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Stephen A. Woodbury and Wayne Vroman

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**The Incidence and Cost of
Wrongfully Denied Unemployment Benefits
Abstract**

Since 1987, the U.S. Department of Labor has performed random audits of Unemployment Insurance (UI) payments in order to estimate the extent of benefit payment errors — particularly overpayments. However, the accuracy of the process that determines benefit eligibility is not currently assessed. In particular, the extent to which eligible claimants for UI are wrongfully denied benefits is not known.

This paper reports the results of the Denied Claims Accuracy (DCA) Pilot Project, a five-state pilot conducted by the Department of Labor during 1997-98, in which random samples of monetary, separation, and nonseparation denials were subjected to intensive field investigation in order to determine their accuracy. Two main sets of findings are reported. The first pertains to the incidence of wrongful denials: After adjusting for appeals, redeterminations, and other agency actions to resolve errors, 11 percent of monetary denials, over 6 percent of the separation denials, and 13 percent of nonseparation denials were in error. Several aspects of these basic findings are discussed: the effectiveness of UI agency activities and the appeals process in correcting errors, the causes of wrongful denials, and the extent to which wrongful denials are correlated with observable claimant characteristics.

The second set of findings pertains to the dollar value of benefits lost by claimants due to wrongful denials. Lost benefits are unobservable and must be imputed; two approaches to making the imputations are developed. The imputations suggest that between \$565 million and \$625 million in benefits were wrongfully denied in the United States during fiscal year 1998, amounting to just over 3 percent of total regular UI benefit payments. Of this total, between \$220 million and \$240 million were wrongfully denied due to incorrect monetary determinations, between \$190 million and \$230 million were wrongfully denied due to incorrect separation determinations, and between \$150 and \$155 million were wrongfully denied due to incorrect nonseparation determinations.

The Incidence and Cost of Wrongfully Denied Unemployment Benefits

Unemployment Insurance (UI) is intended to be a source of short-term income support for workers who experience involuntary unemployment and are seeking reemployment. When a worker becomes unemployed, he or she must claim UI benefits and meet three basic eligibility criteria in order to receive benefits. First, the worker's pre-unemployment earnings must meet or exceed specified thresholds — that is, the worker must be "monetarily eligible" for benefits. Second, the worker must have separated from employment for lack of work and through no fault of his or her own (the worker cannot have quit or been discharged for cause) — that is, the worker must meet the "separation" criteria for benefit eligibility. Third, the worker must be able to work, available for work, and seeking reemployment — that is, the worker must satisfy the "nonseparation" criteria for continuing benefit eligibility. Although these three criteria appear cut-and-dried, they can be misapplied in practice, and errors may arise. Workers who are in fact eligible for UI benefits may be denied those benefits.

Since 1987, the U.S. Department of Labor has had a "Benefit Accuracy Measurement" system, or BAM (Skrable 1997; U.S. Department of Labor 1995), which performs random audits of UI payments in order to estimate the extent of benefit overpayments. (On the development of this system, see Kingston and Burgess 1986; Burgess and Kingston 1987.) However, the Department has not estimated the accuracy of the process that determines benefit eligibility. In particular, the extent to which eligible claimants for UI are wrongfully denied benefits has been unknown.

During 1997-98, the Department of Labor conducted a five-state Denied Claims Accuracy (DCA) Pilot Project in which random samples of denied UI claims were subjected to intensive field investigation in order to determine their accuracy. The

purpose of the pilot was twofold — to obtain information on extent of wrongful denial of UI benefits, and to appraise the feasibility of an ongoing program that would estimate the accuracy of denied UI claims.

This paper reports the main findings of that pilot project. Section 1 provides institutional background on UI benefit eligibility, with special attention to the five states in which the pilot was conducted. Section 2 sketches the design of the pilot and indicates the some of the choices that were made in formulating that design. Section 3 presents the main findings on the incidence of wrongful denials in each of the five pilot states and the extent to which appeals and UI agencies' activities "automatically" correct errors. Section 4 examines the causes of errors and whether wrongful denials are correlated with observable characteristics of workers. Section 5 offers estimates of the dollar value of benefits lost by claimants due to wrongful denials. Section 6 summarizes the findings and implications for policy that can be drawn from the pilot.

1. UI Eligibility and Denial of Benefits

For the DCA Pilot Project, The Department of Labor selected five states from among a larger number that volunteered to participate in the project. The Department attempted to select a group of states that was reasonably balanced geographically, in size, and in features of the UI law, and chose Nebraska, New Jersey, South Carolina, West Virginia, and Wisconsin. This section describes the UI eligibility criteria used in those states and discusses the extent to which UI claimants are denied benefits in both the pilot states and the United States as a whole.

1.1. Eligibility Criteria

Table 1 summarizes the UI eligibility criteria of the five pilot states. Monetary eligibility criteria are characterized along four dimensions: (a) the type of eligibility

formula used, (b) the minimum base period earnings required (the base period is the first four of the five completed quarters preceding the UI claim), (c) the earnings distribution requirement, and (d) the existence of restrictions on eligibility of seasonal workers.

Nebraska and West Virginia are among 6 states that use a so-called "flat" eligibility formula, under which a claimant must have earned some specified minimum dollar amount during the base period. New Jersey is one of 7 states requiring a claimant to have worked at least 20 weeks (at specified minimum weekly earnings) during the base period. South Carolina is one of 24 states using a "multiple of high-quarter wages" formula. South Carolina's formula requires a worker to have earned at least \$600 in the high quarter of the base period (that is, the quarter of the base period in which earnings were highest) and at least 1.5 times the high-quarter earnings (that is, at least \$900) in the entire base period. Finally, Wisconsin is one of 14 states using a "multiple of weekly benefit amount" formula. Wisconsin's formula requires first that a worker have earned at least \$1,325 in the high quarter of the base period, which would qualify the claimant for a weekly benefit amount of \$53. The worker must then have earned at least 30 times that calculated weekly benefit amount (that is, at least \$1,590) during the entire base period to be monetarily eligible.

The second row under monetary eligibility criteria gives the minimum base period earnings that a claimant would need in order to qualify for benefits. The third row shows each state's distribution requirement. For example, Nebraska requires the claimant to have earned at least \$400 outside the high quarter of the base period. Similarly, the other five pilot states have some requirement that the claimant's base period earnings were not concentrated in a single quarter. For example, New Jersey, South Carolina, and West Virginia each require that a claimant have earnings in at least two quarters of the base period.

The fourth row under monetary eligibility criteria shows that West Virginia and Wisconsin have special provisions that restrict the eligibility of seasonal workers. In general, wages earned by workers in an industry defined as seasonal can be used to establish UI eligibility only for unemployment during periods when the worker is usually employed in his or her seasonal job.

The middle panel of Table 1 summarizes the two main aspects of the pilot states's separation eligibility criteria. The first is how a state handles the UI eligibility of a worker who voluntarily quit his or her job. Such a worker is eligible for UI benefits only if he or she had "good cause" for quitting, and the definition of good cause differs from state to state. Table 1 shows that in New Jersey, West Virginia, and Wisconsin, the definition of "good cause" is restricted to issues directly related to work or the employer (although West Virginia and Wisconsin define certain specific reasons for voluntary leaving that are permitted, such as claimant illness and leaving to accept another job that does not materialize, with the number of such specific reasons shown in the "number of inclusions" row of Table 1.) Nebraska and South Carolina, on the other hand, allow "good cause" to include good personal reasons as well as reasons that are directly related to employment.

Table 1 also shows how long a claimant who quits voluntarily will be disqualified from receiving UI benefits. In Nebraska, a worker who quits voluntarily is disqualified for 7 to 10 weeks. In the other pilot states, a worker who quits voluntarily is disqualified for the duration of his or her current spell of unemployment. In order to requalify for benefits, the worker must then earn some minimum amount, specified as a multiple of the weekly benefit amount in New Jersey, South Carolina, and Wisconsin. In West Virginia, the worker must work at least 30 days to requalify.

The second aspect of the separation criteria summarized in Table 1 pertains to discharge for misconduct. In the pilot states, a discharged will be ineligible for UI

benefits for between 5 weeks (New Jersey) and 26 weeks (South Carolina). In addition, all of the pilot states except New Jersey reduce the benefits that a worker receives at the end of a misconduct disqualification. Also, all pilot states except Wisconsin impose some additional penalty on a worker who was discharged for gross misconduct.

