University of Michigan Retirement Research Center

Working Paper

WP 2004-087

Welfare Reform and Immigrant Participation in the Supplemental Security Income Program

Paul S. Davies and Michael J. Greenwood

M R
R C

Project #: UM02-C1

"Welfare Reform and Immigrant Participation in the Supplemental Security Income Program"

Paul S. Davies
Social Security Administration

Michael J. Greenwood
University of Colorado at Boulder

September 2004

Michigan Retirement Research Center
University of Michigan
P.O. Box 1248
Ann Arbor, MI 48104

Acknowledgements

This work was supported by a grant from the Social Security Administration through the Michigan Retirement Research Center (Grant # 10-P-98358-5). The opinions and conclusions are solely those of the authors and should not be considered as representing the opinions or policy of the Social Security Administration or any agency of the Federal Government.

Welfare Reform and Immigrant Participation in the Supplemental Security Income Program

Paul S. Davies and Michael J. Greenwood

Abstract

We examine the effect of the 1996 welfare reform legislation on participation in the Supplemental Security Income (SSI) program by immigrants. Although none of the immigrants on the SSI rolls before welfare reform lost eligibility, the potential exists for future impacts on the SSI caseload and the well-being of recent immigrants. We use microdata files from the Social Security Administration's Continuous Work History Sample matched to administrative data on SSI participation for the period 1993 to 1999. We estimate simple models of SSI participation and compare our results to the existing literature. We then estimate a series of difference-in-differences models of SSI participation. These models compare SSI participation by immigrants relative to native-born individuals, and among affected immigrants relative to unaffected immigrants and native-born individuals, before and after welfare reform. Descriptive results indicate that the percentage of immigrants and natives receiving SSI decreased after welfare reform, but by a larger percentage for natives than for immigrants. The probability of SSI participation decreased after welfare reform for immigrants who were affected by the legislation relative to immigrants who were unaffected. The difference-in-differences estimate is positive for immigrants relative to otherwise similar natives, but the estimated effect among affected immigrants is about half as large as the effect for unaffected immigrants. When the sample is limited to low earners as a proxy for the SSI means test, the results are qualitatively unchanged but quantitatively much stronger.

Authors' Acknowledgements

We are grateful to Ulyses Balderas for assisting with the collection of some data used here. A previous version of this paper was presented at the 2004 Western Regional Science Association Annual Meeting, February 25-28, 2004, Maui, HI.

Introduction

Taxes and transfers are potentially important channels through which redistributions occur from natives to immigrants. An important issue that arises in this context involves immigrant participation in welfare programs. Although some evidence suggests that immigrants, especially more recent immigrants, are less likely to participate in welfare programs than otherwise comparable natives (Borjas and Trejo, 1991; Blau, 1984; Tienda and Jensen, 1986), significant transfers from natives to immigrants still may occur. In the United States, two of the most important welfare programs that involve the foreign born are the Temporary Assistance for Needy Families (TANF, formerly Aid for Families with Dependent Children or AFDC) and Supplemental Security Income (SSI) programs. Some evidence suggests that immigrant participation in social welfare programs rises with duration of residence in the United States (Blau, 1984), and this tendency should be particularly marked for SSI, one component of which provides benefits specifically for older persons. Partially in response to immigrant usage of welfare, in 1996 the U.S. Congress implemented welfare reforms that limited the access of non-citizens to welfare. The present study, which specifically concerns SSI, seeks to determine how successful Congress was in forbidding or discouraging foreign-born participation in this program.

