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## Equity in Unemployment Insurance Benefit Access

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# EQUITY IN UNEMPLOYMENT INSURANCE BENEFIT ACCESS

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## ABSTRACT

This paper examines the uneven pattern of access to unemployment insurance (UI) by age, gender, and race across the United States. We present results from a descriptive analysis using publicly available longitudinal data reported by states on rates of UI reciprocity and characteristics of UI beneficiaries. Reciprocity measures the proportion of all unemployed who are receiving UI benefits. UI is intended to provide temporary, partial income replacement to involuntarily unemployed UI applicants with strong labor force attachments while they are able, available, and actively seeking return to work. Each of these UI eligibility conditions contributes to the UI reciprocity rate being less than 100 percent, and the individual decision to apply for benefits also affects the reciprocity rate. We examine each of these factors and find suggestive evidence of reasons for differences in reciprocity by age, gender, and race. We discuss practical program reforms to improve equity in access to UI that could be adopted by all states and required by the federal government.

**JEL Classification Codes:** J65, J15, J68

**Key Words:** unemployment insurance, reciprocity, demographics, characteristics of recipients, gender, race, age, pooled cross-section time-series, barriers to access, descriptive analysis

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Unemployment insurance (UI) exists as a social insurance program to provide temporary partial income replacement to involuntarily unemployed wage and salary workers actively seeking reemployment. It also serves as an automatic macroeconomic stabilizer maintaining aggregate purchasing power when aggregate unemployment rises. To achieve those goals, UI should provide adequate income replacement for a sufficient duration with equal access to most involuntarily unemployed wage and salary workers. The UI reciprocity rate is an important dimension of system adequacy. Reciprocity is measured as the proportion of unemployed who receive UI benefits. This paper examines equity in UI receipt by examining the degree of balance in UI reciprocity across demographic subgroups partitioned by gender, race, ethnicity, and age.<sup>1</sup> We use pooled state data over time on state UI reciprocity rates and the characteristics of UI claimants reported by state UI agencies to the U.S. Department of Labor (USDOL).

## **STANDARDS FOR UNEMPLOYMENT INSURANCE**

Throughout the history of the UI program, the Congress has not enacted any federal requirements for state UI programs to assure equity in access to and adequacy of UI benefits. As a result, while some states maintain strong programs with adequate benefit programs paid for with sufficient payroll tax revenues, many other states have engaged in a “race to the bottom”

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<sup>1</sup> Equity is a fundamental principle that social insurance should maintain and reinforce. This paper is an attempt to objectively assess equity of access to UI by demographic subgroups as a basis to improve program performance. We aim to use wording that respects all groups defined by gender, race, ethnicity, and age while maintaining clarity of meaning and concise expression. The data we use were compiled by the U.S. Department of Labor and the Bureau of Labor Statistics and span the period 1992–2019, when pronouns and subgroup names were changing and not well defined or measured at times. Without intending disrespect for any subgroup measured or not measured in the data, we adopt the following subgroup naming conventions. Available data on gender are binary so we use male and female groups. To have adequate sample sizes for race subgroups we use Blacks for all African Americans; AAPI for all Asian American, Pacific Islander, and Hawaii Natives; Native Americans for all Native Americans, American Indians, and Alaska Natives; and Whites for all Caucasians. We use Hispanics as the group name including all Latinx persons. Age groups are defined by ranges of years attained.

with increasingly weak programs. Figure 1 shows a declining average reciprocity rate across states over time. Figure 2 shows that in the prepandemic year of 2019 there was a wide range of UI reciprocity rates across states. Reciprocity ranged from 52 percent in New Jersey to just 10 percent in Florida and North Carolina. Many factors contribute to the differences in UI reciprocity rates across states. Focusing on the states at the extremes, Florida and North Carolina at the bottom offer variable potential durations that stood at 12 weeks prior to the pandemic, while New Jersey was among most states with normal potential duration of 26 weeks. Another distinguishing feature of New Jersey is employee UI taxes. The employee tax in New Jersey alerts workers that UI is social insurance they have paid for, and that it is an entitlement to which involuntarily unemployed workers have earned a right. Pennsylvania and Alaska also collect employee UI tax contributions, and like New Jersey, employees in those states have higher than average UI reciprocity rates, and organized labor there has substantial input into laws and administration governing UI. During the pandemic, “[a]mong adults in households that lost employment income during the pandemic . . . 31.8 percent received benefits” (Carey et al. 2021, p. 29). This average reciprocity rate across states is only slightly higher than prepandemic.

Over time policy analysts have developed a wide consensus about what should be the minimum provisions for state UI benefit systems (O’Leary and Wandner 2018). UI should replace at least 50 percent of prior wages for at least 26 weeks, attempting to provide adequate income replacement while minimizing work disincentives and providing sufficient time for productive job search. The state maximum weekly benefit amount should be two-thirds of the average weekly wage in UI-covered employment so that about 80 percent of beneficiaries get 50 percent wage replacement. For low-wage workers, the minimum benefit amount should replace more than 50 percent of prior weekly wages. State tax revenues should match benefit payments

over the business cycle. States' UI benefit reserves should be sufficient to pay at least one year of benefits at the average rate of the three highest payout rates over the past 20 years.

### **Historical Factors Limiting Access**

When the federal-state UI program was established under provisions of the Social Security Act of 1935, economic and political conditions of the Depression era shaped elements of the program. Even though the 1930s' unemployment problem concerned long-term joblessness, actuarial concerns led to federal recommendations that states create UI programs with low benefit amounts, short benefit durations, high tax contribution rates, and limited eligibility and coverage.

Compromises made during earlier New Deal programs to address the labor market, like the National Recovery Administration, led initial eligibility for the new UI and Social Security programs to focus on full-time primary earners in households working in larger for-profit industrial enterprises, and excluding agriculture, domestic, and most service sector workers—the preponderance of the Black workforce at that time. Coverage was limited to private sector for-profit employers with eight or more employees, and agriculture and other industries were excluded from coverage (Blaustein 1993, p. 180).<sup>2</sup> These coverage exclusions reduced reciprocity among racial and ethnic minorities, many of whom were employed as domestic or household workers, in other service sector jobs, and in agriculture.<sup>3</sup>

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<sup>2</sup> Workers excluded from coverage consisted of agricultural workers; domestic household workers; self-employed individuals (including farm proprietors, sharecroppers, food “hawkers”); nonprofit sector workers; professionals, including self-employed doctors, lawyers, and ministers; employees of charitable or educational foundations; employees of federal, state, and local governments; persons aged 65 or older; casual laborers; seamen in the merchant marine; and members of Congress. It was the exclusion of agricultural and domestic household workers that had the strongest adverse effect on Blacks because their employment had been limited to these occupations. Indeed, the effect of the exclusion of agricultural and domestic household workers from coverage was to exclude 65 percent of all Black workers but only 27 percent of all White workers from UI coverage (DeWitt 2010).

<sup>3</sup> Some have argued that coverage exclusions were a Roosevelt compromise to southern Senators to ensure sufficient votes for passage of the Social Security Act. Perea (2011, p. 102) writes that benefit payments under the

## Mechanisms for Assuring UI Standards

The federal-state UI system emerged in response to a federal tax on employers that would be reduced by 90 percent in states establishing systems that satisfy federal conformity standards. Employers in nonconforming states are subject to the full federal tax. The few federal conformity standards that Congress has enacted have dealt primarily with UI tax provisions rather than the benefit side of the program, and tax requirements are minimal. States are required to assess UI taxes on a minimum taxable wage base, and they may only lower tax rates charged employers below federal minimums based on employer unemployment experience. While not a conformity requirement, states are incentivized to maintain benefit reserves sufficient to pay at least one year of benefits at the average rate of the three highest payout rates over the past 20 years. These federal requirements are weak. In particular, the UI taxable wage base has increased only three times since 1939 and has remained at \$7,000 since 1983, while the Social Security taxable wage base has been indexed and has increased yearly, reaching \$142,800 in 2021. The resulting minimal UI financing has led to stagnating benefit levels in many states and shortened potential durations in some (O’Leary and Wandner 2018).

On the benefit side, there are no federal conformity requirements, but enforceable federal standards are needed to ensure adequate reciprocity, benefit amounts and durations, and equity between individuals and between states. While other benefit standards could be considered, minimum accepted standards for UI as a social insurance program should be adopted. These standards are necessary because UI serves as the primary automatic stabilizer for macroeconomic policies during economic slowdowns. Given the reluctance of some states to provide adequate UI benefits and the resulting unequal treatment of the unemployed across demographic groups, a

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Social Security Act, including UI, were a threat to the racially segregated southern political economy by improving the economic independence of Blacks and reducing their subordination.

comprehensive set of federal benefit and financing standards are needed (O’Leary and Wandner 2018).

- Benefits should replace at least 50 percent of lost wages up to a maximum amount of two-thirds of the state average weekly wage, with a minimum benefit equal to 25 percent of the maximum, and benefits should be available for at least 26 weeks.
- For separating workers in all states, employers should be required to provide information about how to apply for UI, states should administer simple application forms, and states should have eligibility provisions such that 40–55 percent of unemployed workers receive UI benefits.<sup>4</sup>
- States should monitor and report on the UI reciprocity rate quarterly. Federal UI tax rate reductions should be adjusted for states failing to meet reciprocity targets.

USDOL would need to ensure adoption and administration of the new standards at both the federal and regional office level. It would also need to provide interpretations of new federal legislative requirements, develop model state legislative language to carry them out, and provide leadership through its offices for support relating to the benefit and financing of state UI programs. Further, USDOL regional office staff would have to offer guidance and periodically conduct on-site state program reviews. USDOL would also need to provide much increased computer support to the states developing model systems that would improve and make more consistent UI benefit application, payment, and tax systems.

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<sup>4</sup> After excluding job quits, new labor market entrants, reentrants who have not worked in more than a year, and workers fired for cause, at least 40–55 percent of the unemployed should be eligible for UI. The proportion eligible should move directly with the level of unemployment.

Finally, USDOL needs to regularly monitor state UI eligibility, reciprocity, and financing to ensure that the UI program is working in a timely, accurate, and equitable manner. Periodic, rigorous program evaluations could supplement performance measurement systems.

Enacting federal UI application, benefit, and financing standards—and ensuring that states adopt and administer those new standards—will make the UI program more equitable across demographic groups in all states. In the final section of this paper, we discuss additional program improvements that could increase UI reciprocity rates for specific demographic subgroups.

### **Outline of This Paper**

The next section describes how we assembled data for analysis, explains our estimation methodologies, and compares UI reciprocity shares to employment and population shares across different groups. The following section presents parameter estimates from models in which we predict aggregate UI reciprocity. The fourth section presents parameter estimates from models in which we predict demographic groups' shares of UI receipt. Our concluding section suggests possible UI program reforms to address uneven or insufficient access to UI during unemployment for demographic groups.

## **DATA AND METHODOLOGY**

Our analysis uses data on all states across several years—that is, pooled cross-section time-series data. We estimate fixed effects for states and years since random effects models did not improve precision of estimates and would omit important state effects and time trends that have economic meaning in our context. Least squares estimation of model parameters is



consistent (Hoechle 2007). Based on Hausman (1978) specification tests, we conclude random effects estimation is not more efficient. We have more state observations than years of data, and we produce robust standard errors by clustering on states to account for very slow, within-state changes over time in important UI program and labor force dimensions. We focus on the correlation between changes in the unemployment shares of demographic groups on overall UI reciprocity and the share of UI recipients in that demographic group.

### **Data for Analysis**

We estimate two sets of descriptive statistical models.<sup>5</sup> Both sets of models use annual averages of monthly state data over several years, but the time frames are limited by the availability of data in each case. The dependent variables in our first set of models are average state UI reciprocity rates—the ratio of UI beneficiaries to the number of unemployed. The dependent variables in our second set of models are the shares of UI beneficiaries in each demographic group. Since both sets of models are based on state-year observations, both use similar right-hand-side control variables.

### **Dependent variables**

Our aggregate UI reciprocity models use data on UI reciprocity by state published monthly by USDOL. These data are available from 1976 to 2020.

We construct demographic characteristics of UI recipients from data collected monthly from states by the Employment and Training Administration (ETA); these data are available electronically since 1992 as the “Characteristics of the Unemployment Insurance Claimants.”<sup>6</sup>

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<sup>5</sup> This summary relies on the complete exposition of data sources given in Appendix A. A copy of the final analytic data set, along with Stata programs to replicate results, are available from the authors on request.

<sup>6</sup> Tom Stengle, Chief Actuary for the Office of Unemployment Insurance at USDOL, indicates that no earlier data are available. He also indicates that ETA 203 data have improved in recent years. USDOL has tested the ETA 203 data compared to national totals from other reports and has found the data to be comparable (Stengle 2021).

These include data from state reports on age and gender since 1992, with a few states not reporting in the first two years of the series. Data collection on ethnicity, race, industry, and occupation became available in 2001. However, many of these variables contain missing or incomplete information, particularly in early years of data collection.

To construct our dataset, we include only state-years in which the rate of missing values was less than 25 percent in six or more months. In survey research, a reliable basis for population estimates typically requires a response rate between 60 and 80 percent.<sup>7</sup> We apply a standard requiring a 75 percent response rate and assume the responses provided by UI beneficiaries are accurate. Over the years 1992–2019 there were 1,428 possible observations on 51 state UI programs (including D.C.) on the age and gender variables. Our response rate exclusion rules result in 1,416 useable state-year observations over the 28 years. Over the years 2001–2019 there were a maximum 969 possible observations on 51 states. Applying our response rate standard, only 799 observations were useable on race, and 852 observations were usable on ethnicity.

Once states start reporting data on a demographic category, the number of adequately responding states tends to remain the same or increase in future years. Nearly all states have reported most years on age and gender. Only about 45 states reported usable data since 2001 on ethnicity, and fewer, about 42 per year, reported on race. Notably, California, Texas, and Vermont never report on UI recipients by race, and Connecticut, New Mexico, Oregon, and Washington do so in only a few years. It is also notable that most southern states reported usable data on race in all 19 years from 2001 to 2019. Ethnicity data are usable from most states in all years except Kansas (1 available year), Kentucky (7 available years), Vermont (0 available

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<sup>7</sup> Davern (2013, p. 3) cites the Office of Management and Budget requirement that a nonresponse adjustment must be applied when item nonresponse is below 80 percent, and the *Journal of the American Medical Association* rule that studies should have at least 60 percent response and adequate characterization of nonrespondents.

years), and Washington (3 available years). In our analysis we use all state-year demographic data in which the effective response rate was at least 75 percent. We do not drop states from our analysis for not having all possible years of data available.

### **Right-hand-side variables**

To control for annual state labor market characteristics, we assembled data from the Bureau of Labor Statistics (BLS) Local Area Unemployment Statistics (LAUS) program and from microdata in the BLS Current Population Survey (CPS) monthly data files. We use LAUS estimates of the unemployment rate and the number of unemployed by state and year (1992–2019). To control for labor market conditions, we calculate annual state unemployment rates as the average monthly unemployment level divided by the average monthly labor force.

Since reciprocity rates in any state will be low if UI application rates are low, we used LAUS estimates of unemployment combined with state counts of annual UI initial claims from program administrative reports to compute state-year UI application rates. We also include a control variable for the unemployment rate by state and year from the LAUS data.

Our regression models of UI reciprocity and shares of UI recipients include variables for state-year demographic shares of noninstitutional civilian population age 16+, employment, unemployment, labor force, and not in the labor force. We also use labor force participation rates as control variables. We calculate labor force participation rates by group from CPS data. To control for the shares of unemployment by occupation and industry, we also use data from the CPS, converting the detailed codes there into two-digit Standard Occupation Codes (SOC) and North American Industrial Classification System (NAICS) codes using published concordance matrices (see Appendix A for sources and details).

## Methodology to Examine Aggregate Reciprocity

We analyze UI reciprocity two different ways. The first set of models has the aggregate state-year reciprocity rate,  $R$ , as the dependent variable in linear regression models.<sup>8</sup> We view these descriptive analyses as correlational, not causal, and ordinary least squares allow easy interpretation of parameter estimates. We estimate models of UI reciprocity with the general form:

$$(1) \quad R_{st} = \alpha + \Gamma U + \Lambda X^0 + \mu_s + \pi_t + \epsilon_{st}$$

To simplify interpretation of parameter estimates from Equation (1), we difference all variables from their sample means. This forces the OLS estimate of  $\alpha$  to be the mean of  $R$ , which is the sample proportion across all states and years for the UI reciprocity rate. Our parameters of interest are  $\gamma_i$ , elements of the vector of coefficients  $\Gamma$  on the shares of each group  $i$ 's unemployment in matrix  $U$ . We include all demographic groups in these regressions, and because variables are differenced from their means,  $\gamma_i$  estimates how overall UI reciprocity varies with changes in the unemployment share of group  $i$ . For example, both male and female group shares of unemployed are included in  $U$ , and  $\gamma_m$  and  $\gamma_f$  are interpreted as correlation measures of changes in the shares of unemployment of males and females, respectively, with the overall sample mean rate of reciprocity. The matrix  $U$  includes all group shares of unemployed: not just by gender, but also by race, ethnicity, and age, for a total of  $i=16$  demographic groups of interest.

The matrix  $X^0$  contains control variables, including shares of population, labor force, and/or labor force participation rates of demographic groups at the state-year level—all differenced from means. The matrix  $X^0$  also includes shares of unemployment by prior

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<sup>8</sup> This is a descriptive analysis and OLS models allow easy interpretation of parameter estimates. Logistic models that constrain prediction within the zero-one interval yield similar marginal effect estimates after transformation of regression results.

occupation and prior industry, as well as state-year unemployment rates and UI application rates. The indicators  $\mu_s$  and  $\pi_t$  represent state and year fixed effects. We assume all regressors are uncorrelated with the disturbance term  $\epsilon_{st}$  for all  $s, t$  (strong exogeneity).

### Methodology to Examine Demographic Shares of Recipients

The second set of results is based on regression models that have as dependent variables the UI recipient share of each separate demographic group. For example, we estimate separate models for each sex (males and females) reported in the data. We also estimate 4 separate race models (Native American, AAPI, Black, and White); 2 ethnicity models; and 8 different age group models, 1 for each distinct age range in the data—a total of 16 different models.

Each of the beneficiary share models has the following general linear form:

$$(2) \quad Y_{st}^i = \alpha + \delta_i U + \theta X^1 + \mu_s + \pi_t + \epsilon_{st}^i$$

The dependent variable in each model,  $Y_{st}^i$ , denotes the share that group  $i$  constitutes among all UI recipients within a given state and year. The right-hand-side variables in Equation (2) have definitions analogous to those in Equation (1). The control variables in matrix  $X^1$  are limited to the shares of the population, labor force, or population and labor force participation rate—depending on the specification—for the demographic category at hand. For example, as seen in the tables in Appendix B, the male gender model with population controls includes only the two gender shares of population. These exclusions did not affect parameter estimates, and excluding them conserves degrees of freedom, particularly for the models by race and ethnicity that have smaller sample sizes. The parameter of interest in each model is  $\delta_i$ , the coefficient on the unemployment share of subgroup  $i$ . This coefficient estimates the correlation between the group's share of unemployment and its share of those receiving UI benefits.

## Contrasting UI Reciprocity Shares with Sample Proportions

With the caveat of the data quality issues noted above, Table 1 compares demographic characteristics of UI recipients from the ETA data with characteristics on population and labor force indicators from the CPS. The table also lists labor force participation rates for the groups. In comparing the proportions in Table 1, note that the CPS statistics are based on data for all states over years 1992–2019.<sup>9</sup> This range matches data availability from the ETA 203 reports on the demographic shares of UI recipients for gender and age, but data are more limited for race (799 state-year observations) and ethnicity (852 state-year observations).

Table 1 shows that the proportion of UI recipients who are male (0.581) exceeds the proportion of unemployed who are male (0.548). The same is true when comparing the male UI share to the male shares of labor force and population. Among racial groups, the Black share of UI recipients (0.204) is greater than the Black share of unemployed (0.190), as well as the Black shares of labor force and population. These relationships hold within states. But, using data from Table 1, Figure 3 shows how state UI reciprocity varies with the proportion of the state population who are Black. The suggestive pattern of low reciprocity in southern states with high proportions of Blacks in their populations prompt a deeper investigation, because the within-state patterns do not necessarily follow at the national level.

In contrast to the shares for Blacks, Table 1 shows that the share of UI recipients who are Hispanic (0.114) is about the same as the share of unemployed who are Hispanic (0.112).<sup>10</sup> Among age groups, the share of UI recipients who are youngest—under age 22, (0.030)—is much smaller than the unemployed share who are youngest (0.231). This dramatic difference for

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<sup>9</sup> Because of large swings during the pandemic, we limit our analysis to prepandemic data ending in 2019.

<sup>10</sup> During the pandemic, “[a]mong those who applied for UI benefits . . . Blacks had the lowest success rate and Asians the highest, with a difference of 10 percentage points. This pattern could be due, in part, to Blacks being more likely to work in low-wage jobs and Asians being less likely” (Carey et al. 2021, p. 30).

the youngest age group means that all other age groups constitute larger shares of UI recipients than their shares among the unemployed.

Whereas Table 1 directly compares proportions in published data, Table 2 offers a more evenhanded comparison of unadjusted proportions. We compute demographic shares of unemployment from the CPS for the same limited state-year observations available in the ETA 203 data on demographic shares of UI reciprocity. Furthermore, we statistically test differences in proportions, allowing for nonzero covariance between variables. When we do so, we find differences remain between the proportion of UI beneficiaries who are female (0.419) and the proportion of the unemployed who are female (0.452). Recomputing the CPS Black share of unemployment (0.203) based on the state-year observations in the ETA 203, the proportions are not statistically different. However, the Native American UI recipient share (0.030) is significantly less than the share of unemployed (0.035). The Hispanic share of UI recipients (0.114) is also significantly less than the share of unemployed (0.130). Each age group's share of UI recipients also significantly differs from its share of unemployed. For groups age 24 and younger, shares of UI reciprocity are lower than their shares of unemployment, while the reverse is true for all older age groups.

Statistical tests for significant differences in Table 2 suggest that the completely unadjusted comparisons in Table 1 can be misleading. In this paper we examine correlations between UI reciprocity and demographic proportions of unemployment using state-year data, controlling for observable characteristics and some macroeconomic factors.

## AGGREGATE UI RECIPIENCY

Table 3 shows three models of UI reciprocity. These models have the general linear form represented in Equation (1). The parameters of interest in each model are the coefficients on the demographic shares of unemployment. Parameters on the unemployment share variables are listed on the first page of the table under the heading characteristics of the unemployed. The three models differ in the sets of demographic share control variables included. The first model includes demographic shares of the population, the second model includes demographic shares of the labor force, and the third model includes demographic shares of the population and demographic-specific labor force participation rates. All three models also include controls for state-year unemployment rates and UI application rates, plus state and year indicator variables.

The parameters of interest on the unemployment share demographic variables are not significantly different across the three models.<sup>11</sup> We focus on parameter estimates for the first model. A 1 percentage point increase in the female share of unemployed is associated with a 0.039 percentage point reduction in the overall UI reciprocity rate. The corresponding correlations are also statistically significant but negative for Blacks and Native Americans, reductions of 0.087 percentage points and 0.084 percentage points, respectively. The model estimates suggest a positive but small correlation for Whites, a 0.024 percentage point increase. Controlling for observable effects in the model, there was no correlation between the Hispanic share of unemployed and the overall UI reciprocity rate. However, significant negative correlations exist for the under-age-22 group,  $-0.097$ , and over-age-64 group,  $-0.202$ . Indeed, the latter had the largest correlation of any demographic group.

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<sup>11</sup> Robust standard errors were estimated clustering data at the state level. These standard errors were used to compute t-statistics reported in Table 3. They suggest that parameters on demographic shares of unemployment do not differ across the three models.



Control variables suggest a large positive association between increased application rates and reciprocity, as well as a small negative association between the unemployment rate and reciprocity. Figure 4 summarizes parameter estimates on the state fixed effects. These coefficients show mean reciprocity rates for states, adjusting for the demographic composition of UI beneficiaries, the unemployment rate, the UI application rate, and the demographic composition of the population. The overall mean UI reciprocity rate is 33.1 percent (calculated by the intercept of the model using data from 1992–2019 with variables differenced from means). The estimates for state fixed effects suggest that, controlling for measurable factors mentioned above, UI reciprocity is at least 10 percentage points lower than the overall mean in Alabama, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, and Virginia, and is at least 10 percentage points higher than the overall mean in Connecticut, Massachusetts, and New Jersey. These differences capture factors not measured in the regression, including different eligibility rules, administrative processes, and public attitudes toward UI. The coefficients on the year indicators reflect higher reciprocity rates in crisis periods than during recovery and expansion years.

## **DEMOGRAPHIC SHARES OF UI RECIPIENTS**

Results in Table 4 summarize 16 sets of regressions reported in Appendix B. Just as with the models of aggregate UI reciprocity, we estimate for each specification three versions that differ in the sets of control variables included: population shares, labor force shares, and population shares joint with labor force participation rates. Our parameter of interest in each equation is the coefficient on the demographic group share of unemployment, where the dependent variable is the same group's share of UI receipt. The coefficients in Table 4 on the

demographic shares of unemployment are measures of the correlation between changes in the demographic group's share of unemployment and the demographic group's proportion of UI recipients. Table 4 presents estimates only from models with group population shares as control variables. (Estimates in the alternative specifications were not significantly different.)

Model estimates suggest that a 1 percentage point increase in the female share of unemployment is associated with a 0.031 percentage point increase in the female share of UI recipients. Although this correlation for females is larger than that for males, the difference between the genders is not significant.

Parameter estimates show that the White and AAPI unemployment shares do not correlate statistically with these groups' respective shares of UI reciprocity. However, estimates suggest that a 1 percentage point increase in Black's unemployment share is associated with a 0.058 percentage point increase in the Black share of UI recipients. The corresponding correlation for Native Americans is 0.066 percentage points, and for Hispanics, 0.068 percentage points. Although these correlations for Blacks, Native Americans, and Hispanics are statistically significant, they are small.

Among the eight age groups considered, only one showed a significant correlation between unemployment share and UI reciprocity share: those of ages 22–25, with an estimate of 0.025. These results suggest that changes in the age composition of unemployment do not substantively change the age composition of UI receipt.

### **Rationalizing Results from Reciprocity Rate and Recipient Share Models**

To understand the relationship between Table 3's estimates on the aggregate UI reciprocity rate and Table 4's estimates on demographic shares of UI recipients, we compare in Table 5 the state-specific means from the two models. The first column in Table 5 lists mean,

regression-adjusted state reciprocity rates. (We compute these by adding the intercept reported in Table 3 to the state-specific estimated effects in column two of Table 3.) The sum of the overall state-year average UI reciprocity rate and the state fixed effect is a regression-adjusted state average reciprocity rate for the 1992–2019 period. These adjusted rates are also presented in Figure 5, which shows the lowest reciprocity rates clustered in the Southeast. The remaining columns of Table 5 present state-specific shares of UI recipients for different demographic groups from separate regressions reported in Appendix B. Table 5 and Figures 6–9 explain why many parameter estimates on demographic group shares of unemployment are positive in Table 4 but negative in Table 3.

For example, the parameter estimate in Table 3 on the Black share of total unemployment is  $-0.087$  and statistically significant in a model explaining aggregate UI reciprocity. That means that a 1 percentage point increase in Blacks as a share of unemployment is correlated with an aggregate decline in UI reciprocity of 0.087 percentage points—nearly one-tenth of 1 percentage point.<sup>12</sup> However, in Table 4 we see that a 1 percentage point increase in Blacks as a share of unemployment is correlated with an *increase* in the Black share of UI recipients on average within states. Figure 6 helps reconcile these seemingly conflicting results. The strong positive coefficient on the Black unemployment share in Table 4 is driven largely by Black UI receipt in low-UI reciprocity states during the 2001–2019 period, including Washington, D.C., Georgia, North Carolina, South Carolina, Alabama, Mississippi, Virginia, Louisiana, and Tennessee.<sup>13</sup>

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<sup>12</sup> Von Wachter et al. (2021, p. 2) report that in California, “almost 85% of the Black labor force has filed for unemployment benefits since the beginning of the pandemic in mid-March.” Carey et al. (2021) report that Blacks increased their rate of UI application in the pandemic but have a lower UI reciprocity rate due to lower average earnings and therefore lower rates of UI monetary eligibility. Browne and Spriggs (2020), based on National Opinion Research Center data, report that Blacks were disproportionately more likely to be unemployed and that just 13 percent of unemployed Blacks received UI between April and June 2020.

<sup>13</sup> Note that as explained in Appendix A, there are no ETA 203 data on UI recipients by race group for CA, TX, and VT. Figures 6–9 show zeros for Blacks as a share of UI recipients in these states. These figures do show Black shares of UI recipients for some states that have reported few years of race data. These states are NM (two

Therefore, a positive increase in the Black share of UI reciprocity is not enough to boost nationwide aggregate UI reciprocity explained by models in Table 3.<sup>14</sup>

A similar pattern is seen for Native Americans, who demonstrate statistically significant parameter estimates in Tables 3 and 4, almost identical to those for Blacks. However, Figure 7 for Native Americans is not as stark as Figure 6 for Blacks because Native Americans make up a smaller share of the total population.

Parameter estimates for females in Tables 3 and 4 follow a more muted but similar pattern to Blacks. Figure 8 shows that the largest female shares of UI recipients are in states with low aggregate rates of UI reciprocity. While we have not examined demographic group interactions, this pattern for females could result if Black females are a significant share of UI recipients in states with low aggregate reciprocity.

In the ETA 203 data, Hispanics have constituted 13 percent of all UI recipients since 2001. The coefficient on the Hispanic share of unemployment reported in Table 4 is 0.058 and statistically significant. However, the Hispanic population is diffuse around the country. Figure 9 shows that in the period 2001–2019, Hispanics constitute large shares of the unemployed in New Mexico, Arizona, California, Florida, Texas, Colorado, New Jersey, Nevada, and New York. The UI reciprocity rates across these states vary widely, with many states having relatively high aggregate rates. Consequently, the coefficient on the share of unemployed who are Hispanic reported in Table 3 is not significantly different from zero. In aggregate, a change in the Hispanic share of unemployment is not associated with a change in the overall rate of UI reciprocity.

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years of data), WA (three years), OR (four years), and CT (five years). The resulting race group reciprocity rates appear reasonable graphically for these states, but the limited race group observations for these states reduces the power of race group variables in regression models.

<sup>14</sup> A Government Accountability Office analysis of UI receipt during the pandemic in early 2021, based on the Household Pulse Survey, found UI receipt among Black applicants to be 7 percentage points lower than among White applicants, a statistically significant difference (Costa 2021, p. 3).

The pattern for Hispanics is something of a counterfactual for the case of Blacks. Aggregate UI reciprocity rates tend to be very low in states where Blacks constitute a sizeable share of all unemployed, while aggregate UI reciprocity rates vary widely across states where Hispanics make up a large share of the unemployed. This examination of UI reciprocity and demographic shares of unemployment by state reveals the importance of federal conformity requirements to ensure equitable access to all groups regardless of their state of residence.

Figure 10 and Table 6 offer a summary view of average UI reciprocity rates for race and ethnic groups across states over the past 20 years. We compute annual average unadjusted UI reciprocity rates as the weighted sum of state reciprocity rates, where the weights are state shares of UI beneficiaries in a demographic group divided by the sum of such shares across all states measuring that group in the year. As reported in Appendix A, shares of UI recipients by race and ethnicity have been measured only since 2001, and the number of states with fewer than 25 percent item nonresponse varies between 43 and 46 per year. These are rough estimates of average UI reciprocity rates by race and ethnicity. No official data on these rates are available.

About 73 percent of all UI beneficiaries are White, so the average reciprocity rate for Whites is close to the national average, as shown in Figure 10. Among the four race groups, the Black reciprocity rate is lowest, and lower than the Hispanic rate in all years. Over time, the Black group leads the decline in average UI reciprocity rate, falling from 40 percent in 2001 to 23 percent in 2019. The drop in the weighted average Black reciprocity rate diverges from the other race groups after 2011, which was the first year several southeastern states cut potential duration of UI benefits to less than 26 weeks. The highest reciprocity rate in most years is for AAPI, but even that reciprocity rate is low relative to an adequate reciprocity rate of between 40 and 55

percent that varies inversely with the unemployment rate over business cycles.<sup>15</sup> The reciprocity rate for Whites oscillates around that for Native Americans. The reciprocity rate for Hispanics was slightly below that for Whites in most years but was somewhat higher in the first and last two years of the series.

### **Program Reforms to Improve Equity in UI Reciprocity**

Following are some possible program reforms intended to improve equity in UI access for different demographic groups of unemployed workers. Each group faces somewhat different barriers to receipt of UI benefits and return to work. We separately consider program reforms to help female workers, older workers, younger workers, and workers grouped by race and ethnicity.

Female workers have been particularly adversely affected by the fact that federal and state UI laws have not kept up with their increasing labor force participation since World War II. They are more likely than men to work part time, so it is important that all states permit workers to receive UI benefits after losing part-time jobs and when searching for new part-time jobs. Women are also more likely to provide child care, elder care, and sick care, and to follow a spouse/partner to a new location, and so again all states should allow all workers to be eligible for UI if they leave work for these reasons. Female workers are also more likely to move in and

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<sup>15</sup> As social insurance, UI benefits are payable to involuntarily unemployed workers with strong labor force attachment who are able, available, and actively seeking work. These conditions exclude workers who quit their jobs, were fired for cause, or are new labor force entrants or reentrants with insufficient recent earnings. Furthermore, UI take-up is low: about one-third of unemployed workers who would be eligible for UI fail to apply (Blank and Card 1991). In recessions, the rate of voluntary job quits declines and recent prior earnings of new applicants generally increases, suggesting the UI reciprocity rate should also increase. The target range between 40 and 55 percent is based on cross-state variation and national average rates before the decline over the past 40 years. Anderson and Meyer (1997) suggest that improving benefit replacement rates and restoring potential durations to at least 26 weeks would increase take-up and therefore reciprocity rates.

out of the labor force, so both alternative and extended base periods are more likely to allow them to qualify for UI when they return to the labor force.

The labor force participation rate of older workers has increased greatly in recent decades, so increasingly they need UI support when they become unemployed, as well as assistance in returning to work. Like female workers, they are more likely to work in part-time jobs. They experience low unemployment rates, but once they are unemployed, they have more difficulty returning to work. They would be helped greatly by receiving reemployment assistance tailored to their specific needs and by the availability of self-employment assistance, since they are much more likely to be self-employed than younger workers (Wandner, Balducci, and O’Leary 2015).

Few young workers normally qualify for UI benefits because they frequently are either new entrants to the labor force or they have limited employment history. For those young workers with limited work experience, an alternative base period may help them qualify for benefits. New entrants to the labor force are not eligible for standard UI. Some analysts have suggested that the UI program could provide alternative benefits to workers who would not qualify for UI benefits, including new entrants (Bivens et al. 2021).

Providing more equitable access to benefits for unemployed job seekers by race and ethnicity could most readily be accomplished by developing, enacting, and enforcing a strong set of federal application, eligibility, benefit, and financing provisions. These could help equalize reciprocity rates across states while ensuring benefit adequacy. The lowest reciprocity rates are currently found in many states with high percentages of Blacks and Hispanics. These workers are disproportionately affected by restrictive state UI laws, but all workers in low-reciprocity-rate states have limited access to income replacement during involuntary joblessness.

The Coronavirus Aid, Relief and Economic Security (CARES) Act of 2020 included requirements for states to provide at least two means for UI benefit applications. Application procedures should not be a barrier to access, but these practices are hard to monitor. The reciprocity rate is the best summary measure of reasonableness in the ease of applying for and receiving UI benefits. USDOL should monitor state UI reciprocity rates and set annual targets of 40–55 percent based on the condition of the labor market. Since reciprocity is only meaningful if wage replacement is adequate, federal UI conformity should require states to replace at least 50 percent of prior wages with weekly benefit maximums set at two-thirds of average weekly wages in UI covered employment (Advisory Council on Unemployment Compensation 1996, p. 22).<sup>16</sup>

## REFERENCES

- Advisory Council on Unemployment Compensation. 1996. “Collected Findings and Recommendations: 1994–1996.” Washington, DC: U.S. Department of Labor, Advisory Council on Unemployment Compensation.
- Anderson, Patricia M., and Bruce D. Meyer. 1997. “Takeup Rates and the After-Tax Value of Benefits.” *Quarterly Journal of Economics* 112(3): 913–937.
- Bivens, Josh, Melissa Boteach, Rachel Deutsch, Francisco Diez, Rebecca Dixon, Brian Galle, Alix Gould-Werth, Nicole Marquez, Lily Roberts, Heidi Shierholz, and William Spriggs. 2021. *Reforming Unemployment Insurance: Stabilizing a System in Crisis and Laying the Foundation for Equity*. A joint report of the Center for American Progress, Center for Popular Democracy, Economic Policy Institute, Groundwork Collaborative, National Employment Law Project, National Women’s Law Center, and Washington Center for Equitable Growth (June).  
<https://mail.google.com/mail/u/0/#inbox/FMfcgzGkXwGhMqDMnNnPgnMbxvrZTtDw?projector=1&messagePartId=0.1>

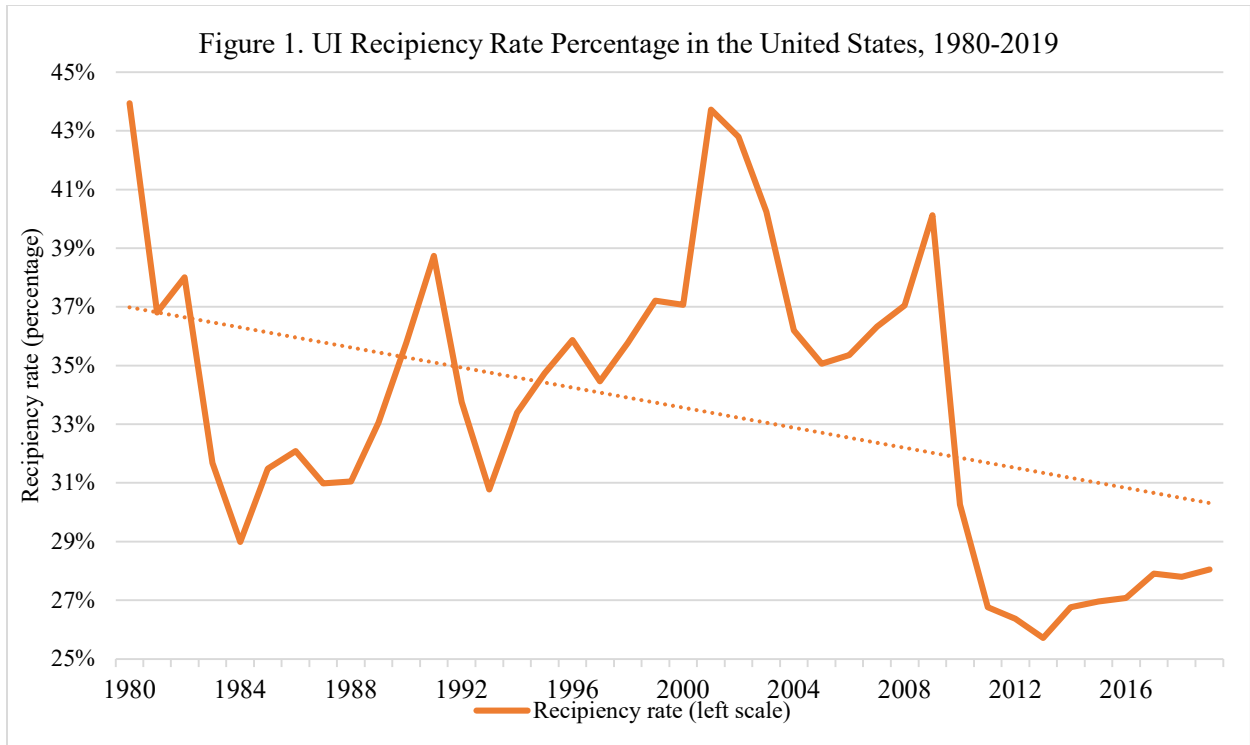
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<sup>16</sup> Dube (2021) and Ganong et al. (2021) provide evidence from the pandemic that replacement rates even higher than 50 percent do not discourage return to work. Since requirements for adequate access to benefits through reciprocity monitoring could induce some states to lower wage replacement as a cost control measure, we recommend the Advisory Council on Unemployment Compensation (1996) standards for wage replacement—at least 50 percent, and benefit maximums at two-thirds of average state wages in UI covered employment—be made federal conformity requirements for all state UI programs.