The bottom panel of Table 1 summarizes the pilot states' nonseparation eligibility criteria. All require that a worker be "available" for work in some sense, although some states, such as South Carolina and West Virginia, require only that a worker be available to work in his or her usual occupation. Nebraska, New Jersey and Wisconsin, in contrast, require that a worker be available for (and willing to accept) any work. Also, in all of the pilot states, a worker who refuses suitable work is disqualified from receiving benefits for at least some time, and in two of the states (South Carolina and Wisconsin) such a worker is disqualified for the duration of his or her unemployment spell. Nebraska and West Virginia reduce the benefits that a worker receives at the end of a disqualification period stemming from refusal of suitable work.

1.2. Benefit Denials Nationwide and in the Pilot States

When a worker loses a job and claims UI benefits, he or she files a new initial claim that is subjected to a monetary determination (to ensure that the claim satisfies the monetary eligibility criteria) and possibly also a separation determination (if there is a question about whether the claim meets the separation eligibility criteria). If a claimant is eligible, then he or she can claim up to the maximum benefit amount during the ensuing year (called a benefit year) by filing a succession of continued claims, usually every 2 weeks. The maximum benefit amount equals the claimant's weekly benefit amount times the number of weeks of benefits for which the claimant is eligible (typically 26). Each continued claim may receive a nonseparation determination if the

UI agency has reason to believe that the claimant is not able, available, and seeking work (that is, did not satisfy the nonseparation eligibility criteria). Subjecting a claim to a separation or nonseparation determination is often referred to as adjudication.

The maximum benefit amount need not be paid in a sequence of consecutive weeks. Rather, a worker could become reemployed before receiving the maximum benefit amount, lose the new job, and file an additional initial claim, which may in turn receive a separation determination. Also, if a worker remains unemployed after a year, he or she may file a transitional claim, which could (if the claim satisfies the monetary eligibility criteria) result in a new maximum benefit amount that could be received during a new benefit year.

Table 2 summarizes information about the number of claims that were processed (or "determined") and their disposition during fiscal year 1998, both nationwide and in the five pilot states. Nationwide, nearly 10.8 million monetary determinations were made, and 10.9 percent of these resulted in denial of benefits (these are referred to as monetary denials). In the pilot states, 941,000 monetary determinations were made, and 10.6 percent of these resulted in denial of benefits. As a group, the pilot states seem reasonably representative of the nation as a whole.

As can be seen in the middle panel of Table 2, 15.9 million initial claims (both new and additional) were filed nationwide in 1998, of which 3.4 million (21.4 percent) were adjudicated. Of these, 1.86 million (or 54.4 percent) were ultimately denied (these are referred to a separation denials). In the five pilot states, 1.32 million initial claims were filed, of which 295,000 (22.4 percent) were adjudicated. Of these, 179,000 (60.8 percent) were denied. The incidence of separation denials appears somewhat higher in the pilot states than in the nation as a whole.

The bottom panel of Table 2 shows that nationwide during 1998, nearly 118 million continued claims were filed. Each of these events had the potential to result in

a nonseparation denial. Of these, 4.3 million (or 3.6 percent) were adjudicated, and of these latter, 2.4 million (or 55.9 percent) resulted in denied benefits. In the five pilot states, 11.2 million continued claims were filed, of which 265,000 (2.4 percent) were adjudicated. Of these, 161,000 (60.6 percent) were denied. The incidence of nonseparation denials appears to be somewhat lower in the pilot states than in the nation as a whole.

In what follows, it will be useful to keep in mind that about 10 to 11 percent of monetary determinations, and 55 to 60 percent of separation and nonseparation determinations, result in denial of benefits. It also needs to be kept in mind that, whereas all new initial and transitional claims are subjected to a monetary determination, only 22 percent of new initial, additional initial, and transitional claims are subjected to a separation determination (that is, adjudicated), and that only about 3 percent of continued claims are subjected to a nonseparation determination.

2. Design of the Denied Claims Accuracy Pilot Project

For the DCA Pilot Project, Department of Labor officials decided to estimate the accuracy of denied UI claims by drawing three separate samples of denied claims — one sample each for monetary, separation, and nonseparation denials — in each of the five pilot states.¹ The samples were drawn on a weekly basis, with 4 of each type of denial drawn at random each week until 200 denials of each type (600 total) had

¹ The rationale for and development of the pilot program are traced in a series of Unemployment Insurance Program Letters (U.S. Department of Labor 1995, 1996a, 1996b). One alternative sampling design was considered for the pilot, in which a random sample of new initial claims would be drawn and added to a longitudinal file. The experience of each claimant would then be monitored and all denials investigated as they occurred. The Department of Labor cited two main reasons in choosing its simple random sampling design in preference to the longitudinal design. First, if one is interested in estimating the incidence of wrongful denials, it makes sense to sample denials directly, rather than sample initial claims and then wait for denials to crop up. In fact, an important drawback to the longitudinal design is that it would be difficult to control the sample sizes of separation and (especially) nonseparation denials for investigation (recall from Table 2 that under 2 percent of continued claims are denied). Second, the design chosen mirrored the design of the existing BAM program (the program that estimates the extent of overpayments), so UI information systems personnel in each state were already familiar with it.

been drawn. Hence, the pilot took place over the course of about one year (4 denials of each type per week times 50 weeks yielded 200 of each type of denial). The states began drawing samples for investigation in September 1997 and continued to sample during the following year. Site visits to each of the pilot states were made by Washington UI office staff and by the authors for the purpose of monitoring the states' progress with the pilot and identifying problems.

At the heart of the pilot project was the intensive field investigation of each denial sampled. Each state received funding for two staff members to investigate the 600 sampled denied claims and to code their findings on a Data Collection Instrument that was adapted from the BAM program. Most states spread the pilot caseload among more than two investigators; however, all investigators were experienced and specially trained personnel, and most were already working in the states' BAM unit.

How did the field investigations proceed? There were clearly variations among the states and among the investigators. However, monetary denials were generally investigated first by reviewing all pertinent agency records, then by interviewing (usually by phone) the claimant and contacting employers to ascertain the claimants' wages, hours of work, weeks of work, and so on, as prescribed by state law. Similarly, separation and nonseparation denials were investigated by reviewing existing agency records, then following up by contacting employers, the claimant, and (in some cases) third parties to determine whether the denial was in accord with fully informed application of state law. All investigated cases were reviewed by the supervisor of the BAM unit before being coded and transmitted to the Washington office. Note that the investigations went beyond a review of agency records already on file. This is the "field" aspect of the investigation, which embodies the assumption that existing agency records may be flawed and, in any case, must be verified.

3. Incidence of Wrongful Denials

Table 3 displays the main findings of the DCA Pilot Project — point estimates of the denial error rates in each of the five pilot states (and for the five states aggregated) for each of the three types of denials. Column 1 shows "unadjusted" error rates; that is, denial error rates before taking account of any corrections that result from claimants' appeals and UI agencies' own checks. Columns 2, 3, and 4 show error rates that account for these corrective measures. We discuss each in turn.

3.1 Unadjusted Error Rates

Table 3 (column 1) shows that, for the five pilot states, 16 percent of sampled monetary denials, 8.7 percent of separation denials, and 15 percent of nonseparation denials were incorrect. The lower error rate of separation denials is consistent across the states (except for Wisconsin) and is too large overall to be attributed to sampling error. It seems clear that monetary and nonseparation denials are more likely to be incorrect than separation denials.

In large part, differences among the five pilot states in error rates can be attributed to sampling error. South Carolina's monetary denial error rate is statistically significantly higher than that of two of the other pilot states, Wisconsin's separation denial error rate is higher than that of three of the other states, and West Virginia's nonseparation denial error rate is lower than Wisconsin's, but otherwise the differences among the states are statistically insignificant.² During the pilot project, representatives of the pilot states made clear their belief that interstate differences in error rates should not be interpreted as interstate differences in the quality of agencies' enforcement efforts. In particular, the UI laws, policies, and procedures of one state may be harder to apply than those of another, leading to interstate differences in error

² Throughout this discussion, a "statistically significant" difference refers to a difference with a P-value of 0.05 or less using a two-tailed test. Tests of differences in proportions are noted in the text but are not displayed in the tables. Such tests can be performed from data displayed in the tables.

rates. It is difficult to appraise such arguments, but the relatively rare differences among the states in error rates makes such concerns largely moot.

3.2. Error Rates Adjusted for Appeals and Agencies' Actions

Ideally, a wrongful denial would be corrected by processes that are part of the UI system — appeals filed by claimants who believe that they should be found eligible for UI benefits and the agency's own checks and follow-up. Columns 2, 3, and 4 of Table 3 suggest the extent to which errors are corrected by appeals and the states' internal processes.