Congress established the SSI program in 1972, and the program actually began making payments in January, 1974. This means-tested program was to provide cash assistance to needy aged, blind, and disabled citizens and noncitizens lawfully admitted for permanent residence or permanently residing under color of law. Between 1974 and the present, the program underwent many changes that affected the eligibility of noncitizens, and participation by noncitizens changed dramatically. Both the absolute number of immigrants receiving SSI benefits and the

number of immigrants receiving SSI benefits as a percentage of all SSI recipients increased substantially between 1982 and 1995. This is particularly true among the elderly. In 1982, 127,900 SSI recipients were non-citizen immigrants, representing 3.3 percent of the total caseload. By 1995, 785,410 SSI recipients, or 12.1 percent of the caseload, were non-citizen immigrants. Among elderly SSI recipients, 91,900 (5.9 percent) were non-citizen immigrants in 1982, compared to 459,220 (31.8 percent) in 1995 (Parrott, Kennedy, and Scott, 1998). The average federally administered SSI payment to non-citizens in December 1995 was $422, compared to $309 for citizens (Social Security Administration, 1996, Table 5). Given that U.S. immigration law has a strong family reunification component, the age composition of immigrants to the U.S. is becoming increasingly older, and the skill composition is becoming increasingly less skilled (Greenwood and McDowell, 1999), many expected that the upward trend in the proportion of SSI recipients who are immigrants would continue.

In August, 1996, the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) was signed into law. PRWORA, also referred to as welfare reform, substantially limited the eligibility of immigrants for SSI benefits and benefits from other social programs. The Illegal Immigration Reform and Immigrant Responsibility Act of 1996 further restricted immigrant access to the SSI program and strengthened provisions for sponsor-to-immigrant deeming of income in determining SSI eligibility. The Balanced Budget Act of 1997 and subsequent legislation enacted in 1998 restored SSI eligibility to many groups of immigrants, but some are still denied access. Parrott, Kennedy, and Scott (1998) provide a detailed legislative history of the debate surrounding SSI eligibility for immigrants.

Generally speaking, immigrant eligibility for the SSI program includes only non-citizens who were lawfully in the United States as of August 22, 1996, and who were receiving SSI

benefits on August 22, 1996. Refugees and asylees who entered the United States after August 22, 1996, may be eligible for SSI under current law, but face a 7-year time limit on their eligibility. Other non-citizens who entered the U.S. after August 22, 1996, may become eligible for SSI only by becoming U.S. citizens or by amassing 40 quarters of Social Security-covered employment. All immigrants who apply for SSI benefits are subject to strict and legally enforceable provisions regarding sponsor-to-immigrant deeming.

Although none of the non-citizens on the SSI rolls prior to August 22, 1996, lost SSI eligibility as a result of the legislative changes, the potential exists for substantial future impacts on SSI caseloads and program costs and on the well-being of recent immigrants themselves. Even among those non-citizens who are eligible for SSI, there may have been a "chilling effect" from the legislative changes (Fix and Passel, 1999), resulting in a decrease in the SSI application rate. In addition, low-income and disabled non-citizens now have an incentive to become U.S. citizens in order to become eligible for SSI benefits. Indeed, in 1996 and subsequent years the number of naturalizations increased significantly. Borjas (2002) found a strong positive correlation between pre-welfare reform welfare utilization and post-welfare reform naturalization rates.

It is well known that the AFDC/TANF caseload decreased substantially in the years immediately following passage of the welfare reform legislation. The extent to which this decline is due to welfare reform or the strong economic growth experienced during the 1990s is the subject of much debate (Council of Economic Advisors, 1997; Moffitt, 1999; Figlio and Ziliak, 1999; Haider, Klerman, and Roth, 2003). Some studies based on publicly-available survey data also cite a decline in the percentage of households receiving SSI in the years after welfare reform (Borjas, 2002; Fix and Passel, 2002). Our descriptive analyses based on

individual-level data from the Social Security Administration (SSA) confirm these previous findings. The percentage of immigrants receiving SSI decreased by about 5.5 percent between the pre-welfare reform period (1993 to 1995) and the post-welfare reform period (1997 to 1999). Importantly, however, the percentage of native-born individuals receiving SSI decreased by approximately 9.5 percent over that same period. Moreover, the absolute number of noncitizens receiving SSI increased each year from 1997 to 2002, after an initial drop between 1996 and 1997 (Social Security Administration, 2003).