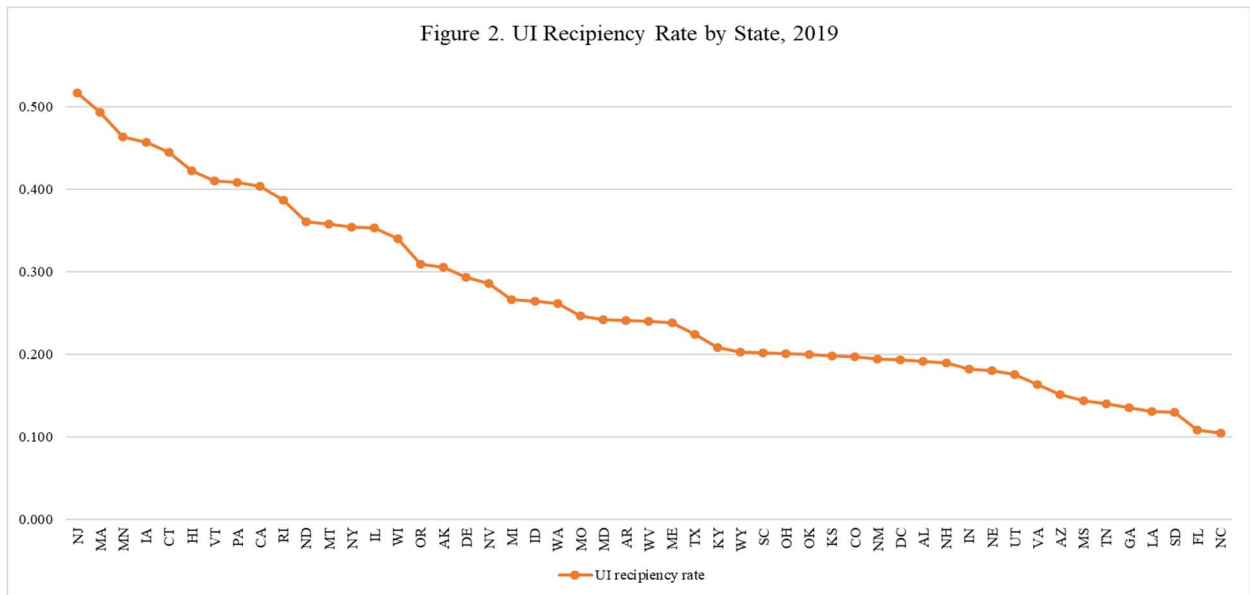


- Blaustein, Saul J. 1993. *Unemployment Insurance in the United States: The First Half Century*. Kalamazoo, MI: W.E. Upjohn Institute. [https://research.upjohn.org/up\\_press/70/](https://research.upjohn.org/up_press/70/)
- Blank, Rebecca M, and David E. Card. 1991. “Recent Trends in Insured and Uninsured Unemployment: Is There an Explanation?” *Quarterly Journal of Economics* 106 (4): 1157–1189. <https://doi.org/10.2307/2937960>
- Browne, Nyanya, and William Spriggs. 2020. “Cross-tabs of data retrieved from weeks 1-3 combined,” in Abigail Wozniak, Joe Willey, Jennifer Benz, and Nick Hart. “COVID Impact Survey: Version 1” [dataset]. Chicago, IL: National Opinion Research Center.
- Carey, Patrick, Jeffrey A. Groen, Bradley A. Jensen, Thomas J. Krolik, and Anne E. Polivka. 2021. “Applying for and receiving unemployment insurance benefits during the coronavirus pandemic.” *Monthly Labor Review* 106(9): 1–43. <https://www.bls.gov/opub/mlr/2021/article/applying-for-and-receiving-unemployment-insurance-benefits-during-the-coronavirus-pandemic.htm>
- Costa, Thomas M. 2021. “Management Report: Preliminary Information on Potential Racial and Ethnic Disparities in the Receipt of Unemployment Insurance Benefits during the COVID-19 Pandemic.” GAO-21-599R DOL Management Report. Washington, DC: Government Accountability Office (GAO). <https://www.gao.gov/products/gao-21-599r>
- Davern, Michael. 2013. “Nonresponse Rates are a Problematic Indicator of Nonresponse Bias in Survey Research,” *Health Services Research* 48(3): 905–912. [www.DOI.org/10.1111/1475-6773.12070](http://www.DOI.org/10.1111/1475-6773.12070)
- DeWitt, Larry. 2010 “The Decision to Exclude Agricultural and Domestic Workers from the Social Security Act.” *Social Security Bulletin* 70(4). <https://www.ssa.gov/policy/docs/ssb/v70n4/v70n4p49.html>
- Dube, Arindrajit. 2021. “Aggregate Employment Effects of Unemployment Benefits During Deep Downturns: Evidence from the Expiration of the Federal Pandemic Unemployment Compensation.” NBER Working Paper 28470. Cambridge, MA: National Bureau of Economic Research. <http://www.nber.org/papers/w28470>
- Ganong, Peter, Fiona Greig, Max Liebeskind, Pascal Noel, Daniel M. Sullivan, and Joseph Vavra. 2021. “Spending and Job Search Impacts of Expanded Unemployment Benefits: Evidence from Administrative Micro Data.” Working Paper No. 2021-19. Chicago: University of Chicago, Becker-Friedman Institute for Economics. <https://ssrn.com/abstract=3784008>
- Hausman, Jerry. 1978. “Specification Tests in Econometrics.” *Econometrica* 46(6): 1251–1271.
- Hoechle, Daniel. 2007. “Robust Standard Errors for Panel Regressions with Cross-Sectional Dependence.” *Stata Journal* 7(3): 281–312. <https://doi.org/10.1177%2F1536867X0700700301>

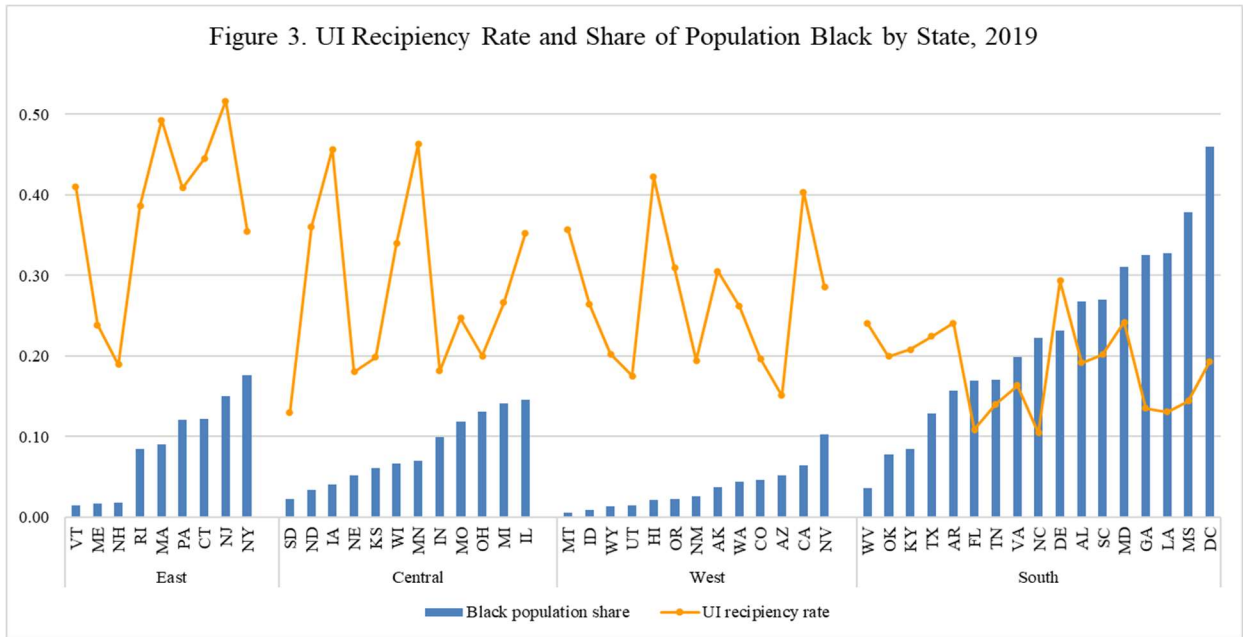
- O’Leary, Christopher J., and Stephen A. Wandner. 2018. “Unemployment Insurance Reform: Evidence Based Policy Recommendations,” chapter 5 (pp. 131–210) in: *Unemployment Insurance Reform: Fixing a Broken System*, Stephen A. Wandner, editor. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.  
[https://research.upjohn.org/up\\_bookchapters/936/](https://research.upjohn.org/up_bookchapters/936/)
- Perea, Juan F. 2011. “The Echoes of Slavery: Recognizing the Racist Origins of the Agricultural and Domestic Worker Exclusion from the National Labor Relations Act.” *Ohio State Law Journal*, 72(1): 95–138. <https://lawcommons.luc.edu/facpubs/151/>
- Stengle, Tom. 2021. Interview by Stephen Wandner on September 13, 2021.
- Von Wachter, Till, Alex Bell, Thomas J. Hedin, Roozbeh Moghadam and Geoffrey Schnorr. 2021. “An Analysis of Unemployment Insurance Claims in California During the COVID-19 Pandemic,” California Policy Lab (June 30).  
<https://www.capolicylab.org/california-unemployment-insurance-claims-during-the-covid-19-pandemic/>
- Wandner, Stephen A., David Balducci, and Christopher J O’Leary. 2015. *Workforce Development in the United States: Lessons Learned for Older Workers*. Report prepared for AARP Inc., March 2015. <http://www.aarp.org/content/dam/aarp/ppi/2015/aarp-selected-public-workforce-development-programs.pdf>
- U.S. Department of Labor (USDOL). 2021. UI Chartbook. Washington, DC: U.S. Department of Labor (USDOL), Employment and Training Administration. Series A-13.  
<https://oui.doleta.gov/unemploy/chartbook.asp>



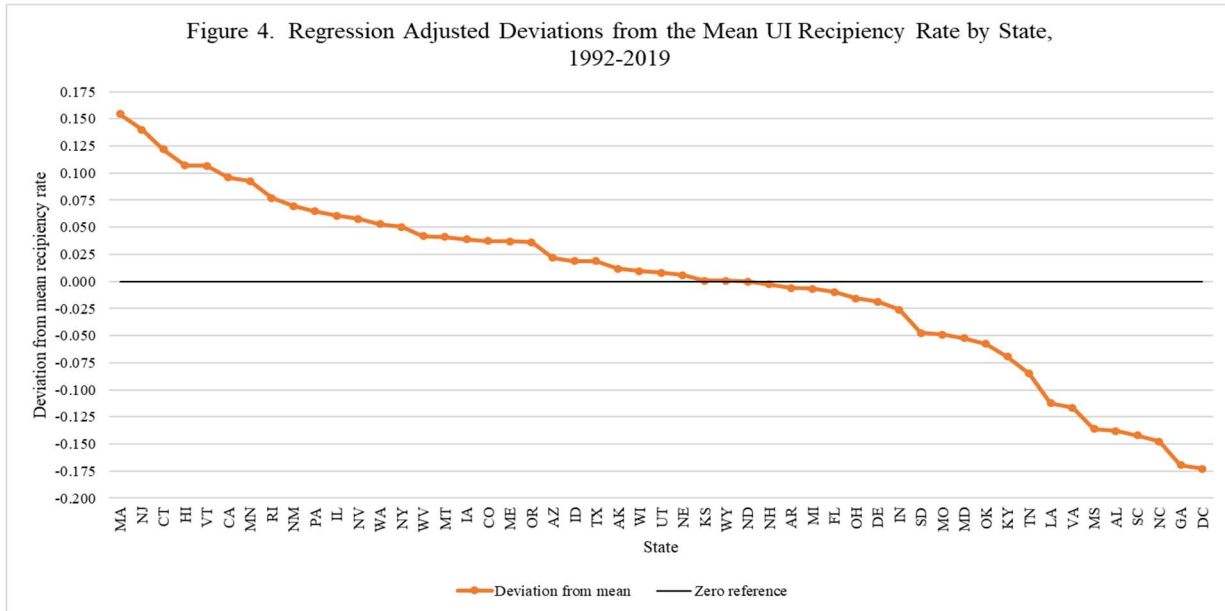
SOURCE: USDOL (2021) UI Chartbook. Series A-13. <https://oui.doleta.gov/unemploy/chartbook.asp>



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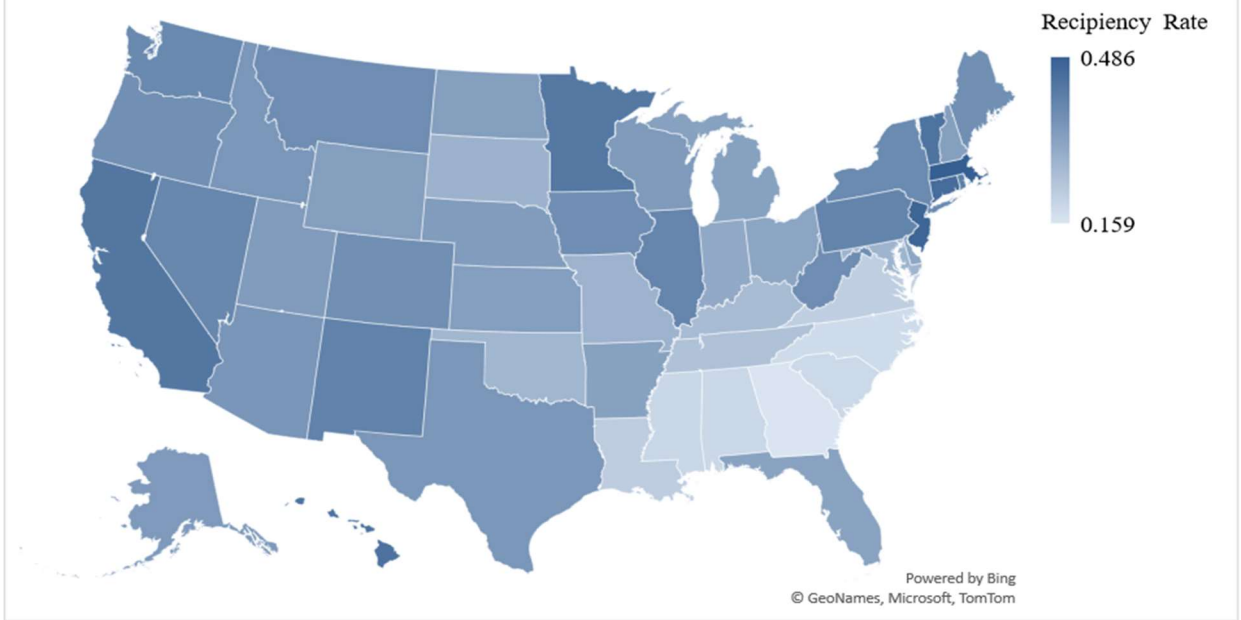


SOURCE: Series A13 in UI Data Book, U.S. Department of Labor, Office of Unemployment Insurance, and Bureau of Labor Statistics, Current Population Series.



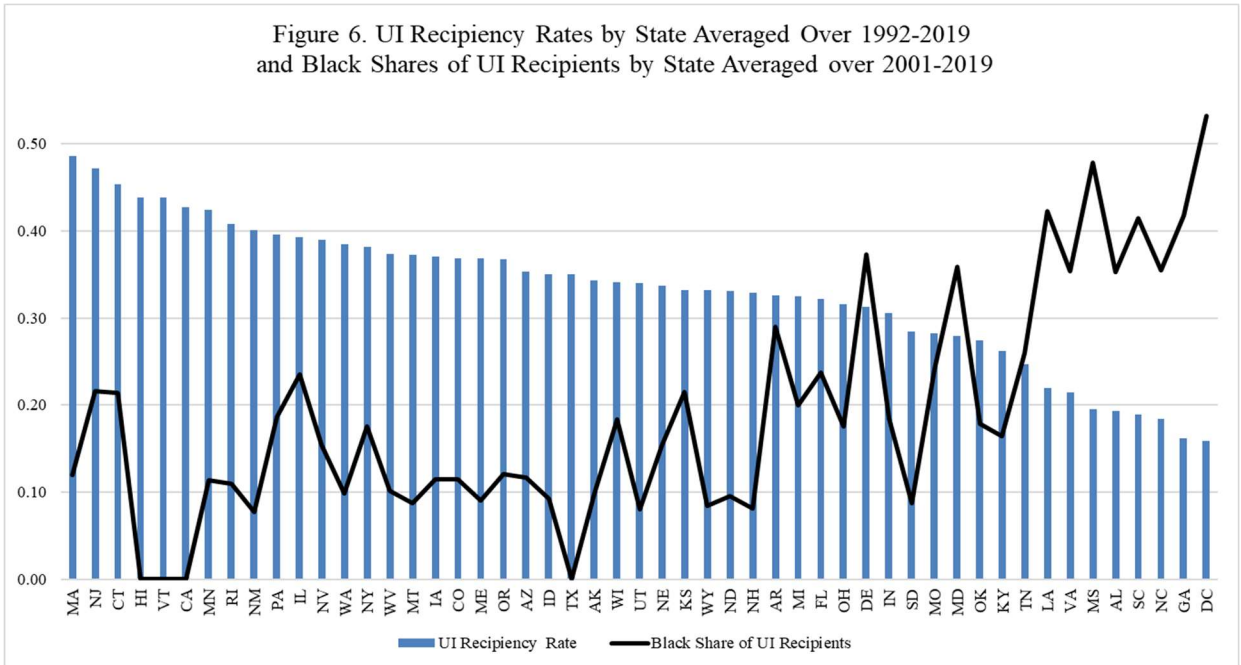
SOURCE: Authors' computations of state fixed effects reported in column 2 of Table 3.

Figure 5. Average Adjusted State UI Reciprocity Rates, 1992-2019 from State Fixed Effects Model Estimates



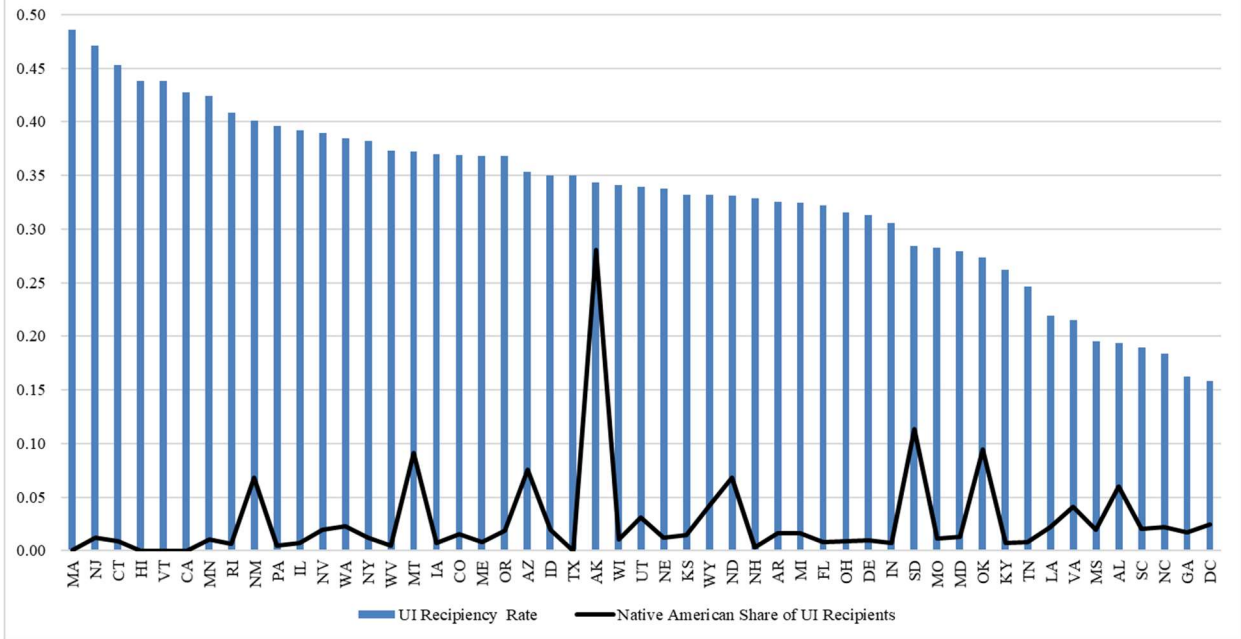
SOURCE: Authors' totals of state fixed effects plus mean reported in column 2 of Table 3.

Figure 6. UI Reciprocity Rates by State Averaged Over 1992-2019 and Black Shares of UI Recipients by State Averaged over 2001-2019



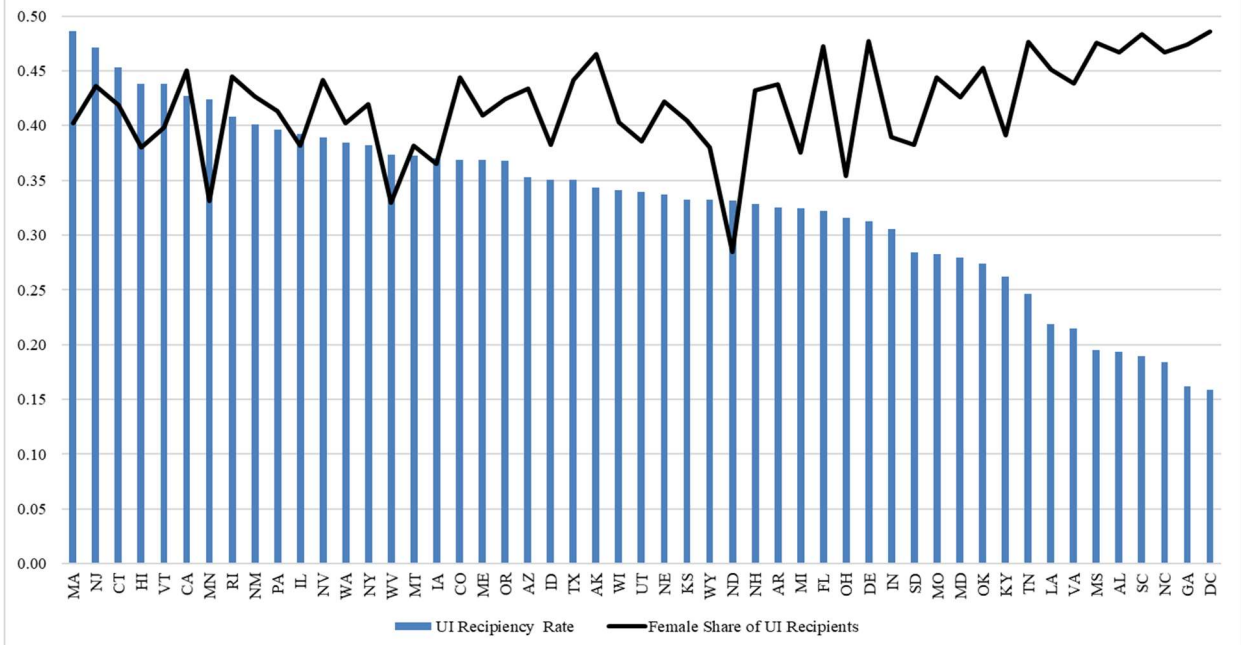
SOURCE: Authors' computations of state reciprocity rates from the dependent variable mean and state fixed effects from the model reported in Table 3 with population controls and Black shares from dependent variable mean and state fixed effects from the model based on ETA 203 data reported in Appendix B Table B7.

Figure 7. UI Reciprocity Rates by State Averaged Over 1992-2019 and Native American Shares of UI Recipients by State Averaged over 2001-2019



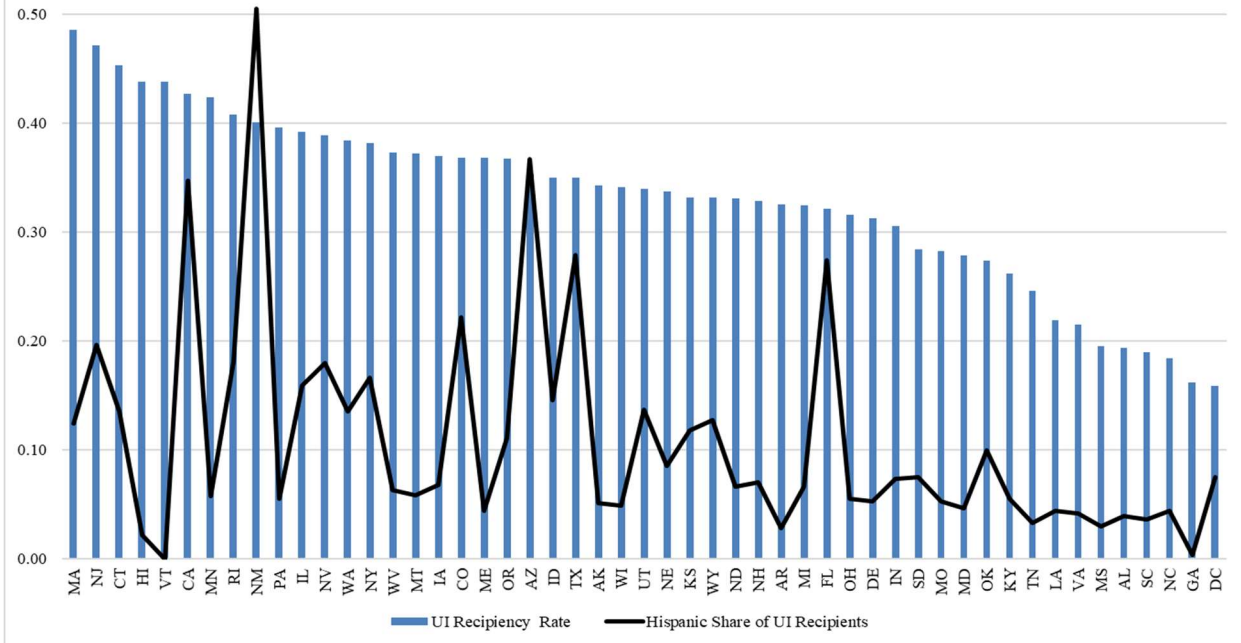
SOURCE: Authors' computations of state reciprocity rates from the dependent variable mean and state fixed effects from the model reported in Table 3 with population controls and Native American shares from dependent variable mean and state fixed effects from the model reported in Appendix B Table B5.

Figure 8. UI Reciprocity Rates by State Averaged Over 1992-2019 and Female Shares of UI Recipients by State Averaged over 2001-2019



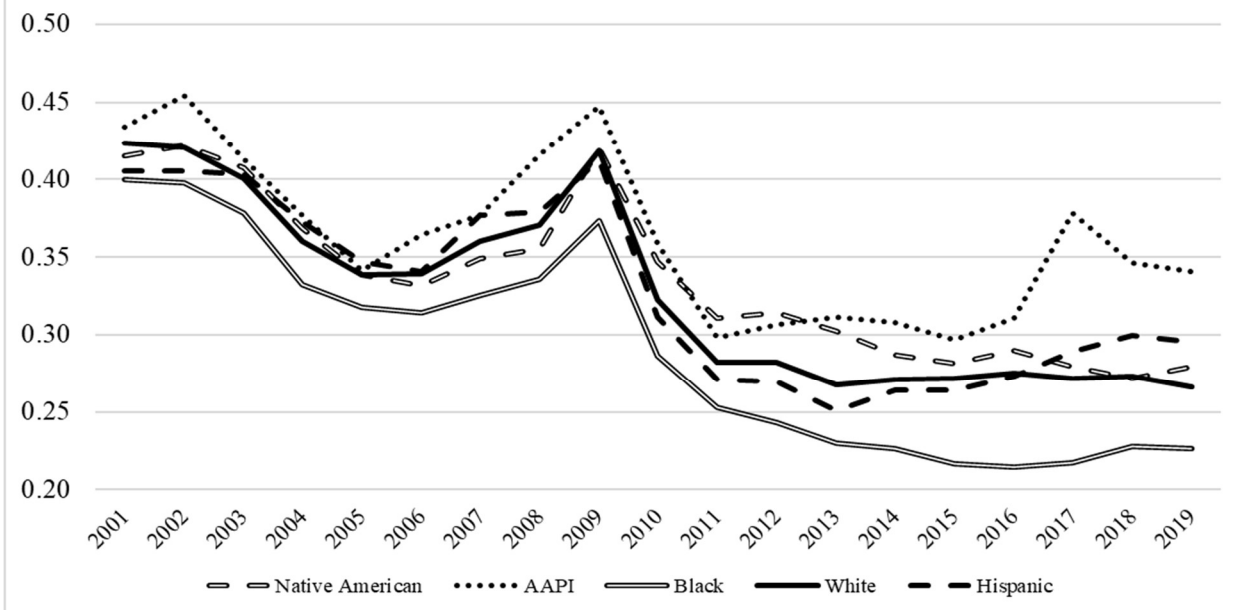
SOURCE: Authors' computations of state reciprocity rates from the dependent variable mean and state fixed effects from the model reported in Table 3 with population controls and female shares from dependent variable mean and state fixed effects from the model reported in Appendix B Table B3.

Figure 9. UI Reciprocity Rates by State Averaged Over 1992-2019 and Hispanic Shares of UI Recipients by State Averaged over 2001-2019



SOURCE: Authors' computations of state reciprocity rates from the dependent variable mean and state fixed effects from the model reported in Table 3 with population controls and Hispanic shares from dependent variable mean and state fixed effects from the model reported in Appendix B Table B10.

Figure 10. Average UI Reciprocity Rates by Race and Ethnicity as Weighted State Shares of UI Recipients in Groups, 2001-2019



SOURCE: Authors' computations are weighted sums of state reciprocity rates from Series A13 in UI Databook where the weights are state shares of demographic subgroups from ETA 203 data divided by the sum of such shares across all states measuring that subgroup in the year.

**Table 1 Summary of Characteristic Shares by Category and the Labor Force Participation Rates Associated with Each Characteristic of Interest Based on Annual Averages for 51 states, 1992-2019, n = 1,428**

Characteristic	UI Recipients ETA 203	Characteristic Shares from CPS					LF Participation Rate (CPS)
		Unemployed	Employed	Not in Labor Force	Labor Force	Population	
<b>Gender:</b>							
Male	0.581	0.548	0.530	0.387	0.531	0.483	0.730
Female	0.419	0.452	0.470	0.613	0.469	0.517	0.602
<b>Race:</b>							
Native American	0.030	0.033	0.013	0.018	0.014	0.015	0.638
AAPI	0.038	0.036	0.043	0.041	0.042	0.042	0.683
Black	0.204	0.190	0.099	0.112	0.104	0.107	0.667
White	0.729	0.741	0.845	0.828	0.839	0.836	0.668
<b>Ethnicity:</b>							
Hispanic	0.114	0.112	0.086	0.077	0.088	0.084	0.701
<b>Age:</b>							
Less than 22	0.030	0.231	0.080	0.142	0.088	0.106	0.546
22-24	0.054	0.098	0.062	0.032	0.064	0.053	0.796
25-34	0.247	0.227	0.225	0.086	0.225	0.178	0.838
35-44	0.258	0.183	0.238	0.083	0.235	0.184	0.848
45-54	0.229	0.145	0.218	0.090	0.214	0.172	0.823
55-59	0.088	0.053	0.082	0.060	0.081	0.074	0.719
60-64	0.057	0.033	0.052	0.087	0.051	0.063	0.528
65+	0.037	0.029	0.043	0.420	0.042	0.168	0.165

NOTE: ETA 203 sample sizes are 1,416 for the gender and age variables; 799 for the race variables and 852 for the ethnicity variable. The CPS means for each characteristic are based on 1,428 observations and are the simple averages of weighted state-year means. Means of the CPS variables for Native American are based on zero values for CT in 1993 because of missing data; the labor force participation rate is based on 1,427 observations because division by zero is impossible.



**Table 2 Characteristic Shares of UI Recipients from ETA 203 and of the Unemployed from CPS with the Sample Size Restricted to ETA 203 Data Availability**

	UI recipients (ETA 203)	Unemployed (CPS)	t-statistic of difference
<b>Gender (n = 1,416):</b>			
Male	0.581	0.548	24.09
Female	0.419	0.452	-24.09
<b>Race (n = 799):</b>			
Native American	0.030	0.035	-3.84
AAPI	0.038	0.039	-1.75
Black	0.204	0.203	0.42
White	0.729	0.723	2.66
<b>Ethnicity (n = 852):</b>			
Hispanic	0.114	0.130	-12.25
Not Hispanic	0.886	0.870	12.25
<b>Age (n = 1,416):</b>			
Less than 22	0.030	0.231	-139.32
22-24	0.054	0.098	-67.81
25-34	0.247	0.227	18.38
35-44	0.258	0.182	79.90
45-54	0.229	0.146	96.24
55-59	0.088	0.053	54.51
60-64	0.057	0.034	48.53
65+	0.037	0.029	14.71

NOTE: See Appendix A for discussion of data availability issues. Only state and year observations used for the ETA 203 observations were used for the CPS unemployment demographic group shares. t-tests are based on the variance calculation: Var of Difference = Var (ETA 203 mean) + Var (CPS mean) - 2\*Covariance (ETA 203 mean, CPS mean). For the t-test, the standard error is computed as: SE = Square Root (Var of Difference/N)

**Table 3 Alternative Model Specifications of the Overall UI Reciprocity Rate Using State-Year Observations (n = 1,428)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic (robust se)	Parameter estimate	t-statistic (robust se)	Parameter estimate	t-statistic (robust se)
Intercept (Dep Variable Mean)	0.331						
<b>Characteristics of Unemployed:</b>							
Male	0.548	0.032	1.93	0.03	1.69	0.031	1.90
Female	0.452	-0.039	-1.93	-0.03	-1.69	-0.037	-1.90
Native American	0.033	-0.084	-0.88	-0.11	-1.08	-0.084	-0.86
AAPI	0.036	0.051	0.95	0.06	1.00	0.037	0.68
Black	0.190	-0.087	-2.47	-0.09	-2.37	-0.081	-2.26
White	0.741	0.024	2.48	0.03	2.53	0.023	2.34
Hispanic	0.112	-0.001	-0.02	0.00	0.00	-0.012	-0.20
Not Hispanic	0.888	0.000	0.02	-0.00	-0.00	0.001	0.20
Age less than 22	0.231	-0.097	-3.40	-0.08	-2.84	-0.088	-3.08
Age 22-24	0.098	-0.032	-0.74	-0.02	-0.55	-0.032	-0.79
Age 25-34	0.227	0.035	1.35	0.03	1.33	0.032	1.22
Age 35-44	0.183	0.088	3.21	0.08	3.03	0.092	3.30
Age 45-54	0.145	0.063	1.38	0.04	0.97	0.044	1.00
Age 55-59	0.053	-0.047	-0.70	-0.06	-0.79	-0.047	-0.71
Age 60-64	0.033	0.023	0.26	0.01	0.09	0.016	0.19
Age 65+	0.029	-0.202	-2.05	-0.16	-1.54	-0.175	-1.76
<b>Characteristics of Population:</b>							
Male	0.483	-0.216	-1.22			-0.200	-1.19
Female	0.517	0.202	1.22			0.187	1.19
Native American	0.015	0.450	1.89			0.463	1.87
AAPI	0.042	-0.242	-0.80			-0.227	-0.72
Black	0.107	0.494	3.37			0.440	3.42
White	0.836	-0.059	-2.59			-0.053	-2.46
Hispanic	0.084	-0.184	-1.48			-0.220	-1.72
Not Hispanic	0.916	0.017	1.48			0.020	1.72
Age less than 22	0.106	0.155	0.70			0.181	0.81
Age 22-24	0.053	-0.128	-0.43			0.062	0.23
Age 25-34	0.178	0.091	0.82			0.075	0.72
Age 35-44	0.184	0.122	0.84			0.098	0.67
Age 45-54	0.172	-0.231	-1.30			-0.239	-1.40
Age 55-59	0.074	-0.205	-0.87			-0.146	-0.61
Age 60-64	0.063	0.028	0.10			0.037	0.14
Age 65+	0.168	0.029	0.19			-0.027	-0.19
<b>Characteristics of Labor Force:</b>							
Male	0.531			0.04	0.56		
Female	0.469			-0.05	-0.56		
Native American	0.014			0.56	2.31		
AAPI	0.042			-0.20	-0.63		
Black	0.104			0.47	4.00		
White	0.839			-0.06	-2.86		
Hispanic	0.088			-0.17	-1.37		
Not Hispanic	0.912			0.02	1.37		
Age less than 22	0.088			-0.07	-0.29		

**Table 3 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic (robust se)	Parameter estimate	t-statistic (robust se)	Parameter estimate	t-statistic (robust se)
Age 22–24	0.064			-0.16	-0.87		
Age 25–34	0.225			0.06	0.84		
Age 35–44	0.235			0.13	1.40		
Age 45–54	0.214			-0.07	-0.63		
Age 55–59	0.081			-0.11	-0.65		
Age 60–64	0.051			0.08	0.31		
Age 65+	0.042			-0.20	-0.77		
<b>Labor Force Participation Rates:</b>							
Male	0.730					0.164	1.77
Female	0.602					-0.199	-1.77
Native American	0.638					0.010	1.03
AAPI	0.683					0.021	1.29
Black	0.667					0.025	1.23
White	0.668					-0.056	-2.15
Hispanic	0.701					-0.005	-0.16
Not Hispanic	0.661					0.005	0.16
Age less than 22	0.546					-0.104	-1.44
Age 22–24	0.796					-0.073	-1.84
Age 25–34	0.838					0.014	0.20
Age 35–44	0.848					0.002	0.04
Age 45–54	0.823					0.137	1.74
Age 55–59	0.719					-0.003	-0.08
Age 60–64	0.528					-0.001	-0.02
Age 65+	0.165					-0.053	-0.67
<b>Occupation of Unemployed:</b>							
Mgt, Business, Financial	0.071	0.021	0.36	0.04	0.65	0.012	0.21
Computers, Engineering, Sci.	0.028	-0.052	-0.62	-0.05	-0.60	-0.058	-0.64
Education, Legal, Comm Svc	0.060	-0.016	-0.19	-0.01	-0.17	-0.005	-0.07
Healthcare Practitioners, Tech	0.016	0.094	0.70	0.13	0.92	0.095	0.71
Service Occupations	0.230	-0.008	-0.23	-0.00	-0.14	-0.017	-0.48
Sales and Office Occupations	0.237	0.032	0.93	0.03	0.95	0.036	1.06
Farming, Fishing, Forestry	0.017	-0.067	-0.53	-0.04	-0.33	-0.047	-0.40
Construction and Extraction	0.114	-0.016	-0.26	-0.04	-0.66	-0.005	-0.07
Installation, Maint., Repair	0.029	-0.003	-0.04	-0.02	-0.25	-0.003	-0.04
Production, Trans, Mat Movng	0.192	-0.010	-0.29	-0.01	-0.30	-0.012	-0.36
Military Specific	0.004	-0.311	-1.58	-0.25	-1.23	-0.301	-1.55
<b>Industry of Unemployed:</b>							
Agric, Forestry, Fishing	0.022	0.150	1.34	0.13	1.10	0.138	1.23
Mining	0.009	0.263	2.28	0.23	2.06	0.223	1.88
Utilities	0.004	0.017	0.09	0.03	0.17	-0.003	-0.02
Construction	0.122	0.025	0.41	0.04	0.72	0.019	0.31
Manufacturing	0.124	-0.090	-1.54	-0.09	-1.42	-0.072	-1.28
Wholesale Trade	0.023	0.022	0.22	0.01	0.11	0.014	0.15
Retail Trade	0.134	-0.026	-0.70	-0.03	-0.70	-0.033	-0.86
Transportation, Warehousing	0.039	0.081	1.20	0.08	1.13	0.087	1.25
Information	0.027	0.064	0.81	0.07	0.89	0.049	0.63
Finance and Insurance	0.025	0.094	1.16	0.08	0.98	0.074	0.91
Real Estate, Rental, Leasing	0.014	-0.006	-0.05	-0.05	-0.44	-0.031	-0.28
Prof, Scientific, Technical	0.026	0.107	0.95	0.10	0.91	0.107	0.97

