility status. Although states determine UI eligibility using a number of criteria, we focus on the following three: (1) the unemployment must be the result of a job loss that was not caused by the individual, (2) the individual must have earned a specified amount of money during the time preceding the unemployment, and (3) the individual must be actively looking for new employment. The NLSY79 provides the information necessary to estimate whether these criteria are met by an unemployed individual. For criterion 1, the NLSY79 provides information about the reason that a job was lost. Only those unemployed individuals who lost a job through no fault of their own were deemed to be UI-eligible.⁶ For the monetary eligibility criterion 2, we compiled a detailed set of UI eligibility and benefit criteria for each of the 50 states and the District of Columbia over the period 1978 to 2002.⁷ When these criteria

⁵R. Mark Gritz and Thomas MaCurdy, "Measuring the Influence of Unemployment Insurance on Unemployment Experiences," *Journal of Business and Economic Statistics*, vol. 15, no. 2, (1997), examined the role that UI rules have on an individual's choice to report himself or herself as unemployed (CPS definition) as opposed to out of the labor force. They found that, in addition to having longer nonemployment periods, UI recipients report being unemployed in the CPS sense for a greater proportion of their nonemployment period.

⁶It appeared from the NLSY79 data that a number of respondents did not differentiate between being laid off and being discharged or fired. As a result, we include those who report being either laid off or discharged or fired as satisfying the first UI eligibility rule. The NLSY79 reports a number of other reasons for leaving a job, including having found better work, low pay, pregnancy, illness, change of job by spouse or parents, other family reasons, job's interference with school, the end of a program, bad working conditions, and entrance into the armed forces.

⁷See U.S. Department of Labor, Employment and Training Administration, *Significant Provisions of State Unemployment Insurance Laws* (Washington, D.C., 1979-2002).

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were combined with the NLSY79's detailed employment and earnings histories, we were able to determine monetary eligibility for UI with reasonable accuracy, as well as the weekly benefit amount and the number of weeks of benefits a person was eligible to receive.⁸ For criterion 3, we considered as UI-eligible only those unemployed individuals who reported actively looking for work during at least 1 week of their unemployment. We erred on the side of overestimating the eligibility based on criterion 3, because individuals who self-report information about nonemployment may not fully realize the impact that "looking for work" versus "being out of the labor force" has on UI eligibility, especially if they did not receive UI benefits. Although this estimation method is not perfect, we believe that it captures some of the most important features of UI eligibility. It is similar to the methods used by other researchers.⁹

In addition to estimating the UI eligibility status of individuals at the time of each of their unemployment periods, we also created the other variables used in our analysis. The empirical model outlined in the following subsection focuses on UI benefit receipt and unemployment duration. UI benefit receipt during unemployment was determined using the monthly measure provided in the NLSY79.¹⁰ The duration of unemployment, as defined above, is measured in weeks from the week after a job was lost to the week a new job was begun. We censor duration to be no longer than 100 weeks.

To isolate the impact that a variable has on the likelihood of UI benefit receipt and unemployment duration, our model controls for a great number of other factors that were observable at the start of, and throughout, the person's unemployment. One set of variables relates to the employment experience of the individual immediately preceding unemployment, including industry and occupation of the last job (measured at the one-digit Standard Industrial Classification [SIC] and

⁸Although UI eligibility is based upon the rules in the state where an individual is employed, we used state of residence for our estimates because state of employment was not available in the NLSY79. Thus, people who work in one state but live in another may not be classified correctly. However, we believe that only a small percentage of such data are classified incorrectly and, thereby, our results should be only minimally affected.

⁹See Gritz and MaCurdy, 1997, and McCall 2000 for examples.

¹⁰We consider only an individual's first period of unemployment with UI receipt during a person's "benefit year." A benefit year is the 52-week period during which UI benefits can be claimed.

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Standard Occupational Classification [SOC] level), union status and tenure at the job lost, earnings (base period earnings [BPE] and high quarter earnings [HQE]), whether the job was lost because of a plant closing, and the calendar year and month the unemployment began.¹¹ We group both earnings measures into brackets to allow for nonlinear effects. All dollar values are adjusted for inflation to 2002 dollars using the BLS's Consumer Price Index for All Urban Consumers (CPI-U). We also control for the state unemployment rate during the month that unemployment began, and, in the duration equation, for the time-varying state monthly unemployment rate over the period of unemployment.

A second set of variables summarizes UI program factors, such as the weekly benefit amount (WBA) a person is eligible to receive, the number of weeks of benefits a person is eligible to receive, whether the state has a waiting period before benefits can be received, and whether permanent or temporary extended benefits are in effect.¹² We also control for the percentage of new UI claims that are denied by a state (in the receipt equation) and the percentage of continuing UI claims that are denied by a state (in the duration equation). In the unemployment duration equation, we also allow the parameter estimates for WBA, remaining weeks of benefits, and extended benefits to vary over the period of unemployment. This is done by interacting these variables with a cubic function of the number of weeks unemployed. Again, all dollar values are adjusted for inflation to 2002 dollars using the BLS's CPI-U.

A third group of variables relates to a person's history of unemployment and UI benefit receipt as measured at the start of an unemployment period. This group of variables includes the number of times the person had been unemployed and the number of times a person had received UI benefits previously (in the receipt equation) and whether or not the person had been unemployed and whether or not the person had received UI benefits previously (in the duration equation). We also interact these variables with industry and occupation dummy variables to investigate whether previous unemployment and UI receipt affect the likelihood of

¹¹The base period is the period of time during which earnings are counted toward UI eligibility. It generally covers a year. We define the base period as the first four of the last five completed calendar quarters. High quarter earnings refers to the quarter of highest earnings during the base period.

¹²Permanent extended benefits are triggered by high unemployment rates in a state, and provide for up to 13 additional weeks of benefits to UI-eligible individuals. Temporary extended benefits are available periodically, as authorized by Congress.

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current UI receipt and unemployment durations differently across industries. These interactions with industry and occupation are done in separate specifications of the model.

A fourth group of variables relates to a person's demographic characteristics at the time of unemployment. These include age, race, gender, marital status, number of years of schooling, health limitations, whether a spouse has used UI previously, family size, number of children, number of children between the ages of 0 and 2, whether the person lives with his or her parents, state of residence, and whether the person lives in a Standard Metropolitan Statistical Area (SMSA) as opposed to a rural area.

We limit our analysis to the nonmilitary sample of NLSY79 respondents.¹³ In addition, we drop individuals with insufficient information to estimate UI eligibility with reasonable accuracy. Data for an individual were included up to their first missed interview.¹⁴ Individuals without any unemployment, and those without unemployment that was estimated to be UI-eligible, were not used in the analysis. Also, individuals who were missing data required by our econometric model were not used in the analysis. This yielded a sample of 5,631 individuals who had been unemployed and eligible for UI benefits at least once, resulting in a total of 15,506 separate periods of UI-eligible unemployment.

Econometric Model

To investigate the key factors associated with UI benefit receipt, including the role of prior UI benefit receipt (repeat UI recipiency), we used a dynamic econometric model that jointly determines UI benefit receipt and unemployment duration. As mentioned above, the reason for modeling these outcomes jointly is to allow for the likely correlations that exist between them.¹⁵ In addition to modeling UI receipt and unemployment duration jointly, our model allows prior unemployment and prior UI

¹³The NLSY79 began with 12,686 individuals in 1979, 1,280 of whom were part of the military subsample. The majority of the military subsample of the NLSY79 was eliminated in 1985.

¹⁴The NLSY79 attempts to reconnect with individuals that missed an interview in the previous year.

¹⁵For one example of an economic model of how the receipt of UI benefits can affect the expected length of unemployment by affecting a person's reservation wage, see Mortensen.

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receipt to influence current UI receipt and unemployment duration to allow for the correlations that possibly exist over time for an individual.

We used a complementary log-log specification to model the probability of UI receipt during an individual's kth unemployment period, $k=1, \dots, K$, as:

$$\Pr[UI(k) = 1 | \mathbf{x}^u(k), \xi^u, \mathbf{z}^u(k)] = 1 - \exp(-\xi^u \exp[\mathbf{x}^u(k)' \boldsymbol{\beta}^u + \mathbf{z}^u(k)' \boldsymbol{\gamma}^u]),$$

where $\mathbf{x}^u(k)$ is a vector of exogenous variables measured at the start of the kth unemployment period, all of which are assumed to be independent of the unobserved random variable ξ^u , which helps control for unobserved heterogeneity. Variables in $\mathbf{x}^u(k)$ include demographic characteristics, characteristics about the lost job, and UI program information. The vector $\mathbf{z}^u(k)$ is a vector of endogenous variables pertaining to past unemployment and past UI benefit receipt, which are measured at the start of an individual's kth unemployment period and may be correlated to ξ^u .

We modeled unemployment durations using a discrete-time hazard function, which gives the probability of an event occurring during a discrete time period, conditional upon not having experienced the event prior to that time. This can be thought of as the escape rate from unemployment during a specific time period. We assume that the conditional probability that an individual's kth period of unemployment ends in the interval $(m-1, m]$, given that it exceeds $m-1$, where m indexes the number of weeks, follows a complementary log-log specification:

$$\Pr[d(k) = m | \mathbf{x}^d(k), \xi^d, \mathbf{z}^d(k)] = 1 - \exp(-\xi^d \exp[\mathbf{x}^d(k)' \boldsymbol{\beta}^d + \mathbf{z}^d(k)' \boldsymbol{\gamma}^d + \alpha_m^d]),$$

for $m=1, \dots, M$, and where $\mathbf{x}^d(k)$ is a vector of exogenous variables measured at the start of the kth unemployment period, all of which are assumed to be independent of the unobserved random variable ξ^d , which helps control for unobserved heterogeneity. Variables in $\mathbf{x}^d(k)$ include demographic characteristics, characteristics about the lost job, and UI program information. The vector $\mathbf{z}^d(k)$ consists of endogenous variables pertaining to current UI benefit receipt, past unemployment, and past UI benefit receipt, which are measured at the start of an individual's kth

unemployment period and may be related to ξ^d . The parameter vector $\mathbf{a}^d = (\alpha_1^d, \alpha_2^d, \dots, \alpha_M^d)$ is the baseline hazard function.

Letting $i, i = 1, \dots, I$, index individuals and k index an individual's unemployment periods, we define $q_i(k)$ to be equal to 1 when individual i has a k th unemployment period, and 0 otherwise. Also, we define $c_i(k)$ to be equal to 1 when individual i 's k th unemployment period is complete, and 0 otherwise. Using this notation, individual i 's contribution to the likelihood function can be written:

$$\begin{aligned}
 L_i(\mathbf{0}, \xi^u, \xi^d) &= \prod_{k=1}^{K_i} \left(\Pr[UI_i(k) = 1 \mid \mathbf{x}_i^u(k), \xi_i^u, \mathbf{z}_i^u(k)]^{q_i(k)} \right. \\
 &\times \left. \left(1 - \Pr[UI_i(k) = 1 \mid \mathbf{x}_i^u(k), \xi_i^u, \mathbf{z}_i^u(k)] \right)^{1 - q_i(k)} \right) \\
 &\times \left(\prod_{m=1}^{d_i(k)-1} \left(1 - \Pr[d_i(k) = m \mid \mathbf{x}_i^d(k), \xi_i^d, \mathbf{z}_i^d(k)] \right) \right) \\
 &\times \left. \left(\Pr[d_i(k) \mid \mathbf{x}_i^d(k), \xi_i^d, \mathbf{z}_i^d(k)] \right)^{c_i(k)} \right\}
 \end{aligned}$$

where the vector of parameters $\mathbf{0}$ is to be estimated and contains \mathbf{B}^j , $\boldsymbol{\gamma}^j$, ξ^j , and \mathbf{a}^d , where $j = d, u$. We assume that the distribution of the unobserved random variables (ξ^d, ξ^u) is such that there are 3 different types of individuals in the population, with the fraction of each type equal

to p_h , where: $\sum_{h=1}^3 p_h = 1$. Combining these possibilities, we write an individual's likelihood contribution as: $L_i(\mathbf{0}, \mathbf{p}) = \sum_{h=1}^3 p_h L_i(\mathbf{0}, \xi_h^u, \xi_h^d)$,

where $\mathbf{p} = (p_1, p_2, p_3)'$. Taking logarithms and summing over all individuals yields the full log likelihood function for the sample:

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$\log L(\theta, \mathbf{p}) = \sum_{i=1}^I \log L_i(\theta, \mathbf{p})$. This likelihood is computed in FORTRAN and maximized using the BHHH algorithm.¹⁶

A number of features outlined above are simplifications of a more general version of this model, and were introduced to help reduce the number of parameters to be estimated by the model. First, the baseline hazard function, α^j , was assumed to be independent of the unemployment period number, k . Second, the parameters associated with the exogenous (β^j , $j = d, u$) and endogenous (γ^j , $j = d, u$) variables were assumed to be independent of the unemployment period number, k . Third, the unobserved random variables (ξ^j , $j = d, u$) were assumed to be independent of the unemployment period number, k . Although this assumption is not as general as allowing each individual to have different unobserved components over time, it does help control for unobserved differences between individuals that may influence UI receipt and unemployment durations.

Because of the complexity of the empirical model outlined above, interpreting the parameter estimates is difficult.¹⁷ As a result, we use the output from the model to simulate the effect that changes in certain variables have on the likelihood of UI receipt and the duration of unemployment for the average unemployed person in our sample. For example, to understand differences in UI receipt and unemployment durations by industry, we simulate the likelihood of UI benefit receipt and unemployment duration for the average person in our sample for each of the possible industries, and then compare the results. To do this, we use the model's output to calculate every person's likelihood of UI receipt and escape rate from unemployment—conditional upon receiving and not receiving UI—assuming all were in the first industry grouping when they lost their job. Averaging over all individuals yields the average probability

¹⁶See E. K. Berndt, B. H. Hall, R. E. Hall, and J. A. Hausman, "Estimation and Inference in Nonlinear Structural Models," *Annals of Economic and Social Measurement*, vol. 3, no. 4 (1974). The BHHH algorithm is a quasi-Newton method for finding maximums.

¹⁷In addition to being a highly nonlinear model, the data were all normalized to help the convergence of the parameter estimates.

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of UI receipt and the averaged (week by week) survivor function.¹⁸ The averaged survivor function can be used to compute the expected median duration of unemployment.¹⁹ We then repeat this process, successively, assuming that all individuals were in another industry grouping when they lost their jobs, until all industry groups have been simulated.

The simulated average likelihood of UI benefit receipt and median unemployment duration can then be compared across industries to estimate the differences by industry. Using all individuals for each simulation, and reporting results for the average unemployed person, helps insure that differences in the simulation results (e.g., industry 1 versus industry 2) reflect only the variables (industry 1, industry 2) being simulated.²⁰ To describe results that are not related to past experience with unemployment and UI benefit receipt, we present simulations that are specific to first-time unemployment—a simple and clearly defined scenario (the observable trends also hold for unemployed individuals with prior unemployment and UI receipt experience).

Results

We report parameter estimates from two specifications of our model. The first specification includes interaction terms between industry and our measures of past UI benefit receipt and past unemployment. These results are presented in tables 8 and 9 for the UI benefit receipt equation and the unemployment duration equation respectively. The second specification includes interaction terms between occupation and our measures of past UI benefit receipt and past unemployment. These results are presented in tables 10 and 11 for the UI benefit receipt equation and the unemployment duration equation respectively. We included the industry and occupation interactions in separate specifications to avoid the issues brought about by

¹⁸The survivor function at time t for an event is the probability of not having experienced that event prior to time t . The survivor function is mathematically related to the escape rate (hazard rate).

¹⁹We chose median rather than mean because of the skewed nature of our unemployment duration data.

²⁰For our simulations, if we used only those individuals that reported losing a job from a specific industry, as opposed to using all individuals, it is likely that a portion of the differences we would observe in the likelihood of UI benefit receipt and unemployment duration would be due to differences in other observable factors between the individuals from the different industry groups. For example, it may be that professional services workers have higher average earnings than agricultural workers, which would be earnings effect, not an industry-specific effect.

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multicollinearity.²¹ Because the results for the noninteraction terms are similar between the two specifications, we focus on those from the industry-interaction specification (tables 8 and 9). After discussing these results, we discuss the results for the occupation-interaction specification (tables 10 and 11).

Tables 8, 9, 10, and 11 are structured as follows. The first column in each table lists the variable names; the second column, the parameter estimates; the third column, the estimated standard errors; and the fourth column, the t-statistics. The last column contains asterisks that signify statistical significance. One asterisk (*) signifies statistical significance at the 90 percent confidence level (t-statistics greater than or equal to 1.65 in absolute value); two asterisks signify statistical significance at the 95 percent confidence level (t-statistics greater than or equal to 1.96 in absolute value) and three asterisks (***) signify statistical significance at the 99 percent confidence level. Parameter estimates discussed below are statistically significantly different from zero at the 95 percent confidence level unless stated otherwise.²² To conserve space, the tables do not present the parameter estimates for the unobserved heterogeneity (ξ^d and ξ^u), state, year, and month effects.