In the analysis that follows, using administrative data sources from SSA, we estimate models of SSI participation by immigrants in years prior to welfare reform and in years since welfare reform. Results for the pre-reform and post-reform years are contrasted to identify changes in the underlying relationship between immigrant characteristics and SSI participation. Changes in participation outcomes may be the result of changes in the laws (e.g., welfare reform legislation) or program rules, changes in the (age, sex, skill, source country) composition of the immigrant population, and changes in economic conditions. We attempt to isolate the effect of changes in the law through the use of difference-in-differences models of the probability of SSI participation.

In the next section, we discuss the data used in this study. Subsequent sections describe the models and methodology employed here, as well as the empirical results. The final section provides a summary and conclusions.

Data

Prior studies of welfare receipt among immigrants have relied on decennial Census data (e.g., Bean, Van Hook, and Glick, 1997; Borjas and Trejo, 1993). However, Bean and Van

Hook (1996-97) note several problems regarding the use of decennial Census data to study the two most common welfare programs (AFDC, now TANF, and SSI). Van Hook, Bean, and Glick (1996) suggest several corrections to such data to make them better correspond to information from administrative records. As noted by these authors and others, one of the most important advantages of decennial Census data is that the number of observations is great, which allows more detailed analyses, such as by country of birth.

The data that underlie our study are derived from administrative records themselves. Our samples, which contain about 3 million records (with about half of these for the foreign born) randomly selected from Social Security files, contain sufficient observations to allow detailed analyses both by country of birth and entry cohort. Moreover, one of the major strengths of the data is that they have a temporal component that is lacking in decennial Census data, which provide information on sources of income (e.g., AFDC, SSI) only for the full year preceding the Census. Because the data used here are annual, they allow us to develop observations for just before and just after welfare reform. Since welfare reform occurred in 1996, we focus on the three years before (1993-1995) and the three years after (1997-1999).

Relative to decennial Census data, administrative data are characterized by certain shortcomings. The most important of these for our purposes is that they do not contain detailed economic, social, and demographic information. For example, the data contain no information on education, health status, marital status, or family composition. This is not to say that the data contain no socio-economic information. Social Security records provide age, sex, and annual compensation (up to the Social Security maximum for contribution purposes).

The SSA administrative records that we use are drawn from the one-percent Continuous Work History Sample (CWHS), which has been matched to the Social Security number

identification file. Using these data, we develop a longitudinal sample of immigrants and natives prior to welfare reform and since welfare reform. Place of birth codes on the Social Security number identification file allow for the identification of country of birth. Date of establishment of the Social Security number (SSN) is used as a proxy for year of entry into the United States. The CWHS provides annual earnings for each individual by employer, major industry codes, and geography (employer-based prior to 1994, employee-residence-based starting in 1994).

To the CWHS-based file is matched a longitudinal extract from the Supplemental Security Record that identifies monthly SSI participation and benefit amounts from the inception of the SSI program in January 1974 to the present. The Supplemental Security Record also provides monthly SSI-countable earned and unearned income for SSI applicants and beneficiaries. The number of observations in the analysis file supports detailed analyses of immigrant SSI participation by year, country of birth, year of entry, age, and sex.

To account for local economic and policy conditions, we add data on state unemployment rates, state poverty rates, earnings per worker, state supplementation of federal SSI benefits, implementation of AFDC waivers, implementation of the TANF program, the maximum state AFDC/TANF benefit for a family of three, and the generosity of state programs for immigrants. State poverty rates and earnings per worker are from the Bureau of Economic Analysis Regional Accounts Data. State unemployment rates are from the Bureau of Labor Statistics. Data on the dates of implementation of AFDC waivers and the TANF program are from Crouse (1999). AFDC and TANF benefit levels and SSI state supplements are from various issues of the Green Book. States are classified as more or less generous based on the index developed by the Urban Institute on the availability of state safety net programs for immigrants (Zimmermann and Tumlin, 1999, Table 18).