Column 2 shows that appeals filed by denied claimants had no effect on monetary denial errors. Indeed, only 7 of the 901 sampled monetary denials were appealed (this is not shown in the table), and all of these were correct monetary denials. There was no scope for appeals and redeterminations to correct wrongful monetary denials because none of them was appealed.

Column 2 also shows that appeals had only a slight effect on separation errors. Although 174 (or 17.3 percent) of the 1,006 separation denials were appealed, only 23 of these were appeals of wrongful denials. (That is, only about 28 percent of the separation denial errors were appealed.) As a result, the scope for the appeals process to reduce separation denial errors is quite limited. At the time the data were transferred to the Department of Labor, only 39 of the 174 appeals had resulted in reversals (and of these, 24 were reversals of correct denials), and 64 were still pending. An additional 3 separation denials had been redetermined (all had been wrongful denials). The upshot is that appeals and redeterminations reduced the separation denial error rate for all five pilot states from 8.7 to 6.8 percent (this difference has a P-value of 0.12).

Finally, column 2 shows that appeals and redeterminations had little effect on

wrongful nonseparation denials. Only 71 (or about 7 percent) of the 1,004 nonseparation denials were appealed, and only 13 of these were appeals of wrongful denials. (That is, fewer than 9 percent of the wrongful nonseparation denials were appealed.) Hence, the scope for the appeals process to change the error rate for nonseparation denials is again limited. At the time the data were transferred to the Department of Labor, just 11 had resulted in reversals (of these, 6 were reversals of correct denials), and 35 were pending. An additional 3 nonseparation denials had been redetermined (all had been wrongful denials). As a result, appeals and redeterminations reduced the nonseparation denial error rate in five pilot states from 15.0 to 14.1 percent (statistically insignificant).

It is worth noting that, even if the pending appeals of wrongful separation and nonseparation denials resulted in eligibility, few wrongful denials would be corrected. Only 3 of the pending separation denials that were appealed were wrongful, and only 2 of the pending nonseparation denials that were appealed were wrongful.

Column 3 of Table 3 shows that agencies' actions to identify and correct wrongful denials reduced the monetary denial error rate from 16 percent to 11.2 percent in the five pilot states taken together. (The reduction is statistically significant.) However, the agencies' actions did not significantly reduce either the separation or nonseparation error rates. In the five states together, agencies' actions reduced the separation error rate from 8.7 to 8.0 percent, and reduced the nonseparation error rate from 15.0 to 13.8 (neither difference is statistically significant).

Column 4 of Table 3 shows the combined effect of appeals, redeterminations, and agency actions on denial error rates. The monetary error rates in column 4 are lower than those in column 1 solely due to agency actions. In contrast, the separation and nonseparation error rates in column 4 are lower than those in column 1 due to a combination of appeals and agency actions. These adjusted error rates give a picture

of the performance of the UI system in determining benefit eligibility that reflects the checks that are built into the system. As such, they are preferred to the "raw" error rates. Adjusting for appeals and agency actions reduces the monetary and separation denial error rates by statistically significant amounts — from 16 to 11.2 percent for monetary errors and from 8.7 percent to 6.4 percent separation errors. Adjusting the nonseparation denial error rates results in a decrease in the estimated error rate from 15 to 12.9 percent (P-value of 0.09).

4. Responsibility for and Causes of Errors

The denial error rates discussed above lead naturally to three questions. Were denials that occurred for certain reasons more error-prone than those that occurred for other reasons? Who was responsible for errors — the agency (due to misapplication of law and policy), the employer (due, for example, to failure to report wages), the claimant (due to misreporting), or some combination the three? Are there systematic causes of errors, and can these causes be identified so as to reduce or eliminate them? This section addresses these questions in turn.

4.1. Reasons for Denials

Table 4 displays information on the various reasons for monetary, separation, and nonseparation denials. The top panel shows the possible reasons for monetary denial: insufficient base period wages; insufficient hours, weeks, or days; failure to satisfy the high-quarter wage test; failure to meet a transitional work requirement; and "other" reasons. (These are the possibilities in the data collection instrument used in the pilot project, see U.S. Department of Labor, 1997.) Overall, failure to meet the base period wage test is the most common reason for a monetary denial, followed by failure to meet the high-quarter wage test and failure to meet a transitional work requirement.

However, the evidence suggests that the reason given for a monetary denial is not related to the likelihood of error. For example, 14.3 percent of monetary denials due to insufficient wages were wrongful, whereas 17.2 percent of monetary denials due to failure of the high quarter wage test were wrongful; the difference is statistically insignificant, as are other pairwise differences between the percentages shown in the top panel of Table 4.

The second panel of Table 4 breaks down separation denials by reason and accuracy. Possible reasons for a separation denial include lack of work, voluntary quit, discharge, and not separated (still attached to a job, on a leave or absence, or the like). Overall, 60 percent of all separation denials occur because of a voluntary quit, and about 39 percent occur because of a discharge. As with monetary denials, however, the error rates for separation denials associated with different reasons are statistically the same. (The number of separation denials for "lack of work" and for "not separated" are so small that they have very large sampling error.)

The bottom panel of Table 4 breaks down nonseparation denials by reason and accuracy. Possible reasons for nonseparation denial include inability to work, unavailability for work, failure to meet the work search test, disqualifying or unreported income, refusal of suitable work, a reporting or registration violation (such as failure to report to the agency for an eligibility review interview), and "other." In the five pilot states combined, reporting and registration violations were the most common reason for a nonseparation denial (about 30 percent), followed by unavailability for work (about 24 percent), disqualifying income (18 percent), and inability to work (12 percent).³

³ Although it cannot be seen in Table 4, there is considerable variation across the pilot states in the importance of these main reasons for nonseparation denials. Reporting violations and disqualifying income dominate in Nebraska. Reporting violations and unavailability dominate in both New Jersey and West Virginia. Inability issues, disqualifying income, availability issues, reporting violations, and failure to meet the work search test are all significant in South Carolina. Unavailability, reporting violations, and disqualifying income are all significant in Wisconsin.

Nonseparation denial error rates stemming from disqualifying income (24.9 percent) are higher than nonseparation denial error rates stemming from any other reason, and the difference is statistically significant. This gap appears to result mainly from relatively high nonseparation error rates from disqualifying income in Nebraska and South Carolina. (UI personnel in both Nebraska and South Carolina reported that disqualifying income provisions are difficult to administer.) Differences among the other error rates shown in the bottom panel of Table 4 are statistically insignificant.

4.2. Responsibility for Errors

Where does responsibility for wrongful denials lie? The UI agency is an obvious possibility because it is responsible for correctly applying law and policy. However, employers could play a role if they fail to report or misreport wages, and claimants could play a role if they misreport their situation.

Table 5 displays data on the responsibility for the three types of wrongful denials. The data collection instrument used in the pilot project allowed investigators to code the agency, the employer, the claimant, third parties, or combinations of these as responsible for the wrongful denial.⁴

The first column of Table 5 shows that responsibility for 78 percent of the wrongful monetary denials was attributable to the agency or to the employer (either individually or together), without any shared claimant responsibility. Specifically, responsibility for 32.6 percent of the errors was assigned to the agency, responsibility for 38.3 percent of the errors was assigned to the employer, and responsibility for 7.1 percent of the errors was assigned to the employer and the agency jointly. (Although not shown, this pattern holds across the five pilot states, with at least 65 percent of the wrongful monetary denials attributable to the employer or the agency in each state.)

⁴ Fewer wrongful denials are shown in Table 5 than in Table 3 because error issue data are missing for a few of the wrongful denials.

Employer misreporting or failure to report workers' earnings is the most common cause of wrongful monetary denials, with agency errors a close second.

The second column of Table 5 displays data on responsibility for separation denial errors. The agency (alone) was responsible for about two-thirds of the wrongful separation denials in the five pilot states. Claimants and employers bore responsibility for only small percentages of wrongful denials.

The third column of Table 5 displays data on responsibility for nonseparation denial errors. As in the case of separation denial errors, responsibility for about two-thirds of all nonseparation denial errors can be attributed to the agency.

