Unemployment Insurance Receipt and Unemployment Durations of Immigrants

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A dramatic demographic change in the labor market in recent years has been the fast-growing number of immigrant workers. Two questions have received considerable research attention: immigrants' assimilation in the labor market and their use of public programs. We contribute new evidence on both issues. We found that eligible immigrants were less likely to receive unemployment insurance [UI] benefits than natives, after controlling for immigrant and native differences in observed characteristics. Moreover, there are large differences among various immigrant groups. Immigrants who were naturalized citizens had a slightly higher UI recipiency probability than natives, whereas noncitizens had significantly lower probabilities of filing for UI conditional on eligibility. We also found evidence of immigrants' assimilation in the job search outcome. Although immigrants had longer unemployment duration than natives on average, immigrants who have resided in the country for a long time and were naturalized citizens had no different unemployment duration than natives.

Introduction

One primary demographic change observed in the labor market in recent years has been the rapidly growing number of immigrants. In states such as New York, New Jersey, Florida, and Arizona, immigrants comprise more than 15 percent of population. In California, immigrants account for almost

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one-third of the population. The immigration rate is even higher in some urban areas. In Miami, half of the population is immigrants.[1] The majority of recent immigrants came from Mexico, Central America, and several Asian countries, such as India and China. The rising immigrant population has important implications for labor policies and industrial relations in the future decades, because it gradually changes the workforce composition.

To date, research surrounding recent immigrants has focused on two issues: (1) How well do recent immigrants adjust to the labor market in the United States? (2) Are they more likely to use public programs than natives and, consequently, become a fiscal burden to the nation? This study touches on both issues. With respect to immigrants' use of public programs, although several studies have investigated the participation of immigrants in welfare programs, finding that immigrants are more likely than natives to participate in both means-tested cash and noncash programs (Borjas and Trejo 1991; Borjas and Hilton 1996; Borjas 1999), there are relatively few studies that have investigated immigrants' use of the unemployment insurance (UI) program. The exception is Blau (1984). Blau, however, investigated immigrants' participation in social insurance programs in general, rather than focusing on the UI program.[2]

With respect to immigrants' assimilation in the labor market, studies to date based on the U.S. data have focused on immigrants' wage and employment adjustment (Chiswick 1978, 1997; Borjas 1995). In this study, we explore immigrant and native differences in unemployment experiences. Specifically, we compare unemployment duration of immigrants and natives following an involuntary job separation. Immigrants may experience longer unemployment duration before becoming re-employed, because of language barriers, because they lack information about the labor market, or because some jobs are not available to them.[3] As the result of assimilation, however, immigrant and native differences in unemployment duration may decrease the longer immigrants reside in the United States.

To test these hypotheses, we use recent data from the Current Population Survey's (CPS) Displaced Worker Supplements (DWS) and control for individual characteristics that potentially affect the likelihood of filing a UI claim and the duration of unemployment, which may differ between immigrants and natives. One benefit of the DWS data is that it contains not only individual demographic characteristics such as immigrant status, but also detailed information about characteristics of the lost job. Thus, a multivariate analysis that controls for immigrant status and other influences is possible.

Our major findings include, first, new evidence on immigrants' assimilation in the labor market, specifically, native/immigrant differences in the job search outcomes. Immigrants had longer unemployment durations than did

natives, all else equal. As immigrants stay longer in the United States, however, the average duration of their unemployment spells relative to natives' decreases. For immigrants who have resided in the United States for more than ten years and have become naturalized citizens, the difference between their unemployment duration and that of natives was negligible. Second, among displaced workers who qualify for UI benefits, immigrants had a lower probability of filing for UI benefits than did natives. In addition, there were considerable differences among various immigrant groups: citizens were more likely to use UI than natives, whereas noncitizens—especially newly arrived noncitizens—were significantly less likely to use UI than natives.

The rest of report is organized as follows: section II describes the data; section II investigates immigrant and native differences in the UI recipiency probability; section III presents evidence on the differences between immigrants and natives in unemployment duration; and a summary and conclusion are contained in section IV.