Models and Methodology

We estimate two types of models: (1) basic SSI participation models with controls for immigrant status, and (2) difference-in-differences models that compare SSI participation by immigrants and natives, before and after welfare reform. In the difference-in-differences models, we separately identify immigrants whose potential SSI eligibility was affected by welfare reform and those whose potential SSI eligibility was not affected by welfare reform.

A series of basic SSI participation models are estimated and compared to the existing literature. These models take the form:

$$P_i^* = \alpha_0 + \alpha_{1j} X_{ij} + \alpha_{2k} Y_{ik} + \alpha_{3l} F_{im} + \alpha_4 T + \varepsilon_i \qquad (1)$$

$$P_i = 1 \text{ if } P_i^* > 0, \text{ and}$$

$$P_i = 0 \text{ if } P_i^* \leq 0.$$

P_i indicates SSI participation by individual i (or not); X_{ij} is a vector of individual economic and demographic characteristics (e.g., age, gender, earnings); Y_{ik} is a vector of economic and policy conditions (e.g., unemployment rate, poverty rate, SSI state supplement, implementation of AFDC waivers, implementation of the TANF program, maximum AFDC/TANF benefit for a family of three, and generosity of programs for immigrants) in the state of residence; F_{im} is a vector of immigrant status variables (country of birth and year of entry); and, T is a fixed effect for the year of observation (1993 to 1999).

We also estimate difference-in-differences models that exploit both variation over time (pre-welfare reform and post-welfare reform) and between immigrants and natives to identify the effect of welfare reform on SSI participation by immigrants. The general form of the difference-in-differences model is:

$$P_i = \beta_0 + \beta_{1j} X_{ij} + \beta_{2k} Y_{ik} + \beta_3 FB_i + \beta_4 POSTWR_i + \beta_5 (FB_i * POSTWR_i) + \varepsilon_i \quad (2)$$

where FB is a dummy variable for immigrant status and POSTWR is a dummy variable indicating post-welfare reform periods. All other variables are as previously defined. In this model, native-born individuals are compared to all foreign-born individuals and the coefficient β_5 is the difference-in-differences estimator. This is a naïve model, however, in that it ignores the distinction between foreign-born individuals whose potential SSI eligibility was affected by welfare reform and those whose potential eligibility was not affected. As discussed earlier, foreign-born individuals who were in the U.S. and receiving SSI benefits as of August 22, 1996, were not affected by the welfare reform legislation. In addition, refugees and asylees remain potentially eligible for SSI benefits for the first seven years after entering the U.S.

Using data on the country of birth and date of entry into the U.S. (date of establishment of SSN) from the Social Security number identification file and receipt of SSI benefits from the Supplemental Security Record, we identify immigrants who were in the U.S. and receiving SSI benefits in 1996. These immigrants are unaffected by the welfare reform legislation. Again using country of birth and year of entry, relative to the year of observation, we identify refugees who have been in the U.S. for less than 7 years. These immigrants also are unaffected by the welfare reform legislation. For this purpose, we assume that all immigrants from the main refugee-sending countries – Russia and the former Soviet Union, Cuba, Bosnia, Iran, Vietnam, Somalia, and Iraq – are refugees. Borjas (2002) uses a similar method to identify refugees. All other immigrants not included in the groups described above are assumed to be affected by the welfare reform legislation.

We estimate three additional specifications of the difference-in-differences model to exploit the distinction between affected and unaffected immigrants. In equation (3), we examine the difference between affected cases (AFFECTED=1) and unaffected cases (AFFECTED=0), in the post-reform period relative to the pre-reform period.

$$P_i = \gamma_0 + \gamma_{1j} X_{ij} + \gamma_{2k} Y_{ik} + \gamma_3 AFFECTED_i + \gamma_4 POSTWR_i + \gamma_5 (AFFECTED_i * POSTWR_i) + \varepsilon_i \quad (3)$$

The difference-in-differences estimator is γ_5. When we limit the sample to foreign-born individuals, the comparison is between affected immigrants and unaffected immigrants. In this case, we expect γ_3 to be negative, indicating a lower probability of SSI participation among affected immigrants relative to unaffected immigrants in the post-reform period relative to the pre-reform period. When we use the full sample of native-born and foreign-born individuals, the difference-in-difference estimator provides a comparison between affected foreign-born individuals and all unaffected individuals, including both the native born and unaffected foreign born.