²¹We also tried running a specification of the model that included these interactions for both industry and occupation. The parameter estimates and simulations were generally similar to those for the two separate specifications, but much of the statistical significance for individual parameters was lost due to the correlation between industry and occupation. However, a likelihood ratio test of the joint hypothesis that the interaction terms for both industry and occupation are all equal to zero is rejected at the 95 percent confidence level, suggesting that there are both industry-specific and occupation-specific differences in the effects of past unemployment and past UI receipt on the likelihood of current UI receipt and current unemployment duration.

²²A statistically insignificant result indicates that the effect of a characteristic could not be precisely estimated using the sample data, and does not necessarily prove that the characteristic is unimportant.

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Table 8: Parameter Estimates for UI Receipt Equation from Industry-Interaction Specification

	Parameter estimate	Standard error	t-statistic	
Past unemployment and UI receipt				
Number of previous UI receipt spells	0.714	0.086	8.26	***
Number of previous unemployment spells	-0.072	0.017	-4.27	***
Industry				
Agriculture, forestry, and fishing	0.438	0.211	2.07	**
Mining	0.868	0.242	3.59	***
Construction	0.294	0.135	2.17	**
Manufacturing	0.672	0.108	6.20	***
Transportation and public utilities	0.221	0.162	1.36	
Wholesale and retail trade	0.475	0.109	4.36	***
Finance, insurance, and real estate	0.292	0.174	1.68	*
Business services	0.310	0.142	2.19	**
Personal services	-0.077	0.198	-0.39	
Entertainment and recreation services	0.104	0.226	0.46	
Public administration	0.560	0.188	2.98	***
Valid missing	-0.030	0.095	-0.31	
Occupation				
Managers and administrators	0.614	0.100	6.15	***
Sales workers	0.122	0.138	0.88	
Clerical and unskilled workers	0.296	0.088	3.39	***
Craftsmen	0.261	0.092	2.85	***
Machine operators (nontransportation)	0.187	0.090	2.07	**
Transportation equipment operators	0.244	0.115	2.12	**
Laborers (nonfarm)	0.075	0.101	0.75	
Farmers, farm laborers, and foremen	0.134	0.191	0.70	
Service workers (excluding private household)	0.081	0.092	0.88	
Industry * number previous UI receipt spells				
Agriculture, forestry, and fishing	-0.301	0.101	-2.97	***
Mining	-0.115	0.201	-0.57	
Construction	-0.229	0.091	-2.53	**
Manufacturing	-0.160	0.093	-1.72	*
Transportation and public utilities	0.033	0.120	0.27	
Wholesale and retail trade	0.010	0.109	0.10	
Finance, insurance, and real estate	0.565	0.344	1.64	
Business services	-0.005	0.122	-0.04	

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	Parameter estimate	Standard error	t-statistic	
Personal services	-0.011	0.161	-0.07	
Entertainment and recreation services	0.160	0.227	0.70	
Public administration	0.487	0.239	2.04	**
Valid missing	0.158	0.098	1.61	
Industry * number of previous unemployment spells				
Agriculture, forestry, and fishing	-0.043	0.035	-1.23	
Mining	-0.129	0.056	-2.29	**
Construction	-0.040	0.022	-1.83	*
Manufacturing	-0.057	0.019	-2.97	***
Transportation and public utilities	-0.001	0.028	-0.02	
Wholesale and retail trade	-0.047	0.020	-2.30	**
Finance, insurance, and real estate	-0.013	0.032	-0.41	
Business services	-0.012	0.025	-0.48	
Personal services	0.023	0.035	0.65	
Entertainment and recreation services	-0.052	0.045	-1.15	
Public administration	-0.061	0.040	-1.54	
Valid missing	-0.061	0.021	-2.90	***
UI program variables				
Weekly benefit amount (WBA)	0.064	0.058	1.09	
Potential UI benefit duration	-0.623	0.592	-1.05	
Waiting week for UI benefits	0.053	0.124	0.43	
Denial rate for new UI claims	-1.448	0.836	-1.73	*
Extended UI benefits in effect	0.133	0.097	1.36	
Personal characteristics				
Years of education	0.569	0.128	4.44	***
Armed Forces Qualifying Test score	-0.295	0.097	-3.06	***
African-American	0.005	0.059	0.08	
Hispanic	-0.084	0.086	-0.98	
Hispanic * male	0.225	0.098	2.30	**
Married	0.167	0.050	3.35	***
Age	20.541	4.510	4.55	***
Age-squared	-41.787	8.035	-5.20	***
Male	-0.357	0.051	-7.01	***
Lives in SMSA (urban)	-0.111	0.050	-2.24	**
Health limitations	0.041	0.110	0.38	
Spouse used UI in past	0.270	0.100	2.70	***

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	Parameter estimate	Standard error	t-statistic	
Spouse used UI in past * male	-0.688	0.173	-3.97	***
Live with parents	-0.160	0.097	-1.65	*
Family size	-0.478	0.177	-2.71	***
Live with parents * family size	0.572	0.231	2.47	**
Children under age 2	0.091	0.060	1.51	
Number of children	-0.017	0.025	-0.68	
Recent employment experience				
Union member	-0.003	0.048	-0.05	
Tenure	0.140	0.029	4.85	***
Tenure-squared	-0.015	0.004	-4.20	***
Lost job due to plant closing	-0.263	0.085	-3.08	***
State unemployment rate	0.314	0.150	2.09	**
Base period earnings brackets				
Under \$2,000	-1.450	0.278	-5.21	***
\$2,000-\$3,999	-1.383	0.196	-7.05	***
\$4,000-\$5,999	-1.177	0.168	-7.02	***
\$6,000-\$7,999	-0.799	0.152	-5.25	***
\$8,000-\$9,999	-0.780	0.140	-5.56	***
\$10,000-\$11,999	-0.528	0.127	-4.16	***
\$12,000-\$13,999	-0.565	0.126	-4.50	***
\$14,000-\$15,999	-0.381	0.116	-3.28	***
\$16,000-\$17,999	-0.279	0.109	-2.56	**
\$18,000-\$19,999	-0.282	0.108	-2.62	***
\$20,000-\$24,999	-0.143	0.089	-1.61	
\$25,000-\$29,999	0.015	0.086	0.17	
High quarter earnings				
\$0-\$999	-0.180	0.260	-0.69	
\$1,000-\$1,999	0.076	0.196	0.39	
\$2,000-\$2,999	0.333	0.153	2.18	**
\$3,000-\$3,999	0.443	0.129	3.44	***
\$4,000-\$4,999	0.410	0.113	3.65	***
\$5,000-\$5,999	0.270	0.103	2.63	***
\$6,000-\$6,999	0.096	0.092	1.05	
\$7,000-\$7,999	0.170	0.090	1.89	*
\$8,000-\$8,999	0.030	0.092	0.33	

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	Parameter estimate	Standard error	t-statistic
Year effects	Included		
Month effects	Included		
State effects	Included		
Unobserved heterogeneity effects	Included		

Source: GAO analysis of NLSY79 data.

Note: In the final column an asterisk signifies statistical significance at the 90 percent confidence level, two asterisks signify statistical significance at the 95 percent confidence level, and three asterisks signify statistical significance at the 99 percent confidence level. The notation X * Y signifies an interaction between the variables X and Y. The omitted category for industry is professional and related services and for occupation is professional and technical workers. The omitted category for BPE is \$30,000 and above and for HQE it is \$9,000 and above. Sample includes 5,631 individuals with a total of 15,506 unemployment spells. The maximized log likelihood value is -63,438.514.

Table 9: Parameter Estimates for Duration Equation from Industry-Interaction Specification

	Parameter estimate	Standard error	t-statistic
Past unemployment and UI receipt			
Previous UI receipt	0.155	0.090	1.73 *
Previous unemployment	0.101	0.093	1.09
Industry			
Agriculture, forestry, and fishing	-0.088	0.198	-0.45
Mining	0.301	0.273	1.10
Construction	0.314	0.156	2.01 **
Manufacturing	0.213	0.107	1.99 **
Transportation and public utilities	-0.135	0.233	-0.58
Wholesale and retail trade	0.069	0.104	0.67
Finance, insurance, and real estate	0.121	0.202	0.60
Business services	0.268	0.153	1.76 *
Personal services	-0.031	0.191	-0.16
Entertainment and recreation services	-0.024	0.299	-0.08
Public administration	0.029	0.236	0.12
Valid missing	0.005	0.084	0.06
Occupation			
Managers and administrators	-0.046	0.062	-0.74
Sales workers	-0.024	0.070	-0.33
Clerical and unskilled workers	-0.106	0.044	-2.43 **
Craftsmen	0.030	0.050	0.61
Machine operators (nontransportation)	-0.025	0.048	-0.51
Transportation equipment operators	0.005	0.061	0.08

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	Parameter estimate	Standard error	t-statistic	
Laborers (nonfarm)	-0.030	0.052	-0.59	
Farmers, farm laborers, and foremen	-0.055	0.105	-0.52	
Service workers (excluding private household)	-0.112	0.044	-2.57	**
Industry * previous UI receipt				
Agriculture, forestry, and fishing	-0.004	0.162	-0.02	
Mining	0.006	0.287	0.02	
Construction	-0.123	0.111	-1.10	
Manufacturing	-0.136	0.099	-1.37	
Transportation and public utilities	-0.007	0.144	-0.05	
Wholesale and retail trade	-0.128	0.110	-1.16	
Finance, insurance, and real estate	-0.165	0.213	-0.78	
Business services	-0.104	0.138	-0.75	
Personal services	0.101	0.188	0.54	
Entertainment and recreation services	0.088	0.221	0.40	
Public administration	0.303	0.221	1.37	
Valid missing	-0.080	0.098	-0.82	
Industry * previous unemployment				
Agriculture, forestry, and fishing	0.053	0.196	0.27	
Mining	-0.455	0.295	-1.54	
Construction	-0.253	0.159	-1.60	
Manufacturing	-0.187	0.111	-1.69	*
Transportation and public utilities	0.139	0.239	0.58	
Wholesale and retail trade	-0.126	0.109	-1.16	
Finance, insurance, and real estate	-0.175	0.214	-0.82	
Business services	-0.276	0.163	-1.69	*
Personal services	-0.199	0.199	-1.00	
Entertainment and recreation services	0.012	0.305	0.04	
Public administration	-0.239	0.247	-0.97	
Valid missing	0.224	0.090	2.48	**
UI program variables				
Receiving UI	-1.256	0.195	-6.45	***
Weekly benefit amount (WBA)	0.031	0.035	0.90	
WBA * receiving UI	0.067	0.059	1.14	
Remaining UI benefit duration	-0.014	0.009	-1.64	
Waiting week for UI benefits	0.030	0.064	0.47	
Denial rate for continuing UI claims	0.488	0.215	2.27	**
Extended UI benefits in effect	0.042	0.054	0.78	

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	Parameter estimate	Standard error	t-statistic	
Personal characteristics				
Years of education	0.235	0.069	3.40	***
Armed Forces Qualifying Test score	0.251	0.056	4.49	***
African-American	-0.254	0.033	-7.74	***
Hispanic	-0.078	0.037	-2.13	**
Male	-1.022	0.397	-2.57	**
Married	-0.137	0.037	-3.73	***
Married * male	0.294	0.049	6.05	***
Age	-5.371	2.796	-1.92	*
Age-squared	9.472	5.010	1.89	*
Age * male	7.759	2.905	2.67	***
Age-squared * male	-13.614	5.150	-2.64	***
Lives in SMSA (urban)	-0.040	0.027	-1.48	
Health limitations	-0.095	0.055	-1.73	*
Spouse used UI in past	0.136	0.051	2.68	***
Live with parents	-0.045	0.051	-0.87	
Family size	-0.118	0.089	-1.33	
Live with parents * family size	0.114	0.136	0.84	
Live with parents * family size * male	0.024	0.094	0.26	
Children under age 2	-0.098	0.033	-2.93	***
Number of children	-0.004	0.014	-0.30	
Recent employment experience				
Union member	0.084	0.029	2.86	***
Tenure	0.050	0.018	2.75	***
Tenure-squared	-0.008	0.002	-3.07	***
Lost job due to plant closing	-0.179	0.046	-3.87	***
State unemployment rate (time varying)	-0.030	0.007	-4.04	***
Base period earnings brackets				
Under \$2,000	-0.389	0.103	-3.77	***
\$2,000-\$3,999	-0.367	0.088	-4.18	***
\$4,000-\$5,999	-0.360	0.080	-4.49	***
\$6,000-\$7,999	-0.286	0.079	-3.64	***
\$8,000-\$9,999	-0.239	0.074	-3.22	***
\$10,000-\$11,999	-0.165	0.072	-2.29	**
\$12,000-\$13,999	-0.186	0.069	-2.71	***
\$14,000-\$15,999	-0.137	0.066	-2.07	**
\$16,000-\$17,999	-0.125	0.064	-1.95	*

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	Parameter estimate	Standard error	t-statistic	
\$18,000-\$19,999	-0.101	0.066	-1.53	
\$20,000-\$24,999	-0.039	0.056	-0.71	
\$25,000-\$29,999	-0.135	0.053	-2.54	**
High quarter earnings				
Under \$1,000	-0.051	0.115	-0.44	
\$1,000-\$1,999	0.103	0.096	1.07	
\$2,000-\$2,999	0.060	0.083	0.72	
\$3,000-\$3,999	0.088	0.074	1.20	
\$4,000-\$4,999	0.031	0.066	0.46	
\$5,000-\$5,999	0.021	0.062	0.33	
\$6,000-\$6,999	0.009	0.057	0.17	
\$7,000-\$7,999	-0.034	0.057	-0.60	
\$8,000-\$8,999	-0.029	0.056	-0.51	
Time interactions (t = number of weeks unemployed)				
UI receipt * Extended Benefits * (t-1)	-1.536	0.740	-2.08	**
UI receipt * Extended Benefits * (t-1)-squared	3.351	2.822	1.19	
UI receipt * Extended Benefits * (t-1)-cubed	-0.179	0.246	-0.73	
Remaining UI benefit duration * (t-1)	0.569	0.201	2.83	***
Remaining UI benefit duration * (t-1)-squared	-3.172	2.624	-1.21	
Remaining UI benefit duration * (t-1)-cubed	-0.256	0.956	-0.27	
UI receipt * (t-1)	10.713	1.987	5.39	***
UI receipt * (t-1)-squared	-24.169	5.707	-4.24	***
UI receipt * (t-1)-cubed	1.564	0.441	3.55	***
UI receipt * WBA * (t-1)	-1.052	0.683	-1.54	
UI receipt * WBA * (t-1)-squared	2.425	2.065	1.17	
UI receipt * WBA * (t-1)-cubed	-0.141	0.163	-0.87	
Year effects	Included			
Month effects	Included			
State effects	Included			
Unobserved heterogeneity effects	Included			

Source: GAO analysis of NLSY79 data.

Note: In the final column an asterisk signifies statistical significance at the 90 percent confidence level, two asterisks signify statistical significance at the 95 percent confidence level, and three asterisks signify statistical significance at the 99 percent confidence level. The notation X * Y signifies an interaction between the variables X and Y. The omitted category for industry is professional and related services and for occupation is professional and technical workers. The omitted category for BPE is \$30,000 and above and for HCE it is \$9,000 and above. Sample includes 5,631 individuals with a total of 15,506 unemployment spells. The maximized log likelihood value is -63,438.514.