Data

The data used in this study are drawn from the February 1996, 1998, and 2000 and January 2002 and 2004 DWS. Each survey consists of a random sample of approximately 60,000 households in the United States. Since 1994, the CPS survey asked respondents about their country of birth and, if they were foreign born, the number of years since they immigrated. On the basis of these two variables, respondents were classified as natives if they were born in the United States or immigrants if they were foreign-born. The number of years since a respondent immigrated into the United States was coded yearly by the CPS for more recent immigrants and was grouped into five- or ten-year intervals for less-recent immigrants. Supplemental questions ask respondents whether they have been displaced from a job within the last three years and how long they have been unemployed before they become reemployed. The supplemental questions also ask about the reason for displacement, characteristics of the job from which the individual was displaced, and whether the individual received UI benefits and exhausted benefits.

In this study, we pool the five waves of DWS data. We limit the sample to those 20–68 years of age at the time of the survey. In investigating the UI claim filing decision and unemployment duration, we focus on immigrants who are potentially eligible for UI benefits. It is important to control for eligibility because immigrants may have a lower UI filing rate due to ineligibility. Because the DWS only asked whether respondents received UI benefits, but not their eligibility status, we have taken several steps to determine whether they are eligible.

The UI program is a federal-state administered program. Each state specifies monetary and nonmonetary requirements to qualify for UI benefits. Nonmonetary requirements include that a person must have worked in a covered industry, and must not quit her job or have been fired for cause. Respondents in the DWS consist of workers who lost their jobs because of plant closings, positions being abolished, or insufficient work. Therefore, no individual in the sample would be disqualified for UI based on the reason for job loss.[4] Because unemployment insurance does not necessarily cover farm workers or servants, we exclude displaced workers who worked at agricultural jobs or in private households in the lost job.

Monetary requirements vary considerably across states.[5] On the basis of earning information contained in the DWS, it is difficult to accurately determine whether a displaced worker in a certain state satisfies the state's earning or work requirements for UI eligibility. If one has worked full time at the federal minimum wage for half a year during the base year period, however, he or she would satisfy any work or earning requirement of any state. Therefore, we assign eligibility to displaced workers who have worked full time and had no less than half-year tenure at the predisplacement job. We also used two less restrictive eligibility criteria: having worked full time for no less than half a year or part time for the entire year at the predisplacement job, and having worked full time for no less than a quarter of year or part time for half a year at the predisplacement job.[6] On the basis of any type of eligibility criteria, the difference in the eligibility rate between immigrants and natives is small and statistically insignificant.

In addition, the level of UI benefits may affect the individual's decision to file a UI claim and, through the reservation wage, may also affect reemployment rates and unemployment durations. Because the DWS did not ask the benefit amount that an individual received, we imputed the weekly benefit amount for which the individual was potentially eligible, by use of usual weekly earnings in the lost job and the state of residence reported in the survey and state benefit information provided by the U.S. Department of Labor (various issues).[7]

Immigrant Status and the Receipt of UI Benefits

First, we estimated the UI recipiency rates for the native and immigrant population by use of the survey sampling weights. The UI recipiency rate for immigrants is 48 percent and 51 percent for natives. Therefore, it is estimated that eligible immigrants are 3 percent less likely to receive UI benefits. This difference is statistically significant after taking into account of the sample variance. One question is whether this difference is due to immigrant and native differences in individual characteristics or due to immigrant status.

To investigate this question, we estimated multivariate probit models that controlled for individual demographic, educational, economic, and labor market characteristics, which potentially affect whether one receives UI. The demographic variables include whether an individual was the head of household, age at the time of job loss, gender, race, and marital status. The labor market and economic characteristics include variables pertaining to the lost job, such as industry, occupation, tenure at the lost job, and reasons for job loss, and whether an individual received advance notice of job loss. In addition, we control for state of residence and the metropolitan residence status. To allow for cyclical effects on UI claim filing propensities, we included controls for the year of job loss and the state unemployment rate. We also included the weekly benefit amount (WBA) of UI because higher WBAs have been found to increase the UI filing rate among displaced workers (McCall 1995; Anderson and Meyer 1997). Moreover, because the DWS is conducted every two years but asks respondents about job loss that occurred as long as three years before the survey, survey differences can be identified; thus, we included controls for the year of survey.