Because UI agencies and employers bear most of the responsibility of wrongful denials, it is useful to examine additional data on the actions of agencies and employers. The middle panel of Table 5 shows data on how the UI agency handled wrongful denials. In particular, the investigator coded the actions that were being taken (or had already been taken) by the UI agency at the time of the investigation. The first column shows that the agency could not have detected 39 percent of wrongful monetary denials (due to employer misreporting) and was already resolving about 31 percent of the wrongful monetary denials. In the remaining cases (about 30 percent), the agency had taken the wrong action, did not identify an issue, or had not followed procedures.

For wrongful separation and nonseparation denials, the agency had taken incorrect action, failed to identify an issue, or not followed procedures in a far higher percentage of cases — about 70 percent. For wrongful separation and nonseparation denials, the agency could not have detected the issue in only about 20 percent of the cases, and was already resolving fewer than 10 percent of the cases. These findings on prior agency action are consistent with the data on responsibility for errors discussed above.

The bottom panel of Table 5 displays data on the adequacy and timeliness of the information given by employers in wrongful denials. The data show whether, by the time of the DCA investigation, the employer had provided adequate and timely information, had not responded, had not been asked for information, or there was no employer-related issue. These data suggest that employers' provision of inadequate or untimely information was most likely to be a problem in the case of wrongful monetary denials, and least likely to be a problem in the case of nonseparation denials. Specifically, for about 52 percent of the wrongful monetary denials, about 22 percent of the wrongful separation denials, and about 11 percent of the wrongful nonseparation denials, the employer either had not responded or had provided information that was inadequate or late. (For 73 percent of the wrongful nonseparation denials, there was either no employer issue or no information was requested of the employer.) Again, these findings are consistent with the findings on error responsibility displayed in the top panel of Table 5. (For example, the finding that about 52 percent of all wrongful monetary denials are the responsibility of the employer, the employer and agency jointly, or the claimant and employer jointly is consistent with the finding that 52 percent of monetary denial errors involved inadequate or untimely employer information.)

4.3. Errors and the Characteristics of Workers

Do wrongfully denied claims differ systematically from claims that are correct, or are wrongful denials essentially random accidents? To the extent that wrongful denials do have a systematic component, it should be possible to direct or "target" resources toward the types of denied claims that tend to be in error and to avert some of the errors. Doing so would be an efficient way of reducing the overall error rate. On the other hand, if wrongful denials occur at random, then the error rate could be reduced

only by devoting greater resources overall to eligibility determination. Reducing the error rate would entail greater efforts to obtain information from all parties, greater resources devoted to training decision-makers, and more time spent in making each decision.

This section examines the extent to which there is a systematic component to errors that occur in each of the three types of eligibility determination. The approach is to estimate a linear probability model for each type of determination in which a dummy variable indicating whether a denial was correct (1 if correct, 0 if wrongful) is regressed on the following observable characteristics of each denied claimant:

- age of the denied claimant in years
- gender of the denied claimant (0 if female; 1 if male)
- whether the claimant was a U.S. citizen (0 if not a citizen; 1 if a citizen)
- ethnicity of the claimant (dummy variables for black, Hispanic, Asian/Pacific Islander, American Indian, and nonhispanic white)
- level of schooling completed [dummy variables for less than high school, high school graduate or GED, some college but no degree, college degree (including associates or higher degree)]
- normal wage in the usual job, in dollars per hour (dummy variables for usual wage rate less than \$6 an hour, between \$6 and \$7 an hour, between \$7 and \$12 an hour, and over \$12 an hour).

In addition to the above claimant characteristics, each regression includes a set of dummy variables indicating the state in which the individual claimed UI benefits. (Because of missing variables in Nebraska, the denials are drawn only from New Jersey, South Carolina, West Virginia, and Wisconsin.) Also, each of the three equations estimated includes a set of variables specific to type of denial under consideration. In the equation for monetary denials, a dummy variable is included indicating whether the denial involved a combined wage claim (that is, a claim that combines earnings from one or more employers in another state in order to establish monetary eligibility). In the equation for separation denials, dummy variables are included indicating whether the denial involved a voluntary quit, a discharge, or some

other separation issue. And in the equation for nonseparation denials, dummy variables are included indicating whether the denial involved ability to work, availability for work, a work search issue, refusal of work, a reporting or registration violation, or some other nonseparation issue. The reason for including these variables in the estimated equation is to see whether denials involving one or another specific issue are more likely to be wrongful.

4.3.1. Monetary denials. The first column of Table 6 shows estimates of the wrongful monetary denial equation. Apart from the constant and the coefficient of one of the state dummy variables, only four estimated coefficients in the model are statistically different from zero at the 5-percent level or better: the age coefficient, two of the usual wage coefficients, and the combined wage claim coefficient. For a worker aged 30, the probability that a denial is correct is lower by .003 than for a worker aged 29. (It follows that the monetary denial of a 40-year-old worker is less likely to be correct by 0.03 than is the monetary denial of a 30-year-old.) The coefficient for usual wage less than \$6 per hour suggests that, for a worker whose usual hourly wage rate is less than \$6 per hour, the probability that a monetary denial is correct is higher by 0.166 than for a worker whose usual hourly wage is greater than \$12 per hour (the reference group). For a combined wage claim, the probability that a monetary denial is correct is lower by 0.437 than for a denial that does not involve a combined wage claim.

These results suggest that there is at least some systematic component to the incidence of wrongful monetary denials — that wrongful monetary denials are not wholly random accidents. Monetary denials of older workers, workers with high usual wages, and combined wage claims are all more likely to be wrongful than are other denials. It is not surprising that combined wage claims are relatively error-prone because combined wage claims require cooperation and coordination between UI

agencies in two states. That monetary denials of older workers and workers with higher usual wages are more error-prone may be more surprising. However, the finding needs to be interpreted carefully and in light of the fact that relatively few high-wage and older workers are denied. The results suggest that, conditional on being denied on monetary grounds, older workers and higher-wage workers are more likely to experience a wrongful monetary denial.

4.3.2. Separation denials. The middle column of Table 6 shows estimates of the wrongful separation denial equation. These estimates suggest two points. First, the very few separation denials that involve issues other than voluntary quits or discharges are less likely to be correct than are the more common separation denials (those that do involve voluntary quits and discharges). Second, separation denials of American Indians are less likely to be proper than are the separation denials of other racial or ethnic groups. This would be a troubling result except that it is based on just one case. Otherwise, the model suggests that separation denials are random accidents that have no systematic component.

4.3.3. Nonseparation denials. The right-most column of Table 6 shows estimates of the wrongful nonseparation denial equation. These estimates yield a conclusion that is similar to the one just drawn for separation denials: Nonseparation denials are largely random events. There is only one exception: Nonseparation denials that involve disqualifying income are less likely to be proper than are nonseparation denials that involve other issues.

Overall, the linear probability models in Table 6 suggest relatively few ways that UI agencies could target their resources so as to reduce wrongful denials. Nevertheless, giving extra scrutiny to certain identifiable cases could reduce the incidence of wrongful denials — to monetary denials involving combined wage claims and of older workers and high-wage workers, to separation denials for reasons other

than discharge or voluntary quit, and to nonseparation denials for disqualifying income.

5. Value of Benefits Lost Due to Wrongful Denials

The denial error rates discussed in section 3 are the basic results of the DCA Pilot Project. However, it is reasonable to ask what those error rates imply about the dollar value of benefits that should have been paid but were not. It is not possible to estimate the value of lost benefits in the way the incidence of wrongful denials has been estimated — the benefits that would have been received by a wrongfully denied claimant are not observable. As a result, it is necessary to impute the benefits lost due to wrongful denials. This section develops two sets of imputations of the value of lost benefits.

Total benefits lost due to wrongful denials equal the product of three factors:

- the number of wrongful denials (N_i , where i indexes the type of denial);
- the average weekly benefit amount of workers wrongfully denied (WBA_i);
- the average number of weeks of benefits lost by workers wrongfully denied (WKS_i).

For example, for claimants wrongfully denied for monetary reasons, the total benefits lost ($LOSS_m$) during FY 1998 would be:

$$LOSS_m = N_m \cdot WBA_m \cdot WKS_m$$

It follows that an imputation of lost benefits requires estimates of N_i , WBA_i , and WKS_i .

We discuss each in turn.

5.1. Number of Wrongful Denials

In order to estimate the number of wrongful denials in the United States, it is necessary to assume that the estimates of wrongful denials in the five pilot states

approximate the incidence of wrongful denials in the United States as a whole. If this assumption is accepted, then the number of wrongful denials in the United States during fiscal year 1998 can be imputed by applying Table 3's estimates of wrongful denial incidence to Table 2's data on the number of denials of each type.