Finally, in equation (4), we use the full sample of native-born and foreign-born individuals and separately identify native-born individuals (NB=1), affected foreign-born individuals (NB=0 and AFFECTED=1), and unaffected foreign-born individuals (NB=0 and AFFECTED=0).

$$P_i = \delta_0 + \delta_{1j} X_{ij} + \delta_{2k} Y_{ik} + \delta_3 AFFECTED_i + \delta_4 NB_i + \delta_5 POSTWR_i + \delta_6 (AFFECTED_i * POSTWR_i) + \delta_7 (NB_i * POSTWR_i) + \varepsilon_i \quad (4)$$

From this model, we calculate three difference-in-differences effects. The difference-in-differences estimator for affected foreign-born individuals relative to unaffected foreign-born individuals is δ_6. The estimator for affected foreign-born individuals relative to native-born

individuals is (δ_6 - δ_7). Finally, the difference-in-differences estimator for unaffected foreign-born individuals relative to native-born individuals is -δ_7.

All of the models described above ignore the fact that SSI is a means-tested program. In other words, many of the individuals in our sample will be ineligible to participate because their income and/or assets exceed the SSI eligibility thresholds. Although we cannot precisely measure SSI financial eligibility with our data, we create a rough proxy by calculating the maximum annual earnings that would be consistent with SSI income eligibility, assuming zero unearned income. We then limit our sample to those individuals with earnings below this threshold (i.e., the low earner sample) and re-estimate equations (1) through (4). The results are discussed in the following section.

Empirical Results

Table 1 contains definitions of all variables used in this study, along with their means and standard deviations. The full sample consists of about 3 million native-born and foreign-born individuals for the period 1993 to 1999. Table 2 provides a different look at the descriptive statistics, broken down by time period (pre-welfare reform, year of welfare reform, and post-welfare reform) and nativity (foreign born vs. native born). Table 1 shows that 3.0 percent of foreign-born individuals received SSI benefits compared with 1.6 percent of native-born individuals over the 1993 to 1999 time period. For the time periods shown in Table 2, the percentage of foreign-born individuals receiving SSI held steady at about 3.1 percent during the pre-reform period and the year of welfare reform, and then decreased to 2.9 percent during the post-reform period. The percentage of native-born individuals receiving SSI decreased steadily from 1.7 percent in the pre-reform period to 1.6 percent in the year of welfare reform and 1.5

percent in the post-reform period. In other words, the percentage of individuals receiving SSI decreased by about 5.5 percent among foreign-born individuals between the pre-welfare reform and post-welfare reform periods, compared to a decrease of about 9.5 percent for native-born individuals over the same period.

Table 3 presents probit estimates of SSI participation for the combined native-born and foreign-born samples for the period 1993 to 1999. The first regression includes a vector of personal characteristics, a vector of state economic and policy variables, and an indicator variable to identify foreign-born individuals. The results indicate that the foreign born are significantly more likely to participate in SSI than the native born, that females are less likely to participate than males, and that older persons are less likely to participate than younger. SSI participation was also significantly greater in states with relatively high unemployment rates and relatively high poverty rates. It was lower in states that had relatively generous welfare policies toward immigrants. SSI participation fell with the implementation of the state's TANF program.

The second regression in Table 3 replaces the foreign-born indicator with a series of indicators specific to individual countries (with the native born serving as the benchmark group). With only one exception (the catchall "other" group), each foreign-born group is more likely to participate than its native-born counterpart. The countries that have contributed relatively large numbers of refugees particularly stand out. This group includes Laos, Russia, Cuba, and Vietnam.