Columns (1) to (3) of Table 1 report the marginal effect of multivariate probit estimates of receiving UI conditional on eligibility. The marginal effect is calculated at the means of independent variables. As can be seen in column (1), immigrants had a 6 percent lower UI recipiency probability than natives. This result suggests that, after immigrant and native differences in observable characteristics have been statistically controlled, immigrants appear to be even less likely than natives to use the UI program.

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 denied noncitizens the right to receive most types of public assistance. Eligibility for UI benefits, however, does not depend on citizenship. Nevertheless, noncitizens may be less likely to claim benefits if they mistakenly believe that UI is such a public assistance program and, hence, do not qualify for the benefits, or if they choose not to file due to the concern that claiming benefits may jeopardize their naturalization process. In column (2) of Table 1, we divided immigrants into citizen and noncitizen groups. The two groups appear to have a very different UI filing probability. All else equal, noncitizens were 15 percent less likely to claim benefits than natives, whereas immigrants who are citizens were 4 percent more likely to claim benefits, although the later result is not statistically significant.

Moreover, recent immigrants may be less likely to claim benefits if they lack knowledge about how to file a UI claim. As an immigrant's stay lengthens in the country and they acquire such knowledge, they may become more likely to claim benefits. To test this hypothesis, in column (3) of Table 1, we further divided immigrants into four groups: recent noncitizens, recent citizens,

TABLE 1
Multivariate Probit Estimates of the Probability
of Receipt of UI benefits (Marginal Effect)

	(1)	(2)	(3)
All Immigrants	–0.057***		
	(0.020)	—	—
Citizen Immigrant	—	0.043	
		(0.027)	—
Non–citizen Immigrant	—	–0.154***	
		(0.024)	—
Recent Citizen Immigrant	—	—	0.015
			(0.072)
Recent Noncitizen Immigrant	—	—	–0.258***
			(0.030)
Nonrecent Citizen Immigrant	—	—	0.044
			(0.028)
Nonrecent Noncitizen Immigrant	—	—	–0.073**
			(0.033)
Sample size	9314	9314	9314
Log likelihood	–5901.71	–5883.42	–5873.704

Source: February 1996, 1998 and 2000, and January 2002 and 2004 CPS, DWSs.
Notes: The model is estimated for the sample of individuals eligible for UI. UI eligibility equals one if the displaced job was full time with tenure greater than half a year. Standard errors are in parentheses. One, two, and three asterisks indicate significance at the 10, 5, and 1 percent significance level, respectively. All columns control for individual characteristics including age, age square divided by 100, gender, race, education, marital status and whether the individual is a household head, and characteristics of the displaced job, including whether the individual was a union member or covered by a labor contract, whether has received an advance notice of job loss, tenure, and reasons for displacement. All specifications also control for the imputed weekly benefits amount that an individual is potentially eligible for, effects of industry and occupation of the lost job, survey cohorts, state, and large cities where an individual resides. Large cities include Atlanta, Boston, Chicago, Dallas, Denver, Detroit, Honolulu, Houston, Los Angles, Miami, Minneapolis–St. Paul, New York City, Newark, Oakland, Philadelphia, Phoenix, Pittsburgh, Sacramento, San Diego, San Francisco, San Jose, Seattle, Tampa, and Washington, DC.

nonrecent noncitizens, and nonrecent citizen immigrants. Immigrants who resided in the United States for less than ten years are classified as recent immigrants, and those who resided in the United States for ten years or longer are classified as nonrecent immigrants. The result in column (3) supports the view that nonrecent immigrants are more likely to claim benefits than recent immigrants. The result also shows that both recent and nonrecent immigrants who are citizens are 1–4 percent more likely to receive benefits than natives. Although these effects are not statistically significant, they suggest that immigrants who have naturalized may be more likely to use UI

than natives. In contrast, both recent and nonrecent noncitizens had a lower recipiency probability than natives.