Table 2 shows that there were 1.17 million monetary denials, 1.86 separation denials, and 2.39 million nonseparation denials. Table 3 shows that the incidence of wrongful monetary, separation, and nonseparation denials was 0.112, 0.064, and 0.129. Applying these incidence rates to the national totals yields 131,264 wrongful monetary denials, 118,976 wrongful separation denials, and 286,800 wrongful nonseparation denials. The number of wrongful monetary denials must be reduced because 24.7 percent of monetarily eligible claimants did not receive a first benefit payment during 1998.⁵ Hence, the imputed number of wrongful monetary denials is 98,842 (131,264•0.753). The first column of Table 7 shows the resulting imputations.

5.2. Weekly Benefit Amount of Wrongfully Denied Claimants

The next requirement is an estimate of the WBA that wrongfully denied claimants would have received. This will differ among the three types of erroneous denials. The corrected WBA for each wrongfully denied claimant in the DCA Pilot Project is known — it was calculated and coded by the field investigator. Also known is the WBA of the average paid claim in the pilot states (from BAM program data). To impute an average WBA for wrongfully denied claimants throughout the United States, a "relative WBA" for each type of wrongful denial can be constructed as follows:

$$\frac{\overline{WBA}_i}{\overline{WBA}}$$

where the numerator is the average WBA of wrongfully denied claimants of type *i* in the pilot states (*i* = monetary, separation, and nonseparation), and the denominator is

⁵ There are two reasons for this. First, some monetarily eligible claimants turn out to be ineligible for nonmonetary reasons. Second, some monetarily eligible claimants find a job quickly or drop out of the labor force, and never receive a benefit payment as a result.

the average WBA of paid claimants in the five pilot states. For wrongful monetary denials, this WBA factor is 0.859; for wrongful separation denials, it is 0.866; and for wrongful nonseparation denials, it is 0.909 (see the column headed "relative WBA" in Table 7). The average WBA for wrongfully denied claimants of each type in the United States is imputed by taking the product of the average WBA of paid claimants in the United States (\$199.18, from the BAM data) and the respective WBA factor.

5.3. Weeks of Benefits Lost

Finally, the number of weeks of benefits lost by workers wrongfully denied must be imputed for each type of denial. Two alternative imputations are used here. The first is based on observed benefit durations of correctly determined claimants (these are shown in panel A of Table 7). The second are based on regression models (these are shown in panel B of Table 7). Each set of imputations is described in turn.

5.3.1. Observed benefit durations. The number of weeks of benefits lost due to a wrongful monetary denial can be imputed as the number of weeks compensated per first payment (that is, the sum of first and subsequent spells of benefit receipt in a given benefit year) for the average correctly determined claimant. In fiscal year 1998, the average number of weeks compensated in the United States was 14.2 (ETA 5159 reports). This is used in panel A of Table 7 as an imputation of the number of weeks of benefits lost due to a wrongful monetary denial.

For wrongful separation denials, the average number of weeks compensated overstates the number of weeks of benefits lost. There are two reasons for this. First, many separation denials (especially for misconduct issues) are for a fixed number of weeks (see Table 1). Hence, many separation denials are shorter than the duration of unemployment. Second, many separation denials apply to additional initial claims (rather than new initial claims), which are necessarily associated with relatively short

spells of benefit receipt (because some weeks of benefits have already been used up). During 1998, 61.2 percent of initial claims were new, and 38.8 percent were additional (ETA 5159 reports). In 1990-1993, across fifteen states for which survey data are available (Battelle Memorial Institute 1999, Table 7-1), the average benefit duration for first spells of unemployment was about twice the duration of subsequent spells (the mean first spell was 13.18 weeks long, and the mean subsequent spell was 6.16 weeks long).

If the duration of subsequent spells in 1998 was roughly half that of first spells, then the average number of compensated weeks associated with an additional initial claim would be about 7.1 (half of 14.2). Hence, if all separation denials were for the duration of unemployment, the mean duration of a separation denial would be 11.4 weeks [= $(0.612 \cdot 14.2) + (0.388 \cdot 7.1)$]. (This also assumes that the rates of adjudication for reasons of separation are the same for new and additional claims.) The figure would be somewhat lower if account were taken of the fact that some separation denials are for fixed periods that are shorter than the duration of the spell. In any case, panel A of Table 7 uses 11.4 weeks as the imputed number of weeks of benefits lost due to wrongful separation denials.

Most difficulty arises in estimating the number of weeks of benefits lost due to a wrongful nonseparation denial. A claimant who is denied because he or she is unable to work or unavailable for work loses one week of benefits. However, many nonseparation denials, such as those for refusing suitable work and for violating a requirement to report to the agency, result in penalties that cover several weeks or the remainder of the current unemployment spell (see again Table 1). To obtain an estimate of the number of weeks of benefits lost due to a wrongful nonseparation denial, we first impute the average duration of multi-week penalties, then take a weighted average of the duration of multi-week and single-week penalties.

Three assumptions are needed to obtain an imputation of the average duration of a multi-week penalty. First, the average nonseparation penalty is assessed at the midpoint of a spell of benefit receipt (so that the average multi-week penalty cuts off half the compensated weeks of unemployment). Second, nonseparation penalties are equally likely to be assessed on new initial and additional initial claims. Third, the average duration of a spell of unemployment resulting from an additional claim is half the duration of a spell resulting from a new initial claim (as assumed above). These assumptions imply that the average duration of a multi-week nonseparation penalty (PEN_{mw}) can be imputed as:

$$PEN_{mw} = P(0.5 \cdot DUR) + (1-P)(0.25 \cdot DUR) \quad (1)$$

In equation (1), P denotes the proportion of initial claims that are new. DUR is the average duration of benefit receipt, so $0.5 \cdot DUR$ is the number of weeks of benefits that are cut off by the average multi-week penalty on a new claim (the first assumption is that average multi-week penalty cuts off half the compensated weeks of unemployment). Also, $(1-P)$ denotes the proportion of claims that are additional, and $(0.25 \cdot DUR)$ is the number of weeks that are cut off by the average multi-week penalty on an additional claim (the third assumption is that the average duration of an additional claim is half that of a new claim). For the United States in 1998, DUR was 13.9 weeks, and P was 0.612, so PEN_{mw} was 5.6 weeks.

The imputed average duration of all nonseparation penalties is the weighted average of durations of multi-week and one-week penalties. Of all nonseparation penalties in the United States in 1998, 42.3 percent were multi-week (derived from U.S. Department of Labor 207 reports), so the imputed average of all nonseparation penalties was 2.94 weeks ($= 5.6 \cdot 0.423 + 1.00 \cdot 0.577$). Both panels of Table 7 use this imputation for the number of weeks of benefits lost due to a wrongful separation denial.

5.3.2. Regression-based estimates. The above estimates of the number of weeks of benefits lost by workers wrongfully denied benefits may seem somewhat ad hoc. A preferred procedure might be to generate regression-based estimates of the number of weeks of benefits that would have been received by claimants who were wrongfully denied. In the interest of brevity, the procedure is described and the results given without displaying all the underlying regression results.⁶ First, a sample of claimants who were correctly determined eligible for UI benefits is used to estimate a benefit duration function. This is done by regressing the number of weeks of benefits received during the benefit year on the claimant's individual characteristics (age, gender, citizenship, ethnicity, and schooling), the claimant's usual hourly wage, weekly benefit amount, potential duration of benefits, and the season in which the initial claim was filed.⁷ Second, the estimated coefficients of the regression equation are used to impute the expected benefit duration of claimants who were wrongfully denied benefits. For wrongful monetary denials, this is done by substituting the average characteristics of claimants who were wrongfully denied for monetary reasons into the estimated duration function and solving. For wrongful separation denials, this is done by substituting the average characteristics of claimants who were wrongfully denied for separation reasons into the estimated benefit duration function, solving, and then subtracting the average number of weeks of benefits that had already been received by claimants wrongfully denied for separation reasons.⁸ Note that the regression procedure is not appropriate for estimating the weeks of benefits lost due to wrongful nonseparation denials because many nonseparation denials are for a fixed

⁶ A full description of the results is included in the DCA Pilot Project final report.

⁷ To account for the the empirical distribution of unemployment durations, the error term of the regression is assumed to have the Weibull distribution, and maximum likelihood is used to estimate the model (see, for example, Lancaster 1979).