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Table 10: Parameter Estimates for UI Receipt Equation from Occupation-Interaction Specification

	Parameter estimate	Standard error	t-statistic	
Past unemployment and UI receipt				
Number of previous UI receipt spells	0.678	0.059	11.58	***
Number of previous unemployment spells	-0.094	0.016	-5.84	***
Industry				
Agriculture, forestry, and fishing	-0.044	0.143	-0.30	
Mining	0.302	0.171	1.77	*
Construction	0.004	0.095	0.04	
Manufacturing	0.346	0.079	4.38	***
Transportation and public utilities	0.256	0.106	2.41	**
Wholesale and retail trade	0.285	0.077	3.73	***
Finance, insurance, and real estate	0.307	0.121	2.54	**
Business services	0.253	0.092	2.75	***
Personal services	0.045	0.127	0.36	
Entertainment and recreation services	-0.090	0.157	-0.57	
Public administration	0.426	0.122	3.48	***
Valid missing	-0.174	0.070	-2.48	**
Occupation				
Managers and administrators	0.573	0.154	3.72	***
Sales workers	0.101	0.202	0.50	
Clerical and unskilled workers	0.351	0.122	2.88	***
Craftsmen	0.437	0.126	3.46	***
Machine operators (nontransportation)	0.534	0.121	4.42	***
Transportation equipment operators	0.353	0.167	2.12	**
Laborers (nonfarm)	0.364	0.135	2.70	***
Farmers, farm laborers, and foremen	0.549	0.239	2.29	**
Service workers (excluding private household)	0.108	0.128	0.85	
Occupation * number previous UI receipt spells				
Managers and administrators	-0.155	0.082	-1.89	*
Sales workers	0.830	0.292	2.84	***
Clerical and unskilled workers	0.141	0.097	1.45	
Craftsmen	-0.204	0.071	-2.89	***
Machine operators (nontransportation)	-0.100	0.069	-1.45	
Transportation equipment operators	-0.276	0.073	-3.79	***
Laborers (nonfarm)	-0.108	0.082	-1.31	
Farmers, farm laborers, and foremen	0.035	0.182	0.19	

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	Parameter estimate	Standard error	t-statistic	
Service workers (excluding private household)	0.283	0.091	3.13	***
Occupation * number of previous unemployment spells				
Managers and administrators	0.025	0.025	0.98	
Sales workers	-0.013	0.036	-0.35	
Clerical and unskilled workers	-0.009	0.021	-0.44	
Craftsmen	-0.007	0.020	-0.36	
Machine operators (nontransportation)	-0.060	0.021	-2.91	***
Transportation equipment operators	0.020	0.027	0.73	
Laborers (nonfarm)	-0.049	0.024	-2.03	**
Farmers, farm laborers, and foremen	-0.073	0.052	-1.39	
Service workers (excluding private household)	-0.023	0.022	-1.02	
UI Program variables				
Weekly benefit amount (WBA)	0.068	0.058	1.16	
Potential UI benefit duration	-0.529	0.589	-0.90	
Waiting week for UI benefits	0.050	0.121	0.41	
Denial rate for new UI claims	-1.482	0.828	-1.79	*
Extended UI benefits in effect	0.126	0.095	1.33	
Personal characteristics				
Years of education	0.537	0.128	4.19	***
Armed Forces Qualifying Test score	-0.265	0.096	-2.75	***
African-American	0.008	0.058	0.14	
Hispanic	-0.084	0.086	-0.98	
Hispanic * male	0.239	0.097	2.46	**
Married	0.164	0.050	3.30	***
Age	18.880	4.432	4.26	***
Age-squared	-38.467	7.863	-4.89	***
Male	-0.362	0.051	-7.13	***
Lives in SMSA (urban)	-0.131	0.050	-2.64	***
Health limitations	0.071	0.110	0.64	
Spouse used UI in past	0.271	0.100	2.71	***
Spouse used UI in past * male	-0.696	0.170	-4.10	***
Live with parents	-0.170	0.097	-1.76	*
Family size	-0.485	0.177	-2.74	***
Live with parents * family size	0.577	0.232	2.49	**
Children under age 2	0.109	0.060	1.84	*
Number of children	-0.028	0.024	-1.17	

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	Parameter estimate	Standard error	t-statistic	
Recent employment experience				
Union member	0.000	0.048	0.01	
Tenure	0.130	0.029	4.50	***
Tenure-squared	-0.014	0.004	-3.71	***
Lost job due to plant closing	-0.250	0.085	-2.94	***
State unemployment rate	0.354	0.148	2.40	**
Base period earnings brackets				
Under \$2,000	-1.423	0.278	-5.11	***
\$2,000-\$3,999	-1.344	0.196	-6.85	***
\$4,000-\$5,999	-1.135	0.168	-6.77	***
\$6,000-\$7,999	-0.808	0.152	-5.32	***
\$8,000-\$9,999	-0.778	0.140	-5.55	***
\$10,000-\$11,999	-0.492	0.127	-3.87	***
\$12,000-\$13,999	-0.564	0.126	-4.48	***
\$14,000-\$15,999	-0.365	0.117	-3.12	***
\$16,000-\$17,999	-0.292	0.109	-2.68	***
\$18,000-\$19,999	-0.272	0.108	-2.51	**
\$20,000-\$24,999	-0.136	0.090	-1.50	
\$25,000-\$29,999	0.019	0.086	0.22	
High quarter earnings				
\$0-\$999	-0.209	0.257	-0.81	
\$1,000-\$1,999	0.080	0.195	0.41	
\$2,000-\$2,999	0.339	0.152	2.23	**
\$3,000-\$3,999	0.441	0.129	3.43	***
\$4,000-\$4,999	0.416	0.113	3.69	***
\$5,000-\$5,999	0.275	0.104	2.65	***
\$6,000-\$6,999	0.115	0.093	1.24	
\$7,000-\$7,999	0.169	0.090	1.88	*
\$8,000-\$8,999	0.054	0.091	0.59	
Year effects	Included			
Month effects	Included			
State effects	Included			
Unobserved heterogeneity effects	Included			

Source: GAO analysis of NLSY79 data.

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Note: In the final column an asterisk signifies statistical significance at the 90 percent confidence level, two asterisks signify statistical significance at the 95 percent confidence level, and three asterisks signify statistical significance at the 99 percent confidence level. The notation X * Y signifies an interaction between the variables X and Y. The omitted category for industry is professional and related services and for occupation is professional and technical workers. The omitted category for BPE is \$30,000 and above and for HQE it is \$9,000 and above. Sample includes 5,631 individuals with a total of 15,506 unemployment spells. The maximized log likelihood value is -63,453.973.

Table 11: Parameter Estimates for Duration Equation from Occupation-Interaction Specification

	Parameter estimate	Standard error	t-statistic	
Past unemployment and UI receipt				
Previous UI receipt	0.111	0.076	1.47	
Previous unemployment	0.270	0.095	2.83	***
Industry				
Agriculture, forestry, and fishing	-0.031	0.081	-0.38	
Mining	-0.105	0.111	-0.95	
Construction	0.052	0.051	1.03	
Manufacturing	0.013	0.042	0.32	
Transportation and public utilities	-0.003	0.062	-0.05	
Wholesale and retail trade	-0.069	0.039	-1.75	*
Finance, insurance, and real estate	-0.062	0.068	-0.92	
Business services	-0.007	0.050	-0.14	
Personal services	-0.205	0.058	-3.51	***
Entertainment and recreation services	-0.005	0.076	-0.07	
Public administration	-0.153	0.072	-2.14	**
Valid missing	0.190	0.033	5.71	***
Occupation				
Managers and administrators	0.117	0.251	0.47	
Sales workers	0.340	0.188	1.81	*
Clerical and unskilled workers	0.087	0.123	0.71	
Craftsmen	0.444	0.146	3.03	***
Machine operators (nontransportation)	0.287	0.118	2.42	**
Transportation equipment operators	0.240	0.206	1.16	
Laborers (nonfarm)	0.231	0.136	1.70	*
Farmers, farm laborers, and foremen	-0.002	0.234	-0.01	
Service workers (excluding private household)	0.123	0.122	1.01	
Occupation * previous UI receipt				
Managers and administrators	0.056	0.147	0.38	
Sales workers	-0.074	0.241	-0.31	

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	Parameter estimate	Standard error	t-statistic										
Clerical and unskilled workers	-0.063	0.101	-0.63										
Craftsmen	-0.117	0.099	-1.18										
Machine operators (nontransportation)	-0.053	0.092	-0.58										
Transportation equipment operators	-0.141	0.118	-1.20										
Laborers (nonfarm)	0.079	0.108	0.73										
Farmers, farm laborers, and foremen	0.017	0.202	0.09										
Service workers (excluding private household)	-0.065	0.110	-0.59										
Occupation * previous unemployment													
Managers and administrators	-0.199	0.258	-0.77										
Sales workers	-0.387	0.197	-1.96	**									
Clerical and unskilled workers	-0.202	0.125	-1.62										
Craftsmen	-0.422	0.149	-2.84	***									
Machine operators (nontransportation)	-0.338	0.120	-2.80	***									
Transportation equipment operators	-0.222	0.213	-1.04										
Laborers (nonfarm)	-0.308	0.138	-2.24	**									
Farmers, farm laborers, and foremen	-0.085	0.238	-0.36										
Service workers (excluding private household)	-0.249	0.125	-2.00	**									
UI program variables													
Receiving UI	-1.247	0.195	-6.41	***									
Weekly benefit amount (WBA)	0.028	0.035	0.79										
WBA * receiving UI	0.066	0.059	1.12										
Remaining UI benefit duration	-0.014	0.008	-1.68	0.030	0.064	0.47							
Denial rate for continuing UI claims	0.474	0.214	2.21	**									
Extended UI benefits in effect	0.042	0.054	0.77										
Personal characteristics													
Years of education	0.240	0.070	3.43	***									
Armed Forces Qualifying Test score	0.242	0.056	4.31	***									
African-American	-0.255	0.033	-7.74	***									
Hispanic	-0.080	0.037	-2.16	**									
Male	-0.994	0.399	-2.49	**									
Married	-0.133	0.037	-3.59	***									
Married * male	0.289	0.049	5.91	***									
Age	-5.011	2.825	-1.77	8.897	5.061	1.76	7.571	2.917	2.60	-13.275	5.164	-2.57	**

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	Parameter estimate	Standard error	t-statistic	
Lives in SMSA (urban)	-0.041	0.027	-1.51	
Health limitations	-0.096	0.055	-1.75	*
Spouse used UI in past	0.133	0.051	2.62	***
Live with parents	-0.042	0.051	-0.83	
Family size	-0.120	0.089	-1.35	
Live with parents * family size	0.112	0.135	0.83	
Live with parents * family size * Male	0.023	0.094	0.24	
Children under age 2	-0.095	0.033	-2.83	***
Number of children	-0.004	0.014	-0.30	
Recent employment experience				
Union member	0.087	0.029	2.94	***
Tenure	0.050	0.018	2.75	***
Tenure-squared	-0.007	0.002	-3.03	***
Lost job due to plant closing	-0.175	0.046	-3.80	***
State unemployment rate (time varying)	-0.029	0.007	-4.02	***
Base period earnings brackets				
Under \$2,000	-0.387	0.103	-3.76	***
\$2,000-\$3,999	-0.365	0.088	-4.16	***
\$4,000-\$5,999	-0.359	0.080	-4.49	***
\$6,000-\$7,999	-0.285	0.078	-3.65	***
\$8,000-\$9,999	-0.236	0.074	-3.18	***
\$10,000-\$11,999	-0.161	0.072	-2.24	**
\$12,000-\$13,999	-0.187	0.068	-2.73	***
\$14,000-\$15,999	-0.133	0.066	-2.02	**
\$16,000-\$17,999	-0.134	0.064	-2.10	**
\$18,000-\$19,999	-0.097	0.066	-1.48	
\$20,000-\$24,999	-0.048	0.055	-0.86	
\$25,000-\$29,999	-0.134	0.053	-2.52	**
High quarter earnings brackets				
\$0-\$999	-0.063	0.115	-0.55	
\$1,000-\$1,999	0.096	0.096	0.99	
\$2,000-\$2,999	0.053	0.083	0.63	
\$3,000-\$3,999	0.084	0.074	1.14	
\$4,000-\$4,999	0.027	0.066	0.41	
\$5,000-\$5,999	0.022	0.062	0.36	
\$6,000-\$6,999	0.011	0.057	0.19	
\$7,000-\$7,999	-0.033	0.057	-0.58	

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	Parameter estimate	Standard error	t-statistic	
\$8,000-\$8,999	-0.032	0.056	-0.57	
Time interactions (t = number of weeks unemployed)				
UI Receipt * Extended Benefits * (t-1)	-1.582	0.734	-2.16	**
UI Receipt * Extended Benefits * (t-1)-squared	3.496	2.805	1.25	
UI Receipt * Extended Benefits * (t-1)-cubed	-0.191	0.244	-0.78	
Remaining UI benefit duration * (t-1)	0.572	0.201	2.85	***
Remaining UI benefit duration * (t-1)-squared	-3.185	2.626	-1.21	
Remaining UI benefit duration * (t-1)-cubed	-0.257	0.955	-0.27	
UI receipt * (t-1)	10.722	1.976	5.43	***
UI receipt * (t-1)-squared	-24.286	5.667	-4.29	***
UI receipt * (t-1)-cubed	1.577	0.438	3.60	***
UI receipt * WBA * (t-1)	-1.049	0.680	-1.54	
UI receipt * WBA * (t-1)-squared	2.455	2.051	1.20	
UI receipt * WBA * (t-1)-cubed	-0.145	0.161	-0.90	
Year effects	Included			
Month effects	Included			
State effects	Included			
Unobserved heterogeneity effects	Included			

Source: GAO analysis of NLSY79 data.

Note: In the final column an asterisk signifies statistical significance at the 90 percent confidence level, two asterisks signify statistical significance at the 95 percent confidence level, and three asterisks signify statistical significance at the 99 percent confidence level. The notation X * Y signifies an interaction between the variables X and Y. The omitted category for industry is professional and related services and for occupation is professional and technical workers. The omitted category for BPE is \$30,000 and above and for HCE it is \$9,000 and above. Sample includes 5,631 individuals with a total of 15,506 unemployment spells. The maximized log likelihood value is -63,453.973.

Industry-Interaction Specification

UI Receipt Equation

Table 8 summarizes the parameter estimates for the UI receipt equation of the industry-interaction specification. A positive parameter estimate for a variable implies that an increase in the variable increases the likelihood of UI benefit receipt. A negative parameter estimate implies that an increase in the variable decreases the likelihood of UI benefit receipt. For example, the parameter estimate for years of education is 0.569, meaning that unemployed individuals with more years of education have a higher likelihood of receiving UI benefits than otherwise similar individuals with

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fewer years of education. The single asterisk signifies that the parameter estimate for years of education is statistically significant at the 95 percent confidence level.

The results in table 8 show that the number of prior unemployment periods and the number of prior UI benefit receipt periods are strong predictors of an unemployed individual's likelihood of receiving UI benefits. The parameter estimate for the number of prior unemployment periods is -0.072, which indicates that each additional prior unemployment period experienced by an individual reduces the likelihood of UI benefit receipt during current unemployment. Alternatively, the parameter estimate for the number of prior UI receipt periods is 0.714, which indicates that each additional prior UI receipt period experienced by an individual increases the likelihood of UI benefit receipt during current unemployment.

The fact that the parameter estimate for the number of previous UI receipt periods is larger in absolute value suggests that this is the stronger of the two effects. To illustrate the magnitude of the effects, table 12 presents simulations of the likelihood of UI receipt by past unemployment and past UI receipt experience. According to the table, the average simulated likelihood of UI receipt for unemployed individuals with one previous unemployment period is 48 percent if UI was received in the previous unemployment period, but only 30 percent if UI was not received in the previous unemployment period.²³ Thus, for individuals with one previous unemployment period, the average likelihood of UI receipt is 60 percent higher (18 percentage points) for those who received UI benefits in their previous unemployment period. The remainder of the table shows that UI receipt exhibits significant occurrence dependence. Specifically, an individual who does not receive UI benefits during unemployment becomes less likely to receive them during future unemployment, while an individual who does receive UI benefits during unemployment becomes more likely to receive them during future unemployment.²⁴ Our model and data do not allow us to determine the underlying reasons for these associations. There are several possible reasons for the strong relationship

²³Note that the average simulated likelihood of UI receipt for first-time unemployed workers is 33 percent.

²⁴See Brian P. McCall, "Repeat Use of Unemployment Insurance," in Laurie J. Bassi and Stephen A. Woodbury, editors, *Long-Term Unemployment and Recemployment Policies* (Stamford, Connecticut: JAI Press, Inc., 2000).

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between past UI receipt and current UI receipt, however. If unemployed people do not know they are eligible for benefits, or think that UI benefits are not worth the effort to apply, or are overoptimistic about finding employment, then there may be a "learning effect" that results from having received UI benefits which increases the likelihood of future use. Alternatively, if people do not apply for benefits because of a misperception of UI as a welfare program, then having received benefits once may soften such an outlook and increase the likelihood of future use.

Table 12: Simulated Likelihood of Receiving UI Benefits for UI-Eligible Workers during Successive Periods of Unemployment, by Past UI Receipt Status

Unemployment period	Simulated likelihood of receiving UI benefits (percent)	
	Always received UI benefits previously	Never received UI benefits previously
First	—	33
Second	48	30
Third	64	28
Fourth	78	25
Fifth	88	23
Sixth	94	21

Source: GAO simulations based on GAO analysis of NLSY79 data.

Note: Simulations are the average likelihood of receiving UI by unemployment period for two extreme cases: (1) individuals always received UI benefits during previous unemployment, and (2) individuals never received UI during previous unemployment. N/A denotes that there is no applicable value. See accompanying text for details.

The results in table 8 also show that the likelihood of UI benefit receipt varies by the industry of the job lost by unemployed individuals. The industry variable is categorical in nature, so the parameter estimate for a particular category is an estimate of the effect of being in that category relative to an omitted category. The omitted category for industry is professional and related services. Table 8 shows that unemployed individuals from the mining, manufacturing, public administration, wholesale and retail trade, agriculture, forestry and fishing, business services, and construction industries are more likely to receive UI benefits than similar individuals from the professional services industry, because their parameter estimates are positive and statistically significant. To illustrate the magnitudes of these differences, table 13 presents the average simulated likelihood of UI receipt by industry under the specific assumption of first-time unemployment. The average simulated likelihood of UI receipt during first-time unemployment is 45.6 percent for unemployed miners, but only 24.3 percent for unemployed professional

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service workers. Table 13 clearly demonstrates that there are significant differences across industries in unemployed individuals' likelihoods of UI benefit receipt during first-time unemployment.