Borjas and Trejo (1991) and Borjas and Hilton (1996) examined immigrants' use of welfare programs in the United States. They found that immigrants were more likely to receive cash or noncash welfare benefits than natives. Because of data limitations, they did not distinguish citizen and noncitizen immigrants. Our analysis of immigrants' receipt of UI benefits suggests that different immigrant groups may differ greatly in the likelihood of using public programs. With regard to UI, the 6 percent lower probability of filing a UI claim among immigrants is primarily due to the low recipiency rate of recent and noncitizens, whereas immigrants who have naturalized may be more likely to use UI than natives.

The estimates for the other predictor variables did not change substantially across the specifications reported in Table 1. The sign and magnitude of the estimates are as expected and consistent with previous research in the literature. For example, an increase in the UI weekly benefit amount was found to increase the probability of filing a claim, but at a decreasing rate (the quadratic term of WBA is significantly negative.) This is consistent with results in Anderson and Meyer (1997) and McCall (1995). For brevity, we did not report these estimates in this report.

Immigrant Status and Unemployment Duration of Displaced Workers

Another issue that has received much attention is immigrants' adjustment to the labor market in the host country. As immigrants stay longer in the host country, they receive a higher wage, their unemployment rate decreases, and they work in better occupations (Chiswick 1978, 1997; Borjas 1995; Green 1999). In this report, we provide evidence on immigrants' assimilation with regard to job search and the reemployment outcome. Specifically, we investigate whether displaced immigrants experience longer unemployment durations than natives and whether this difference declines with the length of an immigrant's length of stay in the United States.

A complication in studying immigrants' assimilation in the job search outcome is that an immigrants' rate of reemployment may differ from that of natives for several reasons. Recent immigrants may be less likely to receive a job offer for reasons such as language barrier, discrimination, the lack of familiarity with the labor market, or the perception that the educations they received in their home country are not equivalent to a similar degree of education in the United States. Although such a decrease in the arrival rate of job offers may result in a lower reservation wage, the offset is usually incomplete leading to an overall decrease in the reemployment rate. Recent immi-

grants, however, may have lower reservation wages than natives because they face greater borrowing constraints and, hence, have less ability to smooth consumption during unemployment. This would lead to higher reemployment rates among immigrants.

First, we calculated the empirical reemployment hazard for immigrants and natives in each week following the job separation. The empirical hazard is measured by the ratio of the number of people who become reemployed in a week over the total number of people at risk in that week. Because these hazard estimates are very small and therefore the differences between different groups are difficult to see clearly on the graph, we smooth the estimates by use of the kernel density smoothing techniques.

Figure 1 presents the smoothed reemployment hazard estimates for immigrants and natives. In the first 20 weeks or so, immigrants appear to have had slightly higher reemployment hazards than natives. After 60 weeks, however, immigrants had lower reemployment hazard than natives. Figures 2 and 3 show the reemployment hazards for citizens and noncitizens and for recent and nonrecent immigrants, respectively. In Figure 2, noncitizen immigrants had a noticeably higher reemployment hazard than natives in the first 25 weeks, and, in Figure 3, recent immigrants had substantially higher reemployment hazards than natives in the first 28 weeks. It is in the second and third year following the job loss that noncitizen and recent immigrants had notably lower reemployment hazards than natives.

This result suggests that some groups of immigrants, especially recent noncitizens, may have lower reservation wages than natives and, thus, become reemployed more quickly in the first several months after job separation. Among those who were not able to find jobs quickly, however, immigrants appear to have more difficulty than natives in subsequently finding a job. These results could also potentially be explained by differences in observable characteristics between natives and immigrants.