⁸ Some claimants who were wrongfully denied for separation reasons had received benefits at the time of their wrongful denial because they were filing an additional initial claim. They had met the conditions of separation on their new initial claim and hence received benefits, but the conditions of separation on their additional initial claim — the claim that was subject to the DCA investigation — were viewed as unsatisfactory (wrongly, according to the investigation).

number of weeks rather than for the remainder of the unemployment spell. Accordingly, the imputation of weeks lost due to wrongful nonseparation denials that was derived in section 5.3.1 is maintained.

The above procedure requires a sample of claimants who were correctly determined eligible for benefits and for whom the completed spell of unemployment can be observed. The BAM samples for the five pilot states would be natural candidates for this approach. However, the BAM samples include data on interrupted spells of unemployment (not completed spells) because the BAM investigation applies to a specific week during a claimant's benefits year, not the completed benefit year. To get around this problem, the Quality Control Division in one of the pilot states — South Carolina — added the needed data to its BAM records from the time period of the DCA Pilot Project.⁹

The results of the regression-based imputations suggest that, if they had been correctly determined eligible for benefits, claimants wrongfully denied for monetary reasons would have received about 10 percent fewer weeks of benefits than eligible claimants. (Specifically, the average characteristics of wrongfully denied claimants imply that they would have received 90.9 percent of the weeks of benefits received by claimants who were correctly determined eligible.) The imputations also suggest that claimants wrongfully denied for separation reasons would have received about 32 percent fewer weeks of benefits than other eligible claimants. (This latter imputation takes account of both the characteristics of wrongfully denied claimants and the fact that those claimants had received, on average, 4.2 weeks of benefits before being wrongfully denied.)

The regression-based imputations of benefit duration are displayed in panel B

⁹ The South Carolina group drew data on benefits paid during the full benefit year for each claimant in the BAM sample for September 1997 through August 1998. These data were identified by batch and sequence number, so that they could be matched back to the BAM benefits master file and used in estimation. The effort was carried out by Leland Teal, Bob Branham, Layne Waters, and Doug Potter of the South Carolina Employment Security Commission, to whom we are most grateful.

of Table 7. The imputed number of weeks lost as a result of a wrongful monetary denial is 12.9 ($= 14.2 \cdot 0.908$), and the imputed number of weeks lost as a result of a wrongful separation denial is 9.6 ($= 14.2 \cdot 0.679$).

5.4. Results

The rightmost two columns of Table 7 display the results of the two imputations. The imputations in panel A suggest that \$625 million were lost to claimants nationwide during fiscal year 1998 due to wrongful denials. Roughly \$240 million were lost due to wrongful monetary denials, \$234 million due to wrongful separation denials, and \$151 million due to wrongful nonseparation denials. The rightmost column shows that the average monetary error resulted in lost benefits of \$2,430; the average separation error resulted in lost benefits of \$1,966; and the average nonseparation error resulted in lost benefits of \$527.

The imputations in panel B suggest that \$566 million were lost to claimants nationwide during fiscal year 1998 due to wrongful denials. About \$218 million were lost due to wrongful monetary denials, \$197 million due to wrongful separation denials, and (as in panel A) \$151 million due to wrongful nonseparation denials. The average monetary error resulted in lost benefits of \$2,200; the average separation error resulted in lost benefits of \$1,656; and the average nonseparation error resulted (again) in lost benefits of \$527.

The imputations in panel A suggest that the benefits lost due to wrongful denials amounted to 3.4 percent of total regular UI benefits paid during 1998 (the latter amounted to \$18.4 billion.) The imputations in panel B suggest that the benefits lost due to wrongful denials amounted to 3.1 percent of UI benefits paid during 1998.

It seems clear from the imputations that the biggest bang for the administrative buck is likely to be found in reducing errors in monetary and separation

determinations. This conclusion assumes that investigation costs are similar for the three types of determinations. In a cost-benefit framework, one would need to compare the cost of investigation (which may differ across the three types of determinations) with the expected benefits resulting from those investigations (that is, the benefit payments received by claimants otherwise wrongfully denied).

6. Discussion and Policy Implications

Increasing attention is being focused on the UI system because of the role it can play in maintaining the incomes of former welfare recipients who have joined the labor force as a result of welfare reform. These workers can be expected to be vulnerable to layoff in a recession and (possibly) to have relatively volatile work histories. The presence of these workers in the labor force increases the importance of ensuring that workers who are eligible for benefits actually receive them.

The DCA Pilot Project drew random samples of denied UI claims and subjected those denied claims to an intensive field investigation to determine their accuracy. The findings suggest that, after adjusting for appeals, redeterminations, and agency actions to resolve errors, 11 percent of monetary denials, over 6 percent of the separation denials, and 13 percent of nonseparation denials were wrongful (see Table 3). These are substantial proportions, and they raise questions about what state UI agencies could do to reduce the incidence of wrongful denials.

The field investigations allow one to address several questions about wrongfully denied claims. First, to what extent do appeals and normal agency procedures lead to correction of wrongful denials? It is clear that the appeals process corrects few if any wrongful monetary or nonseparation denials, and only weak evidence exists that appeals are significant in correcting wrongful separation denials (Table 3). Agency procedures, on the other hand, do correct a substantial number of

wrongful monetary denials, although they correct few in any wrongful separation or nonseparation denials.

Second, where does responsibility for wrongful denials lie? The answer varies with the type of denial. Responsibility for wrongful monetary denials falls more often on employers than on agencies or claimants. Employer errors in reporting the earnings of workers are responsible for over half of all wrongful monetary denials, and suggest the importance of auditing employers to ensure compliance with the UI payroll tax (Burgess, Blakemore, and Low 1998). Wrongful separation and nonseparation denials, on the other hand, are more likely to be the responsibility of the agencies — over half of such errors can be attributed to incorrect agency action.

Third, are wrongful denials correlated with observable claimant characteristics? In general, the answer is that the correlations between errors and observable characteristics are not strong. However, it appears that monetary denials of older workers and high-wage workers, as well as those involving combined wage claims, are relatively prone to error. Nonseparation denials for disqualifying income are also relatively error-prone.

The benefits lost due to wrongful denials are substantial — imputations developed in section 5 suggest that benefit losses are on the order of \$560 million to \$625 million annually, or over 3 percent of all regular state benefits paid to workers. The findings suggest that two types of measures could be taken to mitigate these losses. First, efforts to ensure that employers report wages earned by workers correctly and in timely fashion could substantially reduce wrongful monetary denials. Second, better training of claims-takers and adjudicators (and efforts to retain experienced personnel) could reduce wrongful separation and nonseparation denials. The resources needed to achieve these goals (which have not been addressed) would need to be balanced against the benefits that would result from an improved system.

References

- Advisory Council on Unemployment Compensation. Unemployment Insurance in the United States: Benefits, Financing, and Coverage. Washington, DC: Advisory Council on Unemployment Compensation, February 1995. (Chapters on "Benefits: Monetary Eligibility," and "Benefits: Nonmonetary Eligibility.")
- Advisory Council on Unemployment Compensation. Defining Federal and State Roles in Unemployment Insurance. Washington, DC: Advisory Council on Unemployment Compensation, January 1996. (Chapters on "Trends in Determinations, Denials, and Appeals," and "Analysis of Denials and Appeals.")
- Anderson, Patricia M. "Continuing Eligibility: Current Labor Market Attachment." In Unemployment Insurance in the United States: Analysis of Policy Issues, edited by Christopher J. O'Leary and Stephen A. Wandner. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 1997. Pp. 125-161.
- Ashenfelter, Orley and Philip Levine. "UI Appeals in the State of Wisconsin: Who Fights and Who Wins?" Research in Employment Policy 2 (2000): 283-302.
- Battelle Memorial Institute. "Dynamic Models of Unemployment Insurance Benefit Receipt: Survival Rate Analysis Report." Unemployment Insurance Occasional Paper 99-1. Washington, DC: U.S. Department of Labor, Employment and Training Administration, Unemployment Insurance Service, 1999.
- Burgess, Paul L. and Jerry L. Kingston. An Incentives Approach to Improving the Unemployment Compensation System. Kalamazoo, MI: W.E. Upjohn Institute, 1987.
- Burgess, Paul L., Arthur E. Blakemore, and Stuart A. Low. "Using Statistical Profiles to Improve Unemployment Insurance Tax Compliance." Research in Employment Policy 1 (1998): 243-271.
- Chasanov, Amy B. "Nonmonetary Eligibility: State Variation and Effects." In Advisory Council on Unemployment Compensation: Background Papers, Volume I. Washington, DC: Advisory Council on Unemployment Compensation, July 1995. Pp. A-1–A-33.
- Chasanov, Amy B. and Eileen Cubanski. "Understanding Denials and Appeals in the Unemployment Insurance System." Research in Employment Policy 1 (1998): 273-319.
- Corson, Walter, Alan Hershey, and Stuart Kerachsky. Nonmonetary Eligibility in State Unemployment Insurance Programs: Law and Practice. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 1986.