**Table 3 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic (robust se)	Parameter estimate	t-statistic (robust se)	Parameter estimate	t-statistic (robust se)
		Admin, Support, Waste Mgmt Educational Services	0.081	-0.060	-1.23	-0.07	-1.49
Health Care/Social Assistance	0.049	-0.153	-2.15	-0.15	-2.19	-0.164	-2.23
Art, Entertainment, Recreation	0.081	0.016	0.28	0.02	0.37	0.029	0.49
Accommodation, Food Service	0.027	-0.137	-1.09	-0.13	-1.02	-0.141	-1.11
Other Svcs (Ex Pub Admin)	0.122	0.036	0.74	0.03	0.55	0.042	0.87
Public Administration	0.045	0.076	0.96	0.08	0.98	0.089	1.16
Unemployment rate	0.027	0.095	1.14	0.11	1.29	0.080	0.99
Application Rate	5.446	-0.004	-2.13	-0.00	-1.85	-0.005	-2.22
Alaska	0.186	1.104	7.83	1.10	7.68	1.104	7.89
Alabama	0.020	0.012	0.42	-0.00	-0.02	0.010	0.35
Arkansas	0.020	-0.138	-5.26	-0.13	-5.57	-0.141	-5.54
Arizona	0.020	-0.006	-0.37	-0.00	-0.00	-0.007	-0.44
California	0.020	0.022	0.68	0.01	0.30	0.021	0.65
Colorado	0.020	0.096	2.99	0.08	2.61	0.091	2.79
Connecticut	0.020	0.037	1.43	0.02	0.82	0.042	1.58
District of Columbia	0.020	0.122	15.40	0.12	12.15	0.122	11.27
Delaware	0.020	-0.173	-2.06	-0.11	-1.82	-0.152	-1.87
Florida	0.020	-0.019	-1.11	-0.02	-1.02	-0.013	-0.85
Georgia	0.020	-0.010	-0.40	-0.01	-0.51	-0.007	-0.30
Hawaii	0.020	-0.169	-4.67	-0.16	-5.73	-0.174	-5.01
Iowa	0.020	0.107	0.51	0.08	0.37	0.098	0.45
Idaho	0.020	0.039	1.80	0.04	1.95	0.047	2.03
Illinois	0.020	0.019	0.76	0.01	0.55	0.013	0.50
Indiana	0.020	0.061	5.39	0.07	7.43	0.059	4.84
Kansas	0.020	-0.026	-2.28	-0.02	-2.19	-0.029	-2.47
Kentucky	0.020	0.001	0.08	0.00	0.37	0.006	0.50
Louisiana	0.020	-0.069	-4.48	-0.07	-4.99	-0.071	-4.26
Massachusetts	0.020	-0.112	-3.09	-0.09	-3.23	-0.114	-3.25
Maryland	0.020	0.154	17.89	0.15	19.38	0.153	18.23
Maine	0.020	-0.052	-1.57	-0.05	-1.72	-0.045	-1.41
Michigan	0.020	0.037	1.60	0.03	1.65	0.039	1.70
Minnesota	0.020	-0.007	-0.52	-0.00	-0.08	-0.006	-0.42
Missouri	0.020	0.093	7.63	0.09	7.86	0.102	7.47
Mississippi	0.020	-0.049	-4.75	-0.05	-4.32	-0.042	-3.60
Montana	0.020	-0.136	-3.35	-0.12	-3.46	-0.143	-3.57
North Carolina	0.020	0.041	1.54	0.04	1.65	0.042	1.64
North Dakota	0.020	-0.147	-7.43	-0.14	-7.89	-0.149	-7.84
Nebraska	0.020	-0.000	-0.00	0.00	0.14	0.002	0.08
New Hampshire	0.020	0.006	0.38	0.01	0.62	0.016	0.94
New Jersey	0.020	-0.003	-0.17	-0.01	-0.75	-0.004	-0.22
New Mexico	0.020	0.140	10.21	0.14	8.67	0.129	7.90
Nevada	0.020	0.070	1.34	0.06	1.06	0.076	1.48
New York	0.020	0.058	3.20	0.04	2.35	0.063	3.42
Ohio	0.020	0.050	2.98	0.05	3.02	0.040	2.06
Oklahoma	0.020	-0.016	-1.58	-0.01	-1.11	-0.013	-1.29
Oregon	0.020	-0.058	-3.26	-0.06	-3.29	-0.066	-3.41
Pennsylvania	0.020	0.036	1.76	0.03	1.60	0.032	1.72
Rhode Island	0.020	0.065	3.63	0.07	4.15	0.062	3.39
South Carolina	0.020	0.077	5.07	0.08	5.77	0.082	5.11
	0.020	-0.142	-4.97	-0.13	-5.16	-0.143	-5.26

**Table 3 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic (robust se)	Parameter estimate	t-statistic (robust se)	Parameter estimate	t-statistic (robust se)
South Dakota	0.020	-0.047	-1.67	-0.04	-1.48	-0.043	-1.56
Tennessee	0.020	-0.085	-6.62	-0.09	-6.86	-0.089	-6.63
Texas	0.020	0.019	0.49	0.01	0.22	0.017	0.43
Utah	0.020	0.008	0.30	0.01	0.36	-0.001	-0.03
Virginia	0.020	-0.117	-6.23	-0.11	-6.83	-0.117	-6.28
Vermont	0.020	0.107	4.35	0.10	4.78	0.107	4.45
Washington	0.020	0.053	3.44	0.04	3.03	0.046	3.06
Wisconsin	0.020	0.010	0.36	0.01	0.27	0.022	0.71
West Virginia	0.020	0.042	1.92	0.04	2.07	0.031	1.28
Wyoming	0.020	0.001	0.03	-0.01	-0.32	0.001	0.04
Time = 1992	0.036	-0.021	-1.43	-0.02	-1.05	-0.024	-1.34
Time = 1993	0.036	-0.032	-2.37	-0.03	-2.06	-0.034	-2.17
Time = 1994	0.036	-0.025	-2.06	-0.02	-1.72	-0.023	-1.68
Time = 1995	0.036	-0.040	-3.81	-0.04	-3.21	-0.038	-2.97
Time = 1996	0.036	-0.027	-3.09	-0.02	-2.50	-0.025	-2.30
Time = 1997	0.036	-0.031	-3.74	-0.03	-3.09	-0.030	-2.94
Time = 1998	0.036	-0.038	-5.74	-0.04	-4.56	-0.035	-3.95
Time = 1999	0.036	-0.019	-2.93	-0.02	-2.60	-0.016	-1.89
Time = 2000	0.036	-0.026	-3.85	-0.03	-3.45	-0.023	-2.54
Time = 2001	0.036	0.006	0.69	0.00	0.42	0.009	0.84
Time = 2002	0.036	0.054	8.74	0.05	8.12	0.055	7.58
Time = 2003	0.036	0.045	7.77	0.04	7.22	0.043	7.65
Time = 2004	0.036	0.028	5.17	0.03	5.14	0.027	5.04
Time = 2005	0.036	0.014	2.03	0.01	1.72	0.013	1.88
Time = 2006	0.036	0.009	1.23	0.01	0.94	0.008	1.09
Time = 2007	0.036	0.015	1.79	0.01	1.63	0.013	1.55
Time = 2008	0.036	0.012	1.27	0.01	1.03	0.010	1.03
Time = 2009	0.036	0.095	9.53	0.09	9.49	0.094	8.77
Time = 2010	0.036	0.050	6.16	0.05	5.65	0.049	5.02
Time = 2011	0.036	0.019	2.74	0.02	2.09	0.018	1.88
Time = 2012	0.036	0.012	1.88	0.01	1.41	0.011	1.28
Time = 2013	0.036	0.001	0.19	0.00	0.15	-0.000	-0.01
Time = 2014	0.036	-0.002	-0.26	-0.00	-0.21	-0.004	-0.38
Time = 2015	0.036	-0.016	-1.57	-0.01	-1.30	-0.016	-1.40
Time = 2016	0.036	-0.017	-1.39	-0.02	-1.18	-0.017	-1.29
Time = 2017	0.036	-0.019	-1.41	-0.02	-1.19	-0.018	-1.25
Time = 2018	0.036	-0.022	-1.52	-0.02	-1.33	-0.022	-1.44
Time = 2019	0.036	-0.028	-1.87	-0.02	-1.62	-0.026	-1.62

NOTE: Population controls include gender, race, ethnicity, and age shares of the state-year population (in addition to these shares for the state-year unemployed). Labor force controls include gender, race, ethnicity, and age shares of the state-year labor force. LFPR controls include labor force participation rates of the indicated demographic groups in the state-year. Robust t-statistics are based on standard errors clustered by state and robust to heteroskedasticity, computed by Stata procedure CNSREG using the option vce(cluster state). No CPS data are available on Native Americans in Connecticut for 1993. The models with population and labor force controls are estimated on 1,428 observations where the 1993 Connecticut values of population and labor force are set to zero. The model with population and labor force participation rate as controls is estimated on 1,427 observations because the value of the labor force participation rate is undefined and set to missing for estimation.

**Table 4 Summary of Parameter Estimates from Separate Models of Characteristic Shares of Unemployed on the Characteristic Shares of UI Recipients with Controls for the Characteristic Shares of the Population**

Characteristic Groups	Proportion in ETA 203 Data	Parameter estimate	Robust std errors	t-statistic (robust se)
Male	0.581	0.026	0.010	2.64
Female	0.419	0.031	0.012	2.64
Native American	0.030	0.066	0.025	2.69
AAPI	0.038	0.022	0.046	0.47
Black	0.204	0.058	0.031	1.87
White	0.729	0.005	0.010	0.52
Hispanic	0.114	0.068	0.037	1.82
Not Hispanic	0.886	0.010	0.006	1.82
Age less than 22	0.030	-0.002	0.011	-0.19
Age 22-24	0.054	0.025	0.012	2.07
Age 25-34	0.247	-0.011	0.027	-0.43
Age 35-44	0.258	0.002	0.018	0.10
Age 45-54	0.229	-0.024	0.027	-0.87
Age 55-59	0.088	-0.007	0.031	-0.21
Age 60-64	0.057	-0.013	0.033	-0.40
Age 65+	0.037	0.067	0.064	1.05

NOTE: See Appendix B for tables presenting all parameter estimates in related models. Robust t-statistics and standard errors are clustered by state and robust to heteroskedasticity, computed by Stata procedure CNSREG using the option vce(cluster state).

**Table 5 UI Reciprocity Rates and Characteristic Shares of UI Recipients by State (Based on Regression Dependent Variable Mean and State Fixed-Effects Parameters)**

Area	Reciprocity rate	Shares of UI Recipients			
		Female	Black	Native American	Hispanic
Overall average	0.331	0.419	0.204	0.030	0.114
Alaska	0.343	0.465	0.098	0.281	0.051
Alabama	0.194	0.467	0.353	0.060	0.040
Arkansas	0.325	0.438	0.290	0.016	0.028
Arizona	0.353	0.434	0.117	0.076	0.367
California	0.427	0.450	na	na	0.347
Colorado	0.369	0.444	0.114	0.015	0.222
Connecticut	0.453	0.419	0.214	0.009	0.136
District of Columbia	0.159	0.486	0.532	0.024	0.075
Delaware	0.313	0.477	0.373	0.010	0.053
Florida	0.322	0.472	0.237	0.008	0.274
Georgia	0.162	0.474	0.417	0.017	0.004
Hawaii*	0.438	0.380	-0.158	-0.005	0.022
Iowa	0.370	0.365	0.115	0.008	0.068
Idaho	0.350	0.383	0.092	0.020	0.146
Illinois	0.392	0.382	0.235	0.007	0.159
Indiana	0.306	0.390	0.185	0.007	0.074
Kansas	0.332	0.404	0.214	0.015	0.118
Kentucky	0.262	0.391	0.164	0.008	0.055
Louisiana	0.219	0.451	0.422	0.022	0.044
Massachusetts	0.486	0.403	0.119	0.001	0.124
Maryland	0.279	0.426	0.359	0.013	0.047
Maine	0.368	0.409	0.091	0.008	0.045
Michigan	0.325	0.376	0.199	0.016	0.066
Minnesota	0.424	0.332	0.113	0.010	0.057
Missouri	0.283	0.444	0.241	0.011	0.053
Mississippi	0.195	0.476	0.478	0.020	0.030
Montana	0.373	0.382	0.088	0.091	0.058
North Carolina	0.184	0.467	0.354	0.022	0.044
North Dakota	0.331	0.284	0.095	0.068	0.066
Nebraska	0.337	0.422	0.154	0.012	0.086
New Hampshire	0.329	0.432	0.082	0.003	0.071
New Jersey	0.471	0.436	0.216	0.012	0.197
New Mexico	0.401	0.427	0.077	0.068	0.505
Nevada	0.389	0.442	0.154	0.019	0.180
New York	0.382	0.420	0.175	0.012	0.166
Ohio	0.316	0.354	0.176	0.009	0.055
Oklahoma	0.274	0.453	0.178	0.094	0.100
Oregon	0.368	0.424	0.121	0.019	0.111
Pennsylvania	0.396	0.413	0.187	0.005	0.055
Rhode Island	0.408	0.445	0.110	0.006	0.181
South Carolina	0.190	0.483	0.414	0.020	0.036
South Dakota	0.284	0.383	0.088	0.114	0.075
Tennessee	0.247	0.477	0.260	0.008	0.033
Texas	0.350	0.442	na	na	0.280
Utah	0.340	0.386	0.080	0.031	0.137
Virginia	0.215	0.439	0.354	0.041	0.042
Vermont	0.438	0.398	na	na	na
Washington	0.384	0.402	0.098	0.023	0.136
Wisconsin	0.341	0.403	0.183	0.010	0.049
West Virginia	0.373	0.330	0.101	0.005	0.064
Wyoming	0.332	0.380	0.084	0.042	0.127

NOTE: Figures from author's computations. State reciprocity rates are the sum of intercept plus state fixed effects from parameters reported in Table 3 for 1992-2019. Share female are from intercept plus state fixed effects in Appendix B Table B3 for 1992-2019. Race group shares from Appendix B 2001-2019 intercept plus state fixed effects estimates from Table B7 for Blacks, Table B9 for Hispanics, and Table B5 for Native Americans. \*In Hawaii, the unadjusted share of UI recipients 2001-2019 who are Black is 0.060, who are Native American is 0.006, who are White is 0.295, and who are AAPI is 0.640.

**Table 6 Summary of the Average UI Reciprocity Rate across States and that Same Rate Weighted by Shares of UI Recipients in Race and Ethnic Categories within Reporting States**

	Number of states	Reciprocity rate	Reciprocity Rate Weighted by Race/Ethnic Category				
			Native American	AAPI	Black	White	Hispanic
2001	43	0.419	0.415	0.434	0.400	0.423	0.406
2002	46	0.418	0.422	0.454	0.398	0.421	0.406
2003	46	0.397	0.408	0.413	0.378	0.400	0.403
2004	46	0.355	0.369	0.377	0.332	0.360	0.373
2005	44	0.334	0.339	0.341	0.318	0.339	0.347
2006	43	0.335	0.332	0.364	0.314	0.339	0.341
2007	40	0.353	0.349	0.377	0.325	0.360	0.377
2008	40	0.365	0.355	0.416	0.336	0.371	0.379
2009	38	0.411	0.420	0.447	0.373	0.419	0.412
2010	39	0.317	0.347	0.358	0.286	0.322	0.311
2011	39	0.277	0.311	0.298	0.253	0.282	0.271
2012	40	0.276	0.314	0.307	0.243	0.282	0.269
2013	41	0.263	0.302	0.311	0.230	0.268	0.251
2014	43	0.263	0.287	0.308	0.226	0.271	0.264
2015	42	0.262	0.282	0.297	0.216	0.272	0.264
2016	42	0.264	0.290	0.311	0.215	0.275	0.273
2017	41	0.264	0.280	0.379	0.218	0.272	0.289
2018	44	0.266	0.271	0.346	0.227	0.273	0.299
2019	42	0.260	0.279	0.341	0.226	0.266	0.295
Total/Avg	799	0.322	0.336	0.363	0.291	0.328	0.329

SOURCE: Reciprocity rate from: USDOL (2021) UI Chartbook. Series A-13. <https://oui.doleta.gov/unemploy/chartbook.asp>

Demographic shares of UI recipients from ETA (2021) ETA 203 report on Characteristics of the Insured Unemployed.

Available as a data download from the UI Chartbook <https://oui.doleta.gov/unemploy/DataDownloads.asp>

Authors' computations are weighted sums of state reciprocity rates from Series A13 in UI Databook where the weights are state shares of demographic subgroups from ETA 203 data divided by the sum of such shares across all states measuring that subgroup in the year.



## Appendix A

### Equity in Unemployment Insurance Benefit Access: Data for Analysis

This paper examines differences across demographic groups in access to unemployment insurance (UI) benefits. Evidence is based on two sets of descriptive statistical models. Both sets of models use annual averages of monthly state data over several years. The time frames are limited by the availability of data. A key measure of UI access is the ratio of UI beneficiaries to the number of unemployed—the UI reciprocity rate. Our first set of models have as dependent variables, average state UI reciprocity rates. The second set of models uses data on the demographic characteristics of UI beneficiaries as the basis for dependent variables representing the shares of UI beneficiaries in each group. Since both sets of models are based on state-year observations, both sets of models use similar right hand side control variables.

For replication exercises a full copy of all data used for this paper along with Stata program will be provided to readers on request from the authors.

#### Dependent Variables

The aggregate UI reciprocity models use data published by the U.S. Department of Labor on UI reciprocity monthly by state as series A13 in the UI Chartbook.

<https://oui.doleta.gov/unemploy/chartbook.asp>

These monthly state data on UI reciprocity are available from 1976 to 2020.

Models of shares of demographic characteristics of UI recipients are constructed from data collected monthly from states in Employment and Training Administration (ETA) 203 reports since 1992 on the “Characteristics of the Unemployment Insurance Claimants.”

<https://oui.doleta.gov/unemploy/chariu.asp>

About these data, the USDOL website says, “The Characteristics of the Unemployment Insurance Claimants provide information on the demographic composition of unemployment insurance claimants. The data are based on a sample or on the universe of those who file a continued claim in the week containing the 19th of the month, which reflects unemployment during the week containing the 12th. This corresponds with the Bureau of Labor Statistics Current Population Survey.”

The ETA 203 state reports include data on age and gender since 1992, with a few states not reporting in the first two years. Data collection on ethnicity, race, industry and occupation started in 2001, however, significant rates of information not available (INA) have been reported for some of these variables particularly in early years of data collection. Table A1 in this appendix provides some information about INA rates.

To construct our state-year data we only use data on variables from states for years where the INA rate was less than 25 percent in 6 or more months. In survey research a sample is regarded as providing a reliable basis for population estimates if the response rate is at least 80 percent. We accept a relatively more inclusive standard requiring a 75 percent response rate and we assume the responses provided by UI beneficiaries are accurate. Table A1 shows that over the 28 years from 1992 to 2019 there were 1,428 possible observations on 51 state UI programs (including DC) on the age and gender variables and 1,416 were usable by our criteria. Over the years 2001 to 2019 there were a maximum 969 possible observations on 51 states but only 799 observations were useable on race and 852 observations were usable on ethnicity.

Counts on the number of state observations used each year for the four demographic categories are given in Table A2. Once states start providing data on a demographic category, the number of adequately responding states tends to remain the same or increases in future years. Nearly all states have reported most years on age and gender. Only about 45 states reported usable data since 2001 on ethnicity and fewer, about 42 per year, reported on race. Table A3 reports on state-by-state provision of usable data. The most notable counts in Table A3 are zero years of reporting on UI recipients by race from California, Texas, and Vermont, and very few years reporting on race by Connecticut, New Mexico, Oregon, and Washington. It is also notable that most southern states reported usable data on race in all 19 years from 2001 to 2019. Ethnicity data are usable from most states in all years except from four states (usable years) Kansas (1), Kentucky (7), Vermont (0), and Washington (3). In our analysis we use all state-year demographic data with fewer than 25 percent INA. We do not drop states from analysis for not having all possible years of data available.

### **Right-Hand-Side Variables**

To control for state labor market characteristics by year we assembled data from the Bureau of Labor Statistics (BLS) Local Area Unemployment Statistics (LAUS) program and from micro data in the BLS Current Population Survey (CPS) monthly data files ([www.ipums.org](http://www.ipums.org)).

We used LAUS data by state and year (1992–2019) on the unemployment rate and counts of the unemployed drawn from

<https://data.bls.gov/cgi-bin/dsrv?la>

To control for labor market conditions, we use annual state unemployment rates computed as the average of monthly rates from the LAUS data. Similarly, LAUS based counts of state unemployment are annual averages of monthly unemployment.

Since reciprocity rates in any state will be low if UI application rates are low, we used LAUS counts of unemployment combined with state counts of annual UI initial claims from program administrative reports to compute state-year UI application rates. We used the annual monthly averages of initial claims by state from Monthly Program and Financial Data at:

<https://oui.doleta.gov/unemploy/claimssum.asp>

Our regression models of UI reciprocity and shares of UI recipients include variables for state-year demographic shares of non-institutional civilian population age 16+, employment, unemployment, labor force, and not in the labor force. We also use labor force participation rates as control variables. These variables were computed from CPS data available at [www.ipums.org](http://www.ipums.org)

To control for shares of unemployment by occupation and industry we used data from [www.ipums.org](http://www.ipums.org)

However, the occupation and industry codes in the CPS are based on three-digit census codes. We translated these to two-digit Standard Occupation Codes (SOC) and North American Industrial Classification System (NAICS) codes using published concordance matrices.<sup>17</sup> Over time, the census occupation and industry codes have evolved from three to four digits. Since only a mapping to two-digit SOC and NAICS codes was needed for our models, and given time constraints, the occupation variable occ2010 and the industry variable ind1990 were chosen and merged with their respective concordance matrices.

In the case of the industry concordance, there were a few instances where a census code mapped to multiple two-digit NAICS codes:

- 1) Census code 172 mapped to printing and related activities (32) and publishing except newspapers (56). NAICS code 32 was chosen.
- 2) Census code 432 mapped to services incidental to transportation (48) and travel arrangement and reservation services (56). NAICS code 32 was chosen.
- 3) Census code 471 mapped to sewage treatment facilities (22) and waste management and remediation (56). NAICS code 56 was chosen.
- 4) Census code 732 maps to computer systems design and related services (54), software publishing (51) and data processing services (51). NAICS code 51 was chosen.
- 5) Census code 741 mapped to sound recording industries (51), other information services (51), other consumer goods rental (53), commercial, industrial, and other intangible assets rental and leasing (53), and specialized design services (54), business support services (56), and other administrative and other support services (56). NAICS code 56 was chosen.

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<sup>17</sup> Occupation crosswalk from [https://cps.ipums.org/cps/occ\\_transition\\_2002\\_2010.shtml](https://cps.ipums.org/cps/occ_transition_2002_2010.shtml). Columns A, B and E in tab “2002to2010xwalk” from the Excel file “2002\_2011\_occupation\_crosswalk.xls” downloaded from the ipums.org page were used to create the crosswalk. The industry crosswalk is from [Industry and Occupation Code Lists & Crosswalks \(census.gov\)](http://www.census.gov) using the link titled “1990-2012 Census Industry Codes with Crosswalk” and that page. Columns A and B in the tab “1990-2012” in the Excel file “industry-crosswalk-90-00-02-07-12.xls” were used to create the crosswalk.

**Table A1 ETA 203 Distribution of the Number of Months Included in the Annual Average after Monthly Observations with 25+ Percent Information Not Available (INA) are Removed**

Months in Annual Average	Age	Gender	Race	Ethnicity
	(1992–2019)		(2001–2019)	
1	2	2	8	7
2	1	1	4	2
3	0	0	7	5
4	0	0	13	4
5	1	1	9	4
6	0	0	9	6
7	5	5	8	7
8	41	39	11	7
9	5	5	6	14
10	5	4	16	14
11	15	15	15	21
12	1,345	1,348	734	783
Total	1,420	1,420	840	874
Actual used (*1)	1,416	1,416	799	852
Max possible	1,428	1,428	969	969
Coverage rate	0.992	0.992	0.825	0.879

NOTE: (\*1) Exclude state year observation if more than 6 months with 25% plus INA.

**Table A2 ETA 203 Data Available by Year after Data Edits for Information Not Available (INA) and the Requirement that Six or More Months in a Year be Available for Computing the Annual Mean**

Year	Age (1992–2019)	Gender	Race (2001–2019)	Ethnicity
1992	45	45		
1993	48	48		
1994	50	50		
1995	51	51		
1996	51	51		
1997	51	51		
1998	51	51		
1999	51	51		
2000	51	51		
2001	50	50	43	40
2002	51	51	46	44
2003	50	50	46	43
2004	51	51	46	44
2005	51	51	44	46
2006	51	51	43	47
2007	51	51	40	45
2008	51	51	40	47
2009	51	51	38	43
2010	51	51	39	44
2011	51	51	39	45
2012	51	51	40	45
2013	51	51	41	45
2014	51	51	43	44
2015	51	51	42	44
2016	51	51	42	44
2017	51	51	41	46
2018	51	51	44	48
2019	51	51	42	48
Total	1,416	1,416	799	852
Max possible	1,428	1,428	969	969
Coverage rate	0.992	0.992	0.825	0.879

**Table A3 ETA 203 Data Summary of the Number of Observations Available by State after Edits for Information Not Available and the Requirement of at Least Six, Monthly Observations to Calculate the Annual Mean**

State	State Name	Age (1992–2019, n = 28)	Gender	Race (2001–2019, n = 19)	Ethnicity
AK	Alaska	25	25	19	19
AL	Alabama	28	28	19	15
AR	Arkansas	28	28	19	19
AZ	Arizona	26	26	10	19
CA	California	27	27	0	19
CO	Colorado	27	27	18	19
CT	Connecticut	28	28	5	19
DC	District of Columbia	28	28	19	17
DE	Delaware	28	28	19	19
FL	Florida	28	28	18	19
GA	Georgia	28	28	19	19
HI	Hawaii	28	28	19	15
IA	Iowa	28	28	15	16
ID	Idaho	28	28	18	19
IL	Illinois	28	28	19	19
IN	Indiana	28	28	19	19
KS	Kansas	28	28	19	1
KY	Kentucky	28	28	19	7
LA	Louisiana	28	28	19	18
MA	Massachusetts	28	28	19	19
MD	Maryland	27	27	13	19
ME	Maine	28	28	18	13
MI	Michigan	28	28	12	18
MN	Minnesota	28	28	19	19
MO	Missouri	28	28	19	10
MS	Mississippi	28	28	19	18
MT	Montana	28	28	19	19
NC	North Carolina	28	28	19	19
ND	North Dakota	28	28	19	19
NE	Nebraska	28	28	13	17
NH	New Hampshire	28	28	19	17
NJ	New Jersey	27	27	18	18
NM	New Mexico	27	27	2	18
NV	Nevada	28	28	19	19
NY	New York	28	28	10	19
OH	Ohio	28	28	19	19
OK	Oklahoma	28	28	19	15
OR	Oregon	28	28	4	19
PA	Pennsylvania	28	28	19	19
RI	Rhode Island	28	28	18	17
SC	South Carolina	28	28	19	16
SD	South Dakota	28	28	19	19
TN	Tennessee	28	28	19	19
TX	Texas	28	28	0	19
UT	Utah	28	28	15	19
VA	Virginia	28	28	19	19
VT	Vermont	28	28	0	0
WA	Washington	28	28	3	3
WI	Wisconsin	28	28	19	19
WV	West Virginia	28	28	19	14
WY	Wyoming	26	26	19	18

**Appendix B**  
**Regression Results**

**Table B1 Effects of the Gender Group Shares of Unemployment on the Gender Group Shares of Beneficiaries (ETA 203) Controlling in Separate Models for the Gender Group Shares of Population, Labor Force and Labor Force Participation Rate (n = 1,416, \*1)**

Control Variable Descriptions	Parameter estimate	Robust standard error	t-statistic
<b>Male</b>			
ETA 203 mean	0.581		
Population control	0.026	0.010	2.64
Labor Force control	0.025	0.011	2.30
Population and LFPR	0.024	0.010	2.36
<b>Female</b>			
ETA 203 mean	0.419		
Population control	0.031	0.012	2.64
Labor Force control	0.030	0.013	2.30
Population and LFPR	0.030	0.013	2.36

NOTE: (\*1) See appendix tables B2 and B3 for complete models



**Table B2 Alternative Model Specifications of the Male Share of UI Recipients (n = 1,416)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Intercept (Dep Variable Mean)	0.581	0.581		0.581		0.581	
<b>Share of Unemployed:</b>							
Male	0.548	0.026	2.64	0.025	2.30	0.024	2.36
Female	0.452	-0.031	-2.64	-0.030	-2.30	-0.030	-2.36
<b>Share of Population:</b>							
Male	0.483	0.419	2.63			0.429	2.72
Female	0.517	-0.391	-2.63			-0.400	-2.72
<b>Share of Labor Force:</b>							
Male	0.531			0.230	2.98		
Female	0.469			-0.260	-2.98		
<b>Labor Force Participation Rate:</b>							
Male	0.730					0.088	1.55
Female	0.602					-0.106	-1.55
<b>Characteristics of Unemployed:</b>							
Native American	0.032	0.059	0.75	0.060	0.77	0.058	0.75
AAPI	0.036	0.025	0.51	0.020	0.40	0.026	0.54
Black	0.191	-0.035	-1.16	-0.034	-1.11	-0.035	-1.17
White	0.741	0.005	0.71	0.005	0.69	0.005	0.70
Hispanic	0.112	-0.007	-0.27	-0.023	-0.85	-0.014	-0.56
Not Hispanic	0.888	0.001	0.27	0.003	0.85	0.002	0.56
Age less than 22	0.231	-0.008	-0.27	-0.010	-0.34	-0.007	-0.26
Age 22-24	0.098	-0.065	-2.09	-0.061	-1.94	-0.062	-2.01
Age 25-34	0.227	-0.023	-1.15	-0.021	-1.03	-0.024	-1.17
Age 35-44	0.182	0.033	1.12	0.032	1.13	0.032	1.09
Age 45-54	0.146	0.031	1.09	0.030	1.07	0.031	1.10
Age 55-59	0.053	-0.047	-0.88	-0.048	-0.91	-0.048	-0.90
Age 60-64	0.034	0.116	2.21	0.123	2.34	0.118	2.28
Age 65+	0.029	0.052	0.58	0.050	0.58	0.051	0.58
<b>Occupation of Unemployed:</b>							
Management, Business, Financial	0.071	-0.036	-0.89	-0.041	-1.01	-0.036	-0.90
Computers, Engineering, Science	0.028	0.021	0.32	0.009	0.15	0.015	0.25
Education, Legal, Comm Service	0.060	0.031	0.67	0.028	0.61	0.029	0.64
Healthcare Practitioners, Technical	0.016	-0.150	-1.80	-0.152	-1.74	-0.150	-1.78
Service Occupations	0.230	0.040	1.41	0.036	1.30	0.038	1.37
Sales and Office Occupations	0.238	0.010	0.47	0.012	0.52	0.011	0.51
Farming, Fishing, Forestry	0.017	0.345	2.66	0.339	2.63	0.353	2.71
Construction and Extraction	0.114	-0.075	-0.98	-0.072	-0.94	-0.078	-1.01
Installation, Maintenance, Repair	0.029	-0.099	-1.80	-0.084	-1.59	-0.095	-1.74
Production, Trans, Mat Moving	0.192	-0.020	-0.79	-0.017	-0.64	-0.019	-0.73
Military Specific	0.004	0.093	0.49	0.088	0.46	0.100	0.52
<b>Industry of Unemployed:</b>							
Agric., Forestry, Fishing	0.022	-0.326	-3.66	-0.318	-3.75	-0.327	-3.72
Mining	0.008	0.462	3.88	0.442	3.71	0.449	3.79
Utilities	0.004	-0.186	-1.07	-0.169	-0.97	-0.177	-1.01
Construction	0.122	0.130	2.07	0.132	2.07	0.134	2.11
Manufacturing	0.124	-0.028	-0.96	-0.023	-0.79	-0.028	-0.95
Wholesale Trade	0.023	-0.082	-0.89	-0.086	-0.94	-0.086	-0.94
Retail Trade	0.134	-0.001	-0.03	-0.009	-0.34	-0.005	-0.19
Transportation, Warehousing	0.039	-0.045	-0.80	-0.050	-0.89	-0.045	-0.81
Information	0.027	-0.021	-0.39	-0.014	-0.27	-0.019	-0.36
Finance and Insurance	0.025	-0.091	-1.18	-0.105	-1.36	-0.096	-1.28
Real Estate, Rental, Leasing	0.014	0.141	1.50	0.131	1.38	0.133	1.43
Prof, Scientific, Technical	0.026	0.100	1.37	0.104	1.41	0.103	1.40

**Table B2 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Admin, Support, Waste Mgmt	0.081	0.024	0.67	0.020	0.57	0.022	0.60
Educational Services	0.049	-0.055	-1.00	-0.045	-0.87	-0.051	-0.95
Health Care/Social Assistance	0.081	-0.075	-1.39	-0.079	-1.47	-0.075	-1.40
Art, Entertainment, Recreation	0.027	-0.024	-0.32	-0.028	-0.37	-0.028	-0.37
Accommodation, Food Service	0.122	-0.007	-0.19	0.008	0.19	-0.002	-0.05
Other Services (Ex Pub Admin)	0.045	0.009	0.16	-0.002	-0.04	0.007	0.13
Public Administration	0.027	0.063	0.89	0.047	0.63	0.057	0.81
Unemployment rate	5.435	0.005	3.44	0.005	3.55	0.005	3.55
Application Rate	0.186	0.054	1.64	0.060	1.90	0.056	1.74
Alaska	0.018	-0.046	-2.23	-0.035	-1.72	-0.044	-2.12
Alabama	0.020	-0.048	-3.85	-0.059	-4.72	-0.051	-4.31
Arkansas	0.020	-0.019	-2.56	-0.025	-3.39	-0.021	-3.00
Arizona	0.018	-0.015	-1.68	-0.014	-1.34	-0.016	-1.73
California	0.019	-0.032	-2.62	-0.031	-2.35	-0.034	-2.70
Colorado	0.019	-0.026	-2.98	-0.019	-2.20	-0.025	-2.98
Connecticut	0.020	-0.000	-0.01	0.002	0.52	0.002	0.41
District of Columbia	0.020	-0.067	-2.80	-0.066	-2.65	-0.063	-2.56
Delaware	0.020	-0.059	-9.46	-0.058	-8.86	-0.057	-8.89
Florida	0.020	-0.053	-8.51	-0.054	-8.52	-0.053	-8.50
Georgia	0.020	-0.055	-4.38	-0.062	-4.98	-0.057	-4.68
Hawaii	0.020	0.039	1.24	0.044	1.40	0.040	1.27
Iowa	0.020	0.053	8.03	0.058	9.07	0.055	8.04
Idaho	0.020	0.036	4.56	0.036	4.65	0.034	4.30
Illinois	0.020	0.037	7.73	0.036	7.47	0.036	7.76
Indiana	0.020	0.029	6.22	0.025	4.82	0.027	5.91
Kansas	0.020	0.014	3.80	0.017	4.35	0.015	3.93
Kentucky	0.020	0.027	5.09	0.022	4.13	0.026	4.96
Louisiana	0.020	-0.032	-2.38	-0.042	-3.14	-0.035	-2.65
Massachusetts	0.020	0.016	2.99	0.018	3.58	0.018	3.54
Maryland	0.019	-0.007	-0.74	-0.006	-0.63	-0.005	-0.54
Maine	0.020	0.010	1.18	0.013	1.54	0.011	1.37
Michigan	0.020	0.043	7.93	0.040	6.92	0.042	8.04
Minnesota	0.020	0.087	13.76	0.096	17.10	0.091	13.98
Missouri	0.020	-0.026	-5.55	-0.026	-5.20	-0.025	-5.22
Mississippi	0.020	-0.057	-3.25	-0.068	-3.92	-0.060	-3.50
Montana	0.020	0.037	3.43	0.045	4.45	0.039	3.69
North Carolina	0.020	-0.048	-5.27	-0.054	-5.93	-0.050	-5.67
North Dakota	0.020	0.134	8.88	0.142	9.60	0.137	9.24
Nebraska	0.020	-0.003	-0.56	0.003	0.41	-0.001	-0.16
New Hampshire	0.020	-0.013	-1.36	-0.009	-0.93	-0.012	-1.24
New Jersey	0.019	-0.017	-2.85	-0.020	-3.52	-0.019	-2.96
New Mexico	0.019	-0.008	-0.50	-0.002	-0.14	-0.006	-0.38
Nevada	0.020	-0.023	-2.36	-0.017	-2.00	-0.024	-2.42
New York	0.020	-0.001	-0.20	-0.005	-0.89	-0.002	-0.28
Ohio	0.020	0.065	13.40	0.061	11.79	0.064	13.55
Oklahoma	0.020	-0.034	-4.01	-0.042	-4.94	-0.037	-4.23
Oregon	0.020	-0.005	-0.77	-0.002	-0.33	-0.005	-0.78
Pennsylvania	0.020	0.006	1.26	0.000	0.05	0.004	0.96
Rhode Island	0.020	-0.026	-4.35	-0.026	-4.79	-0.025	-4.20
South Carolina	0.020	-0.064	-5.12	-0.073	-5.69	-0.066	-5.40
South Dakota	0.020	0.036	1.96	0.043	2.41	0.039	2.18
Tennessee	0.020	-0.058	-9.02	-0.066	-9.72	-0.061	-9.96
Texas	0.020	-0.023	-2.73	-0.025	-2.63	-0.026	-2.82
Utah	0.020	0.033	3.39	0.030	2.75	0.029	2.65
Virginia	0.020	-0.020	-3.61	-0.022	-4.09	-0.020	-3.72
Vermont	0.020	0.021	2.43	0.026	3.01	0.024	2.76