The final regression in Table 3 focuses on entry cohorts. Those cohorts that entered the U.S. before 1960 show significantly lower probabilities of SSI participation than natives. However, those cohorts that entered the U.S. between 1960 and 1996 all had significantly higher rates of participation than natives. The fact that immigrant skills declined appreciably after 1965

is well recognized. In 1965 (fully implemented in 1968), Congress moved away from the national origins quota system that placed more emphasis on skills (especially after 1952) and moved to an entry system based more on family reunification. The lower probability of participation for the 1997 to 1999 entry cohort could be partly due to the 1996 changes that are our focus in this paper. We explore this hypothesis more completely in the models that follow.

Table 4 repeats the models presented in Table 3, but with the sample limited to individuals with low earnings as a rough proxy for SSI income eligibility. The results are qualitatively the same as those presented for the full sample in Table 3, but the estimated coefficients are substantially larger in absolute value. Among low earners, foreign-born individuals overall and from the 12 individual countries identified in column 2 are significantly more likely than natives to participate in the SSI program. The estimates in column 3 show that immigrants who entered the U.S. before 1960 are less likely to participate than natives, as are immigrants who entered the U.S. after 1996. Those who immigrated between 1960 and 1996 are significantly more likely than natives to participate in the SSI program.

Results from the difference-in-differences models are reported in Table 5 for the full sample and in Table 6 for the low-earner sample, following the specifications in equations (2) through (4). Table 7 summarizes the difference-in-differences estimators for the relevant comparison groups. Model 1 compares the probability of SSI participation among foreign-born individuals relative to native-born individuals, after welfare reform relative to before welfare reform. The results indicate that the foreign born are more likely to participate and that the probability of participation among both the foreign born and the native born decreased after welfare reform, all else equal. The difference-in-differences term is positive and significant, indicating that the probability of SSI participation in the post-reform period increased for the

foreign born relative to otherwise similar native-born individuals. This result is somewhat unexpected given the explicit focus of welfare reform on reducing welfare utilization among immigrants. However, this model is naïve in that it does not account for the fact that certain groups of immigrants were unaffected by welfare reform.

Model 2 makes the distinction between affected and unaffected immigrants. For this model, the sample is limited to foreign-born individuals. The results indicate that affected immigrants are significantly less likely to participate in the SSI program than otherwise similar unaffected immigrants. After controlling for the composition of immigrants between the pre-reform and post-reform period and differences in state economic and policy characteristics, the probability of SSI participation is higher in the post-reform period than in the pre-reform period. The difference-in-differences term is negative, indicating that relative to otherwise similar unaffected immigrants, the probability of SSI participation among affected immigrants decreased in the post-reform period. The magnitude of the effect is extremely small when the full sample of foreign-born individuals is used (Table 5). When the sample is limited to foreign-born individuals with low earnings as a rough proxy for SSI eligibility (Table 6), the difference-in-differences effect is substantially larger (-0.14 percentage points).

Models 3 and 4 add native-born individuals to the sample. Model 3 controls for affected status but not nativity, whereas model 4 includes controls for both affected status and nativity. The results for model 3 are consistent with both model 1 and model 2. The probability of SSI participation is significantly lower for affected immigrants than for unaffected individuals, which include both unaffected immigrants and native-born individuals. The probability of SSI participation decreased overall in the post-reform period. The difference-in-differences term is positive, indicating that the probability of SSI participation among affected immigrants in the

post-reform period increased relative to unaffected individuals. This finding is largely because native-born individuals are included in the unaffected group, and their participation patterns swamp those of the much smaller group of unaffected immigrants.

Model 4 includes the measures of affected status, and adds a control variable for nativity, as well as difference-in-differences terms for native-born relative to foreign-born individuals. This is the most complete model in that it allows us to estimate three difference-in-differences effects. The basic results in Tables 5 and 6 indicate that affected immigrants are less likely to participate in SSI than unaffected immigrants and that native-born individuals are significantly less likely to participate than immigrants. The difference-in-differences effects are calculated and summarized in Table 7. Relative to unaffected immigrants, the probability of SSI participation decreased among affected immigrants in the post-reform period, confirming the results from model 2. For the low earner sample, the magnitude of that effect is -0.6 percentage points.