Upjohn Institute for Employment Research, 1986.

- Kingston, Jerry L., Paul L. Burgess, and Robert D. St. Louis. "Unemployment Insurance Overpayments: Evidence and Implications." Industrial and Labor Relations Review 39 (April 1986): 323-336.
- Lancaster, Tony. "Econometric Methods for the Duration of Unemployment." Econometrica 47 (July 1979): 939-956.
- Nicholson, Walter. "Initial Eligibility for Unemployment Compensation." In Unemployment Insurance in the United States: Analysis of Policy Issues, edited by Christopher J. O'Leary and Stephen A. Wandner. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 1997. Pp. 91-123.
- Skrable, Burman. "Fraud, Abuse, and Errors in the Unemployment Insurance System." In Unemployment Insurance in the United States: Analysis of Policy Issues, edited by Christopher J. O'Leary and Stephen A. Wandner. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 1997. Pp. 423-456.
- U.S. Department of Labor. Benefits Quality Control ADP User Guide, ET Handbook No. 400. Washington, DC: U.S. Department of Labor, Employment and Training Administration, Unemployment Insurance Service, May 1995.
- U.S. Department of Labor. Unemployment Insurance Quality Control 1994 Annual Report. Washington, DC: Employment and Training Administration, Unemployment Insurance Service, July 1995.
- U.S. Department of Labor. "Draft Narrative Describing the System for Enhancing Unemployment Insurance (UI) Performance: The 'UI Performs' System." Unemployment Insurance Program Letter No. 41-95, Employment and Training Administration, Unemployment Insurance Service, August 24, 1995.
- U.S. Department of Labor. Comparison of State Unemployment Insurance Laws. Employment and Training Administration, Unemployment Insurance Service, January 7, 1996 and subsequent updates (January 1, 1997 and January 4, 1998).
- U.S. Department of Labor. "Proposal to Modify the Benefits Quality Control Program." Unemployment Insurance Program Letter No. 15-96, Employment and Training Administration, Unemployment Insurance Service, April 2, 1996.
- U.S. Department of Labor. "Pilot Test to Determine the Accuracy of Benefit Denials." Unemployment Insurance Program Letter No. 27-96, Employment and Training Administration, Unemployment Insurance Service, July 12, 1996.

U.S. Department of Labor. Benefit Accuracy Measurement (BAM) Denied Claims Accuracy (DCA) Subsystem: Database Specification Document. Washington, DC: Employment and Training Administration, Unemployment Insurance Service, 1997.

Vroman, Wayne. "Disputes over Unemployment Insurance Claims: A Preliminary Analysis." In Advisory Council on Unemployment Compensation: Background Papers, Volume IV. Washington, DC: Advisory Council on Unemployment Compensation, Volume I, January 1996. Pp. SS-1–SS-65.

Table 1
 UI eligibility criteria in states participating in the DCA Pilot Project, 1997

Eligibility Criteria	State				
	Nebraska	New Jersey	South Carolina	West Virginia	Wisconsin
Monetary					
Formula	Flat	20 weeks	1.5 x HQ	Flat	30 x WBA
Minimum earnings	\$1,200	\$2,020	\$900	\$2,200	\$1,590
Distribution requirement	≥\$400 outside HQ	2Q	2Q	2Q	8 x WBA outside HQ
Seasonal restriction	no	no	no	yes	yes
Separation					
Voluntary leaving:					
Good cause restricted to work-related issues	no	yes	no	yes	yes
Number of inclusions	0	0	0	2	4
Disqualification period	7-10 weeks	Duration	Duration	Duration	Duration
Earnings to requalify	--	6 x WBA	8 x WBA	30 days	4 x WBA
Misconduct:					
Disqualification period (weeks)	7-10	5	5-26	6	Duration
Earnings to requalify	--	--	--	--	14 x WBA
Benefits reduced	yes	no	yes	yes	yes
Added penalty for gross misconduct	yes	yes	yes	yes	no
Nonseparation					
Able and available for:					
Any work	yes	yes	no	no	yes
Suitable work	no	no	no	no	no
Usual work	no	no	yes	yes	no
Refusing suitable work:					
Disqualification period	7-10 weeks	3 weeks	Duration	4 weeks	Duration
Benefits reduced	yes	no	no	yes	no

Notes: See text (section 1) for discussion. "HQ" refers to high quarter; "WBA" refers to weekly benefit amount; "Duration" refers to disqualification for the duration of the current unemployment spell.
 Sources: U.S. Department of Labor, Comparison of State Unemployment Insurance Laws (1997); Advisory Council on Unemployment Insurance (1995, Chapters 7 and 8), Nicholson (1997), Anderson (1997), and the laws of the five pilot states.

Table 2
 Unemployment insurance eligibility, by type of determination and outcome,
 United States and five pilot states, fiscal year 1998
 (figures in thousands)

	<u>United States</u>	<u>Five pilot states</u>
Monetary Determinations		
New initial and transitional claims	10,782	941
Insufficient wage credits	1,172	100
Proportion with insufficient wage credits	0.109	0.106
Separation Determinations		
New initial and additional initial claims	15,910	1,320
Issue/adjudicated	3,416	295
Denied	1,859	179
Proportion of initial claims adjudicated	0.214	0.224
Proportion of adjudicated claims denied	0.544	0.608
Proportion of initial claims denied	0.117	0.136
Nonseparation Determinations		
Continued claims	117,591	11,238
Issue/adjudicated	4,276	265
Denied	2,390	161
Proportion of continued claims adjudicated	0.036	0.024
Proportion of adjudicated claims denied	0.559	0.606
Proportion of continued claims denied	0.020	0.014

Sources: ETA 218 reports (monetary determinations); ETA 207 reports (separation and nonseparation determinations).

Table 3

Denial error rates, unadjusted and adjusted for appeals, redeterminations, and agency resolution of issues, by state and for the five pilot states

(percentage of denials found in error, with standard errors in parentheses)

State	(1) Error rate unadjusted	Denial error rate adjusted for:			Number of cases
		(2) Appeals & re- determinations	(3) Agency resolution	(4) All factors	
Monetary Denials					
Nebraska	10.1 (2.1)	10.1 (2.1)	9.6 (2.1)	9.6 (2.1)	198
New Jersey	12.6 (2.5)	12.6 (2.5)	8.2 (2.0)	8.2 (2.0)	182
South Carolina	23.4 (3.1)	23.4 (3.1)	16.2 (2.7)	16.2 (2.7)	192
West Virginia	15.1 (3.2)	15.1 (3.2)	13.5 (3.0)	13.5 (3.0)	126
Wisconsin	18.2 (2.7)	18.2 (2.7)	9.4 (2.0)	9.4 (2.0)	203
Five Pilot States	16.0 (1.2)	16.0 (1.2)	11.2 (1.1)	11.2 (1.1)	901
Separation Denials					
Nebraska	4.0 (1.4)	3.5 (1.3)	4.0 (1.4)	3.5 (1.3)	200
New Jersey	11.3 (2.3)	7.2 (1.9)	9.7 (2.1)	6.2 (1.7)	195
South Carolina	5.0 (1.5)	3.0 (1.2)	4.0 (1.4)	3.0 (1.2)	200
West Virginia	3.4 (1.3)	2.9 (1.2)	3.4 (1.3)	2.9 (1.2)	208
Wisconsin	19.7 (2.8)	17.2 (2.6)	18.7 (2.7)	16.3 (2.6)	203
Five Pilot States	8.7 (0.9)	6.8 (0.8)	8.0 (0.9)	6.4 (0.8)	1,006
Nonseparation Denials					
Nebraska	14.0 (2.5)	14.0 (2.5)	13.5 (2.4)	13.5 (2.4)	200
New Jersey	14.4 (2.5)	12.3 (2.4)	13.9 (2.5)	11.8 (2.3)	195
South Carolina	18.5 (2.7)	18.0 (2.7)	17.5 (2.7)	17.0 (2.7)	200
West Virginia	6.8 (1.8)	6.3 (1.7)	6.3 (1.7)	5.8 (1.6)	206
Wisconsin	21.7 (2.9)	20.2 (2.8)	17.7 (2.7)	16.3 (2.6)	203
Five Pilot States	15.0 (1.1)	14.1 (1.1)	13.8 (1.1)	12.9 (1.1)	1,004

Source: Tabulated from Denied Claims Accuracy Pilot records for September 1997 through September 1998. Missing cases excluded.