**Table B2 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Washington	0.020	0.017	2.44	0.019	2.81	0.016	2.38
Wisconsin	0.020	0.016	2.42	0.024	4.01	0.019	2.56
West Virginia	0.020	0.089	10.56	0.081	9.76	0.086	10.41
Wyoming	0.018	0.039	3.52	0.043	3.99	0.038	3.51
Time = 1992	0.032	0.009	1.20	-0.001	-0.11	0.005	0.66
Time = 1993	0.034	0.022	4.20	0.014	2.57	0.018	3.45
Time = 1994	0.035	0.016	3.07	0.010	2.16	0.013	2.71
Time = 1995	0.036	0.012	2.19	0.006	1.26	0.010	1.86
Time = 1996	0.036	0.006	1.12	0.001	0.31	0.004	0.87
Time = 1997	0.036	0.006	1.56	0.004	0.98	0.005	1.34
Time = 1998	0.036	0.001	0.28	-0.001	-0.14	0.001	0.12
Time = 1999	0.036	0.005	0.89	0.003	0.53	0.004	0.80
Time = 2000	0.036	0.001	0.23	-0.001	-0.17	0.001	0.17
Time = 2001	0.035	0.008	1.62	0.006	1.31	0.008	1.60
Time = 2002	0.036	0.007	1.66	0.005	1.14	0.006	1.59
Time = 2003	0.035	-0.004	-0.97	-0.005	-1.23	-0.004	-1.06
Time = 2004	0.036	-0.013	-4.53	-0.013	-4.56	-0.013	-4.63
Time = 2005	0.036	-0.016	-5.36	-0.015	-5.28	-0.016	-5.42
Time = 2006	0.036	-0.019	-5.74	-0.018	-5.55	-0.019	-5.73
Time = 2007	0.036	-0.004	-1.11	-0.003	-0.90	-0.003	-1.07
Time = 2008	0.036	0.006	1.60	0.007	2.00	0.007	1.73
Time = 2009	0.036	0.015	2.65	0.017	3.16	0.016	2.79
Time = 2010	0.036	-0.014	-2.80	-0.010	-2.21	-0.012	-2.54
Time = 2011	0.036	-0.024	-5.05	-0.020	-4.50	-0.023	-4.83
Time = 2012	0.036	-0.015	-3.33	-0.012	-2.70	-0.014	-3.19
Time = 2013	0.036	-0.014	-3.05	-0.011	-2.46	-0.013	-2.95
Time = 2014	0.036	-0.009	-2.13	-0.006	-1.29	-0.008	-1.93
Time = 2015	0.036	0.009	2.03	0.013	2.99	0.010	2.41
Time = 2016	0.036	0.015	3.00	0.019	3.97	0.017	3.36
Time = 2017	0.036	-0.001	-0.12	0.004	0.68	0.001	0.19
Time = 2018	0.036	-0.006	-0.86	-0.001	-0.17	-0.004	-0.63
Time = 2019	0.036	0.002	0.31	0.008	1.10	0.004	0.65

**Table B3 Alternative Model Specifications of the Female Share of UI Recipients (n = 1,416)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Intercept (Dep Variable Mean)	0.419	0.419		0.419		0.419	
<b>Share of Unemployed:</b>							
Male	0.548	-0.026	-2.64	-0.025	-2.30	-0.024	-2.36
Female	0.452	0.031	2.64	0.030	2.30	0.030	2.36
<b>Share of Population:</b>							
Male	0.483	-0.419	-2.63			-0.429	-2.72
Female	0.517	0.391	2.63			0.400	2.72
<b>Share of Labor Force:</b>							
Male	0.531			-0.230	-2.98		
Female	0.469			0.260	2.98		
<b>Labor Force Participation Rate:</b>							
Male	0.730					-0.088	-1.55
Female	0.602					0.106	1.55
<b>Characteristics of Unemployed:</b>							
Native American	0.032	-0.059	-0.75	-0.060	-0.77	-0.058	-0.75
AAPI	0.036	-0.025	-0.51	-0.020	-0.40	-0.026	-0.54
Black	0.191	0.035	1.16	0.034	1.11	0.035	1.17
White	0.741	-0.005	-0.71	-0.005	-0.69	-0.005	-0.70
Hispanic	0.112	0.007	0.27	0.023	0.85	0.014	0.56
Not Hispanic	0.888	-0.001	-0.27	-0.003	-0.85	-0.002	-0.56
Age less than 22	0.231	0.008	0.27	0.010	0.34	0.007	0.26
Age 22-24	0.098	0.065	2.09	0.061	1.94	0.062	2.01
Age 25-34	0.227	0.023	1.15	0.021	1.03	0.024	1.17
Age 35-44	0.182	-0.033	-1.12	-0.032	-1.13	-0.032	-1.09
Age 45-54	0.146	-0.031	-1.09	-0.030	-1.07	-0.031	-1.10
Age 55-59	0.053	0.047	0.88	0.048	0.91	0.048	0.90
Age 60-64	0.034	-0.116	-2.21	-0.123	-2.34	-0.118	-2.28
Age 65+	0.029	-0.052	-0.58	-0.050	-0.58	-0.051	-0.58
<b>Occupation of Unemployed:</b>							
Management, Business, Financial	0.071	0.036	0.89	0.041	1.01	0.036	0.90
Computers, Engineering, Science	0.028	-0.021	-0.32	-0.009	-0.15	-0.015	-0.25
Education, Legal, Comm Service	0.060	-0.031	-0.67	-0.028	-0.61	-0.029	-0.64
Healthcare Practitioners, Technical	0.016	0.150	1.80	0.152	1.74	0.150	1.78
Service Occupations	0.230	-0.040	-1.41	-0.036	-1.30	-0.038	-1.37
Sales and Office Occupations	0.238	-0.010	-0.47	-0.012	-0.52	-0.011	-0.51
Farming, Fishing, Forestry	0.017	-0.345	-2.66	-0.339	-2.63	-0.353	-2.71
Construction and Extraction	0.114	0.075	0.98	0.072	0.94	0.078	1.01
Installation, Maintenance, Repair	0.029	0.099	1.80	0.084	1.59	0.095	1.74
Production, Trans, Mat Moving	0.192	0.020	0.79	0.017	0.64	0.019	0.73
Military Specific	0.004	-0.093	-0.49	-0.088	-0.46	-0.100	-0.52
<b>Industry of Unemployed:</b>							
Agric., Forestry, Fishing	0.022	0.326	3.66	0.318	3.75	0.327	3.72
Mining	0.008	-0.462	-3.88	-0.442	-3.71	-0.449	-3.79
Utilities	0.004	0.186	1.07	0.169	0.97	0.177	1.01
Construction	0.122	-0.130	-2.07	-0.132	-2.07	-0.134	-2.11
Manufacturing	0.124	0.028	0.96	0.023	0.79	0.028	0.95
Wholesale Trade	0.023	0.082	0.89	0.086	0.94	0.086	0.94
Retail Trade	0.134	0.001	0.03	0.009	0.34	0.005	0.19
Transportation, Warehousing	0.039	0.045	0.80	0.050	0.89	0.045	0.81
Information	0.027	0.021	0.39	0.014	0.27	0.019	0.36
Finance and Insurance	0.025	0.091	1.18	0.105	1.36	0.096	1.28
Real Estate, Rental, Leasing	0.014	-0.141	-1.50	-0.131	-1.38	-0.133	-1.43
Prof, Scientific, Technical	0.026	-0.100	-1.37	-0.104	-1.41	-0.103	-1.40

**Table B3 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
		Admin, Support, Waste Mgmt	0.081	-0.024	-0.67	-0.020	-0.57
Educational Services	0.049	0.055	1.00	0.045	0.87	0.051	0.95
Health Care/Social Assistance	0.081	0.075	1.39	0.079	1.47	0.075	1.40
Art, Entertainment, Recreation	0.027	0.024	0.32	0.028	0.37	0.028	0.37
Accommodation, Food Service	0.122	0.007	0.19	-0.008	-0.19	0.002	0.05
Other Services (Ex Pub Admin)	0.045	-0.009	-0.16	0.002	0.04	-0.007	-0.13
Public Administration	0.027	-0.063	-0.89	-0.047	-0.63	-0.057	-0.81
Unemployment rate	5.435	-0.005	-3.44	-0.005	-3.55	-0.005	-3.55
Application Rate	0.186	-0.054	-1.64	-0.060	-1.90	-0.056	-1.74
Alaska	0.018	0.046	2.23	0.035	1.72	0.044	2.12
Alabama	0.020	0.048	3.85	0.059	4.72	0.051	4.31
Arkansas	0.020	0.019	2.56	0.025	3.39	0.021	3.00
Arizona	0.018	0.015	1.68	0.014	1.34	0.016	1.73
California	0.019	0.032	2.62	0.031	2.35	0.034	2.70
Colorado	0.019	0.026	2.98	0.019	2.20	0.025	2.98
Connecticut	0.020	0.000	0.01	-0.002	-0.52	-0.002	-0.41
District of Columbia	0.020	0.067	2.80	0.066	2.65	0.063	2.56
Delaware	0.020	0.059	9.46	0.058	8.86	0.057	8.89
Florida	0.020	0.053	8.51	0.054	8.52	0.053	8.50
Georgia	0.020	0.055	4.38	0.062	4.98	0.057	4.68
Hawaii	0.020	-0.039	-1.24	-0.044	-1.40	-0.040	-1.27
Iowa	0.020	-0.053	-8.03	-0.058	-9.07	-0.055	-8.04
Idaho	0.020	-0.036	-4.56	-0.036	-4.65	-0.034	-4.30
Illinois	0.020	-0.037	-7.73	-0.036	-7.47	-0.036	-7.76
Indiana	0.020	-0.029	-6.22	-0.025	-4.82	-0.027	-5.91
Kansas	0.020	-0.014	-3.80	-0.017	-4.35	-0.015	-3.93
Kentucky	0.020	-0.027	-5.09	-0.022	-4.13	-0.026	-4.96
Louisiana	0.020	0.032	2.38	0.042	3.14	0.035	2.65
Massachusetts	0.020	-0.016	-2.99	-0.018	-3.58	-0.018	-3.54
Maryland	0.019	0.007	0.74	0.006	0.63	0.005	0.54
Maine	0.020	-0.010	-1.18	-0.013	-1.54	-0.011	-1.37
Michigan	0.020	-0.043	-7.93	-0.040	-6.92	-0.042	-8.04
Minnesota	0.020	-0.087	-13.76	-0.096	-17.10	-0.091	-13.98
Missouri	0.020	0.026	5.55	0.026	5.20	0.025	5.22
Mississippi	0.020	0.057	3.25	0.068	3.92	0.060	3.50
Montana	0.020	-0.037	-3.43	-0.045	-4.45	-0.039	-3.69
North Carolina	0.020	0.048	5.27	0.054	5.93	0.050	5.67
North Dakota	0.020	-0.134	-8.88	-0.142	-9.60	-0.137	-9.24
Nebraska	0.020	0.003	0.56	-0.003	-0.41	0.001	0.16
New Hampshire	0.020	0.013	1.36	0.009	0.93	0.012	1.24
New Jersey	0.019	0.017	2.85	0.020	3.52	0.019	2.96
New Mexico	0.019	0.008	0.50	0.002	0.14	0.006	0.38
Nevada	0.020	0.023	2.36	0.017	2.00	0.024	2.42
New York	0.020	0.001	0.20	0.005	0.89	0.002	0.28
Ohio	0.020	-0.065	-13.40	-0.061	-11.79	-0.064	-13.55
Oklahoma	0.020	0.034	4.01	0.042	4.94	0.037	4.23
Oregon	0.020	0.005	0.77	0.002	0.33	0.005	0.78
Pennsylvania	0.020	-0.006	-1.26	-0.000	-0.05	-0.004	-0.96
Rhode Island	0.020	0.026	4.35	0.026	4.79	0.025	4.20
South Carolina	0.020	0.064	5.12	0.073	5.69	0.066	5.40
South Dakota	0.020	-0.036	-1.96	-0.043	-2.41	-0.039	-2.18
Tennessee	0.020	0.058	9.02	0.066	9.72	0.061	9.96
Texas	0.020	0.023	2.73	0.025	2.63	0.026	2.82
Utah	0.020	-0.033	-3.39	-0.030	-2.75	-0.029	-2.65
Virginia	0.020	0.020	3.61	0.022	4.09	0.020	3.72
Vermont	0.020	-0.021	-2.43	-0.026	-3.01	-0.024	-2.76
Washington	0.020	-0.017	-2.44	-0.019	-2.81	-0.016	-2.38

**Table B3 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Wisconsin	0.020	-0.016	-2.42	-0.024	-4.01	-0.019	-2.56
West Virginia	0.020	-0.089	-10.56	-0.081	-9.76	-0.086	-10.41
Wyoming	0.018	-0.039	-3.52	-0.043	-3.99	-0.038	-3.51
Time = 1992	0.032	-0.009	-1.20	0.001	0.11	-0.005	-0.66
Time = 1993	0.034	-0.022	-4.20	-0.014	-2.57	-0.018	-3.45
Time = 1994	0.035	-0.016	-3.07	-0.010	-2.16	-0.013	-2.71
Time = 1995	0.036	-0.012	-2.19	-0.006	-1.26	-0.010	-1.86
Time = 1996	0.036	-0.006	-1.12	-0.001	-0.31	-0.004	-0.87
Time = 1997	0.036	-0.006	-1.56	-0.004	-0.98	-0.005	-1.34
Time = 1998	0.036	-0.001	-0.28	0.001	0.14	-0.001	-0.12
Time = 1999	0.036	-0.005	-0.89	-0.003	-0.53	-0.004	-0.80
Time = 2000	0.036	-0.001	-0.23	0.001	0.17	-0.001	-0.17
Time = 2001	0.035	-0.008	-1.62	-0.006	-1.31	-0.008	-1.60
Time = 2002	0.036	-0.007	-1.66	-0.005	-1.14	-0.006	-1.59
Time = 2003	0.035	0.004	0.97	0.005	1.23	0.004	1.06
Time = 2004	0.036	0.013	4.53	0.013	4.56	0.013	4.63
Time = 2005	0.036	0.016	5.36	0.015	5.28	0.016	5.42
Time = 2006	0.036	0.019	5.74	0.018	5.55	0.019	5.73
Time = 2007	0.036	0.004	1.11	0.003	0.90	0.003	1.07
Time = 2008	0.036	-0.006	-1.60	-0.007	-2.00	-0.007	-1.73
Time = 2009	0.036	-0.015	-2.65	-0.017	-3.16	-0.016	-2.79
Time = 2010	0.036	0.014	2.80	0.010	2.21	0.012	2.54
Time = 2011	0.036	0.024	5.05	0.020	4.50	0.023	4.83
Time = 2012	0.036	0.015	3.33	0.012	2.70	0.014	3.19
Time = 2013	0.036	0.014	3.05	0.011	2.46	0.013	2.95
Time = 2014	0.036	0.009	2.13	0.006	1.29	0.008	1.93
Time = 2015	0.036	-0.009	-2.03	-0.013	-2.99	-0.010	-2.41
Time = 2016	0.036	-0.015	-3.00	-0.019	-3.97	-0.017	-3.36
Time = 2017	0.036	0.001	0.12	-0.004	-0.68	-0.001	-0.19
Time = 2018	0.036	0.006	0.86	0.001	0.17	0.004	0.63
Time = 2019	0.036	-0.002	-0.31	-0.008	-1.10	-0.004	-0.65

**Table B4 Effects of the Race Group Shares of Unemployment on the Race Group Shares of Beneficiaries (ETA 203) Controlling in Separate Models for the Race Group Shares of Population, Labor Force and Labor Force Participation Rate (n = 799, \*1)**

Control Variable Descriptions	Parameter estimate	Robust standard error	t-statistic
Native American			
ETA 203 mean	0.030		
Population control	0.066	0.025	2.69
Labor Force control	0.052	0.031	1.68
Population and LFPR	0.064	0.025	2.62
AAPI			
ETA 203 mean	0.038		
Population control	0.022	0.046	0.47
Labor Force control	0.010	0.037	0.27
Population and LFPR	0.024	0.046	0.53
Black			
ETA 203 mean	0.204		
Population control	0.058	0.031	1.87
Labor Force control	0.055	0.029	1.86
Population and LFPR	0.057	0.031	1.88
White			
ETA 203 mean	0.729		
Population control	0.005	0.010	0.52
Labor Force control	0.003	0.009	0.27
Population and LFPR	0.005	0.010	0.53

NOTE: (\*1) See appendix tables B5 through B8 for complete models

**Table B5 Alternative Model Specifications of the Native American Share of UI Recipients (n = 799)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Intercept (Dep Variable Mean)	0.030	0.030		0.030		0.030	
<b>Share of Unemployed:</b>							
Native American	0.035	0.066	2.69	0.052	1.68	0.064	2.62
AAPI	0.039	0.011	0.31	0.011	0.32	0.008	0.24
Black	0.203	-0.019	-1.30	-0.020	-1.42	-0.020	-1.37
White	0.723	0.002	0.46	0.003	0.81	0.002	0.62
<b>Share of Population:</b>							
Native American	0.015	0.053	0.50			0.058	0.55
AAPI	0.046	0.004	0.05			0.008	0.10
Black	0.116	-0.017	-0.30			-0.018	-0.32
White	0.823	0.001	0.15			0.001	0.14
<b>Share of Labor Force:</b>							
Native American	0.014			0.130	0.94		
AAPI	0.046			-0.004	-0.06		
Black	0.114			-0.000	-0.00		
White	0.827			-0.002	-0.39		
<b>Labor Force Participation Rate:</b>							
Native American	0.626					0.003	1.17
AAPI	0.685					0.003	0.62
Black	0.661					0.003	0.39
White	0.661					-0.009	-1.04
<b>Characteristics of Unemployed:</b>							
Hispanic	0.099	0.011	0.64	0.011	0.65	0.011	0.64
Not Hispanic	0.901	-0.001	-0.64	-0.001	-0.65	-0.001	-0.64
Male	0.552	0.004	0.88	0.004	0.90	0.004	0.86
Female	0.448	-0.005	-0.88	-0.005	-0.90	-0.005	-0.86
Age less than 22	0.215	-0.004	-0.45	-0.003	-0.39	-0.002	-0.30
Age 22-24	0.100	-0.004	-0.23	-0.002	-0.11	-0.005	-0.30
Age 25-34	0.223	0.009	0.60	0.009	0.63	0.009	0.58
Age 35-44	0.173	-0.002	-0.24	-0.003	-0.39	-0.002	-0.27
Age 45-54	0.156	-0.001	-0.09	-0.001	-0.15	-0.002	-0.15
Age 55-59	0.061	0.011	0.40	0.011	0.39	0.014	0.49
Age 60-64	0.039	-0.018	-0.51	-0.017	-0.49	-0.019	-0.55
Age 65+	0.034	-0.009	-0.30	-0.011	-0.37	-0.010	-0.34
<b>Occupation of Unemployed:</b>							
Management, Business, Financial	0.073	-0.019	-1.29	-0.017	-1.21	-0.020	-1.36
Computers, Engineering, Science	0.030	0.013	0.67	0.014	0.72	0.012	0.65
Education, Legal, Comm Service	0.063	0.019	0.76	0.018	0.70	0.020	0.78
Healthcare Practitioners, Technical	0.017	0.008	0.19	0.008	0.20	0.007	0.17
Service Occupations	0.236	-0.002	-0.12	-0.003	-0.16	-0.002	-0.13
Sales and Office Occupations	0.238	0.009	0.90	0.009	0.93	0.010	0.98
Farming, Fishing, Forestry	0.014	0.025	0.44	0.018	0.31	0.020	0.35
Construction and Extraction	0.115	0.014	0.62	0.014	0.66	0.013	0.65
Installation, Maintenance, Repair	0.030	-0.025	-0.92	-0.026	-0.94	-0.027	-0.96
Production, Trans, Mat Moving	0.180	-0.017	-1.28	-0.017	-1.31	-0.017	-1.29
Military Specific	0.004	-0.001	-0.01	-0.003	-0.04	-0.005	-0.06
<b>Industry of Unemployed:</b>							
Agric., Forestry, Fishing	0.019	0.002	0.04	0.005	0.13	0.007	0.17
Mining	0.009	-0.056	-1.17	-0.065	-1.36	-0.061	-1.29
Utilities	0.004	-0.146	-1.58	-0.143	-1.48	-0.148	-1.57
Construction	0.123	-0.005	-0.17	-0.004	-0.16	-0.004	-0.15
Manufacturing	0.114	0.017	1.10	0.017	1.12	0.017	1.14
Wholesale Trade	0.020	-0.031	-0.78	-0.032	-0.82	-0.034	-0.87



**Table B5 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Retail Trade	0.134	-0.028	-1.69	-0.029	-1.77	-0.029	-1.72
Transportation, Warehousing	0.040	0.028	1.13	0.029	1.21	0.029	1.20
Information	0.027	-0.004	-0.13	-0.006	-0.18	-0.006	-0.17
Finance and Insurance	0.026	0.013	0.28	0.010	0.24	0.012	0.26
Real Estate, Rental, Leasing	0.013	0.020	0.42	0.018	0.40	0.019	0.40
Prof, Scientific, Technical	0.028	0.020	0.60	0.018	0.54	0.019	0.58
Admin, Support, Waste Mgmt	0.085	0.018	1.29	0.017	1.23	0.016	1.23
Educational Services	0.052	-0.004	-0.17	-0.003	-0.16	-0.004	-0.18
Health Care/Social Assistance	0.083	0.009	0.58	0.010	0.64	0.010	0.67
Art, Entertainment, Recreation	0.030	0.014	0.38	0.016	0.41	0.015	0.41
Accommodation, Food Service	0.122	-0.005	-0.28	-0.003	-0.18	-0.004	-0.25
Other Services (Ex Pub Admin)	0.042	-0.038	-1.80	-0.036	-1.76	-0.037	-1.78
Public Administration	0.028	0.057	1.73	0.056	1.70	0.056	1.69
Unemployment rate	5.519	-0.000	-0.56	-0.000	-0.56	-0.000	-0.56
Application Rate	0.175	-0.003	-0.19	-0.001	-0.08	-0.002	-0.12
Alaska	0.024	0.251	25.03	0.249	29.03	0.251	24.55
Alabama	0.024	0.030	2.79	0.028	3.34	0.031	2.84
Arkansas	0.024	-0.013	-3.22	-0.014	-3.73	-0.013	-3.30
Arizona	0.013	0.046	5.29	0.047	6.04	0.046	5.21
Colorado	0.023	-0.014	-2.16	-0.013	-2.46	-0.014	-2.18
Connecticut	0.006	-0.020	-4.21	-0.020	-4.34	-0.020	-4.27
District of Columbia	0.024	-0.005	-0.21	-0.012	-0.74	-0.003	-0.11
Delaware	0.024	-0.020	-3.01	-0.021	-3.81	-0.020	-3.02
Florida	0.023	-0.021	-4.09	-0.022	-4.44	-0.022	-4.12
Georgia	0.024	-0.012	-1.00	-0.015	-1.64	-0.012	-0.97
Hawaii	0.024	-0.034	-0.61	-0.029	-0.54	-0.036	-0.63
Iowa	0.019	-0.022	-3.90	-0.020	-5.39	-0.022	-4.02
Idaho	0.023	-0.010	-1.28	-0.008	-1.50	-0.011	-1.38
Illinois	0.024	-0.023	-8.60	-0.023	-9.51	-0.022	-7.39
Indiana	0.024	-0.022	-8.73	-0.022	-9.72	-0.022	-8.55
Kansas	0.024	-0.015	-4.00	-0.014	-5.64	-0.015	-4.07
Kentucky	0.024	-0.022	-7.01	-0.021	-8.63	-0.023	-7.34
Louisiana	0.024	-0.007	-0.54	-0.010	-1.02	-0.007	-0.47
Massachusetts	0.024	-0.029	-6.80	-0.027	-8.32	-0.028	-6.81
Maryland	0.016	-0.016	-1.43	-0.019	-2.29	-0.016	-1.43
Maine	0.023	-0.021	-2.99	-0.020	-3.70	-0.022	-3.06
Michigan	0.015	-0.013	-5.30	-0.014	-6.41	-0.013	-5.06
Minnesota	0.024	-0.019	-3.58	-0.018	-4.46	-0.019	-3.63
Missouri	0.024	-0.018	-9.91	-0.018	-9.37	-0.018	-9.28
Mississippi	0.024	-0.010	-0.58	-0.014	-1.14	-0.009	-0.55
Montana	0.024	0.061	7.48	0.062	9.62	0.061	6.93
North Carolina	0.024	-0.008	-1.02	-0.010	-1.65	-0.007	-0.99
North Dakota	0.024	0.038	4.51	0.040	5.98	0.038	4.34
Nebraska	0.016	-0.017	-3.33	-0.016	-4.31	-0.017	-3.39
New Hampshire	0.024	-0.026	-3.76	-0.025	-4.84	-0.027	-3.84
New Jersey	0.023	-0.018	-4.34	-0.018	-4.21	-0.018	-4.18
New Mexico	0.003	0.038	2.86	0.035	2.56	0.038	2.84
Nevada	0.024	-0.010	-1.78	-0.010	-1.89	-0.011	-1.82
New York	0.013	-0.018	-4.03	-0.018	-4.77	-0.017	-3.79
Ohio	0.024	-0.021	-11.05	-0.021	-10.45	-0.021	-10.60
Oklahoma	0.024	0.065	9.78	0.062	8.33	0.064	9.79
Oregon	0.005	-0.011	-1.33	-0.010	-1.49	-0.011	-1.42
Pennsylvania	0.024	-0.025	-11.49	-0.024	-12.28	-0.025	-11.09
Rhode Island	0.023	-0.023	-4.55	-0.022	-5.62	-0.023	-4.75
South Carolina	0.024	-0.009	-0.81	-0.012	-1.33	-0.009	-0.77
South Dakota	0.024	0.084	9.64	0.087	12.45	0.084	9.11

**Table B5 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Tennessee	0.024	-0.022	-5.74	-0.022	-6.41	-0.022	-6.03
Utah	0.019	0.001	0.20	0.003	0.60	0.001	0.17
Virginia	0.024	0.011	2.29	0.011	2.97	0.012	2.36
Washington	0.004	-0.007	-0.66	-0.005	-0.56	-0.007	-0.70
Wisconsin	0.024	-0.019	-4.49	-0.018	-6.04	-0.019	-4.63
West Virginia	0.024	-0.025	-4.63	-0.023	-5.64	-0.025	-4.68
Wyoming	0.024	0.013	1.79	0.014	2.71	0.012	1.77
Time = 2001	0.054	-0.005	-2.50	-0.005	-2.63	-0.005	-2.64
Time = 2002	0.058	-0.004	-2.53	-0.004	-2.65	-0.004	-2.63
Time = 2003	0.058	-0.003	-2.56	-0.003	-2.47	-0.003	-2.57
Time = 2004	0.058	-0.002	-1.74	-0.002	-1.64	-0.002	-1.68
Time = 2005	0.055	0.000	0.31	0.001	0.45	0.000	0.34
Time = 2006	0.054	0.003	1.43	0.003	1.49	0.003	1.41
Time = 2007	0.050	0.000	0.20	0.000	0.21	0.000	0.16
Time = 2008	0.050	0.000	0.39	0.000	0.36	0.000	0.30
Time = 2009	0.048	-0.003	-0.97	-0.003	-0.95	-0.003	-0.97
Time = 2010	0.049	-0.001	-0.33	-0.001	-0.30	-0.001	-0.31
Time = 2011	0.049	0.000	0.23	0.001	0.25	0.001	0.26
Time = 2012	0.050	0.003	1.60	0.003	1.57	0.003	1.59
Time = 2013	0.051	0.002	1.71	0.002	1.77	0.002	1.73
Time = 2014	0.054	0.002	1.90	0.002	1.87	0.002	1.96
Time = 2015	0.053	0.002	2.00	0.002	2.06	0.002	2.07
Time = 2016	0.053	0.001	0.61	0.001	0.64	0.001	0.67
Time = 2017	0.051	0.002	1.04	0.002	1.04	0.002	1.15
Time = 2018	0.055	0.001	0.58	0.001	0.55	0.001	0.61
Time = 2019	0.053	0.002	1.06	0.002	1.03	0.002	1.04

**Table B6 Alternative Model Specifications of the AAPI Share of UI Recipients (n = 799)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Intercept (Dep Variable Mean)	0.038	0.038		0.038		0.038	
<b>Share of Unemployed:</b>							
Native American	0.035	-0.021	-1.02	-0.022	-1.06	-0.022	-1.07
AAPI	0.039	0.022	0.47	0.010	0.27	0.024	0.53
Black	0.203	-0.004	-0.26	-0.005	-0.30	-0.002	-0.15
White	0.723	0.001	0.22	0.002	0.40	0.000	0.09
<b>Share of Population:</b>							
Native American	0.015	0.078	1.05			0.081	1.11
AAPI	0.046	-0.111	-0.65			-0.117	-0.73
Black	0.116	0.105	3.46			0.110	3.51
White	0.823	-0.010	-1.02			-0.011	-1.11
<b>Share of Labor Force:</b>							
Native American	0.014			0.086	1.28		
AAPI	0.046			-0.047	-0.58		
Black	0.114			0.087	4.02		
White	0.827			-0.011	-1.99		
<b>Labor Force Participation Rate:</b>							
Native American	0.626					0.001	0.42
AAPI	0.685					-0.006	-0.70
Black	0.661					-0.016	-1.66
White	0.661					0.021	1.43
<b>Characteristics of Unemployed:</b>							
Hispanic	0.099	0.069	2.54	0.069	2.58	0.070	2.56
Not Hispanic	0.901	-0.008	-2.54	-0.008	-2.58	-0.008	-2.56
Male	0.552	0.007	0.84	0.007	0.84	0.007	0.86
Female	0.448	-0.008	-0.84	-0.008	-0.84	-0.008	-0.86
Age less than 22	0.215	0.011	0.71	0.010	0.66	0.009	0.61
Age 22-24	0.100	-0.001	-0.08	-0.003	-0.17	0.004	0.20
Age 25-34	0.223	-0.007	-0.36	-0.007	-0.40	-0.005	-0.26
Age 35-44	0.173	-0.016	-0.87	-0.014	-0.76	-0.018	-1.03
Age 45-54	0.156	0.020	1.41	0.020	1.37	0.021	1.43
Age 55-59	0.061	-0.013	-0.48	-0.008	-0.31	-0.017	-0.65
Age 60-64	0.039	-0.011	-0.33	-0.012	-0.34	-0.008	-0.24
Age 65+	0.034	0.003	0.07	0.003	0.07	-0.002	-0.04
<b>Occupation of Unemployed:</b>							
Management, Business, Financial	0.073	0.025	0.88	0.024	0.83	0.026	0.91
Computers, Engineering, Science	0.030	-0.066	-1.81	-0.065	-1.76	-0.065	-1.77
Education, Legal, Comm Service	0.063	-0.017	-0.56	-0.016	-0.55	-0.015	-0.51
Healthcare Practitioners, Technical	0.017	0.023	0.45	0.026	0.54	0.026	0.50
Service Occupations	0.236	-0.001	-0.10	-0.001	-0.06	-0.003	-0.23
Sales and Office Occupations	0.238	-0.001	-0.10	-0.002	-0.14	-0.001	-0.11
Farming, Fishing, Forestry	0.014	0.089	1.42	0.084	1.42	0.085	1.40
Construction and Extraction	0.115	-0.032	-0.78	-0.032	-0.79	-0.031	-0.74
Installation, Maintenance, Repair	0.030	-0.036	-1.20	-0.039	-1.31	-0.033	-1.07
Production, Trans, Mat Moving	0.180	0.022	1.23	0.022	1.20	0.022	1.18
Military Specific	0.004	0.249	1.41	0.258	1.42	0.247	1.40
<b>Industry of Unemployed:</b>							
Agric., Forestry, Fishing	0.019	-0.142	-1.96	-0.141	-1.97	-0.143	-1.99
Mining	0.009	-0.074	-1.35	-0.080	-1.45	-0.068	-1.27
Utilities	0.004	0.043	0.46	0.042	0.46	0.063	0.64
Construction	0.123	-0.004	-0.12	-0.004	-0.13	-0.006	-0.17
Manufacturing	0.114	0.013	0.55	0.014	0.57	0.011	0.48
Wholesale Trade	0.020	-0.020	-0.41	-0.018	-0.41	-0.012	-0.25

**Table B6 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Retail Trade	0.134	0.020	1.25	0.020	1.28	0.020	1.27
Transportation, Warehousing	0.040	-0.046	-1.08	-0.043	-1.07	-0.047	-1.15
Information	0.027	0.087	2.00	0.088	2.00	0.086	1.95
Finance and Insurance	0.026	-0.020	-0.45	-0.021	-0.45	-0.021	-0.47
Real Estate, Rental, Leasing	0.013	-0.074	-1.34	-0.079	-1.40	-0.063	-1.15
Prof, Scientific, Technical	0.028	0.042	1.07	0.042	1.06	0.046	1.13
Admin, Support, Waste Mgmt	0.085	0.002	0.08	0.001	0.06	0.003	0.14
Educational Services	0.052	0.018	0.67	0.015	0.55	0.022	0.78
Health Care/Social Assistance	0.083	-0.020	-0.73	-0.021	-0.79	-0.020	-0.76
Art, Entertainment, Recreation	0.030	-0.000	-0.00	0.000	0.00	-0.002	-0.10
Accommodation, Food Service	0.122	0.000	0.02	0.001	0.07	-0.002	-0.11
Other Services (Ex Pub Admin)	0.042	0.017	0.74	0.017	0.77	0.019	0.82
Public Administration	0.028	-0.018	-0.63	-0.019	-0.65	-0.018	-0.62
Unemployment rate	5.519	0.002	1.28	0.002	1.28	0.002	1.29
Application Rate	0.175	0.013	0.42	0.015	0.47	0.011	0.37
Alaska	0.024	0.050	7.52	0.047	8.74	0.051	7.48
Alabama	0.024	-0.029	-3.30	-0.024	-3.18	-0.030	-3.47
Arkansas	0.024	-0.016	-3.06	-0.014	-3.20	-0.016	-3.13
Arizona	0.013	-0.012	-1.02	-0.013	-1.23	-0.011	-0.93
Colorado	0.023	-0.011	-1.33	-0.012	-1.65	-0.011	-1.45
Connecticut	0.006	-0.024	-4.86	-0.024	-5.30	-0.023	-4.84
District of Columbia	0.024	-0.043	-2.11	-0.027	-1.70	-0.052	-2.52
Delaware	0.024	-0.035	-7.74	-0.034	-8.19	-0.036	-7.90
Florida	0.023	-0.026	-4.46	-0.025	-4.99	-0.026	-4.40
Georgia	0.024	-0.044	-4.18	-0.040	-4.45	-0.046	-4.39
Hawaii	0.024	0.717	6.63	0.679	10.70	0.720	7.09
Iowa	0.019	-0.018	-2.52	-0.019	-3.71	-0.018	-2.48
Idaho	0.023	-0.012	-1.34	-0.013	-2.12	-0.010	-1.11
Illinois	0.024	-0.022	-5.50	-0.021	-6.19	-0.023	-5.37
Indiana	0.024	-0.029	-5.41	-0.029	-7.94	-0.030	-5.78
Kansas	0.024	-0.017	-3.27	-0.017	-4.70	-0.017	-3.45
Kentucky	0.024	-0.031	-5.50	-0.031	-8.16	-0.029	-5.43
Louisiana	0.024	-0.040	-4.16	-0.033	-3.69	-0.042	-4.52
Massachusetts	0.024	0.001	0.25	-0.001	-0.22	0.001	0.14
Maryland	0.016	-0.049	-5.52	-0.046	-6.70	-0.050	-5.83
Maine	0.023	-0.015	-1.71	-0.016	-2.60	-0.013	-1.40
Michigan	0.015	-0.031	-7.18	-0.029	-7.80	-0.032	-7.04
Minnesota	0.024	-0.001	-0.26	-0.003	-0.61	-0.001	-0.22
Missouri	0.024	-0.015	-3.40	-0.014	-4.67	-0.015	-3.47
Mississippi	0.024	-0.057	-4.13	-0.050	-4.04	-0.059	-4.33
Montana	0.024	-0.012	-1.00	-0.012	-1.43	-0.008	-0.71
North Carolina	0.024	-0.042	-5.48	-0.040	-5.96	-0.043	-5.66
North Dakota	0.024	-0.009	-0.65	-0.009	-0.78	-0.007	-0.52
Nebraska	0.016	-0.016	-1.84	-0.016	-2.55	-0.016	-1.93
New Hampshire	0.024	-0.006	-0.65	-0.008	-0.98	-0.005	-0.49
New Jersey	0.023	0.002	0.28	0.000	0.01	0.002	0.20
New Mexico	0.003	-0.049	-2.63	-0.049	-3.12	-0.049	-2.69
Nevada	0.024	0.049	6.31	0.045	5.85	0.049	6.35
New York	0.013	0.002	0.22	0.001	0.20	0.000	0.01
Ohio	0.024	-0.032	-8.19	-0.030	-10.91	-0.032	-8.34
Oklahoma	0.024	-0.022	-2.69	-0.021	-3.71	-0.022	-2.78
Oregon	0.005	0.013	2.68	0.010	2.07	0.014	2.85
Pennsylvania	0.024	-0.032	-6.59	-0.031	-8.11	-0.032	-7.06
Rhode Island	0.023	-0.023	-3.69	-0.024	-4.46	-0.022	-3.75
South Carolina	0.024	-0.050	-5.00	-0.045	-5.25	-0.051	-5.13
South Dakota	0.024	-0.013	-0.96	-0.013	-1.11	-0.011	-0.76
Tennessee	0.024	-0.024	-5.80	-0.023	-6.77	-0.023	-5.60

**Table B6 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Utah	0.019	0.033	3.69	0.032	4.13	0.034	3.84
Virginia	0.024	-0.012	-2.55	-0.012	-3.35	-0.013	-2.83
Washington	0.004	0.035	3.71	0.030	4.22	0.036	4.04
Wisconsin	0.024	-0.020	-2.73	-0.021	-3.84	-0.021	-2.92
West Virginia	0.024	-0.019	-2.00	-0.018	-2.44	-0.017	-1.78
Wyoming	0.024	-0.005	-0.41	-0.005	-0.55	-0.004	-0.34
Time = 2001	0.054	-0.006	-1.07	-0.006	-1.10	-0.006	-1.05
Time = 2002	0.058	-0.003	-0.79	-0.003	-0.80	-0.003	-0.77
Time = 2003	0.058	-0.000	-0.04	0.000	0.02	0.000	0.00
Time = 2004	0.058	0.001	0.23	0.001	0.32	0.000	0.19
Time = 2005	0.055	0.001	0.46	0.002	0.54	0.001	0.46
Time = 2006	0.054	-0.001	-0.29	-0.000	-0.20	-0.000	-0.20
Time = 2007	0.050	-0.001	-0.44	-0.001	-0.39	-0.001	-0.40
Time = 2008	0.050	-0.004	-2.15	-0.004	-2.18	-0.004	-2.08
Time = 2009	0.048	-0.007	-1.24	-0.007	-1.23	-0.007	-1.26
Time = 2010	0.049	-0.008	-1.58	-0.008	-1.52	-0.008	-1.62
Time = 2011	0.049	-0.006	-1.73	-0.006	-1.64	-0.007	-1.81
Time = 2012	0.050	-0.001	-0.52	-0.001	-0.48	-0.001	-0.56
Time = 2013	0.051	-0.001	-0.41	-0.001	-0.40	-0.001	-0.60
Time = 2014	0.054	0.002	0.69	0.001	0.69	0.001	0.62
Time = 2015	0.053	0.005	1.49	0.005	1.48	0.005	1.48
Time = 2016	0.053	0.008	1.98	0.008	2.04	0.008	1.97
Time = 2017	0.051	0.008	1.69	0.007	1.68	0.008	1.72
Time = 2018	0.055	0.007	1.52	0.007	1.48	0.007	1.54
Time = 2019	0.053	0.006	1.33	0.006	1.28	0.007	1.35