To investigate immigrant and native differences in unemployment durations while controlling for other observable differences in characteristics that may influence unemployment durations, we employ a proportional hazard (PH) model. We take several measures to ensure consistent estimates. First, we do not assume any functional form for the baseline hazard and, instead, use a flexible baseline hazard specification, as in Meyer (1990) and McCall (1996). Second, we incorporate unobserved heterogeneity in the duration model and assume that it has a mass-point distribution with three points of support (see Heckman and Singer 1984).[8]

The model is specified as follows:

$$P(T = k \mid \mathbf{x}, K > k - 1, \theta) = 1 - \exp(-\exp(\alpha + \mathbf{\beta'x})\theta)$$

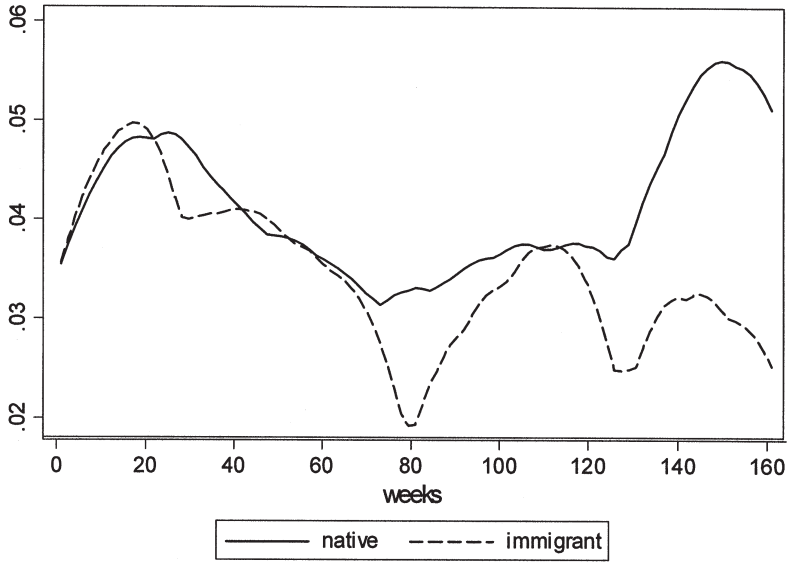## FIGURE 1
Smothed Hazard Estimates
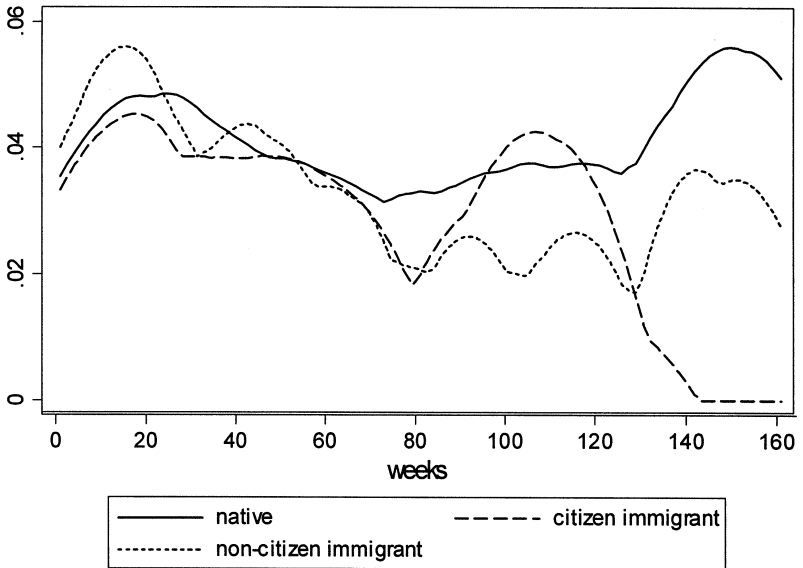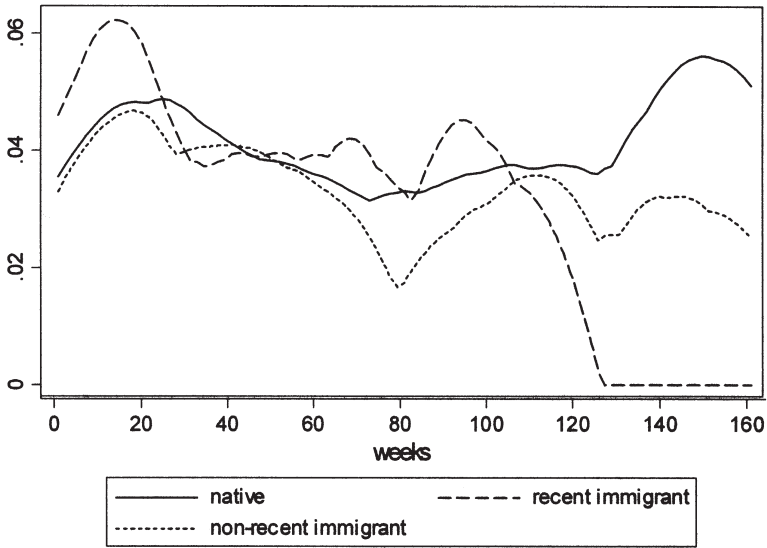