Table 4
Accuracy of denials by reason for denial
(row percentages with number of cases)

Monetary denials

<u>Reason</u>	<u>Accuracy of denial</u>		<u>Number of cases</u>
	<u>Wrongful</u>	<u>Correct</u>	
Insufficient wages	14.3	85.7	683
Insufficient hours/weeks/days	100.0	0.0	1
Failure of high quarter wage test	17.2	82.8	151
Failed transitional work requirement	27.3	72.7	44
Other	31.8	68.2	22
Total	16.0	84.0	901

Separation denials

<u>Reason</u>	<u>Accuracy of denial</u>		<u>Number of cases</u>
	<u>Wrongful</u>	<u>Correct</u>	
No separation issue	100.0	0.0	1
Lack of work	33.3	66.7	3
Voluntary quit	9.3	90.7	604
Discharge	6.7	93.3	388
Not separated (e.g., job attached, leave of absence)	30.0	70.0	10
Total	8.6	91.4	1006

Nonseparation denials

<u>Reason</u>	<u>Accuracy of denial</u>		<u>Number of cases</u>
	<u>Wrongful</u>	<u>Correct</u>	
No nonseparation issue	0.0	100.0	2
Able issue	10.0	90.0	120
Available issue	15.7	84.3	236
Work search issue	9.9	90.1	71
Disqualifying/unreported income	24.9	75.1	185
Refusal of work	16.7	83.3	18
Reporting/registration violation	12.0	88.0	299
Other	13.7	86.3	73
Total	15.0	85.0	1004

Source: Tabulated from reason for monetary denial code, reason for separation code, and reason for nonseparation determination code (all in master table) Denied Claims Accuracy Pilot records for September 1997 through September 1998.

Table 5

Responsibility for, prior agency action on, and prior employer action on wrongful denials, by type of denial, five pilot states

(percentages with number of cases)

	Type of erroneous denial		
	Monetary	Separation	Nonseparation
Responsibility for error			
Third party	0.7	0.0	2.0
Agency	32.6	66.3	67.1
Employer	38.3	9.3	0.7
Employer and agency	7.1	3.5	2.7
Claimant	7.8	11.6	2.7
Claimant and agency	5.7	7.0	12.8
Claimant and employer	7.1	1.2	8.1
Claimant, employer, and agency	0.7	1.2	3.4
Number of cases	141	86	149
Prior agency action on error			
Investigation determined agency:			
Could not detect issue	39.0	19.8	22.2
Was already resolving issue	31.2	8.1	8.7
Took incorrect action	9.2	55.8	51.0
Did not identify issue	9.2	9.3	6.0
Did not follow procedures	10.6	7.0	12.1
Number of cases	141	86	149
Prior employer action on error			
Employer's information was:			
Adequate and timely	24.3	57.0	16.1
Adequate and late	5.7	0.0	0.0
Inadequate and timely	30.0	16.3	5.4
Inadequate and late	4.3	0.0	1.3
Employer did not respond	12.1	5.8	4.0
No information requested	10.0	17.4	6.7
No employer issue	13.6	3.5	66.4
Number of cases	140	86	149

Source: Tabulated from Denied Claims Accuracy Pilot records (error responsibility code, prior agency action codes, and prior employer action code in error issue table).

Table 6

Characteristics of claimants and the likelihood of correct denial

(Ordinary least squares estimates with standard errors in parentheses; dependent variable equals 1 if denial was correct, 0 if incorrect)

Independent variable	Type of investigation		
	Monetary	Separation	Nonseparation
Age	-0.003* (0.001)	-0.002 (0.001)	0.001 (0.001)
Male	-0.065 (0.034)	-0.005 (0.023)	0.031 (0.028)
U.S. citizen	0.007 (0.111)	-0.126 (0.066)	0.087 (0.078)
Ethnicity:			
Black	0.044 (0.041)	0.003 (0.026)	-0.007 (0.036)
Hispanic	-0.039 (0.073)	-0.084 (0.057)	-0.068 (0.069)
American Indian	-0.209 (0.225)	-0.401* (0.201)	-0.137 (0.207)
Asian/Pacific Islander	-0.008 (0.157)	0.042 (0.131)	0.004 (0.099)
Caucasian	ref	ref	ref
Schooling:			
less than high school	-0.006 (0.038)	-0.003 (0.028)	0.007 (0.037)
some college	0.055 (0.051)	-0.014 (0.030)	0.011 (0.036)
college degree	0.003 (0.066)	-0.055 (0.038)	-0.021 (0.043)
high school graduate	ref	ref	ref
Wage in usual job:			
less than \$6/hr	0.166** (0.059)	-0.017 (0.038)	-0.014 (0.047)
\$6 to \$7/hr	0.136* (0.064)	0.008 (0.040)	0.008 (0.049)
\$7 to \$9/hr	-0.003 (0.059)	-0.032 (0.034)	-0.076 (0.041)
\$9 to \$12/hr	0.029 (0.063)	0.002 (0.036)	-0.064 (0.040)
greater than \$12/hr			
State:			
New Jersey	-0.019 (0.049)	0.089** (0.033)	0.042 (0.042)
South Carolina	-0.115* (0.046)	0.145** (0.033)	-0.005 (0.041)
West Virginia	0.069 (0.050)	0.162** (0.031)	0.110** (0.039)
Wisconsin	ref	ref	ref

Table 6 (continued)

<u>Independent variable</u>	<u>Type of investigation</u>		
	<u>Monetary</u>	<u>Separation</u>	<u>Nonseparation</u>
Combined wage claim	-0.437** (0.081)	na	na
Separation issues:			
Discharge	na	ref	na
Voluntary quit	na	-0.003 (0.022)	na
Other separation issue	na	-0.401** (0.098)	na
Nonseparation issues:			
able issue	ref	ref	ref
available issue	na	na	-0.057 (0.044)
work search issue	na	na	-0.022 (0.059)
disqualifying income	na	na	-0.129 (0.053)*
refusal of work	na	na	-0.100 (0.094)
reporting/registration violation	na	na	-0.065 (0.044)
other nonseparation issue	na	na	-0.036 (0.063)
Constant	0.867** (0.146)	1.008** (0.088)	0.777** (0.108)
Number of observations	569	733	733
R-squared	0.13	0.09	0.05

Notes: Standard errors in parentheses.

* denotes significance at 5% level; ** denotes significance at 1% level.

"ref" denotes reference category in a set of dummy variables.

"na" denotes variable not included in the equation.

-- denotes variable dropped because there are no corresponding observations in the sample.

Table 7

Estimates of benefits lost due to wrongful denials, United States, fiscal year 1998

	<u>Number of wrongful denials</u>	<u>U.S. WBA</u>	<u>Relative WBA</u>	<u>Denial duration (weeks)</u>	<u>Total losses (\$ million)</u>	<u>Average loss per error (\$)</u>
A: Estimates based on administrative data						
Monetary	98,842	199.18	0.859	14.20	240	2,430
Separation	118,976	199.18	0.866	11.40	234	1,966
Nonseparation	286,800	199.18	0.909	2.94	151	527
Total	504,618	--	--	--	625	1,239
B: Estimates based in Weibull model of weeks of benefits lost						
Monetary	98,842	199.18	0.859	12.90	218	2,200
Separation	118,976	199.18	0.866	9.60	197	1,656
Nonseparation	286,800	199.18	0.909	2.94	151	527
Total	504,618	--	--	--	566	1,122

Source: Authors' estimates, described in text. Numbers of wrongful denials are imputed by applying the incidence of wrongful denials (Table 3) to the number of denials in the U.S. during the year (Table 2). U.S. WBA is the average weekly benefit amount of eligible UI claimants throughout the U.S. during fiscal year 1998 (from Benefit Accuracy Measurement data for 1998). Relative WBA is the ratio of the corrected WBA of wrongfully denied claimants in the five pilot states (from the DCA Pilot Project data) to the average WBA of eligible claimants in the five pilot states. Denial durations in panel A are imputations from available UI administrative data (described in section 5.3). Denial durations in panel B are imputations based on Weibull models of benefit duration (described in section 5.3.2).