Table 13: Simulated Likelihood of Receiving UI Benefits for UI-Eligible Workers from Different Industries

Industry	Simulated likelihood of receiving UI benefits (percent)
Mining	46
Manufacturing	40
Public administration	37
Wholesale and retail trade	35
Agriculture, forestry, and fishing	34
Business services	31
Construction	31
Finance, insurance, and real estate	31
Transportation and public utilities	29
Entertainment and recreation services	26
Professional and related services	24
Personal services	23
All industries	33

Source: GAO simulations based on GAO analysis of NLSY79 data.

Note: Simulations are the average likelihood of receiving UI during first-time unemployment. The parameter estimates for the mining, manufacturing, public administration, wholesale and retail trade, agriculture, forestry, and fishing, business services, and construction industries are statistically significant relative to the professional and related services industry at the 95 percent confidence level. See accompanying text for details.

To test whether or not the effects of previous experience with unemployment and UI receipt differ by industry, we also included the industry categories interacted with both the number of previous unemployment periods and the number of previous UI receipt periods. As was the case above, the parameter estimates are calculated relative to the omitted professional and related services industry. The parameter estimates for the industry interactions with the number of prior unemployment periods indicate that unemployed individuals from the mining, manufacturing, and wholesale and retail trade industries exhibit stronger occurrence dependence than unemployed individuals from the

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professional services industry.²⁵ That is, each additional previous unemployment period has a stronger negative effect on the likelihood of receiving UI benefits for unemployed individuals from these three industries relative to similar individuals from the professional services industry.²⁶

The parameter estimates for the industry interactions with the number of previous UI receipt periods show that unemployed individuals from the agriculture and construction industries exhibit weaker occurrence dependence than individuals from the professional and related services industry.²⁷ That is, each additional previous UI receipt period has a weaker positive effect on the likelihood of receiving UI benefits for unemployed individuals from these three industries relative to similar individuals from the professional services industry. Unemployed individuals from the manufacturing industry also have weaker occurrence dependence, but the result is only statistically significant at the 90 percent confidence level. Unemployed individuals from the public administration industry exhibit stronger occurrence dependence than individuals from the professional services industry. A similar result occurs for unemployed workers from the finance, insurance, and real estate industry, but the result is only statistically significant at the 90 percent confidence level. The other industries showed no statistically significant effects compared to those from the professional services industry.²⁸

To illustrate the magnitudes of these differences, table 14 presents the average simulated likelihood of UI receipt by industry and by the number of previous unemployment and UI receipt periods. Column 1 presents the simulations for first-time unemployment (see table 13). Column 2 presents

²⁵As stated above, the occurrence dependence in this case relates to the fact that an individual who does not receive UI benefits during unemployment becomes less likely to receive them during future unemployment.

²⁶Although the results for some industries were not individually statistically significant, a likelihood ratio test of the joint hypothesis that all of the interaction terms between industry and past unemployment experience are equal to zero is rejected at the 95 percent confidence level.

²⁷As stated earlier, occurrence dependence relating to previous UI receipt means that an individual who receives UI benefits during unemployment becomes more likely to receive them during future unemployment.

²⁸However, a likelihood ratio test of the joint hypothesis that all of the interaction terms between industry and past UI receipt experience are equal to zero is rejected at the 95 percent confidence level.

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the simulations assuming one prior unemployment period with UI receipt. Column 3 presents the simulations assuming two prior unemployment periods, both with UI receipt. Table 14 shows that, although unemployed individuals from the mining and manufacturing industries have the highest average simulated likelihoods of UI receipt for first-time unemployment, this is not the case if individuals have received UI benefits previously. For unemployed individuals with two prior UI receipt periods, those from the public administration, wholesale and retail trade, entertainment services, transportation, and business services industries are about as likely or are more likely to receive UI benefits again than similar individuals from the mining and manufacturing industries. Administrative unemployment insurance data have shown that repeat UI recipients tend to be from industries that are more seasonal, such as manufacturing and construction. Our results, however, suggest that this is not because workers from these industries who have received UI before are more likely to receive UI benefits when they become unemployed than similar workers from other industries. Rather, it may be that workers from such seasonal industries are unemployed more often on average than workers from other industries, or that a larger fraction of unemployed workers from such industries have collected UI previously.

Table 14: Simulated Likelihood of Receiving UI Benefits during Different Periods of UI-Eligible Unemployment for Workers with Past UI Receipt, by Industry

Industry	Simulated likelihood of receiving UI benefits during a current UI-eligible unemployment period, given past UI receipt (percent)		
	First unemployment period ^a	Second unemployment period	Third unemployment period
Mining	46	57	69
Manufacturing	40	52	65
Public administration	37	68	91
Wholesale and retail trade	35	52	70
Agriculture, forestry, and fishing	34	42	50
Business services	31	48	66
Construction	31	40	51
Finance, insurance, and real estate	31	64	91
Transportation and public utilities	29	46	66
Entertainment and recreation services	26	45	67
Professional and related services	24	39	58
Personal services	23	38	56
All industries	33	48	64

Source: GAO simulations based on GAO analysis of NLSY79 data.

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Note: Simulations are the average likelihood of receiving UI during a first unemployment period, a second unemployment period with UI receipt during the prior unemployment period, and a third unemployment period with UI receipt during both prior unemployment periods. The positive effect that each prior UI receipt period has on the likelihood of current UI receipt is statistically significantly larger for the public administration industry relative to the professional and related services industry at the 95 percent confidence level, and smaller for the agriculture and construction industries. The simulations also incorporate the industry effects and the industry interactions with the number of prior periods of unemployment. See accompanying text for details.

²⁸Workers experiencing their first period of unemployment did not have past UI receipt.

Our model also controls for UI program factors, but the results in table 8 show that after controlling for other observable characteristics, these factors had no statistically significant impact on an unemployed individual's likelihood of UI receipt. These program factors include the estimated amount of weekly benefits an unemployed individual was eligible to receive, the estimated duration of those benefits, and the state-specific denial rate for new UI claims.²⁹ Weekly benefits and the potential duration of benefits are functions of earnings, which we controlled for (and are discussed below).

The parameter estimates in table 8 also show that a number of personal characteristics are associated with an unemployed individual's likelihood of UI benefit receipt, including education, age, and gender. For instance, the parameter estimate on years of education is 0.569, which indicates that each year of education increases an unemployed individual's likelihood of receiving UI benefits. The direction of the age effect on the likelihood of UI benefit receipt is difficult to interpret from the parameter estimates in table 8, because it is included as a polynomial to allow for nonlinear effects. Figure 10 presents a graph of the average simulated likelihood of UI receipt by age for the specific case of first-time unemployment. The graph shows that the likelihood of UI receipt increases until about the age of 25 and then decreases thereafter. For example, the average simulated likelihood of UI receipt during first-time unemployment for 25-year-olds is 10 percentage points (39 percent) higher than for 35-year-olds. While other research has found that older individuals are more likely to receive UI benefits, other researchers generally do not control for individuals' past unemployment and UI receipt experience as completely as we did.³⁰ Because age and experience with both unemployment and UI receipt are

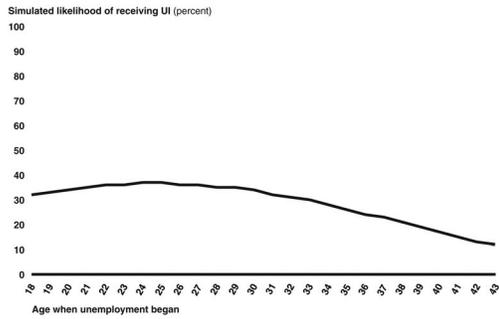
²⁹Other researchers have found that the weekly benefit amount does not affect UI receipt. See Gritz and MaCurdy.

³⁰See McCall.

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correlated, age may act as a proxy for these experience measures when they are not controlled for.

Figure 10: Simulated Likelihood of Receiving UI Benefits for UI-Eligible Workers, by Age



Source: Simulations based on GAO analysis of NLSY79 data.
 Note: Simulations are the average likelihood of receiving UI during first-time unemployment at different ages. The overall average likelihood of receiving UI during first-time unemployment is 33 percent. See accompanying text for details.

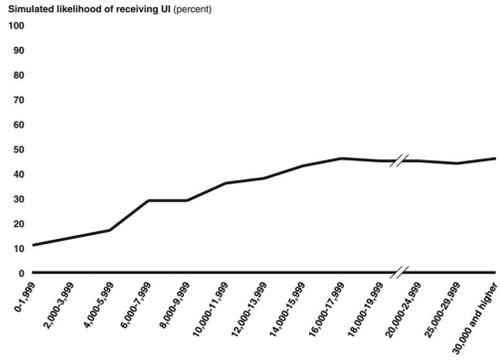
Table 8 also shows that several measures relating to the recent employment experience of unemployed individuals (excluding industry and occupation, which are discussed elsewhere) affect an unemployed individual's likelihood of UI benefit receipt. For instance, table 8 shows that an unemployed individual's likelihood of receiving UI benefits increases with earnings. We include two earnings measures: base period earnings and high quarter earnings. Each measure is grouped in earnings brackets and entered into the equation as a categorical variable to reflect nonlinear effects. As was the case with industry, each estimated effect is relative to an omitted category. For BPE the omitted earnings bracket is \$30,000 and above and for HQE the omitted bracket is \$9,000 and above. The pattern of parameter estimates for BPE shows that an unemployed individual is more likely to receive UI benefits, the higher his BPE (at least up to \$20,000). The pattern of parameter estimates for HQE shows that an unemployed individual is more likely to receive UI benefits if his HQE are

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between \$2,000 and \$6,000. Figure 11 presents a graph of the average simulated likelihood of receiving UI benefits by base period earnings for the specific case of first-time unemployment. The level of HQE is varied to maintain a ratio of HQE to BPE of about 25 percent to approximate steady employment during the base period. The figure shows that unemployed individuals who earned more than \$14,000 in their base period had a likelihood of UI receipt of over 40 percent, while individuals who earned less than \$6,000 had a likelihood of UI receipt of less than 20 percent.

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Figure 11: Simulated Likelihood of Receiving UI Benefits for UI-Eligible Workers, by Prior-Year Earnings



Source: Simulations based on GAO analysis of NLSY79 data.
 Note: Simulations are for the average likelihood of receiving UI during first-time unemployment at different levels of earnings. The overall average likelihood of receiving UI during first-time unemployment is 33 percent. See accompanying text for details.

Table 8 shows that employment experience measures other than earnings also affect the likelihood of UI receipt. For instance, an individual's likelihood of UI receipt increases with tenure up to 9 years, after which it decreases. Also, an individual's likelihood of UI receipt increases as the state unemployment rate increases. Interestingly, the parameter estimate on the plant closing variable is a statistically significant -0.263, indicating that unemployed individuals are less likely to receive UI benefits if they lost their jobs because of a plant closing. Union status does not have a statistically significant effect on an unemployed individual's likelihood of UI receipt.

Unemployment Duration Equation

Table 9 summarizes the parameter estimates for the unemployment duration equation of the industry interaction specification. A positive parameter estimate implies that an increase in a variable increases the escape rate from unemployment, thereby decreasing the duration of

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unemployment. A negative parameter estimate implies that an increase in a variable decreases the escape rate from unemployment, thereby increasing the duration of unemployment. For example, the parameter estimate for years of education is a statistically significant 0.235, which implies that unemployed individuals with more years of education have higher escape rates from unemployment than otherwise similar individuals with fewer years of education. As a result, unemployed individuals with more years of education will tend to have shorter unemployment durations than those with fewer years of education.

We found that after controlling for other observable characteristics, the single most important predictor of unemployment duration is whether or not an individual receives UI benefits during the current unemployment period. The parameter estimate on the dummy variable for UI receipt status is -1.256, which implies that receiving UI benefits while unemployed reduces an individual's escape rate from unemployment, thereby increasing unemployment duration. Simulations show that the median duration of unemployment is 8 weeks for individuals who do not receive UI benefits, but 21 weeks when they do receive UI benefits. We also allowed the effect of UI receipt to vary with the number of weeks of unemployment. These results indicate that a UI recipient's escape rate from unemployment increases until about the 33rd week of unemployment. After 33 weeks, the escape rate decreases again until about the 72nd week, and then increases until 100 weeks.³¹

The parameter estimates in table 9 show that having experienced prior unemployment or prior UI receipt has no statistically significant effect on unemployment duration. This result, however, is conditional upon whether or not an individual currently receives UI benefits. The unconditional effect of having previously received UI benefits is to increase unemployment duration. As stated earlier, we found that unemployed individuals who have previously received UI benefits are significantly more likely to receive UI benefits during current unemployment. Because those individuals who receive UI benefits during unemployment have longer unemployment duration, the unconditional effect of having previously received UI benefits is to increase unemployment duration.

³¹Changes in the escape rate over an unemployment period are also affected by the other time-interaction effects included in the specification. However, these other effects do not affect the general shape of this overall trend.

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Table 9 also shows that there is an association between the industry from which an individual lost a job and the duration of unemployment. As in the UI receipt equation, the omitted category for industry is professional and related services. Table 9 shows that unemployed individuals from the construction and manufacturing industries have higher escape rates from unemployment than otherwise similar individuals from the professional services industry, because their parameter estimates are positive and statistically significant. The parameter estimate for business services is also positive, but is only statistically significant at the 90 percent confidence level. The effects for the other industries are not statistically significant relative to the professional services industry. To illustrate the magnitudes of these differences, table 15 presents the median simulated duration of unemployment by industry for the specific case of first-time unemployment. The median duration is about 17 and 19 weeks, respectively, for unemployed individuals from the construction and manufacturing industries who receive UI benefits, but is about 24 weeks for those from the professional services industry.

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Table 15: Simulated Unemployment Duration for UI-Eligible Workers, by Industry and UI Receipt Status

Industry	Simulated unemployment duration (median weeks)	
	Receiving UI benefits	Not receiving UI benefits
Construction	17	6
Mining	17	6
Business services	18	7
Manufacturing	19	7
Finance, insurance, and real estate	21	8
Wholesale and retail trade	22	9
Public administration	23	9
Professional and related services	24	10
Entertainment and related services	24	10
Personal services	24	10
Agriculture, forestry, and fishing	26	11
Transportation and public utilities	27	12
Overall average duration	21	8

Source: GAO simulations based on GAO analysis of NLSY79 data.

Note: Simulations are the median duration of unemployment during first-time unemployment. The parameter estimates for the construction and manufacturing industries are statistically significant relative to the professional and related services industry at the 95 percent confidence level. See accompanying text for details.

To test whether or not the effects of previous experience with unemployment and UI receipt on the duration of unemployment differ by industry, we also included the industry categories interacted with the indicators for both previous unemployment and previous UI receipt. As stated above, the effects are relative to the omitted category of professional and related services. The parameter estimates in table 9 indicate that there are no statistically significant differences across

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industry types by previous experience with unemployment or previous UI receipt, conditional upon current UI receipt status.²²

Table 9 also shows that only one UI program factor (other than current UI receipt) has a statistically significant impact on an individual's unemployment duration. Specifically, individuals who are unemployed in states with higher denial rates for continuing UI claims have higher escape rates from unemployment. That is, these individuals tend to become reemployed more quickly than those in states with lower denial rates.

The parameter estimates in table 9 show that a number of personal characteristics affect an individual's unemployment duration, including education, race, gender, and marital status. For example, the parameter estimate on years of education is 0.235, which indicates that each year of education increases an individual's escape rate from unemployment. The simulations reported in table 16 show that unemployed individuals with 16 years of education (roughly a college education) have median unemployment duration that is about 1.9 weeks shorter than unemployed individuals with 12 years of education when UI benefits are received, and 1.1 weeks when UI benefits are not received. The parameter estimates for race show that African-Americans have significantly lower escape rate from unemployment than Hispanics, who in turn have slightly lower escape rates than whites. Table 17 displays simulations of median unemployment duration by race for the specific case of first-time unemployment. Simulations showed that the age effect, although statistically significant, did not have much of an impact on the median duration of unemployment. In table 9, the parameter estimates for gender are difficult to interpret because gender is interacted with other variables in our specification, including age. Simulations show that unemployed men have median unemployment durations that are about 2 weeks shorter than for unemployed women when UI benefits are received; and about 1 week shorter when UI benefits are not received. The parameter estimates for marital status show that married women tend to have longer unemployment durations than do unmarried women and married men tend

²²However, a likelihood ratio test of the joint hypotheses that all of the interaction terms between industry and past unemployment experience are equal to zero is rejected at the 95 percent confidence level. A similar test of the joint hypothesis that all of the interaction terms between industry and past UI receipt experience are equal to zero could not be rejected at the 95 percent confidence level.

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to have shorter unemployment durations than do unmarried men.³³ Although the age effects in table 9 are statistically significant, simulations showed that age had minimal effect on the median duration of unemployment.

Table 16: Simulated Unemployment Duration for UI-Eligible Workers, by Education Level and UI Receipt Status

Years of education when unemployment began	Simulated unemployment duration (median weeks)	
	Receiving UI benefits	Not receiving UI benefits
9	22	9
10	22	9
11	21	9
12	21	8
13	20	8
14	20	8
15	19	8
16	19	7
17	18	7
18	18	7
19	18	6
20 and higher	17	6

Source: GAO simulations based on GAO analysis of NLSY79 data.