**Table B7 Alternative Model Specifications of the Black Share of UI Recipients (n = 799)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Intercept (Dep Variable Mean)	0.204	0.204		0.204		0.204	
<b>Share of Unemployed:</b>							
Native American	0.035	-0.101	-3.60	-0.087	-2.82	-0.098	-3.48
AAPI	0.039	-0.069	-1.43	-0.076	-1.51	-0.070	-1.40
Black	0.203	0.058	1.87	0.055	1.86	0.057	1.88
White	0.723	-0.008	-0.93	-0.007	-0.91	-0.008	-0.95
<b>Share of Population:</b>							
Native American	0.015	0.175	1.34			0.161	1.24
AAPI	0.046	0.332	2.05			0.349	2.11
Black	0.116	0.404	5.64			0.406	5.58
White	0.823	-0.079	-5.29			-0.080	-5.19
<b>Share of Labor Force:</b>							
Native American	0.014			0.141	0.95		
AAPI	0.046			0.314	2.23		
Black	0.114			0.344	6.49		
White	0.827			-0.067	-5.21		
<b>Labor Force Participation Rate:</b>							
Native American	0.626					-0.006	-0.84
AAPI	0.685					0.015	1.26
Black	0.661					-0.001	-0.11
White	0.661					-0.009	-0.57
<b>Characteristics of Unemployed:</b>							
Hispanic	0.099	0.030	0.82	0.033	0.88	0.029	0.79
Not Hispanic	0.901	-0.003	-0.82	-0.004	-0.88	-0.003	-0.79
Male	0.552	-0.007	-0.54	-0.006	-0.47	-0.006	-0.51
Female	0.448	0.008	0.54	0.007	0.47	0.008	0.51
Age less than 22	0.215	-0.022	-1.03	-0.022	-1.07	-0.023	-1.04
Age 22-24	0.100	0.016	0.57	0.006	0.22	0.015	0.51
Age 25-34	0.223	-0.022	-1.00	-0.025	-1.17	-0.024	-1.08
Age 35-44	0.173	0.043	1.48	0.047	1.59	0.047	1.58
Age 45-54	0.156	0.008	0.26	0.007	0.25	0.006	0.22
Age 55-59	0.061	-0.026	-0.61	-0.011	-0.25	-0.027	-0.64
Age 60-64	0.039	0.095	1.85	0.089	1.72	0.097	1.90
Age 65+	0.034	-0.082	-1.32	-0.069	-1.09	-0.077	-1.27
<b>Occupation of Unemployed:</b>							
Management, Business, Financial	0.073	-0.067	-1.73	-0.070	-1.84	-0.067	-1.73
Computers, Engineering, Science	0.030	0.110	2.17	0.110	2.25	0.110	2.20
Education, Legal, Comm Service	0.063	-0.062	-1.20	-0.060	-1.16	-0.066	-1.28
Healthcare Practitioners, Technical	0.017	0.052	0.65	0.049	0.61	0.054	0.67
Service Occupations	0.236	0.006	0.20	0.007	0.24	0.007	0.28
Sales and Office Occupations	0.238	-0.034	-1.60	-0.034	-1.60	-0.036	-1.65
Farming, Fishing, Forestry	0.014	-0.067	-0.66	-0.067	-0.65	-0.057	-0.57
Construction and Extraction	0.115	0.040	0.70	0.034	0.62	0.044	0.79
Installation, Maintenance, Repair	0.030	0.056	0.88	0.049	0.77	0.053	0.84
Production, Trans, Mat Moving	0.180	0.033	1.20	0.036	1.28	0.030	1.13
Military Specific	0.004	0.121	0.69	0.130	0.71	0.126	0.69
<b>Industry of Unemployed:</b>							
Agric., Forestry, Fishing	0.019	0.051	0.68	0.052	0.67	0.045	0.59
Mining	0.009	0.008	0.10	-0.005	-0.07	0.006	0.07
Utilities	0.004	0.149	1.19	0.122	0.98	0.135	1.06
Construction	0.123	-0.036	-0.60	-0.036	-0.60	-0.037	-0.62
Manufacturing	0.114	-0.038	-1.20	-0.036	-1.06	-0.035	-1.11
Wholesale Trade	0.020	-0.014	-0.17	-0.023	-0.28	-0.015	-0.18
Retail Trade	0.134	0.004	0.14	0.007	0.23	0.007	0.21

**Table B7 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Transportation, Warehousing	0.040	-0.067	-1.60	-0.065	-1.61	-0.067	-1.59
Information	0.027	-0.003	-0.05	-0.007	-0.11	-0.001	-0.01
Finance and Insurance	0.026	0.030	0.52	0.027	0.47	0.033	0.58
Real Estate, Rental, Leasing	0.013	0.032	0.44	0.021	0.29	0.022	0.29
Prof, Scientific, Technical	0.028	0.037	0.46	0.037	0.46	0.033	0.41
Admin, Support, Waste Mgmt	0.085	0.024	0.69	0.023	0.65	0.025	0.70
Educational Services	0.052	-0.029	-0.61	-0.029	-0.60	-0.033	-0.71
Health Care/Social Assistance	0.083	-0.002	-0.05	-0.000	-0.01	-0.002	-0.06
Art, Entertainment, Recreation	0.030	-0.014	-0.23	-0.018	-0.30	-0.010	-0.17
Accommodation, Food Service	0.122	0.047	1.19	0.050	1.26	0.046	1.20
Other Services (Ex Pub Admin)	0.042	0.075	1.46	0.071	1.41	0.073	1.41
Public Administration	0.028	-0.049	-0.81	-0.058	-0.97	-0.050	-0.83
Unemployment rate	5.519	-0.006	-3.73	-0.006	-3.57	-0.006	-3.75
Application Rate	0.175	-0.116	-2.15	-0.111	-2.05	-0.117	-2.19
Alaska	0.024	-0.106	-6.35	-0.108	-7.63	-0.105	-6.20
Alabama	0.024	0.149	9.80	0.160	11.19	0.148	9.70
Arkansas	0.024	0.086	13.07	0.085	13.54	0.086	13.03
Arizona	0.013	-0.087	-5.12	-0.096	-5.62	-0.086	-5.10
Colorado	0.023	-0.090	-6.74	-0.096	-7.04	-0.088	-6.64
Connecticut	0.006	0.010	0.99	0.005	0.56	0.009	0.96
District of Columbia	0.024	0.328	8.53	0.390	11.50	0.329	8.46
Delaware	0.024	0.169	20.71	0.170	19.98	0.169	20.69
Florida	0.023	0.033	3.97	0.029	3.85	0.033	3.98
Georgia	0.024	0.214	11.71	0.225	12.83	0.214	11.67
Hawaii	0.024	-0.362	-3.40	-0.345	-3.84	-0.372	-3.44
Iowa	0.019	-0.089	-7.58	-0.099	-8.77	-0.089	-7.48
Idaho	0.023	-0.112	-7.20	-0.124	-8.35	-0.111	-7.02
Illinois	0.024	0.031	7.78	0.036	9.65	0.032	7.16
Indiana	0.024	-0.019	-2.49	-0.023	-3.27	-0.018	-2.30
Kansas	0.024	0.010	1.25	0.005	0.61	0.011	1.31
Kentucky	0.024	-0.040	-4.47	-0.048	-5.99	-0.040	-4.39
Louisiana	0.024	0.218	10.77	0.237	12.29	0.217	10.72
Massachusetts	0.024	-0.085	-11.36	-0.088	-11.77	-0.084	-11.19
Maryland	0.016	0.155	9.02	0.166	9.71	0.155	8.96
Maine	0.023	-0.113	-7.74	-0.125	-9.49	-0.114	-7.62
Michigan	0.015	-0.005	-0.79	-0.002	-0.33	-0.005	-0.78
Minnesota	0.024	-0.091	-11.43	-0.097	-13.26	-0.090	-11.06
Missouri	0.024	0.037	6.13	0.034	6.24	0.037	6.05
Mississippi	0.024	0.274	11.71	0.294	12.98	0.273	11.65
Montana	0.024	-0.116	-7.30	-0.126	-8.69	-0.116	-6.95
North Carolina	0.024	0.150	16.61	0.156	17.15	0.150	16.64
North Dakota	0.024	-0.109	-7.57	-0.116	-8.74	-0.108	-7.24
Nebraska	0.016	-0.050	-4.88	-0.057	-5.61	-0.050	-4.75
New Hampshire	0.024	-0.122	-9.09	-0.133	-10.76	-0.122	-8.97
New Jersey	0.023	0.012	1.48	0.012	1.54	0.012	1.45
New Mexico	0.003	-0.127	-5.04	-0.132	-5.39	-0.125	-5.00
Nevada	0.024	-0.050	-4.39	-0.054	-4.76	-0.050	-4.42
New York	0.013	-0.029	-3.04	-0.022	-2.56	-0.029	-2.94
Ohio	0.024	-0.028	-4.82	-0.029	-5.55	-0.028	-4.77
Oklahoma	0.024	-0.026	-2.65	-0.029	-3.10	-0.025	-2.63
Oregon	0.005	-0.083	-6.11	-0.094	-7.60	-0.083	-6.12
Pennsylvania	0.024	-0.017	-2.18	-0.019	-2.42	-0.017	-2.09
Rhode Island	0.023	-0.094	-8.77	-0.103	-9.86	-0.094	-8.75
South Carolina	0.024	0.210	13.92	0.219	15.00	0.209	13.85
South Dakota	0.024	-0.116	-8.41	-0.124	-9.61	-0.117	-8.11
Tennessee	0.024	0.056	8.49	0.052	8.69	0.056	8.33
Utah	0.019	-0.124	-9.11	-0.133	-9.57	-0.123	-9.05

**Table B7 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Virginia	0.024	0.150	14.06	0.156	15.00	0.150	13.83
Washington	0.004	-0.106	-10.58	-0.113	-12.35	-0.107	-10.77
Wisconsin	0.024	-0.021	-1.70	-0.028	-2.33	-0.020	-1.62
West Virginia	0.024	-0.103	-7.62	-0.112	-9.00	-0.104	-7.69
Wyoming	0.024	-0.120	-7.93	-0.130	-9.10	-0.119	-7.74
Time = 2001	0.054	-0.012	-1.91	-0.013	-2.08	-0.012	-1.90
Time = 2002	0.058	-0.010	-2.09	-0.011	-2.26	-0.010	-2.09
Time = 2003	0.058	-0.008	-1.98	-0.008	-2.09	-0.008	-2.01
Time = 2004	0.058	-0.002	-0.64	-0.002	-0.67	-0.002	-0.56
Time = 2005	0.055	0.002	0.64	0.002	0.66	0.002	0.77
Time = 2006	0.054	0.003	1.05	0.003	1.04	0.003	1.04
Time = 2007	0.050	0.005	1.77	0.005	1.80	0.005	1.69
Time = 2008	0.050	0.003	0.86	0.002	0.81	0.002	0.83
Time = 2009	0.048	-0.004	-0.60	-0.004	-0.57	-0.004	-0.63
Time = 2010	0.049	0.000	0.06	0.001	0.12	0.000	0.05
Time = 2011	0.049	0.006	1.29	0.007	1.35	0.006	1.32
Time = 2012	0.050	0.004	1.18	0.005	1.28	0.005	1.19
Time = 2013	0.051	0.006	1.57	0.007	1.75	0.006	1.58
Time = 2014	0.054	0.002	0.65	0.002	0.87	0.002	0.67
Time = 2015	0.053	-0.003	-0.84	-0.003	-0.83	-0.003	-0.84
Time = 2016	0.053	-0.004	-1.15	-0.004	-1.14	-0.004	-1.12
Time = 2017	0.051	0.001	0.36	0.001	0.35	0.001	0.26
Time = 2018	0.055	0.005	1.21	0.006	1.22	0.005	1.17
Time = 2019	0.053	0.007	1.30	0.007	1.28	0.007	1.32



**Table B8 Alternative Model Specifications of the White Share of UI Recipients (n = 799)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Intercept (Dep Variable Mean)	0.729	0.729		0.729		0.729	
Share of Unemployed							
Native American	0.035	0.055	1.18	0.058	1.13	0.056	1.17
AAPI	0.039	0.037	0.52	0.055	0.78	0.038	0.52
Black	0.203	-0.035	-0.99	-0.029	-0.88	-0.035	-1.00
White	0.723	0.005	0.52	0.003	0.27	0.005	0.53
Share of Population							
Native American	0.015	-0.307	-1.45			-0.300	-1.40
AAPI	0.046	-0.225	-1.02			-0.239	-1.10
Black	0.116	-0.492	-4.89			-0.497	-4.82
White	0.823	0.088	4.04			0.089	4.03
Share of Labor Force							
Native American	0.014			-0.357	-1.52		
AAPI	0.046			-0.263	-1.63		
Black	0.114			-0.430	-5.67		
White	0.827			0.080	4.93		
Labor Force Participation Rate							
Native American	0.626					0.002	0.20
AAPI	0.685					-0.012	-0.88
Black	0.661					0.014	0.91
White	0.661					-0.003	-0.17
Characteristics of Unemployed							
Hispanic	0.099	-0.110	-2.79	-0.113	-2.85	-0.110	-2.79
Not Hispanic	0.901	0.012	2.79	0.012	2.85	0.012	2.79
Male	0.552	-0.004	-0.27	-0.005	-0.34	-0.005	-0.30
Female	0.448	0.005	0.27	0.006	0.34	0.006	0.30
Age less than 22	0.215	0.015	0.55	0.016	0.59	0.016	0.57
Age 22-24	0.100	-0.011	-0.27	-0.001	-0.03	-0.013	-0.33
Age 25-34	0.223	0.019	0.64	0.023	0.75	0.020	0.65
Age 35-44	0.173	-0.025	-0.79	-0.030	-0.94	-0.027	-0.82
Age 45-54	0.156	-0.027	-0.73	-0.025	-0.68	-0.026	-0.70
Age 55-59	0.061	0.027	0.54	0.008	0.17	0.030	0.61
Age 60-64	0.039	-0.065	-1.12	-0.060	-1.01	-0.069	-1.17
Age 65+	0.034	0.088	1.11	0.076	0.96	0.089	1.12
Occupation of Unemployed							
Management, Business, Financial	0.073	0.061	1.58	0.064	1.68	0.061	1.58
Computers, Engineering, Science	0.030	-0.057	-1.04	-0.060	-1.15	-0.057	-1.05
Education, Legal, Comm Service	0.063	0.059	0.96	0.057	0.94	0.062	0.99
Healthcare Practitioners, Technical	0.017	-0.082	-0.83	-0.084	-0.86	-0.086	-0.88
Service Occupations	0.236	-0.002	-0.07	-0.003	-0.11	-0.002	-0.07
Sales and Office Occupations	0.238	0.027	0.91	0.027	0.91	0.028	0.92
Farming, Fishing, Forestry	0.014	-0.046	-0.40	-0.035	-0.30	-0.048	-0.42
Construction and Extraction	0.115	-0.021	-0.31	-0.016	-0.24	-0.027	-0.39
Installation, Maintenance, Repair	0.030	0.005	0.07	0.016	0.22	0.007	0.09
Production, Trans, Mat Moving	0.180	-0.038	-1.27	-0.041	-1.35	-0.035	-1.22
Military Specific	0.004	-0.369	-1.74	-0.385	-1.90	-0.368	-1.72
Industry of Unemployed							
Agric., Forestry, Fishing	0.019	0.090	0.93	0.083	0.86	0.091	0.93
Mining	0.009	0.122	1.36	0.150	1.64	0.124	1.39
Utilities	0.004	-0.046	-0.25	-0.021	-0.12	-0.050	-0.26
Construction	0.123	0.044	0.59	0.044	0.59	0.046	0.62
Manufacturing	0.114	0.009	0.23	0.005	0.12	0.007	0.18
Wholesale Trade	0.020	0.064	0.65	0.074	0.75	0.061	0.63

**Table B8 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Retail Trade	0.134	0.005	0.16	0.002	0.08	0.003	0.10
Transportation, Warehousing	0.040	0.085	1.45	0.079	1.42	0.085	1.48
Information	0.027	-0.079	-1.06	-0.075	-1.05	-0.080	-1.07
Finance and Insurance	0.026	-0.022	-0.29	-0.017	-0.23	-0.023	-0.30
Real Estate, Rental, Leasing	0.013	0.022	0.25	0.041	0.48	0.022	0.25
Prof, Scientific, Technical	0.028	-0.100	-1.25	-0.097	-1.21	-0.098	-1.23
Admin, Support, Waste Mgmt	0.085	-0.043	-1.14	-0.041	-1.04	-0.044	-1.14
Educational Services	0.052	0.014	0.24	0.017	0.28	0.015	0.25
Health Care/Social Assistance	0.083	0.013	0.26	0.012	0.24	0.012	0.25
Art, Entertainment, Recreation	0.030	-0.000	-0.01	0.002	0.03	-0.003	-0.04
Accommodation, Food Service	0.122	-0.042	-1.03	-0.048	-1.18	-0.040	-0.98
Other Services (Ex Pub Admin)	0.042	-0.055	-0.96	-0.053	-0.96	-0.055	-0.96
Public Administration	0.028	0.010	0.16	0.020	0.35	0.012	0.20
Unemployment rate	5.519	0.004	1.82	0.004	1.75	0.004	1.83
Application Rate	0.175	0.105	1.77	0.098	1.65	0.107	1.81
Alaska	0.024	-0.195	-9.77	-0.188	-10.74	-0.197	-9.61
Alabama	0.024	-0.150	-8.68	-0.164	-10.12	-0.149	-8.59
Arkansas	0.024	-0.056	-7.33	-0.057	-7.75	-0.056	-7.29
Arizona	0.013	0.052	2.69	0.062	3.34	0.051	2.62
Colorado	0.023	0.115	7.04	0.121	7.72	0.114	6.98
Connecticut	0.006	0.035	3.41	0.039	4.09	0.035	3.40
District of Columbia	0.024	-0.279	-5.67	-0.351	-9.15	-0.275	-5.47
Delaware	0.024	-0.114	-10.87	-0.114	-10.92	-0.114	-10.74
Florida	0.023	0.014	1.40	0.018	1.86	0.014	1.36
Georgia	0.024	-0.157	-6.79	-0.169	-8.06	-0.157	-6.64
Hawaii	0.024	-0.321	-2.22	-0.305	-2.78	-0.312	-2.17
Iowa	0.019	0.129	8.24	0.138	10.51	0.129	8.10
Idaho	0.023	0.134	6.78	0.145	8.71	0.132	6.51
Illinois	0.024	0.013	2.04	0.007	1.26	0.014	1.94
Indiana	0.024	0.071	7.24	0.074	9.29	0.070	7.21
Kansas	0.024	0.021	1.98	0.026	2.84	0.021	1.94
Kentucky	0.024	0.093	8.19	0.100	11.27	0.092	7.90
Louisiana	0.024	-0.171	-7.65	-0.193	-9.58	-0.169	-7.56
Massachusetts	0.024	0.112	13.17	0.117	13.91	0.112	12.96
Maryland	0.016	-0.090	-4.17	-0.101	-5.23	-0.089	-4.05
Maine	0.023	0.150	7.22	0.161	9.78	0.149	6.91
Michigan	0.015	0.049	7.59	0.045	6.89	0.050	7.72
Minnesota	0.024	0.111	9.96	0.118	12.78	0.110	9.76
Missouri	0.024	-0.004	-0.44	-0.002	-0.27	-0.004	-0.50
Mississippi	0.024	-0.207	-7.22	-0.231	-8.74	-0.205	-7.13
Montana	0.024	0.067	2.93	0.075	4.11	0.064	2.66
North Carolina	0.024	-0.101	-7.86	-0.106	-8.43	-0.100	-7.83
North Dakota	0.024	0.079	3.43	0.084	4.32	0.077	3.19
Nebraska	0.016	0.083	5.42	0.089	6.73	0.083	5.37
New Hampshire	0.024	0.155	8.17	0.165	10.56	0.153	7.96
New Jersey	0.023	0.003	0.22	0.005	0.44	0.004	0.27
New Mexico	0.003	0.137	4.56	0.146	5.32	0.136	4.52
Nevada	0.024	0.011	0.74	0.018	1.34	0.011	0.77
New York	0.013	0.045	3.33	0.039	3.78	0.046	3.28
Ohio	0.024	0.081	12.33	0.080	14.97	0.081	12.33
Oklahoma	0.024	-0.017	-1.17	-0.012	-0.89	-0.017	-1.19
Oregon	0.005	0.081	5.37	0.094	6.91	0.081	5.32
Pennsylvania	0.024	0.074	8.23	0.074	8.68	0.073	8.34
Rhode Island	0.023	0.140	12.35	0.149	14.19	0.139	12.29
South Carolina	0.024	-0.151	-8.19	-0.162	-9.16	-0.150	-8.12
South Dakota	0.024	0.046	2.01	0.050	2.57	0.044	1.83
Tennessee	0.024	-0.010	-1.64	-0.007	-1.14	-0.011	-1.56

**Table B8 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Utah	0.019	0.089	4.82	0.098	5.72	0.087	4.75
Virginia	0.024	-0.149	-12.31	-0.155	-14.42	-0.148	-12.04
Washington	0.004	0.078	5.77	0.088	6.79	0.078	5.83
Wisconsin	0.024	0.061	4.18	0.067	5.20	0.060	4.19
West Virginia	0.024	0.146	7.68	0.154	9.87	0.146	7.48
Wyoming	0.024	0.112	5.03	0.121	6.44	0.111	4.91
Time = 2001	0.054	0.024	3.06	0.025	3.23	0.024	3.04
Time = 2002	0.058	0.017	3.09	0.018	3.23	0.017	3.09
Time = 2003	0.058	0.011	2.35	0.011	2.34	0.011	2.37
Time = 2004	0.058	0.004	0.93	0.004	0.89	0.004	0.88
Time = 2005	0.055	-0.004	-0.92	-0.004	-1.05	-0.004	-1.02
Time = 2006	0.054	-0.005	-1.53	-0.005	-1.71	-0.005	-1.55
Time = 2007	0.050	-0.004	-1.16	-0.005	-1.28	-0.004	-1.11
Time = 2008	0.050	0.001	0.34	0.001	0.37	0.001	0.38
Time = 2009	0.048	0.014	1.78	0.014	1.72	0.014	1.80
Time = 2010	0.049	0.009	1.22	0.008	1.09	0.009	1.24
Time = 2011	0.049	-0.000	-0.08	-0.001	-0.22	-0.000	-0.07
Time = 2012	0.050	-0.006	-1.43	-0.007	-1.54	-0.006	-1.42
Time = 2013	0.051	-0.007	-1.64	-0.008	-1.83	-0.007	-1.57
Time = 2014	0.054	-0.005	-1.79	-0.006	-1.94	-0.005	-1.75
Time = 2015	0.053	-0.004	-1.27	-0.004	-1.20	-0.004	-1.28
Time = 2016	0.053	-0.005	-1.16	-0.004	-1.07	-0.005	-1.21
Time = 2017	0.051	-0.011	-2.04	-0.010	-1.95	-0.010	-1.95
Time = 2018	0.055	-0.014	-2.34	-0.013	-2.24	-0.013	-2.30
Time = 2019	0.053	-0.016	-2.38	-0.015	-2.23	-0.016	-2.40

**Table B9 Effects of the Ethnicity Group Shares of Unemployment on the Ethnicity Group Shares of Beneficiaries (ETA 203) Controlling in Separate Models for the Ethnicity Group Shares of Population, Labor Force and Labor Force Participation Rate (n = 852, \*1)**

Control Variable Descriptions	Parameter estimate	Robust standard error	t-statistic
Hispanic			
ETA 203 mean	0.114		
Population control	0.068	0.037	1.82
Labor Force control	0.071	0.037	1.92
Population and LFPR	0.068	0.038	1.79
Not Hispanic			
ETA 203 mean	0.886		
Population control	0.010	0.006	1.82
Labor Force control	0.011	0.006	1.92
Population and LFPR	0.010	0.006	1.79

NOTE: (\*1) See Appendix Tables B10 and B11 for complete models

**Table B10 Alternative Model Specifications of the Hispanic Share of UI Recipients (n = 852)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Intercept (Dep Variable Mean)	0.114	0.114		0.114		0.114	
Share of Unemployed							
Hispanic	0.130	0.068	1.82	0.071	1.92	0.068	1.79
Not Hispanic	0.870	-0.010	-1.82	-0.011	-1.92	-0.010	-1.79
Share of Population							
Hispanic	0.098	0.173	1.10			0.173	1.10
Not Hispanic	0.902	-0.019	-1.10			-0.019	-1.10
Share of Labor Force							
Hispanic	0.104			0.154	1.09		
Not Hispanic	0.896			-0.018	-1.09		
Labor Force Participation Rate							
Hispanic	0.709					0.000	0.01
Not Hispanic	0.652					-0.000	-0.01
Characteristics of Unemployed							
Male	0.552	-0.001	-0.11	-0.002	-0.16	-0.001	-0.11
Female	0.448	0.001	0.11	0.002	0.16	0.001	0.11
Native American	0.037	-0.049	-1.10	-0.048	-1.10	-0.049	-1.09
AAPI	0.039	0.066	1.57	0.068	1.67	0.066	1.58
Black	0.196	0.045	1.64	0.045	1.64	0.045	1.64
White	0.728	-0.013	-1.66	-0.013	-1.68	-0.013	-1.66
Age less than 22	0.212	-0.011	-0.72	-0.012	-0.77	-0.011	-0.72
Age 22-24	0.099	0.030	1.21	0.029	1.15	0.030	1.21
Age 25-34	0.223	-0.034	-1.63	-0.034	-1.63	-0.034	-1.65
Age 35-44	0.173	-0.051	-2.11	-0.052	-2.10	-0.051	-2.10
Age 45-54	0.157	0.085	3.21	0.085	3.16	0.085	3.19
Age 55-59	0.062	0.003	0.06	0.006	0.10	0.003	0.06
Age 60-64	0.040	-0.003	-0.05	0.002	0.04	-0.003	-0.05
Age 65+	0.034	0.069	1.09	0.073	1.17	0.069	1.11
Occupation of Unemployed							
Management, Business, Financial	0.076	0.012	0.36	0.011	0.34	0.012	0.36
Computers, Engineering, Science	0.031	-0.064	-0.88	-0.059	-0.82	-0.064	-0.87
Education, Legal, Comm Service	0.065	-0.012	-0.23	-0.011	-0.21	-0.012	-0.23
Healthcare Practitioners, Technical	0.017	-0.114	-2.00	-0.115	-1.98	-0.114	-1.99
Service Occupations	0.234	0.052	2.00	0.051	1.98	0.052	1.95
Sales and Office Occupations	0.240	-0.012	-0.58	-0.012	-0.60	-0.012	-0.58
Farming, Fishing, Forestry	0.015	0.018	0.13	0.016	0.12	0.018	0.13
Construction and Extraction	0.114	-0.040	-0.81	-0.041	-0.83	-0.040	-0.80
Installation, Maintenance, Repair	0.029	-0.050	-0.82	-0.047	-0.76	-0.050	-0.80
Production, Trans, Mat Moving	0.175	-0.004	-0.20	-0.003	-0.16	-0.004	-0.20
Military Specific	0.004	0.236	1.87	0.237	1.90	0.236	1.88
Industry of Unemployed							
Agric., Forestry, Fishing	0.019	0.052	0.53	0.048	0.47	0.052	0.53
Mining	0.008	-0.034	-0.42	-0.036	-0.44	-0.034	-0.42
Utilities	0.004	-0.147	-1.50	-0.146	-1.52	-0.147	-1.50
Construction	0.123	0.068	1.54	0.070	1.61	0.068	1.54
Manufacturing	0.111	0.026	1.02	0.024	0.94	0.026	1.02
Wholesale Trade	0.021	-0.021	-0.28	-0.020	-0.27	-0.021	-0.28
Retail Trade	0.134	-0.014	-0.50	-0.015	-0.55	-0.014	-0.52
Transportation, Warehousing	0.040	-0.038	-0.78	-0.036	-0.75	-0.038	-0.77
Information	0.028	0.043	0.53	0.042	0.52	0.043	0.53
Finance and Insurance	0.027	-0.091	-1.44	-0.089	-1.40	-0.091	-1.45
Real Estate, Rental, Leasing	0.013	0.090	1.30	0.094	1.35	0.090	1.31
Prof, Scientific, Technical	0.029	0.069	0.93	0.066	0.90	0.069	0.93
Admin, Support, Waste Mgmt	0.085	-0.052	-1.34	-0.054	-1.36	-0.052	-1.35

**Table B10 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Educational Services	0.053	-0.012	-0.26	-0.012	-0.26	-0.012	-0.26
Health Care/Social Assistance	0.084	0.010	0.28	0.010	0.27	0.010	0.28
Art, Entertainment, Recreation	0.030	0.077	1.62	0.076	1.61	0.077	1.62
Accommodation, Food Service	0.119	-0.035	-0.94	-0.033	-0.86	-0.035	-0.92
Other Services (Ex Pub Admin)	0.043	-0.054	-1.08	-0.055	-1.10	-0.054	-1.08
Public Administration	0.028	-0.040	-0.87	-0.039	-0.84	-0.040	-0.87
Unemployment rate	5.598	-0.000	-0.13	-0.000	-0.14	-0.000	-0.13
Application Rate	0.172	0.112	2.63	0.112	2.67	0.112	2.62
Alaska	0.022	-0.062	-3.91	-0.063	-4.01	-0.062	-3.91
Alabama	0.018	-0.074	-7.37	-0.075	-8.02	-0.074	-7.19
Arkansas	0.022	-0.086	-15.34	-0.087	-17.47	-0.086	-14.95
Arizona	0.022	0.254	8.72	0.256	9.51	0.254	8.73
California	0.022	0.233	6.46	0.236	6.97	0.233	6.46
Colorado	0.022	0.108	9.02	0.110	10.67	0.108	8.99
Connecticut	0.022	0.022	5.23	0.023	5.33	0.022	4.85
District of Columbia	0.020	-0.039	-1.70	-0.040	-1.73	-0.039	-1.70
Delaware	0.022	-0.061	-11.07	-0.062	-12.45	-0.061	-10.95
Florida	0.022	0.160	7.67	0.161	7.78	0.160	7.64
Georgia	0.022	-0.110	-9.64	-0.110	-9.75	-0.110	-9.66
Hawaii	0.018	-0.092	-2.94	-0.094	-3.13	-0.092	-2.95
Iowa	0.019	-0.046	-3.82	-0.046	-3.89	-0.046	-3.79
Idaho	0.022	0.032	3.62	0.032	3.59	0.032	3.63
Illinois	0.022	0.046	5.50	0.046	5.48	0.046	5.50
Indiana	0.022	-0.040	-5.94	-0.040	-6.46	-0.040	-5.96
Kansas	0.001	0.004	0.44	0.004	0.41	0.004	0.44
Kentucky	0.008	-0.059	-5.15	-0.059	-5.35	-0.059	-5.15
Louisiana	0.021	-0.070	-5.98	-0.070	-6.30	-0.070	-5.98
Massachusetts	0.022	0.011	1.83	0.011	1.80	0.011	1.79
Maryland	0.022	-0.067	-7.10	-0.068	-7.34	-0.067	-6.99
Maine	0.015	-0.069	-4.67	-0.070	-4.77	-0.069	-4.63
Michigan	0.021	-0.048	-6.29	-0.048	-6.75	-0.048	-6.40
Minnesota	0.022	-0.056	-4.60	-0.057	-4.83	-0.056	-4.59
Missouri	0.012	-0.061	-6.39	-0.061	-6.73	-0.061	-6.39
Mississippi	0.021	-0.083	-6.13	-0.084	-6.47	-0.083	-6.04
Montana	0.022	-0.056	-3.29	-0.056	-3.34	-0.056	-3.26
North Carolina	0.022	-0.069	-10.92	-0.071	-11.23	-0.069	-10.61
North Dakota	0.022	-0.047	-2.06	-0.048	-2.10	-0.047	-2.05
Nebraska	0.020	-0.028	-3.13	-0.028	-3.02	-0.028	-3.06
New Hampshire	0.020	-0.043	-2.86	-0.044	-3.02	-0.043	-2.85
New Jersey	0.021	0.083	7.63	0.083	7.44	0.083	7.60
New Mexico	0.021	0.391	8.64	0.397	9.86	0.391	8.66
Nevada	0.022	0.067	3.40	0.065	3.14	0.067	3.41
New York	0.022	0.053	5.05	0.055	6.24	0.053	5.01
Ohio	0.022	-0.058	-6.46	-0.059	-6.86	-0.058	-6.52
Oklahoma	0.018	-0.014	-1.49	-0.014	-1.67	-0.014	-1.49
Oregon	0.022	-0.003	-0.47	-0.004	-0.66	-0.003	-0.47
Pennsylvania	0.022	-0.058	-6.86	-0.058	-6.74	-0.058	-6.68
Rhode Island	0.020	0.068	15.65	0.068	15.92	0.068	14.86
South Carolina	0.019	-0.077	-7.57	-0.078	-8.11	-0.077	-7.56
South Dakota	0.022	-0.039	-1.77	-0.039	-1.80	-0.039	-1.77
Tennessee	0.022	-0.081	-10.64	-0.081	-11.72	-0.081	-10.61
Texas	0.022	0.166	4.20	0.171	4.88	0.166	4.20
Utah	0.022	0.023	2.68	0.023	2.68	0.023	2.68
Virginia	0.022	-0.072	-10.30	-0.073	-11.38	-0.072	-10.12
Washington	0.004	0.022	2.52	0.021	2.46	0.022	2.52
Wisconsin	0.022	-0.065	-5.95	-0.065	-5.99	-0.065	-5.89
West Virginia	0.016	-0.050	-3.78	-0.050	-3.93	-0.050	-3.77

**Table B10 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Wyoming	0.021	0.014	1.27	0.014	1.27	0.014	1.25
Time = 2001	0.047	-0.024	-3.53	-0.023	-3.18	-0.024	-3.39
Time = 2002	0.052	-0.018	-3.31	-0.017	-3.09	-0.018	-3.41
Time = 2003	0.050	-0.012	-2.94	-0.012	-2.95	-0.012	-2.97
Time = 2004	0.052	-0.005	-1.42	-0.005	-1.46	-0.005	-1.41
Time = 2005	0.054	-0.004	-1.26	-0.003	-1.25	-0.004	-1.27
Time = 2006	0.055	-0.004	-1.56	-0.004	-1.54	-0.004	-1.55
Time = 2007	0.053	-0.006	-2.12	-0.006	-2.14	-0.006	-2.13
Time = 2008	0.055	-0.007	-2.32	-0.007	-2.30	-0.007	-2.29
Time = 2009	0.050	-0.002	-0.36	-0.002	-0.34	-0.002	-0.36
Time = 2010	0.052	0.002	0.38	0.002	0.38	0.002	0.39
Time = 2011	0.053	0.005	0.97	0.005	1.00	0.005	0.98
Time = 2012	0.053	0.004	1.11	0.004	1.21	0.004	1.12
Time = 2013	0.053	0.004	1.46	0.004	1.44	0.004	1.46
Time = 2014	0.052	0.007	3.03	0.007	2.82	0.007	3.08
Time = 2015	0.052	0.011	3.42	0.010	3.38	0.011	3.46
Time = 2016	0.052	0.010	2.68	0.010	2.67	0.010	2.72
Time = 2017	0.054	0.009	2.25	0.009	2.29	0.009	2.29
Time = 2018	0.056	0.011	2.09	0.010	2.10	0.011	2.12
Time = 2019	0.056	0.013	2.20	0.013	2.20	0.013	2.22

**Table B11 Alternative Model Specifications of the Non-Hispanic Share of UI Recipients (n = 852)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Intercept (Dep Variable Mean)	0.886	0.886		0.886		0.886	
Share of Unemployed							
Hispanic	0.130	-0.068	-1.82	-0.071	-1.92	-0.068	-1.79
Not Hispanic	0.870	0.010	1.82	0.011	1.92	0.010	1.79
Share of Population							
Hispanic	0.098	-0.173	-1.10			-0.173	-1.10
Not Hispanic	0.902	0.019	1.10			0.019	1.10
Share of Labor Force							
Hispanic	0.104			-0.154	-1.09		
Not Hispanic	0.896			0.018	1.09		
Labor Force Participation Rate							
Hispanic	0.709					-0.000	-0.01
Not Hispanic	0.652					0.000	0.01
Characteristics of Unemployed							
Male	0.552	0.001	0.11	0.002	0.16	0.001	0.11
Female	0.448	-0.001	-0.11	-0.002	-0.16	-0.001	-0.11
Native American	0.037	0.049	1.10	0.048	1.10	0.049	1.09
AAPI	0.039	-0.066	-1.57	-0.068	-1.67	-0.066	-1.58
Black	0.196	-0.045	-1.64	-0.045	-1.64	-0.045	-1.64
White	0.728	0.013	1.66	0.013	1.68	0.013	1.66
Age less than 22	0.212	0.011	0.72	0.012	0.77	0.011	0.72
Age 22-24	0.099	-0.030	-1.21	-0.029	-1.15	-0.030	-1.21
Age 25-34	0.223	0.034	1.63	0.034	1.63	0.034	1.65
Age 35-44	0.173	0.051	2.11	0.052	2.10	0.051	2.10
Age 45-54	0.157	-0.085	-3.21	-0.085	-3.16	-0.085	-3.19
Age 55-59	0.062	-0.003	-0.06	-0.006	-0.10	-0.003	-0.06
Age 60-64	0.040	0.003	0.05	-0.002	-0.04	0.003	0.05
Age 65+	0.034	-0.069	-1.09	-0.073	-1.17	-0.069	-1.11
Occupation of Unemployed							
Management, Business, Financial	0.076	-0.012	-0.36	-0.011	-0.34	-0.012	-0.36
Computers, Engineering, Science	0.031	0.064	0.88	0.059	0.82	0.064	0.87
Education, Legal, Comm Service	0.065	0.012	0.23	0.011	0.21	0.012	0.23
Healthcare Practitioners, Technical	0.017	0.114	2.00	0.115	1.98	0.114	1.99
Service Occupations	0.234	-0.052	-2.00	-0.051	-1.98	-0.052	-1.95
Sales and Office Occupations	0.240	0.012	0.58	0.012	0.60	0.012	0.58
Farming, Fishing, Forestry	0.015	-0.018	-0.13	-0.016	-0.12	-0.018	-0.13
Construction and Extraction	0.114	0.040	0.81	0.041	0.83	0.040	0.80
Installation, Maintenance, Repair	0.029	0.050	0.82	0.047	0.76	0.050	0.80
Production, Trans, Mat Moving	0.175	0.004	0.20	0.003	0.16	0.004	0.20
Military Specific	0.004	-0.236	-1.87	-0.237	-1.90	-0.236	-1.88
Industry of Unemployed							
Agric., Forestry, Fishing	0.019	-0.052	-0.53	-0.048	-0.47	-0.052	-0.53
Mining	0.008	0.034	0.42	0.036	0.44	0.034	0.42
Utilities	0.004	0.147	1.50	0.146	1.52	0.147	1.50
Construction	0.123	-0.068	-1.54	-0.070	-1.61	-0.068	-1.54
Manufacturing	0.111	-0.026	-1.02	-0.024	-0.94	-0.026	-1.02
Wholesale Trade	0.021	0.021	0.28	0.020	0.27	0.021	0.28
Retail Trade	0.134	0.014	0.50	0.015	0.55	0.014	0.52
Transportation, Warehousing	0.040	0.038	0.78	0.036	0.75	0.038	0.77
Information	0.028	-0.043	-0.53	-0.042	-0.52	-0.043	-0.53
Finance and Insurance	0.027	0.091	1.44	0.089	1.40	0.091	1.45
Real Estate, Rental, Leasing	0.013	-0.090	-1.30	-0.094	-1.35	-0.090	-1.31
Prof, Scientific, Technical	0.029	-0.069	-0.93	-0.066	-0.90	-0.069	-0.93