FIGURE 2
Smoothed Hazard Estimates

FIGURE 3
Smoothed Hazard Estimates

Source: February 1996, 1998 and 2000, and January 2002 and 2004 CPS, DWSs.
Notes: Smoothed hazard estimates are calculated as a weighted kernel density estimate utiliz-ing the estimated hazard contribution, $\Delta\hat{H}(t_j) = \hat{H}(t_j) - \hat{H}(t_{j-1})$, where $\hat{H}(t_j)$ indicates the ratio of the number of individuals who exit unemployment at time tj over the number of indifficuals at risk at tj. The bandwidth used in the calculation is the estimated "optimal" bandwidth that minimizes the mean integrated square error. The estimates are obtained for individuals poten-tially eligible for UI. UI eligibility equals one if the displaced job was full time with tneure greater than half a year. The sample size is 9314.

where α is the baseline hazard parameter, β is a J-dimensional vector of parameters measuring the effect of explanatory variables on the conditional probability of reemployment into a job at time k, and θ indicates unobserved heterogeneity. Explanatory variables include demographic variables, educa-tion, characteristics of the displaced job, tenure at the lost job, and the con-trol for the year of displacement, survey dummies, as well as the fixed effect of state.

One of the explanatory variables is whether an individual received unemployment insurance benefits. The receipt of unemployment insurance benefits and a higher benefit level may increase the individual's reservation wage and lower the probability of accepting a job and, thus, the probability of reemployment. Empirical evidence to date has supported this prediction

(Meyer 1990; Fallick 1991).As shown in the previous section, immigrants and natives, as well as different immigrant groups, have different UI recipiency rates. We control for the receipt of UI benefits in the hazard model to isolate the effect due to immigrant status and the effect due to immigrant and native differences in the UI recipiency probability.

The receipt of unemployment insurance benefits could potentially be endogenous because those who anticipated longer unemployment duration may be more likely to file for the benefits. To correct for this endogeneity, one can introduce an instrumental variable that directly correlates with the UI filing decision but indirectly affects unemployment duration. Because any variable impacting the UI filing decision would potentially also affect unemployment duration, a valid instrumental variable cannot easily be found. Thus, we take a different approach and estimate the UI filing decision and the PH model simultaneously by use of the maximizing likelihood estimation (MLE) method. The identification of this kind of mixed model is discussed in McCall (1996).

The UI filing decision is specified as follows:

$$P(UI = 1 \mid \mathbf{z}, \theta_u) = 1 - \exp(-\exp(\mathbf{\beta_u}'\mathbf{z})\theta_u)$$

where $\mathbf{\beta_u}$ is an L-dimensional vector of parameters measuring the effect of explanatory variables on the probability of receiving UI, and θ_u is an unobserved variable in the UI filing decision that is allowed to be correlated with the θ in the PH model. Thus, we estimate six location parameters (θ_1, θ_{u1}), (θ_2, θ_{u2}), (θ_3, θ_{u3}) and two parameters representing the fraction of each support.