Note: Simulations are the median duration of unemployment during first-time unemployment. Overall average duration is 21 weeks for UI-eligible workers receiving UI benefits and 8 weeks for UI-eligible workers not receiving UI benefits. See accompanying text for details.

³³In alternative specifications we explored whether an individual's likelihood of UI benefit receipt and unemployment duration were affected by spousal income in the previous year. We found that spousal income had no statistically significant effect on an individual's likelihood of UI benefit receipt, but did slightly increase the duration of unemployment.

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Table 17: Simulated Unemployment Duration for UI-Eligible Workers, by Race/Ethnicity and UI Receipt Status

Race or ethnicity	Simulated unemployment duration (median weeks)	
	Receiving UI benefits	Not receiving UI benefits
White	19	8
Hispanic	21	8
African-American	25	11

Source: GAO simulations based on GAO analysis of NLSY79 data.

Note: Simulations are the median duration of unemployment during first-time unemployment. Overall average duration is 21 weeks for UI-eligible workers receiving UI benefits and 8 weeks for UI-eligible workers not receiving UI benefits. See accompanying text for details.

The last set of parameter estimates in table 9 relates to the recent employment experience of unemployed individuals (excluding industry and occupation, which are discussed elsewhere). Most of the parameter estimates in this grouping are statistically significant at the 95 percent level. Specifically, unemployed individuals who belonged to a union at the job that was lost had a higher escape rate from unemployment than otherwise similar individuals who were not union members. The simulations in table 18 show that union members had median unemployment durations that were 2 weeks shorter than nonunion members when UI benefits were received and 1 week shorter when UI benefits were not received. Simulations also show that an individual's unemployment duration decreases modestly with job tenure until 7 years, after which it increases slightly.

Table 18: Simulated Unemployment Duration for UI-Eligible Workers, by Union Status and UI Receipt Status

Union memberships status when unemployment began	Simulated unemployment duration (median weeks)	
	Receiving UI benefits	Not receiving UI benefits
Union member	19	8
Not a union member	21	9

Source: GAO simulations based on GAO analysis of NLSY79 data.

Note: Simulations are the median duration of unemployment during first-time unemployment. Overall average duration is 21 weeks for UI-eligible workers receiving UI benefits and 8 weeks for UI-eligible workers not receiving UI benefits. See accompanying text for details.

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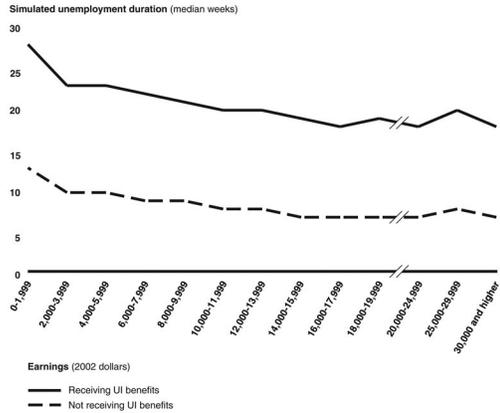
Of our two measures of an individual's earnings, only the base period earnings proved to have a statistically significant effect on the duration of unemployment.³¹ The pattern of parameter estimates for BPE shows that unemployed individuals with low BPE have lower escape rates from unemployment than otherwise similar individuals with higher BPE. That is, lower-earning individuals tend to have longer unemployment periods. Figure 12 graphs simulations of median unemployment duration by BPE for the specific case of first-time unemployment.³² Individuals with BPE below \$6,000 tend to have longer unemployment duration than unemployed individuals with higher BPE.

³¹Recall that each measure was broken into earnings brackets and entered into the equation as a categorical variable. See tables 8,9,10, or 11 for the brackets used. The omitted category for BPE is \$30,000 and above and the omitted category for high quarter earnings is \$9,000 and above.

³²For comparability, the simulations in figure 12 hold the ratio of HQE to BPE as closely as possible to 25 percent.

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Figure 12: Simulated Unemployment Duration for UI-Eligible Workers, by Prior-Year Earnings and UI Receipt Status



Source: Simulations based on GAO analysis of NLSY79 data.
 Note: Simulations are the median duration of unemployment during first-time unemployment. Overall average duration is 21 weeks for UI-eligible workers receiving UI benefits and 8 weeks for UI-eligible workers not receiving UI benefits. See accompanying text for details.

Occupation-Interaction Specification

We also estimated a specification of our model with interaction effects between the occupation categories (as opposed to industry) and our measures of past unemployment and past UI receipt experience. These results are presented in tables 10 and 11. A comparison of these results with those from tables 8 and 9 shows that the overall results of the two specifications are very similar. Therefore, only the occupation estimates will be discussed here.

Because occupation is included as a categorical variable, the parameter estimates are relative to an omitted group, which is professional and technical workers. The estimates in table 10 show that unemployed managers, machine operators, craftsmen, laborers, transportation

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workers, and clerical workers are more likely to receive UI benefits than similar professional and technical workers. Table 19 presents the average simulated likelihood of receiving UI benefits by occupation for the specific case of first-time unemployment. Although the range is not as wide as for industry (see table 13), the table shows that there are differences in the likelihood of UI receipt by occupation.

Table 19: Simulated Likelihood of Receiving UI Benefits for UI-Eligible Workers from Different Occupations

Occupation	Simulated likelihood of receiving UI benefits (percent)
Managers and administrators	39
Farmers, farm laborers and foremen	38
Machine operators (nontransportation)	38
Craftsmen	35
Laborers (nonfarm)	34
Transportation equipment operators	33
Clerical and unskilled workers	33
Service workers (excluding private household)	28
Sales workers	28
Professional and technical workers	25
Overall average	33

Source: GAO simulations based on GAO analysis of NLSY79 data.

Note: Simulations are the average likelihood of receiving UI during first-time unemployment for workers from different occupations. The parameter estimates for managers and administrators, farmers, farm laborers, and foremen, machine operators, craftsmen, laborers, transportation equipment operators, and clerical and unskilled workers are statistically significant relative to professional and technical workers at the 95 percent confidence level. See accompanying text for details.

The interactions between occupation and the number of previous unemployment periods in table 10 indicate that unemployed machine operators and laborers exhibit stronger occurrence dependence than otherwise similar professional and technical workers.³⁶ That is, each additional previous unemployment period has a stronger negative effect on the likelihood of receiving UI benefits for unemployed individuals from

³⁶As stated above, the occurrence dependence in this case relates to the fact that an individual who does not receive UI benefits during unemployment becomes less likely to receive them during future unemployment.

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these two occupations relative to similar professional and technical workers.³⁷

The parameter estimates for occupation interacted with the number of previous UI receipt periods show that unemployed transportation operators and craftsmen exhibit weaker occurrence dependence than otherwise similar professional and technical workers.³⁸ That is, each additional previous UI receipt period has a weaker positive effect on the likelihood of receiving UI benefits for unemployed individuals from these two occupations relative to otherwise similar individuals from professional and technical occupations. Managers also showed weaker occurrence dependence, but this estimate is only statistically significant at the 90 percent confidence level. Unemployed sales workers and service workers exhibit stronger occurrence dependence than otherwise similar professional and technical workers. The other occupations showed no statistically significant effects compared with professional and technical workers.³⁹

To illustrate the magnitudes of these differences, table 20 presents the average simulated likelihood of UI receipt by occupation and by the number of previous UI receipt periods. Column 1 presents the simulations for first-time unemployment (as in table 19). Column 2 presents the simulations assuming one prior unemployment period with UI receipt. Column 3 presents the simulations assuming two prior unemployment periods, both with UI receipt. Table 20 shows that although unemployed managers and machine operators have among the highest average simulated likelihoods of UI receipt for first-time unemployment, this is not the case if individuals have received UI benefits previously. In the case of unemployed individuals with two prior UI receipt periods, sales workers, service workers, clerical workers, and farmers are about as likely, or are

³⁷Although the results for some occupations were not individually statistically significant, a likelihood ratio test of the joint hypothesis that all of the interaction terms between occupation and past unemployment experience are equal to zero is rejected at the 95 percent confidence level.

³⁸As stated earlier, occurrence dependence relating to previous UI receipt means that an individual who receives UI benefits during unemployment becomes more likely to receive them during future unemployment.

³⁹However, a likelihood ratio test of the joint hypothesis that all of the interaction terms between occupation and past UI receipt experience are equal to zero is rejected at the 95 percent confidence level.

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more likely, to receive UI benefits than otherwise similar managers and machine operators.

Table 20: Simulated Likelihood of Receiving UI Benefits during Different Periods of UI-Eligible Unemployment for Workers with Past UI Receipt, by Occupation

Occupation	Simulated likelihood of receiving UI benefits during a current UI-eligible unemployment period, given past UI receipt (percent)		
	First unemployment period*	Second unemployment period	Third unemployment period
Managers and administrators	39	52	65
Farmers, farm laborers, and foremen	38	54	70
Machine operators (nontransportation)	38	50	62
Craftsmen	35	46	56
Laborers (nonfarm)	34	45	58
Transportation equipment operators	33	42	51
Clerical and unskilled workers	33	53	73
Service workers (excluding private household)	28	50	74
Sales workers	28	66	94
Professional and technical workers	25	39	56
Overall average	33	48	64

Source: GAO simulations based on GAO analysis of NLSY79 data.

Note: Simulations are the average likelihood of receiving UI during a first unemployment period, a second unemployment period with UI receipt during the prior unemployment period, and a third unemployment period with UI receipt during both prior unemployment periods. The positive effect that each prior UI receipt period has on the likelihood of current UI receipt is statistically significantly larger for sales workers and service workers relative to professional and technical workers at the 95 percent confidence level, and smaller for transportation equipment operators and craftsmen. The simulations also incorporate the occupation effects and the occupation interactions with the number of prior periods of unemployment. See accompanying text for details.

*Workers experiencing their first period of unemployment did not have past UI receipt.

Table 11 shows that there is also an association between the occupation from which an individual lost a job and the duration of unemployment. Specifically, unemployed craftsmen and machine operators have higher escape rates from unemployment than similar professional and technical

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workers, because the estimates are positive and statistically significant. The effects for the other occupations were not statistically significant relative to professional and technical workers. To illustrate the magnitudes of these differences, table 21 presents the median simulated duration of unemployment by occupation for the specific case of first-time unemployment. The median duration is under 20 weeks for unemployed craftsmen and machine operators who receive UI, but is almost 26 weeks for professional and technical workers.

Table 21: Simulated Unemployment Duration for UI-Eligible Workers, by Occupation and UI Receipt Status

Occupation	Simulated unemployment duration (median weeks)	
	Receiving UI benefits	Not receiving UI benefits
Craftsmen	16	6
Sales workers	18	7
Machine operators (nontransportation)	19	7
Transportation equipment operators	20	8
Laborers (nonfarm)	20	8
Service workers (excluding private household)	23	9
Managers and administrators	23	9
Clerical and unskilled workers	23	10
Farmers, farm laborers, and foremen	26	11
Professional and technical workers	26	11
Overall average duration	21	8

Source: GAO simulations based on GAO analysis of NLSY79 data.

Note: Simulations are the median duration of unemployment during first-time unemployment for workers from different occupations. The parameter estimates for craftsmen and machine operators are statistically significant relative to professional and technical workers at the 95 percent confidence level. See accompanying text for details.

To test whether or not the effects of previous experience with unemployment and UI receipt on the duration of unemployment differ by occupation, we also included the occupation categories interacted with the indicators for both previous unemployment and previous UI receipt. As stated earlier, the effects are relative to the omitted category of professional and technical workers. The parameter estimates in table 11

Appendix I: Analysis of UI Benefit Receipt and Unemployment Duration

indicate that the interactions for prior unemployment are negative and statistically significant for craftsmen, sales workers, machine operators, laborers, and service workers. This suggests that unemployed workers from these occupations have lower escape rates from unemployment relative to professional and technical workers as the number of past unemployment periods increases.⁴⁰ The parameter estimates for the interactions between occupation and past UI receipt showed no individual statistical significance.⁴¹

Limitations of the Analysis

Although our analysis was performed using the most appropriate dataset and methodology available, there are a number of limitations to the analysis that could not be avoided and should be highlighted. Although the NLSY79 is the best available dataset for our purposes, it lacks some information that could have improved our analysis. It does not provide information about whether an unemployed individual attempted to collect UI benefits or not, only whether the individual did collect benefits. It also does not provide information about whether an individual was aware of his or her eligibility for benefits. As a result, we had to estimate each unemployed individual's UI-eligibility status. An unemployed worker's awareness of the UI program and knowledge of its basic rules could have a large impact on his or her decision to apply for benefits. This awareness may also be correlated with other observable characteristics (education and earnings, for example). Not controlling for awareness may affect the estimates of such variables.

The NLSY79 also lacks information about an unemployed worker's former employer that could help estimate UI receipt and unemployment duration. Although our results control for industry, firms within an industry have different labor turnover patterns that result in different UI tax rates through experience rating.⁴² The lack of perfect experience rating may even encourage firms to use temporary layoffs and recalls as a way of

⁴⁰However, a likelihood ratio test of the joint hypothesis that all of the interaction terms between occupation and past unemployment experience are equal to zero could not be rejected at the 95 percent confidence level.

⁴¹In addition, a likelihood ratio test of the joint hypotheses that all of the interaction terms between occupation and past UI receipt experience are equal to zero could not be rejected at the 95 percent confidence level.

⁴²Experience rating describes the practice of making a firm's UI tax rate a function of the amount of UI benefits paid to its former employees.

Appendix I: Analysis of UI Benefit Receipt
and Unemployment Duration

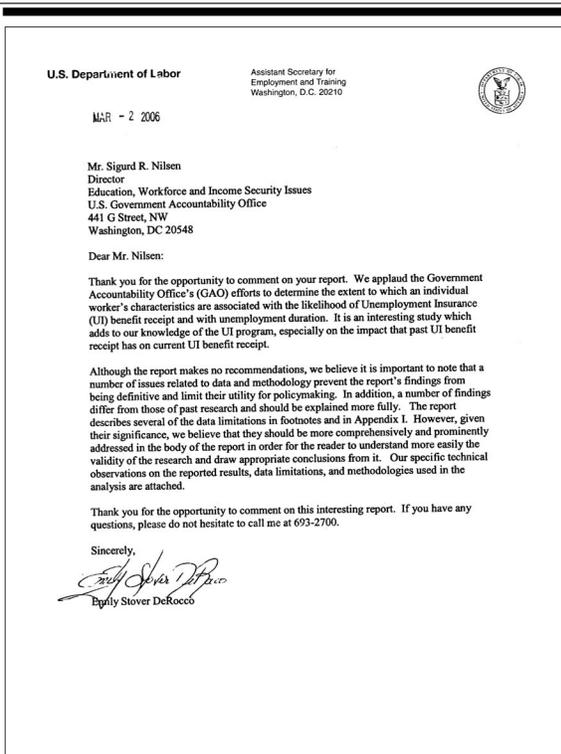
managing its labor force during demand fluctuations.⁴³ An individual who works for a firm with high labor turnover or with a high UI tax rate may be more aware of the UI program and, thus, more likely to receive benefits.

Another limitation of the NLSY79 is that it includes only information about the specific group of individuals who were between the ages of 14 and 22 in 1979. Thus, any findings based on the NLSY79 are specific to this group and do not represent the experiences of workers of all ages during the 1979-2002 period.

A methodological limitation is that we assume that the time between unemployment spells is fixed. One might expect individuals who have been unemployed and received UI benefits to change their subsequent work behavior, either to increase or decrease their chances of using the program in the future. For example, a person who received UI benefits while unemployed may search for more stable employment in order to reduce the likelihood of experiencing a layoff in the future. We do not incorporate such possibilities into our model because this would require a third equation to model employment duration, which would be a more complex and time-consuming analysis.

⁴³See Martin Feldstein, "Temporary Layoffs in the Theory of Unemployment," *The Journal of Political Economy*, vol. 84, no. 5 (1976).

Appendix II: Comments from the Department of Labor



Appendix III: GAO Contact and Staff Acknowledgment

GAO Contact	Sigurd R. Nilsen, Director, (202) 512-7215
Staff Acknowledgments	In addition to the contact named above, Brett Fallavollita, Assistant Director, Reginal Santucci, James Pearce, Bill Bates, Gale Harris, Gene Kuehneman, Jonathan McMurray, Edward Nannenhorn, Dan Schwimer, Shana Wallace, and Daniel G. Williams made major contributions to this report.
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Bibliography

Anderson, Patricia M., and Bruce D. Meyer. "The Effect of Unemployment Insurance Taxes and Benefits on Layoffs Using Firm and Individual Data," NBER Working Paper No. 4960. Cambridge, Massachusetts: National Bureau of Economic Research, 1994.

Berndt, E. K., B. H. Hall, R. E. Hall, and J. A. Hausman. "Estimation and Inference in Nonlinear Structural Models," *Annals of Economic and Social Measurement*, Vol. 3, No. 4 (1974): 653-665.