**Table B11 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
		Admin, Support, Waste Mgmt Educational Services	0.085	0.052	1.34	0.054	1.36
Health Care/Social Assistance	0.053	0.012	0.26	0.012	0.26	0.012	0.26
Art, Entertainment, Recreation	0.084	-0.010	-0.28	-0.010	-0.27	-0.010	-0.28
Accommodation, Food Service	0.030	-0.077	-1.62	-0.076	-1.61	-0.077	-1.62
Other Services (Ex Pub Admin)	0.119	0.035	0.94	0.033	0.86	0.035	0.92
Public Administration	0.043	0.054	1.08	0.055	1.10	0.054	1.08
Unemployment rate	0.028	0.040	0.87	0.039	0.84	0.040	0.87
Application Rate	5.598	0.000	0.13	0.000	0.14	0.000	0.13
Alaska	0.172	-0.112	-2.63	-0.112	-2.67	-0.112	-2.62
Alabama	0.022	0.062	3.91	0.063	4.01	0.062	3.91
Arkansas	0.018	0.074	7.37	0.075	8.02	0.074	7.19
Arizona	0.022	0.086	15.34	0.087	17.47	0.086	14.95
California	0.022	-0.254	-8.72	-0.256	-9.51	-0.254	-8.73
Colorado	0.022	-0.233	-6.46	-0.236	-6.97	-0.233	-6.46
Connecticut	0.022	-0.108	-9.02	-0.110	-10.67	-0.108	-8.99
District of Columbia	0.022	-0.022	-5.23	-0.023	-5.33	-0.022	-4.85
Delaware	0.020	0.039	1.70	0.040	1.73	0.039	1.70
Florida	0.022	0.061	11.07	0.062	12.45	0.061	10.95
Georgia	0.022	-0.160	-7.67	-0.161	-7.78	-0.160	-7.64
Hawaii	0.022	0.110	9.64	0.110	9.75	0.110	9.66
Iowa	0.018	0.092	2.94	0.094	3.13	0.092	2.95
Idaho	0.019	0.046	3.82	0.046	3.89	0.046	3.79
Illinois	0.022	-0.032	-3.62	-0.032	-3.59	-0.032	-3.63
Indiana	0.022	-0.046	-5.50	-0.046	-5.48	-0.046	-5.50
Kansas	0.022	0.040	5.94	0.040	6.46	0.040	5.96
Kentucky	0.001	-0.004	-0.44	-0.004	-0.41	-0.004	-0.44
Louisiana	0.008	0.059	5.15	0.059	5.35	0.059	5.15
Massachusetts	0.021	0.070	5.98	0.070	6.30	0.070	5.98
Maryland	0.022	-0.011	-1.83	-0.011	-1.80	-0.011	-1.79
Maine	0.022	0.067	7.10	0.068	7.34	0.067	6.99
Michigan	0.015	0.069	4.67	0.070	4.77	0.069	4.63
Minnesota	0.021	0.048	6.29	0.048	6.75	0.048	6.40
Missouri	0.022	0.056	4.60	0.057	4.83	0.056	4.59
Mississippi	0.012	0.061	6.39	0.061	6.73	0.061	6.39
Montana	0.021	0.083	6.13	0.084	6.47	0.083	6.04
North Carolina	0.022	0.056	3.29	0.056	3.34	0.056	3.26
North Dakota	0.022	0.069	10.92	0.071	11.23	0.069	10.61
Nebraska	0.022	0.047	2.06	0.048	2.10	0.047	2.05
New Hampshire	0.020	0.028	3.13	0.028	3.02	0.028	3.06
New Jersey	0.020	0.043	2.86	0.044	3.02	0.043	2.85
New Mexico	0.021	-0.083	-7.63	-0.083	-7.44	-0.083	-7.60
Nevada	0.021	-0.391	-8.64	-0.397	-9.86	-0.391	-8.66
New York	0.022	-0.067	-3.40	-0.065	-3.14	-0.067	-3.41
Ohio	0.022	-0.053	-5.05	-0.055	-6.24	-0.053	-5.01
Oklahoma	0.022	0.058	6.46	0.059	6.86	0.058	6.52
Oregon	0.018	0.014	1.49	0.014	1.67	0.014	1.49
Pennsylvania	0.022	0.003	0.47	0.004	0.66	0.003	0.47
Rhode Island	0.022	0.058	6.86	0.058	6.74	0.058	6.68
South Carolina	0.020	-0.068	-15.65	-0.068	-15.92	-0.068	-14.86
South Dakota	0.019	0.077	7.57	0.078	8.11	0.077	7.56
Tennessee	0.022	0.039	1.77	0.039	1.80	0.039	1.77
Texas	0.022	0.081	10.64	0.081	11.72	0.081	10.61
Utah	0.022	-0.166	-4.20	-0.171	-4.88	-0.166	-4.20
Virginia	0.022	-0.023	-2.68	-0.023	-2.68	-0.023	-2.68
Washington	0.022	0.072	10.30	0.073	11.38	0.072	10.12
Wisconsin	0.004	-0.022	-2.52	-0.021	-2.46	-0.022	-2.52
	0.022	0.065	5.95	0.065	5.99	0.065	5.89

**Table B11 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
West Virginia	0.016	0.050	3.78	0.050	3.93	0.050	3.77
Wyoming	0.021	-0.014	-1.27	-0.014	-1.27	-0.014	-1.25
Time = 2001	0.047	0.024	3.53	0.023	3.18	0.024	3.39
Time = 2002	0.052	0.018	3.31	0.017	3.09	0.018	3.41
Time = 2003	0.050	0.012	2.94	0.012	2.95	0.012	2.97
Time = 2004	0.052	0.005	1.42	0.005	1.46	0.005	1.41
Time = 2005	0.054	0.004	1.26	0.003	1.25	0.004	1.27
Time = 2006	0.055	0.004	1.56	0.004	1.54	0.004	1.55
Time = 2007	0.053	0.006	2.12	0.006	2.14	0.006	2.13
Time = 2008	0.055	0.007	2.32	0.007	2.30	0.007	2.29
Time = 2009	0.050	0.002	0.36	0.002	0.34	0.002	0.36
Time = 2010	0.052	-0.002	-0.38	-0.002	-0.38	-0.002	-0.39
Time = 2011	0.053	-0.005	-0.97	-0.005	-1.00	-0.005	-0.98
Time = 2012	0.053	-0.004	-1.11	-0.004	-1.21	-0.004	-1.12
Time = 2013	0.053	-0.004	-1.46	-0.004	-1.44	-0.004	-1.46
Time = 2014	0.052	-0.007	-3.03	-0.007	-2.82	-0.007	-3.08
Time = 2015	0.052	-0.011	-3.42	-0.010	-3.38	-0.011	-3.46
Time = 2016	0.052	-0.010	-2.68	-0.010	-2.67	-0.010	-2.72
Time = 2017	0.054	-0.009	-2.25	-0.009	-2.29	-0.009	-2.29
Time = 2018	0.056	-0.011	-2.09	-0.010	-2.10	-0.011	-2.12
Time = 2019	0.056	-0.013	-2.20	-0.013	-2.20	-0.013	-2.22

**Table B12 Effects of the Age Group Shares of Unemployment on the Age Group Shares of Beneficiaries (ETA 203) Controlling in Separate Models for the Age Group Shares of Population, Labor Force and Labor Force Participation Rate (n = 1,416, \*1)**

Control Variable Descriptions	Parameter estimate	Robust standard error	t-statistic
Age less than 22			
ETA 203 mean	0.030		
Population control	-0.002	0.011	-0.19
Labor Force control	-0.001	0.010	-0.12
Population and LFPR	-0.000	0.011	-0.02
Age 22-24			
ETA 203 mean	0.054		
Population control	0.025	0.012	2.07
Labor Force control	0.027	0.013	2.11
Population and LFPR	0.025	0.013	1.93
Age 25-34			
ETA 203 mean	0.247		
Population control	-0.011	0.027	-0.43
Labor Force control	-0.009	0.026	-0.34
Population and LFPR	-0.008	0.025	-0.31
Age 35-44			
ETA 203 mean	0.258		
Population control	0.002	0.018	0.10
Labor Force control	0.007	0.018	0.38
Population and LFPR	0.003	0.018	0.15
Age 45-54			
ETA 203 mean	0.229		
Population control	-0.024	0.027	-0.87
Labor Force control	-0.034	0.031	-1.08
Population and LFPR	-0.029	0.029	-1.01
Age 55-59			
ETA 203 mean	0.088		
Population control	-0.007	0.031	-0.21
Labor Force control	-0.003	0.030	-0.11
Population and LFPR	-0.006	0.032	-0.17
Age 60-64			
ETA 203 mean	0.057		
Population control	-0.013	0.033	-0.40
Labor Force control	-0.014	0.031	-0.47
Population and LFPR	-0.011	0.031	-0.36
Age 65+			
ETA 203 mean	0.037		
Population control	0.067	0.064	1.05
Labor Force control	0.076	0.066	1.15
Population and LFPR	0.075	0.067	1.12

NOTE: (\*1) See appendix tables B13 through B20 for complete models.

**Table B13 Alternative Model Specifications of the Share of UI Recipients Age less than 22 (n = 1,416)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Intercept (Dep Variable Mean)	0.030	0.030		0.030		0.030	
<b>Share of Unemployed:</b>							
Age less than 22	0.231	-0.002	-0.19	-0.001	-0.12	-0.000	-0.02
Age 22-24	0.098	-0.008	-0.47	-0.011	-0.60	-0.009	-0.51
Age 25-34	0.227	-0.016	-1.38	-0.013	-1.18	-0.014	-1.28
Age 35-44	0.182	0.009	0.53	0.009	0.52	0.009	0.54
Age 45-54	0.146	0.040	1.65	0.043	1.74	0.042	1.69
Age 55-59	0.053	-0.022	-0.89	-0.022	-0.88	-0.024	-0.96
Age 60-64	0.034	-0.006	-0.12	-0.011	-0.23	-0.020	-0.43
Age 65+	0.029	-0.045	-1.32	-0.070	-1.86	-0.065	-1.83
<b>Share of Population:</b>							
Age less than 22	0.106	0.253	3.08			0.249	3.06
Age 22-24	0.053	0.053	0.82			0.037	0.57
Age 25-34	0.178	-0.006	-0.17			-0.012	-0.35
Age 35-44	0.184	0.030	0.78			0.038	0.98
Age 45-54	0.172	-0.030	-0.53			-0.032	-0.62
Age 55-59	0.074	-0.167	-1.74			-0.176	-2.02
Age 60-64	0.063	-0.107	-1.22			-0.104	-1.27
Age 65+	0.169	-0.059	-1.43			-0.049	-1.25
<b>Share of Labor Force:</b>							
Age less than 22	0.088			0.183	2.38		
Age 22-24	0.064			0.038	0.85		
Age 25-34	0.225			-0.034	-0.99		
Age 35-44	0.235			0.014	0.56		
Age 45-54	0.214			-0.012	-0.26		
Age 55-59	0.081			-0.170	-2.06		
Age 60-64	0.051			-0.009	-0.12		
Age 65+	0.043			0.064	0.62		
<b>Labor Force Participation Rate:</b>							
Age less than 22	0.546					-0.012	-0.56
Age 22-24	0.796					0.023	1.19
Age 25-34	0.838					-0.012	-0.44
Age 35-44	0.848					-0.011	-0.56
Age 45-54	0.823					-0.018	-0.64
Age 55-59	0.719					0.000	0.02
Age 60-64	0.529					0.024	1.93
Age 65+	0.165					0.054	1.71
<b>Characteristics of Unemployed:</b>							
Male	0.548	-0.003	-0.30	-0.004	-0.43	-0.003	-0.27
Female	0.452	0.004	0.30	0.005	0.43	0.003	0.27
Native American	0.032	0.018	1.01	0.018	0.97	0.014	0.84
AAPI	0.036	0.016	0.57	0.031	1.05	0.009	0.29
Black	0.191	-0.035	-1.68	-0.039	-1.93	-0.036	-1.75
White	0.741	0.007	1.56	0.008	1.69	0.008	1.77
Hispanic	0.112	0.041	1.59	0.047	1.75	0.037	1.53
Not Hispanic	0.888	-0.005	-1.59	-0.006	-1.75	-0.005	-1.53
<b>Occupation of Unemployed:</b>							
Management, Business, Financial	0.071	-0.001	-0.08	0.003	0.20	-0.002	-0.16
Computers, Engineering, Science	0.028	-0.008	-0.15	0.005	0.09	-0.018	-0.34
Education, Legal, Comm Service	0.060	-0.079	-2.07	-0.076	-1.91	-0.083	-2.19
Healthcare Practitioners, Technical	0.016	-0.071	-2.02	-0.073	-2.01	-0.073	-2.11
Service Occupations	0.230	-0.013	-1.02	-0.013	-1.04	-0.010	-0.87
Sales and Office Occupations	0.238	-0.008	-0.85	-0.009	-0.95	-0.008	-0.80
Farming, Fishing, Forestry	0.017	-0.003	-0.06	-0.002	-0.04	-0.002	-0.03

**Table B13 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Construction and Extraction	0.114	0.030	1.01	0.023	0.80	0.029	1.03
Installation, Maintenance, Repair	0.029	-0.024	-0.62	-0.025	-0.66	-0.021	-0.55
Production, Trans, Mat Moving	0.192	0.044	2.15	0.045	2.21	0.044	2.11
Military Specific	0.004	-0.014	-0.24	-0.011	-0.18	-0.019	-0.32
<b>Industry of Unemployed:</b>							
Agric., Forestry, Fishing	0.022	-0.001	-0.03	-0.004	-0.10	-0.009	-0.22
Mining	0.008	-0.012	-0.30	0.005	0.13	-0.021	-0.53
Utilities	0.004	-0.023	-0.25	-0.020	-0.22	-0.026	-0.29
Construction	0.122	-0.028	-0.91	-0.020	-0.65	-0.034	-1.05
Manufacturing	0.124	-0.019	-1.07	-0.021	-1.12	-0.018	-1.05
Wholesale Trade	0.023	0.034	0.88	0.027	0.76	0.033	0.88
Retail Trade	0.134	-0.018	-1.25	-0.019	-1.25	-0.015	-0.96
Transportation, Warehousing	0.039	-0.025	-0.70	-0.027	-0.76	-0.026	-0.74
Information	0.027	0.016	0.45	0.016	0.46	0.017	0.49
Finance and Insurance	0.025	0.069	1.62	0.070	1.65	0.072	1.75
Real Estate, Rental, Leasing	0.014	0.022	0.46	0.017	0.33	0.035	0.74
Prof, Scientific, Technical	0.026	0.037	0.69	0.033	0.61	0.040	0.74
Admin, Support, Waste Mgmt	0.081	0.019	1.04	0.015	0.84	0.021	1.06
Educational Services	0.049	0.014	0.46	0.018	0.57	0.016	0.52
Health Care/Social Assistance	0.081	-0.001	-0.03	-0.007	-0.24	-0.002	-0.06
Art, Entertainment, Recreation	0.027	0.030	1.18	0.028	1.18	0.027	1.06
Accommodation, Food Service	0.122	0.021	1.33	0.024	1.35	0.022	1.39
Other Services (Ex Pub Admin)	0.045	-0.012	-0.32	-0.015	-0.39	-0.020	-0.54
Public Administration	0.027	0.008	0.23	0.008	0.22	0.010	0.29
Unemployment rate	5.435	0.001	0.59	0.001	0.91	0.001	0.74
Application Rate	0.186	0.041	1.43	0.043	1.45	0.039	1.32
Alaska	0.018	-0.009	-1.02	-0.003	-0.36	-0.009	-1.00
Alabama	0.020	0.024	3.67	0.026	3.71	0.025	3.69
Arkansas	0.020	0.016	4.01	0.015	3.65	0.017	3.97
Arizona	0.018	-0.015	-1.90	-0.017	-2.03	-0.013	-1.85
California	0.019	-0.024	-2.40	-0.022	-2.28	-0.022	-2.44
Colorado	0.019	-0.018	-3.80	-0.017	-4.05	-0.018	-4.07
Connecticut	0.020	-0.007	-2.24	-0.007	-1.85	-0.010	-2.40
District of Columbia	0.020	0.024	1.22	0.033	1.64	0.022	1.03
Delaware	0.020	0.032	8.48	0.032	8.55	0.033	8.70
Florida	0.020	-0.002	-0.39	-0.006	-0.84	-0.001	-0.22
Georgia	0.020	0.007	0.91	0.014	1.85	0.007	0.89
Hawaii	0.020	-0.016	-0.92	-0.026	-1.48	-0.012	-0.70
Iowa	0.020	-0.004	-0.93	-0.007	-1.61	-0.006	-1.15
Idaho	0.020	-0.013	-1.95	-0.014	-1.91	-0.012	-1.61
Illinois	0.020	-0.008	-2.64	-0.005	-1.82	-0.008	-2.50
Indiana	0.020	-0.007	-2.51	-0.006	-2.00	-0.008	-2.95
Kansas	0.020	-0.008	-4.48	-0.009	-4.36	-0.012	-4.96
Kentucky	0.020	-0.006	-1.30	-0.008	-1.77	-0.006	-1.14
Louisiana	0.020	0.014	1.35	0.019	1.77	0.015	1.35
Massachusetts	0.020	-0.004	-2.35	-0.004	-2.14	-0.005	-2.40
Maryland	0.019	0.015	1.62	0.018	1.90	0.014	1.41
Maine	0.020	0.018	3.13	0.013	2.70	0.017	3.03
Michigan	0.020	0.004	1.53	0.003	1.08	0.007	1.93
Minnesota	0.020	0.001	0.27	0.001	0.25	0.000	0.08
Missouri	0.020	0.004	1.05	0.003	0.85	0.004	1.06
Mississippi	0.020	0.016	1.85	0.022	2.39	0.017	1.82
Montana	0.020	0.001	0.22	-0.003	-0.61	0.002	0.29
North Carolina	0.020	0.007	2.22	0.009	2.35	0.008	2.28
North Dakota	0.020	-0.013	-2.88	-0.014	-2.70	-0.014	-2.78
Nebraska	0.020	-0.002	-0.77	-0.003	-0.87	-0.005	-1.42

**Table B13 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
New Hampshire	0.020	-0.007	-2.22	-0.009	-2.87	-0.009	-2.95
New Jersey	0.019	0.024	6.82	0.026	6.66	0.022	5.03
New Mexico	0.019	-0.010	-0.79	-0.013	-1.00	-0.008	-0.67
Nevada	0.020	-0.016	-3.20	-0.018	-3.50	-0.016	-3.10
New York	0.020	0.013	3.04	0.016	3.42	0.013	2.41
Ohio	0.020	0.001	0.24	-0.000	-0.10	0.001	0.26
Oklahoma	0.020	-0.006	-3.12	-0.007	-3.00	-0.008	-2.98
Oregon	0.020	-0.001	-0.13	-0.003	-0.43	0.001	0.14
Pennsylvania	0.020	0.026	6.12	0.024	6.58	0.027	6.13
Rhode Island	0.020	-0.018	-3.81	-0.022	-4.76	-0.018	-3.58
South Carolina	0.020	0.018	3.19	0.019	3.20	0.019	3.21
South Dakota	0.020	-0.011	-2.49	-0.013	-2.66	-0.015	-2.91
Tennessee	0.020	0.001	0.35	0.001	0.35	0.001	0.40
Texas	0.020	-0.018	-2.00	-0.014	-1.73	-0.018	-2.01
Utah	0.020	-0.008	-1.23	-0.003	-0.38	-0.008	-1.21
Virginia	0.020	0.002	0.32	0.004	0.68	0.001	0.20
Vermont	0.020	0.004	0.65	0.002	0.31	0.001	0.24
Washington	0.020	-0.014	-3.03	-0.014	-2.92	-0.012	-2.38
Wisconsin	0.020	-0.006	-1.16	-0.008	-1.39	-0.005	-0.78
West Virginia	0.020	0.004	0.58	-0.002	-0.37	0.005	0.77
Wyoming	0.018	-0.005	-1.04	-0.007	-1.57	-0.005	-1.23
Time = 1992	0.032	0.002	0.29	0.004	0.48	0.005	0.75
Time = 1993	0.034	-0.002	-0.51	0.000	0.02	0.001	0.31
Time = 1994	0.035	-0.007	-1.80	-0.005	-1.03	-0.004	-0.85
Time = 1995	0.036	-0.005	-1.19	-0.003	-0.59	-0.001	-0.29
Time = 1996	0.036	-0.005	-1.51	-0.004	-0.77	-0.002	-0.52
Time = 1997	0.036	-0.006	-1.52	-0.004	-0.75	-0.002	-0.58
Time = 1998	0.036	-0.005	-1.33	-0.003	-0.70	-0.002	-0.47
Time = 1999	0.036	-0.006	-1.80	-0.005	-1.13	-0.003	-0.81
Time = 2000	0.036	-0.007	-1.71	-0.006	-1.44	-0.004	-0.90
Time = 2001	0.035	-0.004	-0.99	-0.004	-0.91	-0.002	-0.41
Time = 2002	0.036	-0.001	-0.41	-0.001	-0.39	0.000	0.12
Time = 2003	0.035	0.004	1.01	0.005	1.51	0.005	1.39
Time = 2004	0.036	0.004	1.45	0.005	2.10	0.004	1.74
Time = 2005	0.036	0.006	1.95	0.007	2.52	0.006	2.07
Time = 2006	0.036	0.006	1.67	0.007	2.05	0.006	1.65
Time = 2007	0.036	0.006	1.59	0.007	1.84	0.005	1.42
Time = 2008	0.036	0.003	0.96	0.003	1.09	0.001	0.55
Time = 2009	0.036	0.004	0.91	0.003	0.77	0.002	0.47
Time = 2010	0.036	0.005	1.14	0.005	1.03	0.003	0.62
Time = 2011	0.036	0.006	1.49	0.005	1.29	0.003	0.76
Time = 2012	0.036	0.003	1.06	0.002	0.48	-0.000	-0.07
Time = 2013	0.036	0.001	0.21	-0.001	-0.28	-0.003	-0.77
Time = 2014	0.036	-0.000	-0.08	-0.002	-0.49	-0.003	-0.91
Time = 2015	0.036	-0.000	-0.16	-0.003	-0.68	-0.003	-0.86
Time = 2016	0.036	-0.001	-0.26	-0.003	-0.81	-0.004	-0.96
Time = 2017	0.036	-0.000	-0.12	-0.004	-0.75	-0.004	-0.86
Time = 2018	0.036	0.001	0.26	-0.003	-0.51	-0.002	-0.42
Time = 2019	0.036	0.002	0.42	-0.003	-0.52	-0.002	-0.46

**Table B14 Alternative Model Specifications of the Share of UI Recipients Age 22-24 (n = 1,416)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Intercept (Dep Variable Mean)	0.054	0.054		0.054		0.054	
<b>Share of Unemployed:</b>							
Age less than 22	0.231	-0.011	-0.87	-0.013	-1.13	-0.011	-0.88
Age 22-24	0.098	0.025	2.07	0.027	2.11	0.025	1.93
Age 25-34	0.227	0.004	0.45	0.005	0.59	0.005	0.62
Age 35-44	0.182	-0.027	-1.61	-0.026	-1.57	-0.027	-1.63
Age 45-54	0.146	0.022	1.85	0.024	1.79	0.025	1.98
Age 55-59	0.053	0.011	0.66	0.009	0.57	0.009	0.56
Age 60-64	0.034	0.042	1.29	0.040	1.20	0.038	1.13
Age 65+	0.029	-0.040	-1.44	-0.049	-1.80	-0.056	-2.14
<b>Share of Population:</b>							
Age less than 22	0.106	0.068	1.55			0.066	1.61
Age 22-24	0.053	0.108	1.17			0.101	1.08
Age 25-34	0.178	0.080	1.13			0.071	1.11
Age 35-44	0.184	-0.028	-0.61			-0.023	-0.52
Age 45-54	0.172	-0.057	-1.13			-0.053	-1.19
Age 55-59	0.074	-0.143	-2.02			-0.156	-2.34
Age 60-64	0.063	-0.165	-1.65			-0.162	-1.69
Age 65+	0.169	0.053	1.18			0.061	1.38
<b>Share of Labor Force:</b>							
Age less than 22	0.088			0.077	1.56		
Age 22-24	0.064			0.068	1.20		
Age 25-34	0.225			0.051	0.98		
Age 35-44	0.235			-0.017	-0.58		
Age 45-54	0.214			-0.049	-1.02		
Age 55-59	0.081			-0.084	-1.59		
Age 60-64	0.051			-0.140	-1.45		
Age 65+	0.043			0.138	1.44		
<b>Labor Force Participation Rate:</b>							
Age less than 22	0.546					-0.004	-0.40
Age 22-24	0.796					0.011	0.91
Age 25-34	0.838					0.013	0.50
Age 35-44	0.848					-0.004	-0.17
Age 45-54	0.823					-0.041	-1.15
Age 55-59	0.719					0.017	1.24
Age 60-64	0.529					0.002	0.14
Age 65+	0.165					0.041	2.13
<b>Characteristics of Unemployed:</b>							
Male	0.548	0.000	0.00	0.000	0.06	0.000	0.07
Female	0.452	-0.000	-0.00	-0.000	-0.06	-0.000	-0.07
Native American	0.032	-0.007	-0.61	-0.009	-0.74	-0.011	-0.95
AAPI	0.036	0.009	0.50	0.013	0.83	0.006	0.32
Black	0.191	-0.005	-0.35	-0.007	-0.49	-0.004	-0.34
White	0.741	0.001	0.31	0.002	0.42	0.001	0.38
Hispanic	0.112	-0.003	-0.29	-0.002	-0.13	-0.005	-0.40
Not Hispanic	0.888	0.000	0.29	0.000	0.13	0.001	0.40
<b>Occupation of Unemployed:</b>							
Management, Business, Financial	0.071	0.003	0.10	0.002	0.08	-0.001	-0.04
Computers, Engineering, Science	0.028	-0.041	-2.23	-0.039	-2.21	-0.047	-2.49
Education, Legal, Comm Service	0.060	-0.005	-0.25	-0.007	-0.34	-0.009	-0.45
Healthcare Practitioners, Technical	0.016	0.078	2.40	0.071	2.18	0.075	2.24
Service Occupations	0.230	0.001	0.21	0.003	0.41	0.002	0.36
Sales and Office Occupations	0.238	-0.011	-1.20	-0.010	-1.16	-0.011	-1.22
Farming, Fishing, Forestry	0.017	-0.042	-0.96	-0.047	-1.04	-0.041	-0.98

**Table B14 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
		Construction and Extraction	0.114	-0.014	-0.81	-0.017	-0.93
Installation, Maintenance, Repair	0.029	0.032	2.26	0.033	2.22	0.037	2.70
Production, Trans, Mat Moving	0.192	0.019	1.77	0.019	1.76	0.019	1.79
Military Specific	0.004	0.038	0.59	0.043	0.71	0.032	0.53
<b>Industry of Unemployed:</b>							
Agric., Forestry, Fishing	0.022	0.005	0.15	0.003	0.11	-0.001	-0.02
Mining	0.008	0.019	0.43	0.024	0.56	0.017	0.41
Utilities	0.004	0.061	1.17	0.062	1.24	0.054	1.07
Construction	0.122	0.004	0.20	0.004	0.20	-0.000	-0.01
Manufacturing	0.124	-0.007	-0.39	-0.007	-0.45	-0.007	-0.47
Wholesale Trade	0.023	0.002	0.07	0.001	0.03	0.004	0.14
Retail Trade	0.134	-0.016	-1.44	-0.015	-1.47	-0.013	-1.23
Transportation, Warehousing	0.039	-0.005	-0.27	-0.005	-0.26	-0.005	-0.28
Information	0.027	0.017	0.81	0.017	0.79	0.021	1.04
Finance and Insurance	0.025	-0.004	-0.13	0.003	0.10	0.001	0.03
Real Estate, Rental, Leasing	0.014	-0.013	-0.28	-0.013	-0.27	-0.003	-0.07
Prof, Scientific, Technical	0.026	0.027	0.82	0.024	0.72	0.027	0.84
Admin, Support, Waste Mgmt	0.081	0.008	0.56	0.007	0.45	0.010	0.64
Educational Services	0.049	-0.011	-0.59	-0.011	-0.57	-0.009	-0.56
Health Care/Social Assistance	0.081	0.001	0.03	0.004	0.26	-0.000	-0.01
Art, Entertainment, Recreation	0.027	0.021	0.85	0.021	0.90	0.017	0.69
Accommodation, Food Service	0.122	0.006	0.37	0.004	0.23	0.006	0.42
Other Services (Ex Pub Admin)	0.045	0.011	0.62	0.010	0.55	0.006	0.33
Public Administration	0.027	-0.026	-0.91	-0.023	-0.84	-0.024	-0.93
Unemployment rate	5.435	0.001	1.70	0.001	1.85	0.001	1.88
Application Rate	0.186	0.050	2.55	0.049	2.70	0.048	2.55
Alaska	0.018	0.011	1.82	0.010	1.96	0.012	2.00
Alabama	0.020	0.012	2.70	0.012	2.90	0.012	2.99
Arkansas	0.020	0.010	3.40	0.009	4.26	0.010	4.00
Arizona	0.018	0.000	0.11	0.000	0.06	0.002	0.51
California	0.019	-0.002	-0.49	-0.001	-0.29	-0.001	-0.23
Colorado	0.019	-0.011	-2.01	-0.012	-2.50	-0.011	-2.05
Connecticut	0.020	-0.000	-0.06	0.000	0.10	-0.001	-0.46
District of Columbia	0.020	-0.018	-1.66	-0.014	-1.25	-0.020	-1.70
Delaware	0.020	0.007	2.02	0.007	2.21	0.007	2.23
Florida	0.020	-0.007	-1.41	-0.006	-1.47	-0.007	-1.40
Georgia	0.020	-0.001	-0.33	-0.000	-0.06	-0.002	-0.38
Hawaii	0.020	-0.015	-1.41	-0.016	-1.59	-0.013	-1.24
Iowa	0.020	0.001	0.34	0.001	0.27	0.000	0.09
Idaho	0.020	0.000	0.02	0.000	0.08	0.002	0.41
Illinois	0.020	-0.005	-2.60	-0.004	-2.05	-0.005	-2.68
Indiana	0.020	-0.002	-0.79	-0.002	-0.81	-0.002	-0.95
Kansas	0.020	-0.001	-0.48	-0.002	-0.84	-0.003	-1.15
Kentucky	0.020	-0.003	-1.10	-0.005	-1.84	-0.003	-0.98
Louisiana	0.020	0.004	0.69	0.004	0.77	0.003	0.66
Massachusetts	0.020	-0.004	-1.93	-0.002	-1.33	-0.004	-1.77
Maryland	0.019	0.014	2.72	0.015	2.44	0.013	2.45
Maine	0.020	0.013	2.84	0.012	2.74	0.012	2.70
Michigan	0.020	0.003	1.33	0.002	0.97	0.004	1.63
Minnesota	0.020	0.004	1.24	0.004	1.37	0.004	1.34
Missouri	0.020	-0.000	-0.13	-0.001	-0.39	-0.001	-0.54
Mississippi	0.020	0.008	1.39	0.009	1.62	0.008	1.43
Montana	0.020	0.006	1.68	0.005	1.41	0.007	1.77
North Carolina	0.020	0.001	0.18	0.001	0.30	0.001	0.21
North Dakota	0.020	0.000	0.07	0.002	0.31	0.001	0.10
Nebraska	0.020	-0.001	-0.40	-0.001	-0.46	-0.003	-0.85



**Table B14 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
New Hampshire	0.020	-0.015	-3.91	-0.016	-4.44	-0.016	-4.12
New Jersey	0.019	0.007	2.53	0.008	2.32	0.006	1.79
New Mexico	0.019	-0.004	-0.76	-0.006	-0.98	-0.003	-0.49
Nevada	0.020	-0.009	-3.63	-0.010	-3.91	-0.008	-2.85
New York	0.020	0.007	2.27	0.009	2.49	0.008	2.05
Ohio	0.020	-0.002	-1.10	-0.003	-1.41	-0.002	-1.14
Oklahoma	0.020	-0.002	-1.24	-0.002	-1.35	-0.003	-1.46
Oregon	0.020	0.000	0.11	0.000	0.04	0.002	0.48
Pennsylvania	0.020	-0.004	-0.90	-0.003	-0.94	-0.003	-0.91
Rhode Island	0.020	0.005	1.53	0.004	1.72	0.005	1.56
South Carolina	0.020	-0.020	-4.43	-0.020	-4.60	-0.020	-4.80
South Dakota	0.020	-0.003	-0.66	-0.003	-0.64	-0.004	-0.85
Tennessee	0.020	-0.009	-4.38	-0.010	-4.66	-0.009	-4.52
Texas	0.020	0.001	0.21	0.001	0.23	0.001	0.21
Utah	0.020	0.008	0.88	0.010	1.09	0.009	1.12
Virginia	0.020	-0.001	-0.29	-0.001	-0.19	-0.001	-0.44
Vermont	0.020	0.004	1.08	0.004	0.92	0.004	0.75
Washington	0.020	-0.003	-0.88	-0.003	-0.85	-0.001	-0.29
Wisconsin	0.020	-0.001	-0.29	-0.001	-0.43	-0.000	-0.06
West Virginia	0.020	0.006	1.07	0.003	0.94	0.005	1.00
Wyoming	0.018	0.013	2.53	0.011	2.27	0.012	2.53
Time = 1992	0.032	0.005	0.79	0.006	0.77	0.007	1.16
Time = 1993	0.034	0.005	0.75	0.006	0.85	0.007	1.20
Time = 1994	0.035	0.001	0.13	0.002	0.27	0.003	0.46
Time = 1995	0.036	-0.003	-0.59	-0.002	-0.32	-0.001	-0.23
Time = 1996	0.036	-0.004	-0.81	-0.003	-0.50	-0.002	-0.44
Time = 1997	0.036	-0.003	-0.74	-0.002	-0.44	-0.002	-0.38
Time = 1998	0.036	-0.003	-0.63	-0.002	-0.43	-0.001	-0.30
Time = 1999	0.036	-0.003	-0.71	-0.003	-0.55	-0.002	-0.38
Time = 2000	0.036	-0.004	-1.27	-0.003	-1.03	-0.002	-0.71
Time = 2001	0.035	-0.001	-0.30	-0.000	-0.15	0.001	0.24
Time = 2002	0.036	0.001	0.32	0.001	0.51	0.002	0.85
Time = 2003	0.035	0.004	2.81	0.004	2.93	0.005	3.14
Time = 2004	0.036	0.007	5.18	0.007	5.13	0.007	5.34
Time = 2005	0.036	0.007	3.96	0.007	3.90	0.007	4.14
Time = 2006	0.036	0.005	3.02	0.005	2.71	0.005	2.97
Time = 2007	0.036	0.006	2.80	0.006	2.50	0.006	2.70
Time = 2008	0.036	0.004	1.64	0.004	1.35	0.003	1.42
Time = 2009	0.036	0.005	1.37	0.005	1.14	0.004	1.16
Time = 2010	0.036	0.007	1.60	0.006	1.34	0.005	1.37
Time = 2011	0.036	0.006	1.70	0.006	1.29	0.005	1.36
Time = 2012	0.036	0.005	1.43	0.004	1.02	0.004	1.00
Time = 2013	0.036	0.002	0.46	0.001	0.20	-0.000	-0.09
Time = 2014	0.036	-0.002	-0.55	-0.003	-0.60	-0.004	-1.06
Time = 2015	0.036	-0.005	-1.13	-0.005	-1.19	-0.006	-1.62
Time = 2016	0.036	-0.008	-1.83	-0.008	-1.82	-0.009	-2.28
Time = 2017	0.036	-0.009	-2.21	-0.010	-2.20	-0.011	-2.71
Time = 2018	0.036	-0.011	-2.82	-0.012	-2.71	-0.013	-3.10
Time = 2019	0.036	-0.013	-3.28	-0.014	-3.24	-0.015	-3.58

**Table B15 Alternative Model Specifications of the Share of UI Recipients Age 25-34 (n = 1,416)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Intercept (Dep Variable Mean)	0.247	0.247		0.247		0.247	
<b>Share of Unemployed:</b>							
Age less than 22	0.231	0.023	0.92	0.003	0.13	0.013	0.58
Age 22-24	0.098	0.022	0.55	0.026	0.67	0.021	0.55
Age 25-34	0.227	-0.011	-0.43	-0.009	-0.34	-0.008	-0.31
Age 35-44	0.182	-0.092	-2.41	-0.082	-2.47	-0.087	-2.48
Age 45-54	0.146	0.059	1.31	0.075	1.47	0.068	1.45
Age 55-59	0.053	0.032	1.03	0.032	1.01	0.027	0.81
Age 60-64	0.034	0.104	2.26	0.117	2.32	0.118	2.39
Age 65+	0.029	-0.063	-1.00	-0.093	-1.39	-0.100	-1.48
<b>Share of Population:</b>							
Age less than 22	0.106	-0.131	-0.95			-0.125	-0.94
Age 22-24	0.053	0.247	1.71			0.208	1.42
Age 25-34	0.178	0.503	2.59			0.455	2.75
Age 35-44	0.184	0.118	1.08			0.121	1.28
Age 45-54	0.172	-0.376	-2.02			-0.336	-2.14
Age 55-59	0.074	-0.198	-1.71			-0.194	-1.76
Age 60-64	0.063	-0.289	-1.25			-0.300	-1.45
Age 65+	0.169	-0.077	-0.72			-0.058	-0.55
<b>Share of Labor Force:</b>							
Age less than 22	0.088			0.078	0.45		
Age 22-24	0.064			0.126	1.12		
Age 25-34	0.225			0.382	2.69		
Age 35-44	0.235			0.048	0.71		
Age 45-54	0.214			-0.371	-2.05		
Age 55-59	0.081			-0.188	-2.17		
Age 60-64	0.051			-0.460	-1.80		
Age 65+	0.043			0.144	0.58		
<b>Labor Force Participation Rate:</b>							
Age less than 22	0.546					0.025	0.89
Age 22-24	0.796					0.013	0.49
Age 25-34	0.838					0.139	2.03
Age 35-44	0.848					0.043	0.61
Age 45-54	0.823					-0.229	-1.70
Age 55-59	0.719					0.023	0.49
Age 60-64	0.529					-0.038	-1.82
Age 65+	0.165					0.088	2.04
<b>Characteristics of Unemployed:</b>							
Male	0.548	-0.010	-1.24	-0.008	-1.14	-0.008	-1.03
Female	0.452	0.012	1.24	0.010	1.14	0.010	1.03
Native American	0.032	0.018	0.69	0.017	0.71	0.004	0.15
AAPI	0.036	0.012	0.43	0.011	0.42	0.014	0.51
Black	0.191	-0.036	-1.04	-0.041	-1.19	-0.037	-1.16
White	0.741	0.008	0.91	0.009	1.08	0.009	1.08
Hispanic	0.112	-0.030	-1.07	-0.023	-0.92	-0.024	-0.92
Not Hispanic	0.888	0.004	1.07	0.003	0.92	0.003	0.92
<b>Occupation of Unemployed:</b>							
Management, Business, Financial	0.071	0.024	0.41	0.017	0.32	0.010	0.21
Computers, Engineering, Science	0.028	-0.040	-0.89	-0.027	-0.65	-0.047	-1.01
Education, Legal, Comm Service	0.060	0.063	0.95	0.066	1.04	0.052	0.94
Healthcare Practitioners, Technical	0.016	0.136	2.80	0.109	2.25	0.126	2.59
Service Occupations	0.230	-0.010	-0.66	-0.010	-0.66	-0.006	-0.39
Sales and Office Occupations	0.238	-0.035	-1.26	-0.033	-1.22	-0.034	-1.29
Farming, Fishing, Forestry	0.017	0.004	0.05	-0.008	-0.10	0.005	0.07