Table 2 reports hazard estimates for immigrant variables. For brevity, hazard estimates of other explanatory variables are not reported. Column (1) shows that immigrants had a significantly lower reemployment hazard than natives. When separating immigrants by citizenship status, as can be seen in column (2), citizen immigrants had a slightly lower reemployment hazard than natives, whereas noncitizens had a significantly lower reemployment hazard. This large difference between citizen and noncitizen immigrants may partly be explained by the fact that noncitizens cannot be employed in federal agencies, defense industry jobs, or state and local government jobs involving public safety, such as police officers, all of which require citizenship.

When we further divided immigrants into recent and nonrecent groups, we found evidence that supports the immigrant assimilation hypothesis for job search outcomes. For both citizen- and noncitizens, nonrecent immigrants, all else equal, had higher reemployment hazard rate than recent immigrants. Compared to natives, recent immigrants had substantially lower

TABLE 2
Proportional Hazard Estimates

	Hazard Estimates		
	(1)	(2)	(3)
All Immigrants	−0.241***		
	(0.062)	—	—
Citizen Immigrant	—	−0.019	
		(0.079)	—
Noncitizen Immigrant	—	−0.385***	
		(0.084)	—
Recent Citizen Immigrant	—	—	−0.222
			(0.227)
Recent Noncitizen Immigrant	—	—	−0.420***
			(0.125)
Nonrecent Citizen Immigrant	—	—	−0.001
			(0.083)
Nonrecent Noncitizen Immigrant	—	—	−0.342***
			(0.106)
Sample size	9314	9314	9314
Log likelihood	−32780.42	−32760.05	−32750.09

Source: February 1996, 1998 and 2000, and January 2002 and 2004 CPS, DWSs.
Notes: The model is estimated for the sample of individuals eligible for UI. UI eligibility equals one if the displaced job was full time with tenure greater than half a year. Standard errors are in parentheses. One, two, and three asterisks indicate significance at the 10, 5, and 1 percent significance level, respectively. All specifications correct for the selectivity due to the UI receipt by estimating the UI receipt equation and proportional hazards simultaneously. Both the UI receipt equation and the proportional hazard model control for individual characteristics including age, age square divided by 100, gender, race, education, marital status and whether the individual is a household head, and characteristics of the displaced job, including whether the individual was a union member or covered by a labor contract, whether has received an advance notice of job loss, tenure, and reasons for displacement. Both also control for the imputed weekly benefits amount that an individual is potentially eligible for, effects of industry and occupation of the lost job, survey cohorts, and state where an individual resides. The proportional hazard model also controls for whether the individual received UI and the interaction of UI with the weekly benefits amount.

reemployment hazard rates. This suggests that, for recent immigrants, those factors described above that increase unemployment durations relative to natives appear to dominate.

We also noticed that nonrecent citizen's reemployment rates following job displacement were not statistically different from natives, whereas non-recent noncitizens had a significantly lower reemployment hazard. Because most immigrants become naturalized citizens after a sufficiently long stay the

host country, nonrecent noncitizens are a small group of immigrants. That they choose not to become naturalized may reflect their low attachment to the host country, which may explain their being less assimilated than those who have naturalized. Another explanation is that nonrecent noncitizens are most likely to be illegal immigrants who came to the United States illegally and do not qualify to become a citizen even though they have resided in the country for a long time. Their illegal status may also explain their lower reemployment hazard in job search. Since the DWS data do not have information about whether immigrants are legal or illegal, we cannot explore this hypothesis in further detail.

Because it is difficult to interpret the size of hazard estimates, we used our estimates to calculate mean and median unemployment durations for natives and immigrants. They are shown in Table 3. The maximum unemployment spell in the data is 160 weeks. Some respondents have not become reemployed by the time of survey and, therefore, were treated as censored observations in the empirical analysis. The estimates show that the mean and median unemployment durations of immigrants are approximately one to three weeks longer than the unemployment durations of natives, except for immigrants who have stayed in the country for a long time and have naturalized. For them, the differences were negligible.