Blank, Rebecca M., and David E. Card. "Recent Trends in Insured and Uninsured Unemployment: Is There an Explanation?" *The Quarterly Journal of Economics*, Vol. 106, No. 4 (1991): 1157-1189.

Calvó-Armengol, Antoni and Matthew O. Jackson. "The Effects of Social Networks on Employment and Inequality." *The American Economic Review*, Vol. 94, No. 3 (2004): pp. 426-454.

Card, David E., and Phillip B. Levine. "Unemployment Insurance Taxes and the Cyclical and Seasonal Properties of Unemployment," *Journal of Public Economics*, Vol. 53, No. 1 (1994): 1-29.

Feldstein, Martin. "Temporary Layoffs in the Theory of Unemployment," *The Journal of Political Economy*, Vol. 84, No. 5 (1976): 937-958.

Gritz, R. Mark, and Thomas MaCurdy. "Measuring the Influence of Unemployment Insurance on Unemployment Experiences," *Journal of Business and Economic Statistics*, Vol. 15, No. 2 (1997): 130-152.

Gruber, Jonathan. "The Wealth of the Unemployed," *Industrial and Labor Relations Review*, Vol. 55, No. 1 (2001): 79-94.

Krueger, Alan B., and Bruce D. Meyer. "Labor Supply Effects of Social Insurance," NBER Working Paper 9014. Cambridge, Massachusetts: National Bureau of Economic Research, 2002.

McCall, Brian P. "Repeat Use of Unemployment Insurance," in Laurie J. Bassi and Stephen A. Woodbury, editors, *Long-Term Unemployment and Reemployment Policies*. Stamford, Connecticut: JAI Press, Inc., 2000.

Meyer, Bruce D. "Unemployment Insurance and Unemployment Spells," *Econometrica*, Vol. 58, No. 4 (1990): 757-782.

Bibliography

Meyer, Bruce D., and Dan T. Rosenbaum. "Repeat Use of Unemployment Insurance," NBER Working Paper 5423. Cambridge, Massachusetts: National Bureau of Economic Research, 1996.

Mortensen, Dale T. "Unemployment Insurance and Job Search Decisions," *Industrial and Labor Relations Review*, Vol. 30, No. 4 (1977): 505-517.

Needels, Karen E., and Walter Nicholson. *An Analysis of Unemployment Insurance Durations since the 1990-1992 Recession*. Prepared for the Department of Labor. 1999.

O'Leary, Christopher J., and Stephen A. Wandner, editors. *Unemployment Insurance in the United States: Analysis of Policy Issues*. Kalamazoo, Michigan: W. E. Upjohn Institute for Employment Research, 1997.

Topel, Robert H. "On Layoffs and Unemployment Insurance," *The American Economic Review*, Vol. 73, No. 4 (1983): 541-559.

Related GAO Products

Unemployment Insurance: Better Data Needed to Assess Reemployment Services to Claimants. GAO-05-413. Washington, D.C.: June 24, 2005.

Unemployment Insurance: Information on Benefit Receipt. GAO-05-291. Washington, D.C.: March 17, 2005.

Women's Earnings: Work Patterns Partially Explain Difference between Men's and Women's Earnings. GAO-04-35. Washington, D.C.: October 31, 2003.

Unemployment Insurance: States' Use of the 2002 Reed Act Distribution. GAO-03-496. Washington, D.C.: March 6, 2003.

Unemployment Insurance: Enhanced Focus on Program Integrity Could Reduce Overpayments. GAO-02-S20T. Washington, D.C.: June 11, 2002.

Unemployment Insurance: Increased Focus on Program Integrity Could Reduce Billions in Overpayments. GAO-02-697. Washington, D.C.: July 12, 2002.

Unemployment Insurance: Role as Safety Net for Low-Wage Workers Is Limited. GAO-01-181. Washington, D.C.: December 29, 2000.

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Chairman HERGER. Thank you very much, Dr. Nilsen. I want to thank you and your team again for the excellent work of this report. It challenges many assumptions about unemployment benefits. In the process it challenges policymakers to consider ways to better serve people who lose jobs and all other taxpayers. One of the most commonly stated assumptions about unemployment benefits is that collecting benefits allows people time to find higher paying jobs. That would seem to make sense. It certainly has been one of the operating assumptions of this program since its beginning. Is there any evidence to show that those who collect unemployment benefits, especially for longer periods of time, return to better-paying jobs? If not, do you think this type of information should be collected?

Dr. NILSEN. You are right, Mr. Chairman. This is a very important aspect of knowing what the program is achieving, but in our work so far we have not been able to look at the employment outcomes, whether or not people who spend more time in a job search and more time on Unemployment Insurance benefits end up getting a better job than those who are on for a shorter period of time, or those who don't get benefits. One study that we did recently that is not part of what I talked about today, looked at a series of case studies on the Trade Adjustment Assistance Program, and we looked at five plant closings across the country, and we tracked every worker who was laid off. Some workers made it into a one-stop to get reemployment assistance. Some people made it into training, and other people didn't come in for services at all.

One of the things we found was that the reemployment experiences of all those workers was about the same. They all got reemployed at about the same rate, and they all got reemployed at about the same wage replacement level. The differences between the workers was that those who didn't go into the one-stops were the higher wage workers, more likely had better skills and better networks, and were able to get reemployment quicker, where those who needed additional assistance were the ones who came into the one-stop, they were the lower wage workers. The lowest wage workers were the ones who needed to change careers and got into training. I think we need to know a lot more about the dynamics of how UI works and how it helps workers, and which workers are the ones that really need more assistance to become reemployed.

Chairman HERGER. Thank you. I think this is a key challenge to those of us who are policymakers, from your report, specifically how can we best ensure that States engage unemployment benefit recipients to ensure that these benefits help laid-off workers quickly return to work, and in high-paying jobs. With that, the gentleman from Washington, Mr. McDermott, to inquire.

Mr. MCDERMOTT. Dr. Nilsen, what is unemployment for; what are we trying to do with it? I have trouble understanding some of the data and all the rest, because it seems to me unemployment is one of those issues where you are trying to replace income while people look for another place, and when you have two-thirds of the people not eligible for it, what is the point of the system? Why do we just pick that third? Why do the States pick that third and say, "We will help them, and then the rest we will exclude by a various set of means?"

Dr. NILSEN. I can't speak for the States and why they design their systems in particular ways, but you are right. In the early fifties, about 50 percent of workers unemployed received benefits, and now it is closer to a third. The two focuses of the Unemployment Insurance system are for wage replacement, earnings replacement, while people are unemployed, looking for work, and to provide economic stabilization for the economy by pumping money into the economy. There are a lot of factors that have driven the UI system down from a 50 percent reciprocity rate to about a 33 percent reciprocity rate, and a lot of it has to do with the changes in the workforce, changes away from manufacturing and unionized work, which traditionally had much higher reciprocity rates, part of that as a result of being full-time workers for long periods of time. Also, the declining proportion of full-time workers. There are many more workers who are part time now, and if you are a part-time worker and if you are looking to go into another part-time job, most States do not provide you benefits. So that is up to the States. As you know, Title III of the Social Security Act established the UI system, but allowed States that met certain criteria to operate and manage their own systems. Very often, these are designed cooperatively between labor and management with the State legislatures, and they work out the sort of system they want to serve their State.

Mr. MCDERMOTT. Is the data you are collecting then collected against a model that no longer exists of employment? You don't go to work for Boeing today and work for 40 years for Boeing, or you don't go in the woods and work felling trees for 40 years, knowing that every winter you will be off, and then you will be back on in the next—or fishing. Our State, we have had ups and downs in our employment all the time related to the local industries. It seems to me the data that you are collecting now doesn't really—is it not looking at what the workforce is.

Dr. NILSEN. I think it is—an important consideration is, is the system meeting the current workforce needs? The people who are becoming unemployed now, is the system able to help them? That is something that would be important to look at.

Mr. MCDERMOTT. It seems to me there is a lot of difference between a 35-year-old employee of a software company in Seattle, who is laid off, but knows that job is going to come back when that next contract comes due in about 4 months, so they say, why should I go get unemployment benefits, as opposed to somebody who gets laid off in a manufacturing job or something where there is no idea whether the job will ever come back. The system seems to be aimed at those people who are the long-term ones. It doesn't have anything to say about what happens to people in the short term.

Dr. NILSEN. One thing that we found is the different experiences of people who are on Unemployment Insurance, and their duration of unemployment. If you have more education—and that is correlated with higher skills—you are not on UI as long as somebody else who has less education. You have marketable skills is this is allowing you to reenter the workforce and find employment relatively quicker. Those who have a harder time have less education, likely less marketable skills, are having a harder time finding another job.

Mr. MCDERMOTT. I happen to know that my State collects data, and I would like to hear why six States collect for your study, and 44 States don't. What is going on here? Why don't they want to know what is going on?

Dr. NILSEN. I can't answer that question directly in terms of why don't they want to know, but the history of these programs are that the UI system very separate from the job training and reemployment system.

Mr. MCDERMOTT. Still today?

Dr. NILSEN. They have been in the past. They are starting to get better integrated. The Workforce Investment Act (P.L. 105-220) was passed in 1998. One of the things it established was the one-stop centers which required that 17 job training programs be more highly integrated, bringing services together, at least linked, centrally. This is starting a movement in that direction, but right now, very often, UI data systems are still separate, and while the linkages are there, they refer people to the one-stops, to the employment service, I think more needs to be done to get these systems together with the same outcome in mind, and that is, getting people reemployed.

Mr. MCDERMOTT. Thank you.

Chairman HERGER. The gentleman's time has expired. The gentleman from Louisiana, Mr. McCreary, to inquire.

Mr. MCCRERY. Thank you, Mr. Chairman. I heard my colleague from Washington say something about six States and 44 States didn't participate. What is he talking about?

Dr. NILSEN. Whether or not they have outcomes for people who are on Unemployment Insurance, whether or not they were linked—information on the extent to which they were linked with the workforce development system, and then did you have information on the outcomes that were achieved? Did they get reemployed, and what kind of wage replacement? There are only six States that have that kind of data.

Mr. MCCRERY. Your study includes data other than just those six States.

Dr. NILSEN. Right. We covered all 50 States. This was a nationally representative sample. Then when we looked at the linkages, we surveyed all State workforce development systems to find out how their systems were linked.

Mr. MCCRERY. Even though it is one-third, approximately one-third unemployed workers who receive unemployment benefits, there is fully 76, 77 percent who are eligible to receive benefits who become unemployed.

Dr. NILSEN. Right.

Mr. MCCRERY. Only about half of those, for whatever reason, collect unemployment benefits. In a typical State, do you know how long between the time a worker loses his job and the time he gets his first unemployment check is?

Dr. NILSEN. It is usually on the order of 1 to 2 weeks. Some States have a 1 week waiting period, but it is then really 1 to 2 weeks.

Mr. MCCRERY. I am just trying to figure out, or get some idea of why there is fully one-half of people who become unemployed

who do not collect unemployment benefits. I didn't really see anything in your study that clearly says this is the reason.

Dr. NILSEN. No. We would like to get behind our analysis and the factors, and understand the motivations of people to find out, okay, was it because you thought you could get out there yourself and get a job quicker? Were you going to drop out of the workforce anyway? There are some who may have tried to get benefits and might have been denied benefits that we were not able to measure in this.

Mr. MCCRERY. Clearly, those who don't get unemployment benefits get jobs more quickly than those who do get unemployment benefits by a long shot.

Dr. NILSEN. That is correct.

Mr. MCCRERY. On average 8 weeks for those who don't collect unemployment benefits, and what is it, 21—

Dr. NILSEN. Twenty-one.

Mr. MCCRERY. Twenty-one weeks. More than two-and-a-half times the amount of time. Certainly, I think we can conclude that motivation is a big factor for those who aren't collecting unemployment benefits, they are obviously more motivated to get a job. That is—yes, they may be more educated, they may be—they have more skills, but I don't think the data clearly shows that. Human nature is, if you are not getting some kind of check, you are going to get out there and try to get a job. I am just wondering how much—and this would be a good study for a sociologist or somebody to conduct—what else is involved in that motivation? Is it a higher sense of one's ability? Is it a higher sense of self-worth? Just what are those factors in those individuals that lead them to forego pretty much a sure check, and get out there and find a job in a relatively short period of time? I don't know. I was disappointed that the study didn't go more into that, or didn't develop any data that could give us some better ideas. I agree with Mr. McDermott that our goal should be to help people through those, what we hope are temporary periods of unemployment, but I think also our goal should be to do what we can to encourage and help those people to find a job, and to reduce their time on unemployment benefits. In welfare, for example, we put into the law requirements for States to get welfare recipients to work. Is there something that maybe we should do, maybe we should mandate in the unemployment field for States, either by rewards or by sticks, to get them to provide more services to people to get them back in the workforce in a shorter period of time?

Dr. NILSEN. Two points. It was just in 2005, I believe, that the Labor Department established a performance measure for the States that measured the speed at which people became reemployed. Prior to that, all their performance measures focused on getting a check out quickly, and then also focusing on getting the right check out, basically, making sure people were eligible and they were doing the calculations correctly. Now they have a reemployment measure that is a performance measure. However, there are no consequences associated with meeting or not meeting that measure. There are two States that have established much more aggressive reemployment programs for people on Unemployment Insurance, and one of the States is Washington, where the Gov-

ernor set a goal that they would—of not paying out more than about three-quarters of total benefits, total eligible benefits, to bring down to 73 percent is the measure. One way they do that is target people. Once people hit halfway on their UI term, they really target those people with reemployment assistance in addition to the federally required, what is called profiling for people likely to exhaust their benefits. This happens at the State level.

Mr. MCCRERY. My time is up, Mr. Chairman, but I would like for GAO, if he could, to present to us in writing any suggestions that GAO might have for legislation directing States to engage more forcefully in reemployment efforts. Thank you.

[The written response of Dr. Nilsen follows:]

At this time, we are unable to provide recommendations for legislative action that would direct states to involve more UI benefit recipients in reemployment efforts. However, we have recommended that Labor work with states to consider collecting more comprehensive information on UI claimants' use of reemployment services and the outcomes they achieve. As stated above, results from Labor's ADARE and 5-year evaluation initiatives may provide useful information to guide future decisions about the structure of the UI system. Nevertheless, we continue to believe that having more comprehensive information on UI claimants who are and are not receiving services is an important step in the development of reemployment efforts that hasten workers' reemployment and minimize UI benefit costs.

Chairman HERGER. I thank the gentleman from Louisiana, and that would be very good data and information for us to have. The gentleman from California, Mr. Becerra, to inquire.

Mr. BECERRA. Thank you, Mr. Chairman. Dr. Nilsen, thank you very much for being here. Let me pick up on what the gentleman from Louisiana just said. I think he hit on the most important point about this hearing, and that is that it seems like we have information, but the information doesn't lead us to any clear conclusions. I think most of us are here to find out we can make sure that some American who has just become unemployed, as quickly as possible, and with the best job opportunity possible, gets back to work. It seems to me that the missing link here is the fact that while we have services for those who become unemployed, they are principally services to linkage information or to a contact to perhaps find that next job, but it is not to get you prepared for that next job if your previous experience hasn't trained you for it, and certainly not necessarily to train you for that new job, because most of the services that are provided are not retraining services. I am correct in saying that, right?

Dr. NILSEN. It depends. We did another study last year looking at spending in the Workforce Investment Act on training services, and about 40 percent of the funds were spent on training. At each of what is called the one-stop centers, people come in and they do an assessment of what people need. Depending upon how much funds they have available and how much assistance they feel somebody needs to get reemployed, you may or may not be referred to training.

Mr. BECERRA. That—

Dr. NILSEN. I just want to make one point.

Mr. BECERRA. Sure.

Dr. NILSEN. This kind of work, getting behind the motivation is an important point. This is the first kind of comprehensive study of this nature to get this far, to understand at least this much about how the system is operating. I think you are right, looking at, now, what is the difference, at a different level, between those people who are using the Unemployment Insurance system? Is it because they are looking for a better job to replace higher wages, or is there some other reason behind it?

Mr. BECERRA. I think you raise more questions than can be answered. For example, it goes against logic to think that someone who earns more in a previous job, then becomes unemployed, is more likely to draw Unemployment Insurance benefits than someone who earns less. You would think the person who makes less money and now become unemployed needs it more and would apply. It makes no sense why a third of all those who are eligible for Unemployment Insurance don't apply or don't get it. There is a missing link here in that information. Returning back to the re-employment services, over the last several years we have begun to cut back moneys for retraining services that can be offered, which would seem to fly in the face of what you are presenting here that says that we have folks who need services beyond just the linkage to a potential new job. You have got to, in many cases, be re-trained, especially since these days we are seeing more and more manufacturing jobs being lost, and so folks who may have spent 20 years doing work in the manufacturing industry, all of a sudden have to, perhaps, consider doing work in a high-tech company, and they may not be ready.