**Table B15 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Construction and Extraction	0.114	-0.058	-1.30	-0.065	-1.39	-0.058	-1.40
Installation, Maintenance, Repair	0.029	0.041	0.91	0.056	1.17	0.061	1.28
Production, Trans, Mat Moving	0.192	0.043	1.94	0.046	1.94	0.044	1.87
Military Specific	0.004	0.273	1.31	0.250	1.30	0.245	1.36
<b>Industry of Unemployed:</b>							
Agric., Forestry, Fishing	0.022	0.069	0.88	0.063	0.76	0.048	0.61
Mining	0.008	0.002	0.03	0.038	0.47	0.032	0.39
Utilities	0.004	-0.043	-0.56	-0.074	-0.85	-0.056	-0.69
Construction	0.122	0.019	0.56	0.024	0.64	0.015	0.45
Manufacturing	0.124	0.014	0.45	0.006	0.21	0.007	0.27
Wholesale Trade	0.023	0.013	0.31	0.016	0.41	0.024	0.59
Retail Trade	0.134	-0.010	-0.56	-0.008	-0.49	-0.001	-0.05
Transportation, Warehousing	0.039	0.026	0.84	0.025	0.86	0.020	0.65
Information	0.027	0.017	0.50	0.020	0.64	0.036	1.13
Finance and Insurance	0.025	-0.013	-0.23	-0.005	-0.08	0.009	0.17
Real Estate, Rental, Leasing	0.014	-0.011	-0.12	-0.017	-0.17	-0.003	-0.04
Prof, Scientific, Technical	0.026	0.150	2.10	0.138	1.91	0.135	1.87
Admin, Support, Waste Mgmt	0.081	0.051	2.01	0.047	2.05	0.046	1.87
Educational Services	0.049	-0.145	-2.54	-0.152	-2.75	-0.141	-2.92
Health Care/Social Assistance	0.081	-0.064	-1.79	-0.060	-1.85	-0.059	-1.79
Art, Entertainment, Recreation	0.027	0.070	1.21	0.065	1.14	0.061	1.07
Accommodation, Food Service	0.122	0.036	1.36	0.042	1.62	0.033	1.14
Other Services (Ex Pub Admin)	0.045	-0.089	-2.19	-0.091	-2.18	-0.097	-2.25
Public Administration	0.027	-0.125	-1.32	-0.123	-1.32	-0.113	-1.30
Unemployment rate	5.435	0.001	0.36	0.001	0.25	0.001	0.54
Application Rate	0.186	0.026	0.52	0.037	0.90	0.027	0.57
Alaska	0.018	0.025	2.09	0.033	2.98	0.031	2.30
Alabama	0.020	0.033	2.59	0.028	2.65	0.027	2.72
Arkansas	0.020	0.026	3.36	0.016	3.79	0.018	3.25
Arizona	0.018	-0.010	-1.30	-0.011	-1.26	-0.007	-0.95
California	0.019	-0.004	-0.39	-0.001	-0.09	-0.000	-0.01
Colorado	0.019	-0.031	-1.88	-0.025	-1.79	-0.030	-1.98
Connecticut	0.020	0.006	0.83	0.010	0.93	0.008	0.92
District of Columbia	0.020	-0.055	-2.69	-0.043	-2.14	-0.051	-2.62
Delaware	0.020	0.027	2.88	0.024	3.04	0.025	3.23
Florida	0.020	-0.002	-0.13	-0.006	-0.60	-0.004	-0.39
Georgia	0.020	0.012	1.07	0.018	1.73	0.012	1.11
Hawaii	0.020	-0.003	-0.15	0.003	0.16	0.006	0.30
Iowa	0.020	-0.012	-1.59	-0.012	-1.72	-0.011	-1.68
Idaho	0.020	-0.021	-2.30	-0.021	-2.02	-0.015	-1.95
Illinois	0.020	0.003	0.82	0.006	1.83	0.006	1.74
Indiana	0.020	-0.002	-0.32	-0.002	-0.39	-0.002	-0.42
Kansas	0.020	0.006	1.13	0.005	1.28	0.005	1.18
Kentucky	0.020	-0.001	-0.11	-0.008	-1.37	-0.010	-1.50
Louisiana	0.020	0.031	2.47	0.027	2.40	0.027	2.41
Massachusetts	0.020	-0.005	-1.01	-0.002	-0.46	-0.002	-0.40
Maryland	0.019	0.027	2.11	0.035	2.27	0.029	2.28
Maine	0.020	0.007	0.84	0.007	0.97	0.004	0.58
Michigan	0.020	0.013	2.99	0.010	2.96	0.012	2.64
Minnesota	0.020	-0.001	-0.07	0.003	0.33	0.002	0.20
Missouri	0.020	0.002	0.73	-0.001	-0.58	-0.003	-1.26
Mississippi	0.020	0.031	2.24	0.026	2.17	0.028	2.20
Montana	0.020	0.006	0.70	0.001	0.09	0.005	0.62
North Carolina	0.020	0.011	1.50	0.011	1.50	0.009	1.38
North Dakota	0.020	-0.006	-0.57	-0.006	-0.51	-0.001	-0.06
Nebraska	0.020	0.001	0.10	0.002	0.34	0.002	0.24
New Hampshire	0.020	-0.049	-4.36	-0.043	-5.01	-0.047	-4.90

**Table B15 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
New Jersey	0.019	0.009	1.27	0.014	1.31	0.013	1.58
New Mexico	0.019	0.025	2.39	0.020	2.03	0.024	2.24
Nevada	0.020	-0.027	-4.24	-0.028	-4.48	-0.030	-4.56
New York	0.020	0.024	3.18	0.026	2.89	0.028	3.27
Ohio	0.020	-0.004	-1.65	-0.006	-2.09	-0.007	-2.28
Oklahoma	0.020	0.002	0.50	-0.001	-0.34	0.002	0.57
Oregon	0.020	-0.006	-0.83	-0.006	-0.86	-0.004	-0.63
Pennsylvania	0.020	0.001	0.10	-0.002	-0.29	0.000	0.02
Rhode Island	0.020	-0.018	-2.90	-0.020	-4.04	-0.019	-3.10
South Carolina	0.020	-0.020	-1.57	-0.023	-2.14	-0.024	-2.33
South Dakota	0.020	-0.036	-3.08	-0.036	-3.77	-0.032	-3.52
Tennessee	0.020	-0.026	-8.53	-0.029	-9.69	-0.032	-8.54
Texas	0.020	0.009	0.85	0.011	1.19	0.009	0.90
Utah	0.020	-0.009	-0.30	-0.004	-0.14	-0.000	-0.01
Virginia	0.020	0.007	1.08	0.012	1.88	0.008	1.36
Vermont	0.020	-0.006	-0.75	-0.001	-0.15	-0.003	-0.40
Washington	0.020	-0.006	-0.77	-0.001	-0.16	0.000	0.07
Wisconsin	0.020	-0.006	-1.32	-0.008	-1.71	-0.008	-1.61
West Virginia	0.020	0.021	1.52	0.006	0.69	0.007	0.67
Wyoming	0.018	0.001	0.14	0.002	0.18	0.002	0.26
Time = 1992	0.032	0.026	1.41	0.022	1.02	0.027	1.54
Time = 1993	0.034	0.023	1.13	0.021	0.95	0.025	1.43
Time = 1994	0.035	0.019	1.11	0.018	0.90	0.020	1.25
Time = 1995	0.036	0.012	0.77	0.010	0.59	0.013	0.89
Time = 1996	0.036	0.009	0.65	0.007	0.44	0.010	0.77
Time = 1997	0.036	0.002	0.19	0.001	0.04	0.003	0.26
Time = 1998	0.036	-0.004	-0.43	-0.006	-0.50	-0.004	-0.40
Time = 1999	0.036	-0.013	-1.45	-0.014	-1.34	-0.013	-1.44
Time = 2000	0.036	-0.017	-2.75	-0.019	-2.45	-0.017	-2.59
Time = 2001	0.035	-0.007	-1.64	-0.008	-1.73	-0.007	-1.56
Time = 2002	0.036	-0.006	-1.67	-0.006	-1.62	-0.006	-1.53
Time = 2003	0.035	-0.007	-1.73	-0.006	-1.62	-0.006	-1.46
Time = 2004	0.036	-0.005	-1.06	-0.003	-0.61	-0.003	-0.82
Time = 2005	0.036	-0.004	-0.76	-0.002	-0.36	-0.004	-0.77
Time = 2006	0.036	-0.008	-1.44	-0.006	-0.97	-0.008	-1.36
Time = 2007	0.036	-0.003	-0.55	-0.001	-0.19	-0.003	-0.55
Time = 2008	0.036	-0.001	-0.10	0.001	0.17	-0.001	-0.20
Time = 2009	0.036	0.004	0.34	0.006	0.45	0.002	0.17
Time = 2010	0.036	0.010	0.85	0.012	0.93	0.008	0.76
Time = 2011	0.036	0.010	0.99	0.013	1.02	0.008	0.86
Time = 2012	0.036	0.010	1.01	0.012	0.97	0.009	0.89
Time = 2013	0.036	0.005	0.56	0.007	0.57	0.003	0.38
Time = 2014	0.036	-0.000	-0.00	0.002	0.15	-0.000	-0.04
Time = 2015	0.036	-0.003	-0.33	-0.003	-0.25	-0.004	-0.39
Time = 2016	0.036	-0.007	-0.74	-0.007	-0.67	-0.007	-0.75
Time = 2017	0.036	-0.009	-1.03	-0.011	-1.01	-0.010	-1.06
Time = 2018	0.036	-0.013	-1.69	-0.014	-1.55	-0.012	-1.39
Time = 2019	0.036	-0.018	-2.47	-0.021	-2.28	-0.017	-1.98

**Table B16 Alternative Model Specifications of the Share of UI Recipients Age 35-44 (n = 1,416)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Intercept (Dep Variable Mean)	0.258	0.258		0.258		0.258	
<b>Share of Unemployed:</b>							
Age less than 22	0.231	0.004	0.27	-0.001	-0.04	0.000	0.02
Age 22-24	0.098	-0.025	-1.21	-0.023	-1.08	-0.023	-1.13
Age 25-34	0.227	-0.023	-1.27	-0.024	-1.30	-0.023	-1.32
Age 35-44	0.182	0.002	0.10	0.007	0.38	0.003	0.15
Age 45-54	0.146	0.080	2.38	0.085	2.39	0.082	2.37
Age 55-59	0.053	-0.048	-1.76	-0.054	-1.73	-0.048	-1.67
Age 60-64	0.034	-0.022	-0.53	-0.020	-0.49	-0.015	-0.36
Age 65+	0.029	-0.060	-1.14	-0.081	-1.21	-0.066	-1.05
<b>Share of Population:</b>							
Age less than 22	0.106	0.080	0.71			0.083	0.72
Age 22-24	0.053	-0.096	-0.78			-0.114	-0.88
Age 25-34	0.178	-0.020	-0.34			-0.027	-0.50
Age 35-44	0.184	0.428	7.31			0.427	7.70
Age 45-54	0.172	-0.341	-3.45			-0.330	-3.59
Age 55-59	0.074	-0.005	-0.04			-0.011	-0.08
Age 60-64	0.063	-0.165	-1.48			-0.166	-1.49
Age 65+	0.169	-0.053	-0.69			-0.049	-0.60
<b>Share of Labor Force:</b>							
Age less than 22	0.088			0.105	0.87		
Age 22-24	0.064			-0.122	-1.13		
Age 25-34	0.225			-0.029	-0.60		
Age 35-44	0.235			0.296	7.00		
Age 45-54	0.214			-0.262	-2.90		
Age 55-59	0.081			-0.016	-0.14		
Age 60-64	0.051			-0.166	-1.14		
Age 65+	0.043			0.035	0.15		
<b>Labor Force Participation Rate:</b>							
Age less than 22	0.546					0.027	1.14
Age 22-24	0.796					-0.014	-0.64
Age 25-34	0.838					0.010	0.27
Age 35-44	0.848					0.029	0.87
Age 45-54	0.823					-0.052	-0.82
Age 55-59	0.719					0.013	0.29
Age 60-64	0.529					-0.006	-0.32
Age 65+	0.165					0.001	0.01
<b>Characteristics of Unemployed:</b>							
Male	0.548	0.010	1.36	0.010	1.33	0.011	1.43
Female	0.452	-0.012	-1.36	-0.012	-1.33	-0.013	-1.43
Native American	0.032	0.036	1.49	0.032	1.32	0.034	1.41
AAPI	0.036	0.001	0.02	0.003	0.08	0.006	0.15
Black	0.191	-0.043	-2.31	-0.044	-2.50	-0.041	-2.28
White	0.741	0.009	1.94	0.010	2.11	0.009	1.93
Hispanic	0.112	0.002	0.11	0.006	0.32	0.005	0.25
Not Hispanic	0.888	-0.000	-0.11	-0.001	-0.32	-0.001	-0.25
<b>Occupation of Unemployed:</b>							
Management, Business, Financial	0.071	0.004	0.15	0.006	0.20	0.005	0.18
Computers, Engineering, Science	0.028	0.100	1.76	0.103	2.00	0.102	1.89
Education, Legal, Comm Service	0.060	0.050	1.51	0.050	1.62	0.047	1.55
Healthcare Practitioners, Technical	0.016	-0.001	-0.01	-0.007	-0.07	0.002	0.02
Service Occupations	0.230	-0.011	-0.73	-0.012	-0.78	-0.011	-0.75
Sales and Office Occupations	0.238	-0.002	-0.11	-0.002	-0.14	-0.002	-0.14
Farming, Fishing, Forestry	0.017	-0.080	-1.47	-0.081	-1.55	-0.080	-1.53

**Table B16 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Construction and Extraction	0.114	-0.051	-1.47	-0.048	-1.34	-0.052	-1.46
Installation, Maintenance, Repair	0.029	-0.069	-2.64	-0.066	-2.37	-0.066	-2.24
Production, Trans, Mat Moving	0.192	0.026	1.26	0.026	1.23	0.028	1.32
Military Specific	0.004	0.226	2.18	0.203	1.99	0.217	2.23
<b>Industry of Unemployed:</b>							
Agric., Forestry, Fishing	0.022	0.112	1.92	0.112	1.89	0.113	1.89
Mining	0.008	0.090	1.67	0.109	1.93	0.094	1.76
Utilities	0.004	0.072	0.70	0.071	0.71	0.075	0.74
Construction	0.122	0.001	0.03	0.003	0.09	0.004	0.13
Manufacturing	0.124	-0.032	-1.44	-0.033	-1.60	-0.035	-1.82
Wholesale Trade	0.023	0.016	0.49	0.015	0.44	0.016	0.50
Retail Trade	0.134	0.030	1.30	0.031	1.15	0.031	1.20
Transportation, Warehousing	0.039	-0.029	-0.82	-0.028	-0.81	-0.029	-0.80
Information	0.027	0.026	0.51	0.028	0.54	0.027	0.53
Finance and Insurance	0.025	0.039	0.91	0.044	0.97	0.044	0.97
Real Estate, Rental, Leasing	0.014	-0.110	-1.57	-0.115	-1.65	-0.114	-1.66
Prof, Scientific, Technical	0.026	0.051	0.81	0.044	0.72	0.046	0.73
Admin, Support, Waste Mgmt	0.081	0.016	0.63	0.011	0.46	0.014	0.60
Educational Services	0.049	-0.085	-1.67	-0.084	-1.65	-0.083	-1.60
Health Care/Social Assistance	0.081	-0.000	-0.01	-0.004	-0.13	-0.000	-0.01
Art, Entertainment, Recreation	0.027	0.015	0.34	0.014	0.33	0.013	0.30
Accommodation, Food Service	0.122	0.018	0.80	0.022	1.00	0.018	0.78
Other Services (Ex Pub Admin)	0.045	-0.046	-0.88	-0.049	-0.90	-0.047	-0.89
Public Administration	0.027	-0.077	-1.80	-0.075	-1.67	-0.075	-1.83
Unemployment rate	5.435	-0.001	-1.00	-0.001	-1.04	-0.001	-1.00
Application Rate	0.186	-0.080	-2.54	-0.075	-2.50	-0.078	-2.61
Alaska	0.018	-0.000	-0.02	0.006	0.53	0.001	0.06
Alabama	0.020	0.023	2.87	0.022	2.74	0.023	3.03
Arkansas	0.020	0.024	4.54	0.020	4.14	0.023	5.02
Arizona	0.018	-0.007	-1.09	-0.007	-1.19	-0.007	-1.12
California	0.019	-0.013	-1.44	-0.010	-1.17	-0.012	-1.45
Colorado	0.019	-0.005	-0.65	-0.002	-0.24	-0.005	-0.67
Connecticut	0.020	-0.013	-2.78	-0.012	-1.90	-0.012	-2.11
District of Columbia	0.020	0.018	1.33	0.024	1.85	0.022	1.49
Delaware	0.020	0.013	2.77	0.012	2.85	0.013	2.97
Florida	0.020	0.002	0.36	-0.001	-0.22	0.002	0.36
Georgia	0.020	0.030	3.44	0.034	4.55	0.031	3.40
Hawaii	0.020	0.017	0.64	0.016	0.65	0.015	0.65
Iowa	0.020	-0.005	-1.31	-0.007	-1.66	-0.007	-1.44
Idaho	0.020	-0.015	-3.31	-0.015	-2.84	-0.015	-2.95
Illinois	0.020	0.013	5.33	0.016	7.70	0.014	5.39
Indiana	0.020	0.011	3.05	0.011	3.26	0.011	3.83
Kansas	0.020	0.007	2.41	0.007	2.20	0.006	2.19
Kentucky	0.020	0.014	2.92	0.010	2.08	0.013	3.02
Louisiana	0.020	0.023	2.41	0.022	2.55	0.023	2.50
Massachusetts	0.020	-0.008	-2.03	-0.006	-1.47	-0.007	-1.77
Maryland	0.019	0.009	1.40	0.012	1.92	0.010	1.48
Maine	0.020	-0.016	-2.71	-0.018	-3.53	-0.017	-2.87
Michigan	0.020	0.015	3.86	0.015	2.97	0.015	3.51
Minnesota	0.020	-0.013	-2.34	-0.011	-1.96	-0.014	-2.34
Missouri	0.020	0.013	4.32	0.012	3.82	0.012	4.07
Mississippi	0.020	0.026	2.45	0.026	2.62	0.027	2.56
Montana	0.020	-0.010	-1.56	-0.013	-2.22	-0.010	-1.68
North Carolina	0.020	0.025	5.14	0.024	5.01	0.025	5.41
North Dakota	0.020	-0.017	-2.73	-0.017	-2.58	-0.017	-2.49
Nebraska	0.020	-0.009	-2.30	-0.008	-1.93	-0.010	-2.30

**Table B16 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
New Hampshire	0.020	-0.025	-3.90	-0.023	-3.89	-0.025	-4.12
New Jersey	0.019	-0.013	-2.71	-0.010	-1.61	-0.011	-2.14
New Mexico	0.019	-0.010	-1.06	-0.013	-1.40	-0.010	-1.08
Nevada	0.020	-0.010	-1.89	-0.010	-2.26	-0.011	-2.05
New York	0.020	-0.008	-1.99	-0.006	-1.22	-0.006	-1.20
Ohio	0.020	0.016	5.08	0.015	4.24	0.015	4.94
Oklahoma	0.020	0.003	1.09	0.002	0.73	0.004	1.41
Oregon	0.020	-0.007	-1.35	-0.007	-1.82	-0.007	-1.49
Pennsylvania	0.020	0.008	1.80	0.006	1.76	0.008	1.88
Rhode Island	0.020	-0.014	-3.00	-0.015	-4.15	-0.015	-3.02
South Carolina	0.020	-0.001	-0.08	-0.002	-0.34	-0.001	-0.08
South Dakota	0.020	-0.062	-8.85	-0.062	-8.58	-0.062	-8.83
Tennessee	0.020	0.002	0.61	0.001	0.34	0.002	0.53
Texas	0.020	0.002	0.28	0.004	0.75	0.002	0.33
Utah	0.020	-0.025	-2.32	-0.020	-1.78	-0.025	-2.17
Virginia	0.020	0.009	2.24	0.011	3.06	0.010	2.44
Vermont	0.020	-0.018	-4.02	-0.018	-4.19	-0.018	-3.89
Washington	0.020	-0.001	-0.23	0.002	0.49	0.000	0.04
Wisconsin	0.020	-0.000	-0.06	-0.002	-0.49	-0.002	-0.62
West Virginia	0.020	0.014	1.72	0.005	0.71	0.014	1.77
Wyoming	0.018	-0.018	-2.51	-0.020	-2.80	-0.019	-2.80
Time = 1992	0.032	0.002	0.42	0.003	0.41	0.001	0.20
Time = 1993	0.034	0.003	0.60	0.005	0.66	0.003	0.45
Time = 1994	0.035	0.013	2.51	0.014	2.16	0.012	1.89
Time = 1995	0.036	0.024	4.16	0.025	3.47	0.023	3.17
Time = 1996	0.036	0.027	4.73	0.028	4.05	0.026	3.71
Time = 1997	0.036	0.027	5.25	0.028	4.44	0.026	4.05
Time = 1998	0.036	0.031	6.59	0.032	5.31	0.030	5.01
Time = 1999	0.036	0.027	7.14	0.027	6.87	0.025	6.23
Time = 2000	0.036	0.028	5.26	0.028	5.40	0.026	4.75
Time = 2001	0.035	0.026	4.69	0.026	5.36	0.025	4.82
Time = 2002	0.036	0.019	4.60	0.019	5.71	0.019	4.95
Time = 2003	0.035	0.014	4.46	0.015	5.43	0.014	4.75
Time = 2004	0.036	0.009	3.29	0.010	3.91	0.009	3.44
Time = 2005	0.036	0.006	2.10	0.007	2.55	0.006	2.11
Time = 2006	0.036	0.003	1.04	0.004	1.43	0.003	1.03
Time = 2007	0.036	0.001	0.40	0.001	0.53	0.001	0.49
Time = 2008	0.036	-0.004	-1.42	-0.004	-1.52	-0.004	-1.39
Time = 2009	0.036	-0.011	-2.16	-0.011	-2.12	-0.010	-2.07
Time = 2010	0.036	-0.018	-3.86	-0.019	-3.48	-0.018	-3.48
Time = 2011	0.036	-0.022	-5.11	-0.022	-4.45	-0.021	-4.49
Time = 2012	0.036	-0.026	-6.78	-0.026	-5.51	-0.025	-5.24
Time = 2013	0.036	-0.026	-7.25	-0.027	-5.71	-0.025	-5.55
Time = 2014	0.036	-0.026	-6.98	-0.026	-5.53	-0.025	-5.30
Time = 2015	0.036	-0.027	-6.14	-0.029	-5.44	-0.026	-5.12
Time = 2016	0.036	-0.027	-5.40	-0.028	-4.80	-0.026	-4.52
Time = 2017	0.036	-0.025	-4.30	-0.027	-3.69	-0.024	-3.58
Time = 2018	0.036	-0.024	-4.09	-0.025	-3.50	-0.022	-3.34
Time = 2019	0.036	-0.024	-3.57	-0.025	-3.06	-0.022	-2.94

**Table B17 Alternative Model Specifications of the Share of UI Recipients Age 45-54 (n = 1,416)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Intercept (Dep Variable Mean)	0.229	0.229		0.229		0.229	
<b>Share of Unemployed:</b>							
Age less than 22	0.231	-0.014	-0.90	-0.005	-0.41	-0.011	-0.76
Age 22-24	0.098	-0.017	-0.93	-0.019	-1.00	-0.015	-0.87
Age 25-34	0.227	0.009	0.54	0.007	0.41	0.007	0.42
Age 35-44	0.182	0.032	1.20	0.027	1.11	0.030	1.22
Age 45-54	0.146	-0.024	-0.87	-0.034	-1.08	-0.029	-1.01
Age 55-59	0.053	0.012	0.57	0.020	0.95	0.019	0.91
Age 60-64	0.034	-0.052	-1.23	-0.054	-1.21	-0.055	-1.20
Age 65+	0.029	0.054	1.45	0.078	2.12	0.077	1.98
<b>Share of Population:</b>							
Age less than 22	0.106	-0.101	-1.33			-0.100	-1.32
Age 22-24	0.053	-0.107	-0.92			-0.098	-0.92
Age 25-34	0.178	-0.250	-2.00			-0.226	-2.10
Age 35-44	0.184	-0.198	-2.65			-0.197	-2.86
Age 45-54	0.172	0.431	3.72			0.407	4.24
Age 55-59	0.074	0.046	0.47			0.063	0.65
Age 60-64	0.063	0.181	1.23			0.177	1.37
Age 65+	0.169	0.048	0.84			0.038	0.68
<b>Share of Labor Force:</b>							
Age less than 22	0.088			-0.162	-1.66		
Age 22-24	0.064			-0.043	-0.46		
Age 25-34	0.225			-0.178	-1.83		
Age 35-44	0.235			-0.129	-2.86		
Age 45-54	0.214			0.366	3.22		
Age 55-59	0.081			0.011	0.19		
Age 60-64	0.051			0.200	1.15		
Age 65+	0.043			-0.047	-0.33		
<b>Labor Force Participation Rate:</b>							
Age less than 22	0.546					-0.003	-0.14
Age 22-24	0.796					-0.014	-0.58
Age 25-34	0.838					-0.082	-1.67
Age 35-44	0.848					-0.021	-0.77
Age 45-54	0.823					0.155	1.92
Age 55-59	0.719					-0.038	-1.47
Age 60-64	0.529					0.010	0.53
Age 65+	0.165					-0.043	-1.53
<b>Characteristics of Unemployed:</b>							
Male	0.548	0.004	0.59	0.004	0.57	0.003	0.46
Female	0.452	-0.005	-0.59	-0.005	-0.57	-0.004	-0.46
Native American	0.032	-0.039	-1.71	-0.036	-1.44	-0.030	-1.32
AAPI	0.036	0.023	0.73	0.016	0.57	0.025	0.87
Black	0.191	0.041	1.33	0.044	1.50	0.039	1.38
White	0.741	-0.010	-1.28	-0.011	-1.45	-0.010	-1.41
Hispanic	0.112	0.022	0.89	0.016	0.69	0.020	0.90
Not Hispanic	0.888	-0.003	-0.89	-0.002	-0.69	-0.003	-0.90
<b>Occupation of Unemployed:</b>							
Management, Business, Financial	0.071	-0.034	-0.94	-0.031	-0.91	-0.024	-0.75
Computers, Engineering, Science	0.028	0.005	0.12	-0.003	-0.09	0.014	0.33
Education, Legal, Comm Service	0.060	-0.001	-0.02	0.001	0.02	0.008	0.17
Healthcare Practitioners, Technical	0.016	-0.028	-0.61	-0.018	-0.43	-0.026	-0.59
Service Occupations	0.230	-0.010	-0.87	-0.010	-0.84	-0.012	-1.05
Sales and Office Occupations	0.238	0.015	0.91	0.015	0.92	0.014	0.93
Farming, Fishing, Forestry	0.017	0.064	1.39	0.071	1.52	0.064	1.39



**Table B17 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Construction and Extraction	0.114	0.039	1.21	0.043	1.23	0.036	1.13
Installation, Maintenance, Repair	0.029	-0.001	-0.02	-0.010	-0.37	-0.015	-0.52
Production, Trans, Mat Moving	0.192	-0.019	-1.87	-0.022	-1.98	-0.020	-1.89
Military Specific	0.004	-0.097	-0.64	-0.076	-0.54	-0.070	-0.50
<b>Industry of Unemployed:</b>							
Agric., Forestry, Fishing	0.022	-0.062	-1.11	-0.061	-1.09	-0.052	-0.99
Mining	0.008	-0.080	-2.55	-0.102	-3.35	-0.092	-2.82
Utilities	0.004	0.087	1.20	0.089	1.23	0.096	1.29
Construction	0.122	-0.014	-0.47	-0.019	-0.56	-0.009	-0.28
Manufacturing	0.124	-0.020	-0.76	-0.014	-0.62	-0.016	-0.71
Wholesale Trade	0.023	-0.057	-2.20	-0.057	-2.30	-0.066	-2.57
Retail Trade	0.134	0.008	0.61	0.008	0.63	0.002	0.19
Transportation, Warehousing	0.039	-0.038	-1.30	-0.037	-1.28	-0.034	-1.18
Information	0.027	0.062	1.87	0.058	1.85	0.050	1.58
Finance and Insurance	0.025	0.014	0.35	0.005	0.14	0.002	0.05
Real Estate, Rental, Leasing	0.014	0.029	0.52	0.032	0.54	0.015	0.32
Prof, Scientific, Technical	0.026	-0.056	-1.33	-0.047	-1.15	-0.050	-1.23
Admin, Support, Waste Mgmt	0.081	-0.003	-0.19	0.001	0.08	-0.002	-0.13
Educational Services	0.049	0.046	1.33	0.043	1.29	0.040	1.37
Health Care/Social Assistance	0.081	0.020	0.82	0.021	0.94	0.019	0.83
Art, Entertainment, Recreation	0.027	-0.024	-0.58	-0.020	-0.48	-0.016	-0.37
Accommodation, Food Service	0.122	0.014	0.90	0.009	0.63	0.014	0.88
Other Services (Ex Pub Admin)	0.045	0.014	0.50	0.019	0.65	0.022	0.65
Public Administration	0.027	0.051	0.85	0.048	0.81	0.044	0.80
Unemployment rate	5.435	-0.000	-0.25	-0.000	-0.31	-0.000	-0.46
Application Rate	0.186	-0.068	-1.99	-0.074	-2.51	-0.068	-2.12
Alaska	0.018	0.010	0.98	0.004	0.38	0.005	0.49
Alabama	0.020	-0.029	-3.12	-0.026	-3.37	-0.025	-3.37
Arkansas	0.020	-0.018	-3.85	-0.013	-4.34	-0.015	-3.89
Arizona	0.018	0.007	1.47	0.008	1.26	0.005	0.87
California	0.019	-0.000	-0.04	-0.003	-0.46	-0.002	-0.35
Colorado	0.019	0.030	3.01	0.027	3.16	0.029	3.10
Connecticut	0.020	-0.010	-1.84	-0.012	-1.61	-0.010	-1.54
District of Columbia	0.020	0.025	1.28	0.016	0.84	0.026	1.38
Delaware	0.020	-0.034	-5.22	-0.033	-5.85	-0.033	-6.05
Florida	0.020	-0.012	-1.40	-0.009	-1.16	-0.011	-1.45
Georgia	0.020	-0.010	-1.07	-0.015	-1.76	-0.009	-1.02
Hawaii	0.020	-0.013	-0.66	-0.013	-0.70	-0.019	-1.05
Iowa	0.020	0.007	1.14	0.009	1.48	0.007	1.21
Idaho	0.020	0.019	2.50	0.019	2.29	0.015	2.19
Illinois	0.020	0.002	0.45	-0.002	-0.48	0.001	0.21
Indiana	0.020	0.013	3.10	0.013	3.23	0.013	3.52
Kansas	0.020	0.005	1.14	0.005	1.47	0.006	1.62
Kentucky	0.020	0.011	2.54	0.016	3.34	0.015	2.69
Louisiana	0.020	-0.021	-1.99	-0.021	-2.13	-0.018	-1.92
Massachusetts	0.020	0.002	0.62	0.000	0.07	0.001	0.45
Maryland	0.019	-0.033	-3.36	-0.038	-3.30	-0.033	-3.24
Maine	0.020	-0.009	-1.16	-0.006	-0.88	-0.008	-1.08
Michigan	0.020	-0.001	-0.44	0.000	0.12	-0.002	-0.67
Minnesota	0.020	0.004	0.53	0.002	0.35	0.002	0.35
Missouri	0.020	-0.001	-0.32	0.002	0.90	0.003	0.96
Mississippi	0.020	-0.021	-1.79	-0.022	-1.96	-0.019	-1.71
Montana	0.020	0.005	0.75	0.009	1.37	0.005	0.76
North Carolina	0.020	-0.006	-0.95	-0.006	-0.99	-0.004	-0.81
North Dakota	0.020	0.015	1.72	0.015	1.62	0.013	1.53
Nebraska	0.020	0.000	0.06	-0.000	-0.05	0.001	0.13

**Table B17 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
New Hampshire	0.020	0.036	3.95	0.034	4.51	0.035	4.59
New Jersey	0.019	-0.031	-5.52	-0.035	-4.62	-0.031	-4.97
New Mexico	0.019	-0.009	-1.00	-0.006	-0.64	-0.010	-1.13
Nevada	0.020	0.009	2.42	0.010	2.77	0.010	2.28
New York	0.020	-0.027	-4.53	-0.031	-4.37	-0.029	-4.20
Ohio	0.020	0.015	6.10	0.017	6.48	0.017	6.15
Oklahoma	0.020	0.009	2.54	0.010	2.94	0.009	2.72
Oregon	0.020	0.009	1.53	0.010	1.69	0.008	1.28
Pennsylvania	0.020	-0.010	-1.49	-0.007	-1.45	-0.009	-1.60
Rhode Island	0.020	-0.001	-0.19	0.002	0.55	-0.000	-0.10
South Carolina	0.020	-0.013	-1.42	-0.012	-1.41	-0.011	-1.36
South Dakota	0.020	0.018	1.91	0.018	2.15	0.016	2.08
Tennessee	0.020	0.006	2.54	0.009	3.19	0.010	3.30
Texas	0.020	0.001	0.07	-0.002	-0.33	0.000	0.05
Utah	0.020	0.015	0.75	0.010	0.50	0.010	0.59
Virginia	0.020	-0.002	-0.44	-0.005	-1.09	-0.002	-0.50
Vermont	0.020	-0.001	-0.14	-0.002	-0.27	-0.002	-0.34
Washington	0.020	0.019	3.06	0.016	2.73	0.014	2.70
Wisconsin	0.020	0.010	2.43	0.013	2.77	0.010	2.27
West Virginia	0.020	0.005	0.51	0.015	2.57	0.011	1.19
Wyoming	0.018	0.006	0.84	0.007	1.09	0.004	0.72
Time = 1992	0.032	-0.013	-0.90	-0.012	-0.73	-0.015	-1.05
Time = 1993	0.034	-0.011	-0.81	-0.012	-0.78	-0.015	-1.09
Time = 1994	0.035	-0.011	-0.92	-0.011	-0.85	-0.013	-1.11
Time = 1995	0.036	-0.006	-0.61	-0.007	-0.56	-0.008	-0.80
Time = 1996	0.036	-0.004	-0.40	-0.004	-0.38	-0.005	-0.61
Time = 1997	0.036	-0.002	-0.28	-0.003	-0.29	-0.004	-0.48
Time = 1998	0.036	0.001	0.18	0.001	0.14	-0.000	-0.01
Time = 1999	0.036	0.006	1.00	0.005	0.83	0.004	0.77
Time = 2000	0.036	0.008	2.54	0.009	2.17	0.007	2.03
Time = 2001	0.035	0.010	3.04	0.011	3.01	0.009	2.67
Time = 2002	0.036	0.008	3.21	0.009	3.10	0.008	2.80
Time = 2003	0.035	0.009	4.60	0.008	4.38	0.009	4.03
Time = 2004	0.036	0.008	3.59	0.007	3.25	0.007	3.27
Time = 2005	0.036	0.011	3.49	0.010	3.11	0.011	3.71
Time = 2006	0.036	0.014	4.03	0.013	3.57	0.014	4.11
Time = 2007	0.036	0.013	3.34	0.013	2.88	0.014	3.64
Time = 2008	0.036	0.014	2.76	0.014	2.44	0.015	3.19
Time = 2009	0.036	0.007	1.00	0.007	0.92	0.009	1.39
Time = 2010	0.036	-0.000	-0.05	-0.001	-0.09	0.002	0.24
Time = 2011	0.036	-0.003	-0.38	-0.003	-0.37	-0.000	-0.06
Time = 2012	0.036	-0.003	-0.46	-0.003	-0.40	-0.001	-0.19
Time = 2013	0.036	-0.003	-0.51	-0.003	-0.38	-0.001	-0.14
Time = 2014	0.036	-0.003	-0.44	-0.003	-0.34	-0.001	-0.18
Time = 2015	0.036	-0.005	-0.82	-0.004	-0.57	-0.003	-0.56
Time = 2016	0.036	-0.007	-1.25	-0.006	-0.90	-0.006	-0.97
Time = 2017	0.036	-0.011	-1.81	-0.009	-1.31	-0.009	-1.46
Time = 2018	0.036	-0.014	-2.55	-0.013	-1.93	-0.013	-2.16
Time = 2019	0.036	-0.016	-3.20	-0.015	-2.37	-0.016	-2.67