Conclusion

One of the most dramatic demographic changes in the labor market in recent years has been the increase in the number of immigrant workers. Two questions concerning immigrants have received considerable research attention: immigrants' assimilation in the labor market and their use of public programs. We contribute new evidence on both issues.

TABLE 3
Predicted Median and Mean Unemployment Duration

	Mean Duration	Median Duration
Natives	22.04	7.00
Recent Citizen Immigrant	23.50	7.88
Recent Non-citizen Immigrant	24.83	9.31
Non-recent Citizen Immigrant	22.04	7.01
Non-recent Non-citizen Immigrant	24.31	9.11
Sample size	9314	9314

Source: February 1996, 1998 and 2000, and January 2002 and 2004 CPS, DWSs.
Notes: The predictions are based on the sample of individuals eligible for UI. UI eligibility equals one if the displaced job was full time with tenure greater than half a year. The mean and median duration are calculated based on the hazard estimates reported in column 3 of table 2.

In particular, we examined immigrants' receipt of unemployment insurance benefits. Unlike welfare programs, the UI program has strict earning and work requirements as well as nonmonetary requirements for eligibility. These requirements, however, do not differ by immigrant status. Conditional on eligibility, we found that eligible immigrants were 6 percent less likely to file for UI benefits, all else equal. We also found that there were sizeable differences among various groups of immigrants in the UI filing probability. Citizen immigrants, both those who recently arrived and those who have stayed a long time in the United States, were a few percent more likely to claim benefits than natives. Noncitizens, especially recent noncitizens, were significantly less likely to claim benefits than natives.

After controlling for immigrant and native differences in the receipt of UI benefits and other characteristics that potentially affect the reemployment probability and unemployment duration, we found that, on average, periods of unemployment were one to two weeks longer for immigrants than for natives. There is, however, evidence suggesting immigrants' assimilation in terms of the job search outcome. This is shown in that immigrants who have resided in the United States for a long time had shorter unemployment duration than those who have arrived recently. In particular, nonrecent immigrants who have naturalized had no different unemployment duration than natives.

Acknowledgements

Notes

1. The immigrant rates are estimated base on the January 2004 CPS data.

2. There have been studies investigating immigrants' receipt of UI in other countries, for example, in Canada, Baker and Benjamin (1995), Siklos and Marr (1998), and Crossley, McDonald, and Worswick (2001); and, in Australia, Nahid and Shamsuddin (2001).

3. For examples, jobs in the federal agencies, think tanks, defense industry, or state and local government jobs involving public safety, such as police officers, require citizenship.

4. We exclude individuals if the reason for job loss is not reported.

5. Twenty-four states require that workers earn a certain dollar amount in the highest quarter (HQ) of their base period and that the total earnings in the base period be a multiple of 1.5 or 1.25 times HQ earnings. Twelve states first compute the weekly benefit amount that a worker would qualify for (typically equal to a 1/26 of HQ earnings) and then specify a multiple of this amount as the base period earnings required for eligibility (The multiple ranges from twenty-six to forty times the weekly benefit amount). Twelve states use the flat earning requirement, which specifies a certain dollar amount of total earnings for the base period ranging from $1,000 in the lowest state and $2,800 to the highest. Flat

earning requirements are also accompanied by quarterly distribution requirements to prevent qualification on the basis of a single short-time job. Finally, three states require a minimum number of 20 weeks, or 680 hours, of work for the base period (U.S. Department of Labor 2003).

6. Regression results of using the other two eligibility criteria are very similar to those reported here. For brevity, we do not report these results.

7. Contact the authors for details.

8. The mass-point method of estimating the unobservable has an advantage over specifying the distribution functional form for the unobservable, such as gamma or inverse Gaussian distribution, because it is essentially nonparametric and is therefore more robust.

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