My concern would be, one, we need to get a clear answer—and maybe GAO can help us in doing this analysis, as Mr. McCrery has suggested—in helping direct Congress to figure out where we go next with services, unemployment services. At the same time I think we have to have a clearer exploration of what reemployment services are essential, and here I think retraining services are essential. I think one of the first things Congress has to do is stop cutting moneys for training programs, and I think the President's budget would cut retraining programs by some \$2 billion compared to 2002 levels. So we are really seeing a marked abandonment of retraining programs at a time when we are finding that there are a lot of folks who don't use unemployment benefits to begin with, and those who do aren't necessarily finding a lot of success. I think it is good that you give us the report. I think though, perhaps, the clearest answer we get from your report is that we need more information, and we need to go that next step now beyond just compiling data about who some of these folks are who are unemployed, but how we actually get them back to work at a good job, not just back to work, because too many folks are finding that they are losing a \$16 an hour job and obtain a \$7 an hour job, and that is really tough. That is a big hit. Thank you for the information. Lots of questions. I will yield back my time, but I hope that what we are able to do is follow this up with information that tells us how we get the next step that Americans are expecting of us, and how we link all this to make sure that there is a job at the end of the day that someone is ready and willing to take. Thank you. Yield back.

Chairman HERGER. I thank the gentleman from California, Again, this is a very helpful hearing, some information that, again, has not been out there before. Again, I thank the GAO, and I thank each of the Members on this Subcommittee for some very good questions and some great observations. With that, the gentlelady from Pennsylvania, Ms. Hart, to inquire.

Ms. HART. Thank you, Mr. Chairman. I agree that this information probably brings up more questions than it answers, but one of the points that is made regarding the States and some of the requirements that States place upon those who are actually recipients of Unemployment Insurance, that they are monitored, that they be searching for a job, a number of different things. I have been informed that 49 States have some kind of requirements placed on recipients regarding searching for work or going to school, but Pennsylvania does not.

Dr. NILSEN. Right.

Ms. HART. Have you noticed a glaring difference, or is there statistical information that would actually separate Pennsylvania out to show that maybe there is more stubborn unemployment as a result, or there is any difference as a result of that?

Dr. NILSEN. I haven't really studied the difference between the 49 other States and Pennsylvania because it does not have a work search requirement.

Ms. HART. Is the work search requirement a Federal requirement that has been waived in Pennsylvania, or is it just something that they have chosen?

Dr. NILSEN. The Federal Government requires that people be ready, willing and available for work, and the 49 other States implement that in a particular way that says there is a work search requirement, and Pennsylvania doesn't. Really, we haven't looked at that difference.

Ms. HART. I am interested in if there is something that came out of this report that would direct us to determine that there should be certain requirements placed on those who are actually receiving the benefit. If that comes to light, I certainly would be very interested in knowing that.

Dr. NILSEN. Sure. I think that the important thing, again, is to see—we would like better information I think that we can make better suggestions for improving the program by having better information about what happens to people once they become unemployed and they are on the UI rolls. Are they actually actively working with a reemployment system to become reemployed? Is it the labor market that is stopping them, or is it something else?

Ms. HART. The other thing that seemed a little counter-intuitive at first when I read the information that said that people who are receiving the benefit are more likely to be more educated, until I thought about it, and then I thought, well, there are probably fewer positions that are available for those folks, so they are probably more likely to take longer to find a similar position.

Dr. NILSEN. Well, actually, the duration for those who are more educated is less. You are more likely, if you are higher educated, you are more likely to get benefits, and it could be because you know more about how the system operates or whatever, and you are more willing to take advantage, use the system, but once you

are on benefits, if you are higher educated, your duration is less than someone who is less educated.

Ms. HART. You are just more likely to seek them?

Dr. NILSEN. Yes.

Ms. HART. Get them, qualify for them. The folks who don't qualify—well, actually, you said they are eligible, they are not receiving.

Dr. NILSEN. Yes. In our analysis they are likely eligible, but not receiving.

Ms. HART. Do we know anything more about them than that?

Dr. NILSEN. Well, similarly, we looked at their characteristics, and that is how we were able to compare the different educational levels, age—

Ms. HART. The folks who in your 39 percent unemployed and eligible, are less educated?

Dr. NILSEN. Yes, on average.

Ms. HART. On average. Is there anything else that was a distinguishing characteristic?

Dr. NILSEN. Younger workers are more likely to get benefits.

Ms. HART. You are saying they are older than—

Dr. NILSEN. We controlled for each of these factors. Older workers are less likely. Men are less likely. Women are more likely.

Ms. HART. Just the opposite of all the "more likelysts."

Dr. NILSEN. Yes.

Ms. HART. One of the things, just anecdotally, that we experience in the communities I represent is there is significant turnover in positions that require fewer skills. Always the employers are talking to me, saying we've got to find ways to get these people to stay here, to retain them, that sort of thing, trying to pay them more, trying to provide them with benefits, trying to provide whatever they can to help secure people in these jobs. The complaints have been that people just are not used to working, people show up drunk for work, all those kinds of problems that, obviously, they end up not working. The concern I think that I have is that a lot of folks who may qualify for unemployment benefits—or maybe they don't qualify—but I am presuming that a lot of people qualify for unemployment benefits because the employer doesn't want to fight it in the incidents such as some of the employers in my district would talk about people show up constantly late, they show up drunk, and then they kind of leave, and then they apply for unemployment benefits and normally get them. Is there any information in any of the surveys that you did that deal with the employers' behavior regarding whether or not they will just accept a person's application for unemployment benefits or fight it, anything that you did at all?

Dr. NILSEN. No. We really haven't looked at the application and appeals process.

Ms. HART. Nothing at all?

Dr. NILSEN. I think the—

Ms. HART. Is there any study that you can refer me to?

Dr. NILSEN. I think DOL does have information on the appeals. I am not sure. I could check on that.

Ms. HART. We could follow up with DOL.

[The written response of Dr. Nilsen follows:]

In reference to background information on employer certification of unemployment benefit applications, all states provide employers the opportunity to contest UI benefit claims and to provide evidence that may invalidate these claims. A summary and comparison of state laws on processing UI claims appeals are available online at: <http://workforcesecurity.doleta.gov/unemploy/uilawcompar/2005/appeals.pdf>. (See the following attachment.)

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IN GENERAL

This chapter provides information about state law provisions concerning appeals authorities and time limitations for review for first stage appeals, second stage appeals, and judicial review.

The Social Security Act (SSA) requires states to offer “opportunity for a fair hearing before an impartial tribunal, for all individuals whose claims for unemployment compensation are denied.” Hence, all state laws provide for such appeal tribunals. Further, all but a few states’ laws provide for a second appeal stage. In all states, individuals who are not satisfied with the outcome of the administrative appeal(s) can appeal their cases in the state court system, federal courts, and, as a last resort, to the U.S. Supreme Court. In all states, employers who have an interest are granted the right to appeal decisions on claims as well.

As a result of *California Department of Human Resources Development v. Java*, once a claimant has been held eligible for benefits, such claimant will continue to receive benefits until a decision is issued reversing the determination allowing benefits. Thus, an employer’s appeal will not affect the continuance in payment of benefits unless a decision is issued denying benefits. The majority of state laws specifically provide for the payment of benefits pending an appeal from a determination or decision allowing benefits while other states have either interpreted their laws or have been required by court order to follow this procedure. In all states, this procedure applies to any determination or decision issued allowing benefits.

Most of the states specify that findings of fact, conclusions of law, or final orders made by a UI hearing officer or board of review will not be binding in any separate or subsequent proceeding brought before any court, judicial, administrative, or arbitration proceeding in that state or the U.S. Government. Some states’ laws provide that information obtained in connection with the UI law may not be used in certain civil law suits as well. Listed below are the states that do not specify that findings, conclusions, or orders of hearing officers are not binding in court:

* Alabama	* Delaware	* Hawaii	* Kentucky	* Maryland
* Mississippi	* Puerto Rico	* Rhode Island	* South Carolina	* Virginia
* Virgin Islands	* West Virginia			

FIRST AND SECOND STAGE APPEALS

FIRST STAGE APPEALS—Typically, all state laws provide that appeals at the initial stage will be conducted by one person called a referee, examiner, or administrative law judge.

The time period for appealing to the first stage appeals body is generally stated in terms of days; the number of days for filing an appeal after notice of the determination varies among the states, ranging from 5 to 30 days. Almost half of the states specify that a “day” is defined as a calendar day. Some of the states which do not define day extend the due date for filing appeals if the last day for filing or the date of mailing falls on a Saturday, Sunday, holiday, or any other day the state agency is closed. Many states extend the time for filing for good cause. For more specific information about states’ law provisions, see the table at the end of this section.

In all but a few states, the decision of the first stage appeals body is final in the absence of an appeal. In other states, the official may reconsider his decision within the appeal period.

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SECOND STAGE APPEALS—About half of the states that established a second stage appeals have a board of review, board of appeals, or appeals board to hear cases appealed from the decision of the lower appeal tribunal. Almost all of these boards consist of three members. The members of the appeals boards generally represent labor, employers, and the public. Shown below is an overview of the exceptions concerning membership:

- AR – The chairman must be an attorney who is not a representative of employers or employees.
- CA – Two of the members must be attorneys.
- IN – No more than two members may belong to the same political party. One member must practice law in the state.
- ME – The chairman of the commission must be an attorney.
- MA – The chairman must be an attorney.
- NH – When the board is in session, none of the three members can be from the same category of representation.
- NY – No more than three members may belong to the same political party.
- OH – No more than two members may belong to the same political party.
- OK – No member may serve as an officer of any political party organization during his term of office.
- OR – No more than two members may belong to the same political party.
- RI – No more than two members may belong to the same political party.
- WV – The governor may not appoint anyone who is identified with the interests of either employers or employees.

In the rest of the states that established a second stage appeals, it is handled by an existing commission or agency head.

TIME LIMITS FOR FILING APPEALS AND APPEALS BODIES—Many states extend the time for filing for good cause; this provision can be found in policy rather than in law in some states. Some states provide that a contested determination which involves a labor dispute shall be appealed directly to the second stage appeals body. In some states, a special examiner is designated to determine the original claim. State-specific information for filing appeals can be found in the following table:

TABLE 7-1: TIME LIMITATIONS FOR APPEAL AND APPEALS BODIES				
State	1 st Stage Appeals		2 nd Stage Appeals	
	Number Of Days For Filing	Body	Number Of Days For Filing	Body
AL	15 after mailing; 7 after delivery	Appeals Tribunal	15 after mailing	Board of Appeals
AK	30 after mailing or personal delivery	Referee	30 after mailing or personal delivery	Commissioner
AZ	15 ¹ after mailing, 7 ¹ after delivery	Appeal Tribunal	15 ¹ after mailing	Appeals Board
AR	20 after mailing	Appeal Tribunal	20 ¹ after mailing or delivery	Board of Review
CA	20 after mailing or personal service	Administrative Law Judge	20 after mailing or personal service	Appeals Board.
CO	15 ¹ mailing or personal delivery	Hearing Officer	15 ¹ mailing or personal delivery	Industrial Claim Appeals Office (Panel)
CT	21 after mailing	Referee	22 ¹ after mailing	Board of Review
DE	10 ¹ after mailing	Appeal Tribunal	10 after decision is final	Office of Inspector General
DC	10 ¹ after mailing or actual delivery	Examiner	10 ¹ after mailing	Director
FL	20 ¹ after mailing or delivery	Referee	20 ¹ after mailing or delivery	Unemployment Appeals Commission

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TABLE 7-1: TIME LIMITATIONS FOR APPEAL AND APPEALS BODIES				
State	1 st Stage Appeals		2 nd Stage Appeals	
	Number Of Days For Filing	Body	Number Of Days For Filing	Body
GA	15 after mailing or delivery	Administrative Hearing Officer	15 after mailing	Board of Review
HI	10 from mailing or delivery	Referee	NO SECOND STAGE APPEAL	
ID	14 after mailing or delivery	Examiner	14 after actual notice	Industrial Commission
IL	30 after mailing or delivery	Referee	30 after mailing	Board of Review
IN	10 after mailing or delivery /1/	Administrative Law Judge	15 th notification or mailing	Review Board
IA	10 mailing	Examiner	15 notification or mailing	Appeal Board
KS	16 th after mailing or delivery	Referee	16 after mailing	Board of Review
KY	10 after mailing	Referee	10 after mailing	UI Commission
LA	15 after mailing or being given to the party	Administrative Law Judge (Appeal Tribunal)	15 after mailing or being given to the party	Board of Review
ME	15 th after mailing	Division Of Admin. Hearings	15 th after mailing	UI Commission
MD	15 th after mailing or delivery	Examiner	15 th after mailing or delivery	Board of Appeals
MA	10 mailing or delivery	Board, or examiner designated by the board	30 mailing	Board of Review
MI	30 after mailing or personal service	Referee	30 after mailing	Board of Review
MN	30 after mailing or delivery	Unemployment Law Judge	30 after mailing or delivery	Commission of Jobs and Training
MS	14 after notification or delivery	Appeal Tribunal	14 after notification or delivery	Board of Review
MO	15 from delivery or mailing	Appeal Tribunal	15 from delivery or mailing	Industrial Commission
MT	10 after mailing	Referee	10 after mailing	Board of Labor Appeals
NE	20 after delivery or mailing	Appeal Tribunal	NO SECOND STAGE APPEAL	
NV	10 after mailing or personal services	Appeal Tribunal	10 after mailing or personal service	Board of Review
NH	14 th after mailing	Appeal Tribunal	14 after mailing	Appellate Board
NJ	7 after delivery 10 after mailing	Appeal Tribunal	10 days notification or mailing	Board of Review
NM	15 after notification or mailing	Hearing Officer	15 days after notification or mailing	Board of Review
NY	30 after mailing or personal delivery	Referee	20 after mailing or personal delivery	Appeal Board
NC	15 after notification or mailing	Referee	10 th after notification or mailing	Employment Security Commission
ND	12 after mailing or service	Appeal Tribunal	12 after mailing or service	Bureau
OH	21 st after mailing (Redetermination)	Director	21 st after mailing	Unemployment Compensation Review Commission
OK	10 after mailing or delivery	Appeal Tribunal	10 after mailing	Board of Review
OR	10 after delivery or mailing	Hearing Officer	20	Employment Appeals Board
PA	15 th after mailing	Referee	15 after mailing	Board of Review
PR	15 after mailing or delivery	Referee	15 after mailing or delivery	Secretary of Labor
RI	15 th	Appeal Tribunal	15	Board of Review
SC	10 after mailing or delivery	Appeal Tribunal	10 th after mailing or delivery	Employment Security Commission
SD	15 after mailing	Referee	15 mailing or notification	Secretary

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TABLE 7-1: TIME LIMITATIONS FOR APPEAL AND APPEALS BODIES				
State	1 st Stage Appeals		2 nd Stage Appeals	
	Number Of Days For Filing	Body	Number Of Days For Filing	Body
TN	15 after mailing or been given-which ever occurs first	Tribunal (Unemployment Hearing Officers)	15 after mailing or been given, which ever occurs first	Board of Review
TX	14 after mailing	Appeal Tribunal (examiner)	14 after mailing	Commission Appeals
UT	15 ¹ after mailing	Administrative Law Judge	30 after notice	Appeals Board
VT	30 after mailing	Appeals Referee	30	Employment Security Board
VI	10 after mailing or delivery	Examiner	NO SECOND STAGE APPEAL	
VA	30 ¹ after mailing or delivery	Appeal Tribunal	30 after mailing or delivery	Board of Review
WA	30 after mailing or notification	Appeal Tribunal	30 after mailing or notification	Employment Security Commission
WV	8 ¹ after mailing or delivery	Appeal Tribunal	8 ¹ after mailing or delivery	Board of Review
WI	14 after mailing or been given-which ever occurs first	Appeal Tribunal	21 after mailing	Labor and Industry Review Commission
WY	15 after mailing or delivery	Appeal Tribunal	15 after mailing or delivery	Employment Security Commission

¹ Indicates "calendar" days * Indicates "working" days
 1/ Entry in table applies to claimants only. Employers have 10 days to appeal, except for employers in AK, HI or PR, who have 15 days.

JUDICIAL REVIEW

All states provide for appeals to the courts for judicial review. In general, the time limit for filing ranges from 10 to 50 days. States that designate a specific period of time to exhaust actions before the second administrative appeal body decision becomes final provide an additional period of time in which to seek judicial review commencing with the date the decision is final.

TABLE 7-2: JUDICIAL REVIEW				
State	Number Of Days For Filing			Court Of Initial Jurisdiction
	After Delivery 1/	After Mailing	Other	
AL		10 + 30		Circuit Court in county in which claimant resides.
AK			Within 30 days after date of entry of decision (prescribed by appellate rules).	Superior Court
AZ	30			Court of Appeals
AR	30			Court of Appeals
CA			Within 6 months of date of decision, or date it is designated a precedent, whichever is later.	Superior Court; by court rule, no statutory provision.
CO		15 + 20; claimant must appeal to commission for a review within 15 days before appeal to court.		Court of Appeals
CT		31		Superior Court in Hartford or district where appellant resides.