**Table B18 Alternative Model Specifications of the Share of UI Recipients Age 55-59 (n = 1,416)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Intercept (Dep Variable Mean)	0.088	0.088		0.088		0.088	
<b>Share of Unemployed:</b>							
Age less than 22	0.231	0.015	0.93	0.025	1.41	0.020	1.21
Age 22-24	0.098	-0.012	-0.77	-0.018	-1.15	-0.015	-1.04
Age 25-34	0.227	0.016	1.13	0.014	1.00	0.015	1.14
Age 35-44	0.182	0.020	1.02	0.014	0.77	0.018	0.98
Age 45-54	0.146	-0.071	-2.36	-0.081	-2.47	-0.079	-2.42
Age 55-59	0.053	-0.007	-0.21	-0.003	-0.11	-0.006	-0.17
Age 60-64	0.034	0.000	0.00	0.006	0.15	0.003	0.07
Age 65+	0.029	0.034	1.01	0.067	1.93	0.069	1.99
<b>Share of Population:</b>							
Age less than 22	0.106	-0.017	-0.15			-0.015	-0.13
Age 22-24	0.053	-0.103	-1.18			-0.054	-0.60
Age 25-34	0.178	-0.119	-1.32			-0.097	-1.26
Age 35-44	0.184	-0.140	-2.70			-0.146	-3.24
Age 45-54	0.172	0.153	1.58			0.133	1.62
Age 55-59	0.074	0.318	2.82			0.332	2.69
Age 60-64	0.063	0.114	0.72			0.115	0.76
Age 65+	0.169	-0.017	-0.18			-0.036	-0.36
<b>Share of Labor Force:</b>							
Age less than 22	0.088			-0.112	-1.23		
Age 22-24	0.064			-0.020	-0.28		
Age 25-34	0.225			-0.069	-0.98		
Age 35-44	0.235			-0.096	-2.80		
Age 45-54	0.214			0.163	1.71		
Age 55-59	0.081			0.236	3.62		
Age 60-64	0.051			0.106	0.56		
Age 65+	0.043			-0.234	-1.36		
<b>Labor Force Participation Rate:</b>							
Age less than 22	0.546					-0.031	-1.29
Age 22-24	0.796					-0.000	-0.01
Age 25-34	0.838					-0.014	-0.40
Age 35-44	0.848					-0.052	-1.78
Age 45-54	0.823					0.130	1.88
Age 55-59	0.719					-0.023	-0.82
Age 60-64	0.529					-0.011	-0.45
Age 65+	0.165					-0.069	-2.11
<b>Characteristics of Unemployed:</b>							
Male	0.548	-0.017	-1.03	-0.017	-1.01	-0.018	-1.11
Female	0.452	0.020	1.03	0.021	1.01	0.021	1.11
Native American	0.032	-0.011	-1.16	-0.007	-0.62	-0.002	-0.20
AAPI	0.036	0.003	0.08	-0.001	-0.02	0.002	0.06
Black	0.191	0.054	1.89	0.059	2.08	0.053	1.97
White	0.741	-0.014	-1.64	-0.015	-1.76	-0.014	-1.76
Hispanic	0.112	-0.011	-0.63	-0.014	-0.95	-0.013	-0.81
Not Hispanic	0.888	0.001	0.63	0.002	0.95	0.002	0.81
<b>Occupation of Unemployed:</b>							
Management, Business, Financial	0.071	-0.040	-1.21	-0.041	-1.26	-0.038	-1.18
Computers, Engineering, Science	0.028	0.013	0.40	0.009	0.24	0.024	0.70
Education, Legal, Comm Service	0.060	-0.011	-0.30	-0.009	-0.25	-0.001	-0.02
Healthcare Practitioners, Technical	0.016	-0.073	-0.77	-0.056	-0.60	-0.075	-0.74
Service Occupations	0.230	-0.004	-0.28	-0.005	-0.32	-0.007	-0.44
Sales and Office Occupations	0.238	0.017	1.24	0.016	1.23	0.017	1.35
Farming, Fishing, Forestry	0.017	0.072	1.43	0.077	1.55	0.070	1.49

**Table B18 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Construction and Extraction	0.114	0.021	0.79	0.024	0.86	0.021	0.79
Installation, Maintenance, Repair	0.029	0.038	1.13	0.034	0.96	0.028	0.81
Production, Trans, Mat Moving	0.192	-0.014	-0.74	-0.015	-0.73	-0.015	-0.84
Military Specific	0.004	-0.185	-1.68	-0.173	-1.67	-0.161	-1.67
<b>Industry of Unemployed:</b>							
Agric., Forestry, Fishing	0.022	-0.089	-1.64	-0.081	-1.55	-0.079	-1.52
Mining	0.008	0.015	0.53	0.003	0.09	0.016	0.55
Utilities	0.004	-0.055	-0.87	-0.046	-0.74	-0.054	-0.92
Construction	0.122	0.032	0.99	0.032	0.85	0.034	1.11
Manufacturing	0.124	0.021	1.11	0.022	1.27	0.024	1.38
Wholesale Trade	0.023	-0.040	-1.40	-0.037	-1.23	-0.041	-1.47
Retail Trade	0.134	-0.005	-0.30	-0.008	-0.39	-0.011	-0.60
Transportation, Warehousing	0.039	0.019	0.64	0.017	0.63	0.020	0.68
Information	0.027	-0.015	-0.54	-0.010	-0.35	-0.020	-0.69
Finance and Insurance	0.025	-0.009	-0.27	-0.022	-0.58	-0.024	-0.68
Real Estate, Rental, Leasing	0.014	0.107	1.11	0.110	1.18	0.101	1.07
Prof, Scientific, Technical	0.026	-0.019	-0.50	-0.011	-0.28	-0.013	-0.33
Admin, Support, Waste Mgmt	0.081	-0.021	-1.66	-0.018	-1.56	-0.020	-1.73
Educational Services	0.049	0.046	1.29	0.048	1.40	0.041	1.27
Health Care/Social Assistance	0.081	0.004	0.14	0.000	0.01	0.004	0.14
Art, Entertainment, Recreation	0.027	-0.068	-1.91	-0.064	-1.84	-0.060	-1.81
Accommodation, Food Service	0.122	-0.040	-1.86	-0.042	-2.17	-0.040	-1.74
Other Services (Ex Pub Admin)	0.045	-0.001	-0.02	0.004	0.11	0.010	0.28
Public Administration	0.027	0.074	1.46	0.072	1.45	0.068	1.46
Unemployment rate	5.435	-0.000	-0.22	-0.000	-0.24	-0.000	-0.41
Application Rate	0.186	0.020	0.59	0.017	0.53	0.020	0.65
Alaska	0.018	-0.014	-1.37	-0.018	-2.42	-0.017	-1.51
Alabama	0.020	-0.036	-3.09	-0.036	-3.11	-0.036	-2.98
Arkansas	0.020	-0.027	-4.46	-0.024	-3.68	-0.026	-4.23
Arizona	0.018	0.017	2.03	0.017	2.33	0.014	1.91
California	0.019	0.012	2.10	0.009	1.77	0.009	1.68
Colorado	0.019	0.026	2.77	0.023	2.55	0.025	2.93
Connecticut	0.020	0.004	0.77	0.004	0.52	0.006	0.84
District of Columbia	0.020	-0.005	-0.26	-0.014	-0.78	-0.008	-0.38
Delaware	0.020	-0.026	-4.42	-0.025	-4.40	-0.026	-4.59
Florida	0.020	0.006	0.63	0.007	1.02	0.006	0.66
Georgia	0.020	-0.027	-1.78	-0.032	-2.49	-0.028	-1.75
Hawaii	0.020	-0.004	-0.18	-0.004	-0.18	-0.007	-0.36
Iowa	0.020	0.007	1.47	0.009	1.90	0.010	1.63
Idaho	0.020	0.016	2.71	0.016	2.50	0.014	2.39
Illinois	0.020	-0.002	-0.64	-0.004	-1.94	-0.003	-1.01
Indiana	0.020	-0.001	-0.32	0.000	0.01	-0.000	-0.10
Kansas	0.020	0.001	0.24	0.003	0.85	0.005	1.19
Kentucky	0.020	-0.003	-0.91	0.001	0.27	-0.001	-0.22
Louisiana	0.020	-0.029	-2.46	-0.029	-2.76	-0.030	-2.31
Massachusetts	0.020	0.010	1.71	0.008	1.43	0.010	1.54
Maryland	0.019	-0.026	-2.79	-0.030	-3.13	-0.026	-2.82
Maine	0.020	0.003	0.26	0.005	0.52	0.005	0.45
Michigan	0.020	-0.011	-3.93	-0.010	-3.26	-0.012	-3.88
Minnesota	0.020	0.010	1.64	0.009	1.48	0.011	1.79
Missouri	0.020	-0.008	-4.13	-0.007	-3.58	-0.005	-2.96
Mississippi	0.020	-0.038	-2.36	-0.039	-2.66	-0.039	-2.27
Montana	0.020	0.009	0.85	0.012	1.39	0.009	0.91
North Carolina	0.020	-0.021	-2.57	-0.022	-2.63	-0.021	-2.53
North Dakota	0.020	0.012	2.06	0.011	1.86	0.012	1.95
Nebraska	0.020	0.007	1.55	0.008	1.61	0.011	1.84

**Table B18 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
New Hampshire	0.020	0.029	3.24	0.028	3.19	0.030	3.23
New Jersey	0.019	-0.008	-2.00	-0.011	-1.83	-0.009	-2.19
New Mexico	0.019	0.011	0.87	0.013	1.30	0.009	0.83
Nevada	0.020	0.018	2.81	0.019	3.44	0.018	3.02
New York	0.020	-0.009	-2.50	-0.012	-2.49	-0.013	-2.73
Ohio	0.020	-0.000	-0.22	0.001	0.53	0.001	0.51
Oklahoma	0.020	0.002	0.70	0.004	1.28	0.002	0.80
Oregon	0.020	0.010	1.31	0.010	1.57	0.008	1.16
Pennsylvania	0.020	-0.006	-1.12	-0.005	-1.41	-0.007	-1.34
Rhode Island	0.020	0.012	1.91	0.014	2.79	0.014	1.87
South Carolina	0.020	0.007	0.69	0.008	0.73	0.007	0.58
South Dakota	0.020	0.041	5.27	0.044	5.16	0.045	4.67
Tennessee	0.020	-0.002	-0.39	-0.000	-0.04	-0.000	-0.10
Texas	0.020	0.003	0.49	0.001	0.30	0.002	0.40
Utah	0.020	0.013	0.87	0.010	0.72	0.011	0.88
Virginia	0.020	-0.007	-1.18	-0.010	-1.76	-0.009	-1.26
Vermont	0.020	0.011	1.31	0.011	1.29	0.013	1.30
Washington	0.020	0.011	2.25	0.008	1.84	0.006	1.71
Wisconsin	0.020	0.001	0.28	0.002	0.58	0.003	0.97
West Virginia	0.020	-0.003	-0.22	0.004	0.49	-0.001	-0.12
Wyoming	0.018	0.007	1.00	0.009	1.34	0.009	1.18
Time = 1992	0.032	-0.012	-1.25	-0.013	-1.10	-0.015	-1.45
Time = 1993	0.034	-0.010	-0.92	-0.012	-0.96	-0.013	-1.27
Time = 1994	0.035	-0.006	-0.80	-0.008	-0.87	-0.008	-1.08
Time = 1995	0.036	-0.008	-1.18	-0.011	-1.23	-0.011	-1.49
Time = 1996	0.036	-0.009	-1.47	-0.012	-1.43	-0.012	-1.75
Time = 1997	0.036	-0.009	-1.50	-0.011	-1.48	-0.011	-1.78
Time = 1998	0.036	-0.009	-1.74	-0.011	-1.62	-0.011	-1.89
Time = 1999	0.036	-0.010	-1.34	-0.012	-1.34	-0.011	-1.42
Time = 2000	0.036	-0.011	-1.62	-0.012	-1.52	-0.012	-1.65
Time = 2001	0.035	-0.013	-2.13	-0.014	-1.98	-0.014	-2.21
Time = 2002	0.036	-0.009	-2.22	-0.011	-2.21	-0.010	-2.38
Time = 2003	0.035	-0.010	-2.67	-0.011	-3.10	-0.011	-2.79
Time = 2004	0.036	-0.008	-2.62	-0.010	-3.22	-0.009	-2.87
Time = 2005	0.036	-0.009	-2.07	-0.010	-2.53	-0.009	-2.15
Time = 2006	0.036	-0.006	-1.64	-0.007	-2.07	-0.006	-1.69
Time = 2007	0.036	-0.008	-2.07	-0.009	-2.35	-0.008	-2.10
Time = 2008	0.036	-0.005	-1.43	-0.006	-1.36	-0.004	-1.29
Time = 2009	0.036	-0.002	-0.42	-0.002	-0.28	-0.001	-0.09
Time = 2010	0.036	-0.000	-0.01	0.000	0.06	0.002	0.29
Time = 2011	0.036	0.003	0.43	0.004	0.44	0.005	0.76
Time = 2012	0.036	0.007	1.10	0.008	1.06	0.009	1.33
Time = 2013	0.036	0.013	1.89	0.015	1.77	0.015	2.10
Time = 2014	0.036	0.016	2.55	0.018	2.30	0.018	2.56
Time = 2015	0.036	0.019	2.82	0.021	2.79	0.021	2.86
Time = 2016	0.036	0.021	3.27	0.024	3.28	0.023	3.20
Time = 2017	0.036	0.023	3.43	0.026	3.45	0.024	3.35
Time = 2018	0.036	0.026	3.38	0.029	3.56	0.027	3.17
Time = 2019	0.036	0.027	3.26	0.031	3.54	0.028	3.10

**Table B19 Alternative Model Specifications of the Share of UI Recipients Age 60-64 (n = 1,416)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Intercept (Dep Variable Mean)	0.057	0.057		0.057		0.057	
<b>Share of Unemployed:</b>							
Age less than 22	0.231	-0.006	-0.76	-0.002	-0.25	-0.005	-0.57
Age 22-24	0.098	-0.012	-0.89	-0.011	-0.89	-0.012	-0.96
Age 25-34	0.227	0.015	1.32	0.014	1.24	0.015	1.31
Age 35-44	0.182	0.018	1.26	0.016	1.10	0.017	1.24
Age 45-54	0.146	-0.045	-1.97	-0.049	-1.92	-0.048	-2.00
Age 55-59	0.053	0.022	1.11	0.021	0.94	0.023	1.13
Age 60-64	0.034	-0.013	-0.40	-0.014	-0.47	-0.011	-0.36
Age 65+	0.029	0.052	1.62	0.072	1.88	0.065	1.71
<b>Share of Population:</b>							
Age less than 22	0.106	-0.057	-0.90			-0.054	-0.88
Age 22-24	0.053	-0.103	-1.21			-0.084	-0.95
Age 25-34	0.178	-0.126	-2.03			-0.116	-2.00
Age 35-44	0.184	-0.116	-2.71			-0.119	-3.17
Age 45-54	0.172	0.102	1.31			0.095	1.33
Age 55-59	0.074	0.118	2.08			0.110	1.71
Age 60-64	0.063	0.302	3.70			0.307	4.21
Age 65+	0.169	0.059	1.35			0.052	1.14
<b>Share of Labor Force:</b>							
Age less than 22	0.088			-0.073	-1.02		
Age 22-24	0.064			-0.057	-0.76		
Age 25-34	0.225			-0.077	-1.56		
Age 35-44	0.235			-0.062	-2.11		
Age 45-54	0.214			0.090	1.21		
Age 55-59	0.081			0.147	3.78		
Age 60-64	0.051			0.269	3.30		
Age 65+	0.043			-0.064	-0.47		
<b>Labor Force Participation Rate:</b>							
Age less than 22	0.546					-0.005	-0.37
Age 22-24	0.796					-0.011	-0.77
Age 25-34	0.838					0.001	0.02
Age 35-44	0.848					-0.027	-1.01
Age 45-54	0.823					0.046	0.76
Age 55-59	0.719					0.004	0.15
Age 60-64	0.529					-0.002	-0.15
Age 65+	0.165					-0.035	-1.06
<b>Characteristics of Unemployed:</b>							
Male	0.548	0.001	0.18	0.001	0.27	0.001	0.12
Female	0.452	-0.001	-0.18	-0.002	-0.27	-0.001	-0.12
Native American	0.032	-0.006	-0.61	-0.006	-0.62	-0.002	-0.18
AAPI	0.036	-0.024	-0.90	-0.031	-1.28	-0.023	-0.93
Black	0.191	0.008	0.40	0.012	0.58	0.009	0.45
White	0.741	-0.001	-0.15	-0.001	-0.28	-0.001	-0.24
Hispanic	0.112	-0.010	-0.68	-0.016	-1.15	-0.010	-0.75
Not Hispanic	0.888	0.001	0.68	0.002	1.15	0.001	0.75
<b>Occupation of Unemployed:</b>							
Management, Business, Financial	0.071	-0.004	-0.19	-0.005	-0.20	-0.004	-0.17
Computers, Engineering, Science	0.028	0.010	0.22	-0.004	-0.10	0.016	0.37
Education, Legal, Comm Service	0.060	0.010	0.40	0.006	0.22	0.014	0.58
Healthcare Practitioners, Technical	0.016	-0.016	-0.32	-0.004	-0.08	-0.013	-0.25
Service Occupations	0.230	0.019	1.76	0.020	1.87	0.017	1.58
Sales and Office Occupations	0.238	0.012	0.89	0.012	0.87	0.012	0.90
Farming, Fishing, Forestry	0.017	-0.056	-0.96	-0.051	-0.89	-0.056	-1.02

**Table B19 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Construction and Extraction	0.114	0.030	1.27	0.034	1.42	0.030	1.33
Installation, Maintenance, Repair	0.029	-0.021	-0.77	-0.022	-0.79	-0.024	-0.93
Production, Trans, Mat Moving	0.192	-0.046	-2.36	-0.047	-2.35	-0.046	-2.30
Military Specific	0.004	-0.153	-2.04	-0.149	-2.04	-0.146	-2.22
<b>Industry of Unemployed:</b>							
Agric., Forestry, Fishing	0.022	0.007	0.14	0.008	0.16	0.012	0.26
Mining	0.008	-0.012	-0.36	-0.037	-1.11	-0.013	-0.45
Utilities	0.004	-0.056	-1.01	-0.048	-0.84	-0.056	-1.01
Construction	0.122	-0.006	-0.26	-0.012	-0.47	-0.004	-0.17
Manufacturing	0.124	0.030	1.84	0.032	2.16	0.029	1.95
Wholesale Trade	0.023	0.025	0.89	0.027	0.98	0.025	0.85
Retail Trade	0.134	-0.000	-0.01	-0.000	-0.00	-0.003	-0.18
Transportation, Warehousing	0.039	0.037	1.45	0.038	1.45	0.037	1.51
Information	0.027	-0.080	-2.67	-0.082	-2.65	-0.083	-2.88
Finance and Insurance	0.025	-0.013	-0.40	-0.015	-0.44	-0.019	-0.53
Real Estate, Rental, Leasing	0.014	0.006	0.10	0.011	0.19	0.002	0.03
Prof, Scientific, Technical	0.026	-0.060	-1.25	-0.053	-1.11	-0.057	-1.13
Admin, Support, Waste Mgmt	0.081	-0.024	-1.47	-0.019	-1.28	-0.022	-1.41
Educational Services	0.049	0.040	1.22	0.042	1.30	0.038	1.21
Health Care/Social Assistance	0.081	-0.004	-0.20	-0.000	-0.00	-0.004	-0.22
Art, Entertainment, Recreation	0.027	0.001	0.03	0.002	0.04	0.002	0.05
Accommodation, Food Service	0.122	-0.030	-1.96	-0.034	-2.21	-0.029	-1.81
Other Services (Ex Pub Admin)	0.045	0.047	1.68	0.047	1.62	0.052	1.85
Public Administration	0.027	0.036	1.03	0.036	1.00	0.032	1.00
Unemployment rate	5.435	0.000	0.51	0.000	0.50	0.000	0.42
Application Rate	0.186	0.015	0.65	0.010	0.46	0.015	0.69
Alaska	0.018	-0.010	-1.75	-0.017	-2.82	-0.011	-1.74
Alabama	0.020	-0.016	-1.94	-0.014	-1.66	-0.015	-2.30
Arkansas	0.020	-0.017	-3.64	-0.013	-2.83	-0.016	-5.06
Arizona	0.018	0.006	1.34	0.008	1.64	0.005	1.26
California	0.019	0.014	2.50	0.012	2.26	0.013	2.53
Colorado	0.019	0.012	1.85	0.009	1.46	0.012	2.02
Connecticut	0.020	0.006	1.30	0.004	0.76	0.006	1.28
District of Columbia	0.020	0.019	1.12	0.011	0.63	0.018	1.09
Delaware	0.020	-0.013	-3.25	-0.011	-3.22	-0.013	-3.68
Florida	0.020	0.004	0.84	0.009	1.95	0.004	0.93
Georgia	0.020	-0.002	-0.29	-0.008	-0.95	-0.003	-0.37
Hawaii	0.020	0.012	0.72	0.016	1.02	0.010	0.68
Iowa	0.020	0.003	0.82	0.004	0.95	0.004	1.05
Idaho	0.020	0.004	0.83	0.005	0.79	0.003	0.72
Illinois	0.020	-0.000	-0.00	-0.003	-1.47	-0.001	-0.36
Indiana	0.020	-0.005	-2.57	-0.006	-3.00	-0.005	-2.60
Kansas	0.020	-0.002	-1.18	-0.003	-1.31	-0.001	-0.60
Kentucky	0.020	-0.006	-2.79	-0.003	-0.97	-0.005	-1.68
Louisiana	0.020	-0.009	-0.87	-0.009	-0.89	-0.008	-0.94
Massachusetts	0.020	0.004	1.08	0.003	0.63	0.004	0.98
Maryland	0.019	-0.005	-0.79	-0.009	-1.21	-0.005	-0.79
Maine	0.020	-0.009	-1.67	-0.007	-1.31	-0.008	-1.45
Michigan	0.020	-0.013	-5.84	-0.011	-4.42	-0.013	-5.62
Minnesota	0.020	0.001	0.21	-0.001	-0.25	0.001	0.15
Missouri	0.020	-0.007	-3.50	-0.006	-3.29	-0.006	-4.06
Mississippi	0.020	-0.011	-0.93	-0.011	-0.98	-0.011	-1.08
Montana	0.020	-0.010	-2.11	-0.006	-1.26	-0.010	-2.04
North Carolina	0.020	-0.008	-1.76	-0.008	-1.60	-0.008	-1.95
North Dakota	0.020	0.007	1.52	0.007	1.31	0.007	1.38
Nebraska	0.020	0.004	1.22	0.003	0.81	0.005	1.55
New Hampshire	0.020	0.021	3.04	0.020	2.96	0.022	3.43

**Table B19 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
New Jersey	0.019	-0.003	-0.71	-0.005	-1.04	-0.003	-0.86
New Mexico	0.019	-0.002	-0.36	0.002	0.42	-0.002	-0.35
Nevada	0.020	0.011	3.25	0.012	3.61	0.011	3.39
New York	0.020	-0.004	-1.44	-0.006	-1.59	-0.006	-1.54
Ohio	0.020	-0.008	-5.00	-0.007	-3.95	-0.007	-4.77
Oklahoma	0.020	-0.002	-1.21	-0.001	-0.36	-0.001	-1.03
Oregon	0.020	-0.003	-0.68	-0.002	-0.39	-0.004	-0.91
Pennsylvania	0.020	-0.012	-3.20	-0.009	-3.02	-0.012	-3.52
Rhode Island	0.020	0.005	1.18	0.007	1.84	0.005	1.28
South Carolina	0.020	0.007	0.92	0.009	1.11	0.007	1.09
South Dakota	0.020	0.034	6.58	0.034	6.43	0.035	8.17
Tennessee	0.020	0.011	3.62	0.012	3.71	0.012	5.16
Texas	0.020	0.006	1.22	0.003	0.68	0.006	1.27
Utah	0.020	0.009	0.93	0.003	0.34	0.008	0.82
Virginia	0.020	0.002	0.52	-0.001	-0.18	0.001	0.40
Vermont	0.020	-0.002	-0.33	-0.003	-0.49	-0.001	-0.23
Washington	0.020	0.001	0.27	-0.000	-0.09	-0.001	-0.17
Wisconsin	0.020	-0.000	-0.13	0.001	0.22	-0.000	-0.05
West Virginia	0.020	-0.022	-4.82	-0.012	-3.38	-0.020	-3.88
Wyoming	0.018	-0.001	-0.32	-0.000	-0.09	-0.000	-0.11
Time = 1992	0.032	-0.004	-0.74	-0.004	-0.59	-0.005	-0.90
Time = 1993	0.034	-0.002	-0.24	-0.003	-0.33	-0.003	-0.44
Time = 1994	0.035	-0.001	-0.22	-0.002	-0.31	-0.002	-0.37
Time = 1995	0.036	-0.004	-0.77	-0.005	-0.78	-0.005	-0.92
Time = 1996	0.036	-0.004	-0.81	-0.005	-0.80	-0.005	-0.95
Time = 1997	0.036	-0.003	-0.62	-0.004	-0.68	-0.004	-0.81
Time = 1998	0.036	-0.004	-0.92	-0.004	-0.91	-0.005	-1.08
Time = 1999	0.036	0.003	0.50	0.002	0.39	0.002	0.36
Time = 2000	0.036	-0.001	-0.27	-0.001	-0.25	-0.001	-0.51
Time = 2001	0.035	-0.007	-2.69	-0.006	-3.09	-0.007	-3.24
Time = 2002	0.036	-0.007	-2.92	-0.007	-3.78	-0.007	-3.64
Time = 2003	0.035	-0.007	-3.72	-0.009	-4.75	-0.008	-4.38
Time = 2004	0.036	-0.007	-3.87	-0.009	-4.70	-0.008	-4.53
Time = 2005	0.036	-0.009	-4.55	-0.011	-4.99	-0.009	-4.97
Time = 2006	0.036	-0.007	-3.11	-0.009	-3.52	-0.007	-3.36
Time = 2007	0.036	-0.007	-2.86	-0.009	-3.01	-0.007	-2.97
Time = 2008	0.036	-0.007	-2.28	-0.008	-2.28	-0.007	-2.25
Time = 2009	0.036	-0.007	-1.67	-0.007	-1.50	-0.006	-1.55
Time = 2010	0.036	-0.004	-1.00	-0.004	-0.94	-0.003	-0.80
Time = 2011	0.036	-0.002	-0.69	-0.003	-0.61	-0.001	-0.40
Time = 2012	0.036	-0.001	-0.27	-0.001	-0.15	0.000	0.06
Time = 2013	0.036	0.003	1.14	0.004	0.98	0.004	1.39
Time = 2014	0.036	0.007	2.53	0.007	1.98	0.008	2.55
Time = 2015	0.036	0.009	3.50	0.011	3.05	0.010	3.40
Time = 2016	0.036	0.013	4.90	0.015	4.17	0.014	4.39
Time = 2017	0.036	0.017	5.09	0.019	4.50	0.018	4.58
Time = 2018	0.036	0.019	5.19	0.021	4.98	0.019	4.67
Time = 2019	0.036	0.023	6.03	0.026	5.60	0.024	5.48



**Table B20 Alternative Model Specifications of the Share of UI Recipients Age 65 and Older (n = 1,416)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Intercept (Dep Variable Mean)	0.037	0.037		0.037		0.037	
<b>Share of Unemployed:</b>							
Age less than 22	0.231	-0.008	-0.33	-0.006	-0.20	-0.006	-0.24
Age 22-24	0.098	0.027	0.62	0.028	0.65	0.028	0.65
Age 25-34	0.227	0.005	0.34	0.006	0.41	0.003	0.24
Age 35-44	0.182	0.038	2.20	0.036	2.30	0.036	2.23
Age 45-54	0.146	-0.062	-2.47	-0.063	-2.48	-0.062	-2.53
Age 55-59	0.053	0.000	0.00	-0.003	-0.08	-0.001	-0.02
Age 60-64	0.034	-0.053	-1.38	-0.064	-1.52	-0.058	-1.30
Age 65+	0.029	0.067	1.05	0.076	1.15	0.075	1.12
<b>Share of Population:</b>							
Age less than 22	0.106	-0.094	-0.69			-0.103	-0.74
Age 22-24	0.053	-0.000	-0.00			0.005	0.03
Age 25-34	0.178	-0.061	-0.92			-0.050	-0.78
Age 35-44	0.184	-0.094	-1.88			-0.099	-2.05
Age 45-54	0.172	0.117	1.40			0.117	1.38
Age 55-59	0.074	0.031	0.34			0.031	0.40
Age 60-64	0.063	0.130	1.09			0.133	1.09
Age 65+	0.169	0.045	0.58			0.041	0.51
<b>Share of Labor Force:</b>							
Age less than 22	0.088			-0.095	-0.67		
Age 22-24	0.064			0.010	0.09		
Age 25-34	0.225			-0.046	-1.09		
Age 35-44	0.235			-0.053	-1.61		
Age 45-54	0.214			0.076	1.22		
Age 55-59	0.081			0.065	0.69		
Age 60-64	0.051			0.199	1.69		
Age 65+	0.043			-0.035	-0.21		
<b>Labor Force Participation Rate:</b>							
Age less than 22	0.546					0.002	0.08
Age 22-24	0.796					-0.007	-0.54
Age 25-34	0.838					-0.055	-0.67
Age 35-44	0.848					0.043	0.52
Age 45-54	0.823					0.009	0.16
Age 55-59	0.719					0.003	0.07
Age 60-64	0.529					0.020	1.25
Age 65+	0.165					-0.037	-1.14
<b>Characteristics of Unemployed:</b>							
Male	0.548	0.014	0.98	0.014	0.97	0.013	0.98
Female	0.452	-0.017	-0.98	-0.017	-0.97	-0.016	-0.98
Native American	0.032	-0.008	-0.31	-0.009	-0.33	-0.008	-0.26
AAPI	0.036	-0.040	-1.22	-0.043	-1.55	-0.039	-1.29
Black	0.191	0.016	1.16	0.016	1.22	0.018	1.15
White	0.741	-0.002	-0.63	-0.002	-0.60	-0.002	-0.73
Hispanic	0.112	-0.011	-0.63	-0.016	-0.85	-0.012	-0.62
Not Hispanic	0.888	0.001	0.63	0.002	0.85	0.001	0.62
<b>Occupation of Unemployed:</b>							
Management, Business, Financial	0.071	0.049	1.72	0.050	1.77	0.054	1.83
Computers, Engineering, Science	0.028	-0.038	-1.01	-0.044	-1.38	-0.042	-0.99
Education, Legal, Comm Service	0.060	-0.027	-0.67	-0.031	-0.82	-0.029	-0.75
Healthcare Practitioners, Technical	0.016	-0.025	-0.58	-0.021	-0.52	-0.018	-0.42
Service Occupations	0.230	0.027	1.98	0.027	2.04	0.027	1.91
Sales and Office Occupations	0.238	0.012	0.64	0.012	0.62	0.011	0.62
Farming, Fishing, Forestry	0.017	0.041	0.60	0.041	0.59	0.040	0.57

**Table B20 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
Construction and Extraction	0.114	0.004	0.14	0.007	0.27	0.007	0.31
Installation, Maintenance, Repair	0.029	0.003	0.08	0.000	0.01	0.000	0.00
Production, Trans, Mat Moving	0.192	-0.053	-2.62	-0.053	-2.51	-0.054	-2.48
Military Specific	0.004	-0.089	-1.27	-0.087	-1.29	-0.098	-1.41
<b>Industry of Unemployed:</b>							
Agric., Forestry, Fishing	0.022	-0.041	-0.58	-0.039	-0.56	-0.032	-0.42
Mining	0.008	-0.024	-0.50	-0.040	-0.88	-0.034	-0.65
Utilities	0.004	-0.044	-0.78	-0.034	-0.58	-0.033	-0.57
Construction	0.122	-0.007	-0.43	-0.012	-0.84	-0.006	-0.40
Manufacturing	0.124	0.013	0.82	0.016	0.92	0.014	0.78
Wholesale Trade	0.023	0.007	0.18	0.008	0.20	0.004	0.11
Retail Trade	0.134	0.011	1.02	0.012	0.96	0.009	0.77
Transportation, Warehousing	0.039	0.016	0.57	0.017	0.64	0.017	0.65
Information	0.027	-0.043	-1.34	-0.047	-1.43	-0.048	-1.44
Finance and Insurance	0.025	-0.083	-1.88	-0.081	-1.82	-0.085	-1.90
Real Estate, Rental, Leasing	0.014	-0.029	-0.51	-0.024	-0.40	-0.032	-0.59
Prof, Scientific, Technical	0.026	-0.131	-1.95	-0.128	-1.86	-0.128	-1.89
Admin, Support, Waste Mgmt	0.081	-0.045	-2.16	-0.043	-2.14	-0.047	-2.02
Educational Services	0.049	0.094	2.28	0.096	2.29	0.098	2.23
Health Care/Social Assistance	0.081	0.045	2.31	0.047	2.53	0.042	2.40
Art, Entertainment, Recreation	0.027	-0.046	-1.06	-0.047	-1.14	-0.044	-1.08
Accommodation, Food Service	0.122	-0.026	-1.27	-0.027	-1.19	-0.024	-1.08
Other Services (Ex Pub Admin)	0.045	0.075	1.44	0.075	1.39	0.074	1.57
Public Administration	0.027	0.059	1.48	0.057	1.45	0.058	1.49
Unemployment rate	5.435	-0.001	-0.75	-0.001	-0.73	-0.001	-0.76
Application Rate	0.186	-0.004	-0.11	-0.007	-0.21	-0.003	-0.09
Alaska	0.018	-0.011	-0.81	-0.015	-1.23	-0.011	-0.79
Alabama	0.020	-0.012	-2.40	-0.011	-2.34	-0.011	-2.19
Arkansas	0.020	-0.013	-3.40	-0.010	-3.25	-0.012	-2.66
Arizona	0.018	0.001	0.23	0.003	0.41	0.002	0.28
California	0.019	0.017	2.20	0.016	2.12	0.016	2.20
Colorado	0.019	-0.003	-0.35	-0.004	-0.63	-0.002	-0.35
Connecticut	0.020	0.014	4.50	0.013	3.64	0.014	4.40
District of Columbia	0.020	-0.009	-0.62	-0.012	-0.86	-0.009	-0.71
Delaware	0.020	-0.007	-2.16	-0.006	-2.14	-0.006	-2.06
Florida	0.020	0.011	1.19	0.014	1.80	0.011	1.35
Georgia	0.020	-0.009	-1.60	-0.011	-2.39	-0.009	-1.60
Hawaii	0.020	0.023	1.07	0.024	1.32	0.020	1.10
Iowa	0.020	0.003	0.88	0.004	1.28	0.002	0.67
Idaho	0.020	0.010	2.01	0.010	1.95	0.008	1.80
Illinois	0.020	-0.003	-1.13	-0.004	-1.92	-0.003	-1.24
Indiana	0.020	-0.007	-2.69	-0.008	-3.73	-0.007	-3.12
Kansas	0.020	-0.007	-3.62	-0.007	-4.36	-0.006	-3.24
Kentucky	0.020	-0.006	-1.57	-0.003	-0.92	-0.003	-0.58
Louisiana	0.020	-0.013	-1.77	-0.013	-1.87	-0.013	-1.78
Massachusetts	0.020	0.004	1.23	0.003	1.00	0.003	1.12
Maryland	0.019	-0.001	-0.16	-0.003	-0.42	-0.001	-0.19
Maine	0.020	-0.007	-1.93	-0.006	-1.71	-0.007	-2.13
Michigan	0.020	-0.011	-3.25	-0.009	-2.97	-0.010	-2.53
Minnesota	0.020	-0.007	-1.72	-0.007	-2.24	-0.007	-1.83
Missouri	0.020	-0.003	-1.50	-0.002	-1.12	-0.003	-1.36
Mississippi	0.020	-0.011	-1.63	-0.012	-1.95	-0.011	-1.62
Montana	0.020	-0.008	-1.72	-0.006	-1.24	-0.008	-1.77
North Carolina	0.020	-0.010	-2.80	-0.009	-2.60	-0.010	-3.14
North Dakota	0.020	0.002	0.30	0.002	0.29	0.000	0.05
Nebraska	0.020	-0.000	-0.10	-0.001	-0.24	-0.001	-0.17

**Table B20 (Continued)**

Variable Description	Variable mean	Population Controls		Labor Force Controls		Population and LFPR Controls	
		Parameter estimate	t-statistic	Parameter estimate	t-statistic	Parameter estimate	t-statistic
New Hampshire	0.020	0.010	2.56	0.009	2.55	0.010	2.68
New Jersey	0.019	0.014	3.17	0.012	2.54	0.014	3.65
New Mexico	0.019	-0.000	-0.07	0.002	0.23	0.000	0.00
Nevada	0.020	0.025	4.42	0.026	4.47	0.025	4.33
New York	0.020	0.005	0.93	0.003	0.63	0.004	1.15
Ohio	0.020	-0.017	-11.74	-0.017	-10.27	-0.017	-12.37
Oklahoma	0.020	-0.006	-1.55	-0.005	-1.67	-0.005	-1.50
Oregon	0.020	-0.002	-0.53	-0.002	-0.44	-0.002	-0.57
Pennsylvania	0.020	-0.004	-0.87	-0.002	-0.73	-0.004	-0.80
Rhode Island	0.020	0.029	6.23	0.030	7.02	0.029	5.90
South Carolina	0.020	0.022	4.44	0.022	5.00	0.022	4.71
South Dakota	0.020	0.019	3.07	0.019	3.55	0.018	2.96
Tennessee	0.020	0.015	7.93	0.016	8.37	0.017	6.93
Texas	0.020	-0.003	-0.38	-0.004	-0.60	-0.002	-0.34
Utah	0.020	-0.003	-0.35	-0.006	-0.80	-0.005	-0.50
Virginia	0.020	-0.009	-2.32	-0.010	-2.60	-0.009	-2.31
Vermont	0.020	0.008	2.21	0.007	1.99	0.007	1.99
Washington	0.020	-0.007	-2.02	-0.008	-2.27	-0.008	-2.17
Wisconsin	0.020	0.003	0.47	0.004	0.66	0.002	0.43
West Virginia	0.020	-0.025	-4.14	-0.020	-3.92	-0.022	-2.81
Wyoming	0.018	-0.003	-0.51	-0.002	-0.43	-0.003	-0.68
Time = 1992	0.032	-0.006	-1.24	-0.005	-0.98	-0.006	-1.28
Time = 1993	0.034	-0.006	-1.25	-0.006	-1.10	-0.007	-1.42
Time = 1994	0.035	-0.007	-1.43	-0.006	-1.23	-0.007	-1.59
Time = 1995	0.036	-0.008	-1.74	-0.008	-1.47	-0.009	-1.96
Time = 1996	0.036	-0.009	-1.86	-0.008	-1.60	-0.009	-2.02
Time = 1997	0.036	-0.006	-1.35	-0.005	-1.11	-0.006	-1.43
Time = 1998	0.036	-0.007	-1.57	-0.006	-1.32	-0.007	-1.74
Time = 1999	0.036	-0.003	-0.77	-0.002	-0.54	-0.003	-0.81
Time = 2000	0.036	0.003	0.58	0.004	0.78	0.003	0.54
Time = 2001	0.035	-0.005	-1.42	-0.003	-1.11	-0.005	-1.54
Time = 2002	0.036	-0.005	-2.02	-0.004	-2.24	-0.005	-2.41
Time = 2003	0.035	-0.007	-4.22	-0.007	-4.79	-0.007	-4.69
Time = 2004	0.036	-0.008	-3.86	-0.008	-3.94	-0.008	-3.93
Time = 2005	0.036	-0.008	-3.17	-0.008	-3.19	-0.008	-3.18
Time = 2006	0.036	-0.007	-2.67	-0.007	-2.74	-0.007	-2.51
Time = 2007	0.036	-0.007	-3.14	-0.008	-3.24	-0.007	-3.09
Time = 2008	0.036	-0.004	-1.62	-0.004	-1.72	-0.004	-1.95
Time = 2009	0.036	-0.001	-0.18	-0.001	-0.28	-0.000	-0.09
Time = 2010	0.036	0.001	0.29	0.000	0.02	0.001	0.38
Time = 2011	0.036	0.002	0.59	0.001	0.21	0.002	0.79
Time = 2012	0.036	0.005	1.35	0.004	0.91	0.005	1.50
Time = 2013	0.036	0.006	1.69	0.005	1.24	0.006	1.90
Time = 2014	0.036	0.008	2.13	0.006	1.64	0.008	2.28
Time = 2015	0.036	0.012	2.47	0.012	2.34	0.013	2.64
Time = 2016	0.036	0.015	3.06	0.014	2.90	0.015	3.26
Time = 2017	0.036	0.016	3.58	0.015	3.42	0.016	3.85
Time = 2018	0.036	0.016	3.02	0.015	2.91	0.016	3.41
Time = 2019	0.036	0.020	3.89	0.020	3.67	0.021	4.33