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TABLE 7-2: JUDICIAL REVIEW				
State	Number Of Days For Filing			Court Of Initial Jurisdiction
	After Delivery 1/	After Mailing	Other	
DE	10 + 10			Superior Court
DC			30 days after decision is final.	D.C. Court of Appeals
FL			Within 30 days after date of entry of decision (prescribed by appellate rules).	District Court of Appeals; where claim was filed.
GA	15 + 15			Superior Court in county or city in which the claimant last worked.
HI			30 days after service of referee's decision.	Circuit Court in county in which claimant resides or in county or city in which the claimant last worked.
ID	30			Supreme Court
IL		35		Circuit Court in county in which claimant resides. Non-resident may file suit in Circuit Court of Cook County or in county in which business is located.
IN		15, or 30 days from date of notice of intention to appeal made within the 15-day period.		Indiana Court of Appeals
IA	10 + 20			District Court in county in which claimant resides. Non-resident may file suit in District Court of Polk County or where claimant last worked.
KS		16		District Court in county where claimant resides. Non-resident may file suit in Shawnee County District Court or in county in which business is located.
KY			20 days after date of decision.	Circuit Court in county or city in which the claimant last worked.
LA	15			District Court in the parish in which claimant resides.
ME	10 + 15			Superior Court in county in which plaintiff lives or does business.
MD	30			Circuit Court of county of Baltimore.
MA		20		District Court in county in which claimant resides or in county or city in which the claimant last worked.
MI		30		Circuit Court in county in which claimant resides or last worked, or county in which business is located.
MN		30		Court of Appeals
MS	10 + 10			Circuit Court of the county where party resides, the county in which the action arose, or in the county of employment.
MO	10 + 20			Appellate Court; appeals on interstate claims will be in Court of Appeals for the Western District.
MT		30		District Court in county in which claimant resides.
NE		5 + 30; no further administrative appeal.		District Court in county in which claimant resides or last worked.
NV	10 + 10			District Court where employment was performed.
NH		30		Supreme Court
NJ		45; by court rule, no statutory provision.		Superior Court, Appellate Division

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TABLE 7-2: JUDICIAL REVIEW				
State	Number Of Days For Filing			Court Of Initial Jurisdiction
	After Delivery ^{1/}	After Mailing	Other	
NM			15; after notification or mailing of decision.	District Court in county in which claimant resides.
NY	30			Supreme Court, Appellate Division, Third Department
NC	30; party must file a notice of intent to appeal before decision is final.			Superior Court in county in which claimant resides.
ND	30			District Court
OH		30		Court of Common Pleas in county in which claimant resides or last worked, or in county in which business is located.
OK		10		District Court in county in which claimant resides. Non-resident may file suit in District Court of Oklahoma County.
OR			30; after decision is served.	Circuit Court
PA		15 + 30		Commonwealth Court
PR	30			Superior Court in county in which claimant resides.
RI	30			Superior Court of Providence or Bristol or in county in which claimant resides.
SC	30			Court of Commons Pleas in county in which claimant resides or in county or city in which the claimant last worked.
SD			30 days after date of decision.	Circuit Court
TN	30			Chancery Court in county in which claimant resides.
TX		14 + 14		County Court in county in which claimant resides. Non-resident may file suit in Travis County Court.
UT	10 + 10			Supreme Court
VT	10	12	30 days after notice of appeal is filed.	Supreme Court
VA	10 + 30			Circuit Court where claimant last worked.
VI	30			District Court of the Virgin Islands
WA	30			Superior Court; appeals on intrastate claims filed in petitioner's choice of Thurston County or county of residence or business; appeals on interstate claims in Thurston County.
WV		30 + 20; appeals involving a labor dispute must be filed within 20 days after mailing of Board's decision.		Circuit Court of Kanawha County
WI		30		Circuit Court of Dane County
WY	10			District Court of Natrona County or in county in which claimant resides or in county in which business is located.

^{1/} Where two figures are shown, first figure is number of days after which decision is final and is the time claimant has to exhaust actions before administrative appeal bodies; second figure is additional time allowed to seek judicial review.

Dr. NILSEN. We have not looked into that to see whether or not there is a difference in terms of employers' behavior about whether or not if people go in to file for benefits, but very often, it is a fairly rigorous process, and the UI system calls back the employer to verify the information about why someone was fired or let go.

Ms. HART. Do they become not eligible when they get a negative report?

Dr. NILSEN. They can. If they say they were fired for cause, in most States they are not eligible for benefits. The information on wages and how long they worked, that all comes from a data system that is maintained by the UI system.

Ms. HART. Do you think there is too much flexibility? I know I am running over time. Is there too much flexibility, yes or no, in what we allow the States to do as far as determining whether people are eligible?

Dr. NILSEN. That is your decision, I think.

[Laughter.]

Ms. HART. All right. I will take it back. Thank you, Mr. Chairman.

Chairman HERGER. I thank the gentlelady from Pennsylvania. This has been a very interesting hearing. I think we probably all agree we have far more questions than we have answers here. I want to thank the GAO, and particularly you, Dr. Nilsen, and your staff, who has worked with you on bringing this information to light. I believe the gentleman from Washington had a comment to make.

Mr. MCDERMOTT. In answer to the gentlewoman from Pennsylvania, it is not in the employer's interest to tell the employee that they are eligible for benefits, is it? Since if it gets reported, it goes on their tax rate?

Dr. NILSEN. Well, if an employee is let go and files for benefits, it could affect the UI tax rate of the employer, that is correct.

Mr. MCDERMOTT. If they let them go but there is nothing that encourages them to say, "But there are benefits out there for you."

Dr. NILSEN. I do not believe employers are required to let employees know.

Mr. MCDERMOTT. They are required to?

Dr. NILSEN. I don't believe they are—

Mr. MCDERMOTT. They are not required to. I think that is part of what she was asking was, when somebody quits. I remember when I was in the State legislature, when we had unemployment benefits for college students who worked the summer and then drew their benefits during the school year, lived off their benefits. We had a real wide open system that everybody understood, and we gradually squeezed it down to the point where—that is why you only have half the people getting the benefits. We had way more than 50 percent in the State of Washington who worked fishing and logging and all sorts of things in the summertime, and made it the rest of the year. Thank you, Mr. Chairman.

Chairman HERGER. I thank you. Again, Dr. Nilsen, thank you very much again for your testimony today. This information will be invaluable as we continue reviewing ways to improve our unemployment program. With that, this Committee stands adjourned.

[Whereupon, at 11:23 a.m., the hearing was adjourned.]

[Questions submitted from Chairman Herger to Dr. Nilsen and responses follow:]

Question: The report (page 16) finds that on average a person collecting unemployment benefits spends 21 weeks unemployed, compared with only 8 weeks unemployed for a person who doesn't collect unemployment benefits. Do we know whether people who spend more time unemployed get additional training or job skills that help them stay in the labor force once they get back to work or gain higher wages when they return to work, compared to their peers who don't collect unemployment benefits?

Answer: As we reported last year (GAO-05-413), although UI claimants have access to a variety of reemployment services, Federal reporting requirements for states' UI programs and for federally funded employment and training programs do not provide a full picture of the services received or the outcomes obtained by all UI claimants. Few states monitor the extent to which claimants are receiving these services or outcomes for these claimants. Therefore, we do not have data to determine whether people who spend more time unemployed receive additional training or job skills to help them stay in the labor force once they return to work, or whether they gain higher wages when they return to work, compared to their peers who do not receive UI benefits.

Question: It is telling that you found "only one UI program factor (other than current UI receipt) has a statistically significant impact on an individual's unemployment duration. Specifically, individuals who are unemployed in states with higher denial rates for continuing UI claims have higher escape rates from unemployment" (p. 71). Does that mean the only thing states do that actually can be shown to help unemployed workers return to work quickly is to deny them unemployment benefits? Are there other ways states try to speed returns to work?

Answer: Our data does suggest that, in the aggregate, individuals who are unemployed in states with higher denial rates for continuing UI claims have higher escape rates for unemployment. However, the NLSY79 dataset does not include information about whether or not an individual worker was denied continued UI benefits; therefore, we are unable to determine how denying an individual's claim might influence their individual reemployment outcome, or whether or not this is an effective strategy for helping unemployed workers return to work quickly. Although we included several state program factors in our analysis, including the rate of denial for continuing UI claims, these factors do not represent the full range of state program variables, since including all aspects of state programs was not within the scope of our analysis. It is possible that other program variables that were not included in our analysis may help speed returns to work for UI beneficiaries. For example, officials in Washington state have the ability to identify various subgroups of claimants using a tracking device called the Claimant Progress Tool. Officials told us that staff typically use this tool to identify claimants who are about 100 days into their claim, and then contact them for targeted job search assistance and job referrals. Similarly, in Georgia, a state-funded Claimant Assistance Program identifies claimants who are seen to be ready for employment and requires them to participate in reemployment services. However, we are unable to determine how effective these services are, based on our work to date.

Question: It is commonly observed that the length of time someone collects unemployment benefits is related to the unemployment rate. So unemployment durations would typically rise as unemployment rates go up, and then fall back as more workers return to work. In the past 15 years, however, average unemployment durations have remained high even as unemployment rates have fallen to historically low levels. For example, at the height of the recession in the early nineties, the unemployment rate was 7.8 percent and the average duration of unemployment was 18 weeks. This past month, the unemployment rate was 4.8 percent and the average duration of unemployment was still about 17.5 weeks. Is there anything in your report that might help explain this phenomenon? Your report finds that women and longer tenured workers are more likely to collect unemployment benefits. Further, experience collecting unemployment benefits makes a worker more likely to collect benefits, and benefit collection is associated with longer spells of unemployment. That all seems to suggest that an aging workforce including relatively more women might result in longer

average durations of unemployment. Is that consistent with what your data found? This suggests states may wish to target job search and other reemployment services to groups that might otherwise spend the longest times out of work. Is that happening in any states?

Answer: Although we cannot fully answer this question, your conclusion is consistent with our findings. Yet, because our analysis does not cover unemployed workers who are older than 45, we cannot say what will happen as this cohort of individuals ages. Again, your question points out a key weakness in this program. That is, research and data are lacking in how to speed reemployment for UI claimants. Our analysis used state unemployment rates rather than national unemployment rates, so we are unable to comment on how national rates are related to unemployment duration. While we found that higher state unemployment rates are associated with longer unemployment durations for the population we studied (younger baby-boom workers), we cannot generalize our results to all ages of workers. It is possible that longer durations overall are more closely related to changes in the economy, which may be causing the skills of certain displaced workers to become less marketable. With respect to women and longer tenured workers, we did find that the likelihood of UI receipt is higher for these groups of workers, and that women have somewhat longer average unemployment durations, and it may be that this has influenced the trend of longer unemployment duration for all workers over the last several years. However, our results are specific to one age cohort, and these trends may not hold for workers from other age cohorts, who could have different experiences over time. Since 1993, the Federal Government has required that states establish a Worker Profiling and Reemployment Services (WPRS) system and implement a process typically referred to as claimant profiling. The claimant profiling process uses a statistical model or characteristics screen to identify claimants who are likely to exhaust their UI benefits before finding work and targets services to these claimants. A number of states have found that job tenure is a meaningful variable and have incorporated it in their profiling model.

Question: A 2005 GAO report on unemployment benefit recipients noted that a slight majority of laid off workers who were eligible to collect unemployment benefits actually turned down those benefits. Specifically, out of a large sample of workers tracked over more than two decades, 39 percent were “unemployed and eligible at least once but never received UI” while 38 percent were “eligible and received UI” at least once. Does your March 2006 report shed more light on that decisionmaking, specifically why so many apparently eligible unemployed workers might turn down these benefits? Elsewhere the report suggests that “receiving or not receiving UI benefits may be a personal choice based on unobserved worker characteristics or preferences” (p. 15). What are some examples of the “worker characteristics or preferences” influencing someone’s decision to collect unemployment benefits—or not collect them?

Answer: The 2005 GAO report on UI benefit receipt (GAO-05-291) concluded that a slight majority of unemployed workers who were likely eligible for UI benefits did not receive them. Given what was available in the dataset we used for that study, we were unable to determine how many of these workers did not seek to apply for benefits, or if they applied, how many were denied benefits. Our March 2006 report relied on the same data, and does not provide more information on whether or not these unemployed, UI-eligible workers decided to apply for benefits. Our March 2006 report describes the strong relationship between past and current receipt/non-receipt of UI benefits, when other factors are taken into account. In describing the possible explanations for this relationship, we suggested that unmeasured worker characteristics may be at play. For example, a lack of information about the UI program or personal preference could explain the continued non-receipt of UI despite meeting possible eligibility requirements when unemployed on multiple occasions. However, we are unable to determine the extent to which these or other unmeasured characteristics contribute to an individual’s decision to file for UI benefits. In our 2005 report (GAO-05-291, p. 23) we cited the results of two supplements to the Current Population Survey designed to explore the reasons why some unemployed workers did not file for UI benefits. In these supplements, the most cited reasons for not applying for benefits were perceived ineligibility, and optimism about becoming reemployed quickly.

Question: The report finds that younger workers are more likely to receive unemployment benefits. What factors might cause that?

Answer: Our 2006 report notes that we are unable to explain why younger workers are more likely than older workers to receive UI benefits (GAO-06-341, p. 11). However, we posit three possible explanations: (1) our analysis isolates the effect of age more carefully than prior studies by controlling for the interactions between age and other factors that are associated with age, such as the number of previous job losses and periods of UI receipt, job tenure, earnings, and so forth., (2) older workers (through age 45) may be better able to weather a period of unemployment without the assistance of UI benefits, or (3) younger workers may simply be less confident about future prospects for reemployment than older workers. An important point to remember is that our analysis only covers workers through age 45. These are generally considered prime age workers who do not have the reemployment problems faced by older workers (ages 55 and older).

Question: In the world of welfare, states are expected to engage low-income parents in work and training. Federal welfare funds for states depend at least in part on state success in helping more welfare recipients go to work. And as a result, work and earnings among low-income parents rose dramatically in recent years. When it comes to providing Federal unemployment funds, are states held to any similar performance standards related to helping laid off workers more quickly return to work? Have states ever experienced any loss of Federal funds for failure to satisfy such Federal performance standards related to returns to work, to your knowledge? If not such return to work outcomes, what generally determines how much Federal funding is provided to states to administer unemployment benefit programs today?

Answer: Federal law provides a great deal of flexibility to states in how they design their UI programs, including whether or not they have goals for reemployment of UI benefit recipients. Labor does not currently have a performance goal for reemployment of UI recipients. However, Labor is working on developing such a measure for its Strategic Plan, and has required that states track a reemployment rate for their UI claimants—defined as the percentage of UI claimants who are reemployed within the quarter following their first UI payment—since summer 2005. To date, no state has experienced a loss of funds as a result of failing to satisfy Federal goals related to reemployment—in fact, administrative funding is only based on projected workloads and the cost of processing claims. Additional Federal funds that help pay for regular or temporary extended benefits, or Disaster Unemployment Assistance benefits, are based on whether or not claimants meet UI program eligibility requirements and are not contingent on state performance.

Question: Your testimony indicated that states have little data to gauge the extent to which unemployed individuals are receiving reemployment services, or the outcomes these services achieve. It seems that having this type of information would be essential to determine which federally funded activities are most effective in helping laid off workers get back on the job. Do you have any suggestions for what Congress can do to see that this type of information becomes available and is used to improve the effectiveness of programs in helping unemployed workers go back to work?

Answer: Beyond our previous recommendation that the Secretary of Labor work with states to consider the feasibility of collecting more comprehensive information on UI claimants' use of reemployment services and the outcomes achieved by claimants, GAO is not making additional recommendations at this time. However, Labor has two initiatives that have the potential to provide somewhat better information about the effectiveness of federally funded activities targeted to unemployed workers. The first initiative, the Administrative Data Research and Evaluation project (ADARE), is an alliance of 9 state partners that provide authorized third-party researchers with detailed, longitudinal data on participants in the Wagner-Peyser Employment Service, Workforce Investment Act (WIA) programs, Temporary Assistance for Needy Families (TANF), and Perkins Vocational Education, as well as UI wage and benefit records and education records. Together, participating states represent 43 percent of the civilian workforce in the United States. While using ADARE would enable analysis of claimants' use of services and of their outcomes in a few states, efforts so far have focused largely on evaluating welfare-to-work programs and WIA. Labor last provided funds for ADARE in October 2004 and has not requested additional work. The second initiative is a 5-year evaluation of the UI benefits program that researchers hope will include data from up to 25 states. This study was designed to identify changes in the labor market, population, and economy relative to the UI program, as well as detailed characteristics of those receiving or not receiv-

ing UI benefits. The original design of the study included an assessment of the extent to which claimants are receiving reemployment services and their outcomes, but those plans were sidelined due to resource constraints. The study is due to be completed in 2009.

Question: In general, states provide unemployment benefit claimants with information about reemployment services and some states require at least some interaction with the employment services program in order for recipients to maintain unemployment benefit eligibility. Is there any evidence to suggest there are positive benefits in the states that require stronger interaction between their unemployment and reemployment programs? What do the most effective states do to help the typical unemployed worker return to work, and at higher wages?

Answer: Because little data are available to gauge reemployment outcomes, it not possible at this time to determine whether or not states that require stronger interaction between their unemployment and reemployment programs have different outcomes for claimants.