The probability of SSI participation for both affected immigrants and unaffected immigrants, relative to native-born individuals, increased in the post-reform period. But the magnitude of the difference-in-differences effect for affected immigrants (0.5 percentage points in the low earners model) is only half as large as the difference-in-differences effect for unaffected immigrants (1.1 percentage points in the low earners model). These results suggest that, although the probability of SSI participation among immigrants as a whole increased in the post-reform period relative to otherwise similar native-born individuals, the welfare reforms led to substantial reductions in the probability of SSI participation among those immigrants who were affected by the legislation (i.e., immigrants who were not receiving SSI in August, 1996, and non-refugee, non-asylee immigrants who entered the U.S. after August, 1996).

Summary and Conclusions

Before 1996, Congress dealt with legal immigration more or less "directly" by means of a three-tier (world, country, and preference category) system of controls. Although this system remained in effect after 1996, the welfare reform policies enacted in that year introduced a new dimension in the U.S. immigrant admittance program. Now legal immigrants were limited in their eligibility for certain social programs. If immigrants were coming to the United States to enjoy various social benefits, at least some of those benefits would now be denied them.

In this paper, our specific focus is on SSI participation, and we use a unique set of administrative data to estimate a number of models of such participation. Our probit results clearly show that immigrants are more likely to participate in SSI than the native born, that females are less likely to participate than males, and that older persons are less likely to participate than younger. Immigrants who entered the U.S. between 1960 and 1996 are significantly more likely to participate than natives, whereas immigrants who entered before 1960 or after 1996 are less likely to participate than natives.

A series of difference-in-differences models suggests that the probability of SSI participation by immigrants increased in the post-welfare reform period relative to otherwise similar natives. When we identify immigrants whose potential SSI eligibility was affected by welfare reform separately from those whose potential SSI eligibility was not affected, we find that the probability of SSI participation among affected immigrants declined significantly after the implementation of welfare reform relative to unaffected immigrants. Although both groups of immigrants are significantly more likely to participate in the post-reform period than

otherwise similar natives, it appears that the welfare reform legislation led to reductions in the probability of SSI participation among affected immigrants relative to unaffected immigrants.

This is an important finding given that the vast majority of immigrants are in the affected group with respect to potential SSI eligibility. Only those immigrants who were receiving SSI in August, 1996, or who entered the U.S. as refugees or asylees and have been in the country for seven years or less, are unaffected by the provisions of welfare reform. As time passes and new immigrants continue to enter the U.S. in large numbers, the affected group will continue to grow. To the extent that the source-country composition of new immigrants to the U.S. continues to be dominated by countries with higher propensities for welfare participation, and the skill-composition of new immigrants continues to deteriorate, welfare reform will continue to impose strong restrictions on the welfare utilization of immigrants. On the other hand, immigrants who become naturalized U.S. citizens transition from affected to unaffected status, and thus undo some of the restrictions imposed by welfare reform. To the extent that immigrants from source countries with higher propensities for welfare participation have higher naturalization rates, this can become an important avenue for canceling out some of the impact of welfare reform.

References

Bean, Frank D., and Jennifer V. W. Van Hook (1996-97), "Public Assistance Use by Immigrants: What Can the U.S. Census Tell Us?" *Focus* 18(2), Fall/Winter, 41-46.

Bean, Frank D., Jennifer V. W. Van Hook, and Jennifer E. Glick (1997), "Country of Origin, Type of Public Assistance, and Patterns of Welfare Recipiency among U.S. Immigrants and Natives," *Social Science Quarterly* 78(2), June, 432-451.

Blau, Francine D. (1984), "The Use of Transfer Payments by Immigrants," *Industrial and Labor Relations Review* 37(2): 222-239.

Borjas, George J. (2002), "Welfare Reform and Immigrant Participation in Welfare Programs," *International Migration Review* 36(4): 1093-1123.

Borjas, George J., and Stephen J. Trejo (1993), "National Origin and Immigrant Welfare Recipiency," *Journal of Public Economics* 50(3), March, 325-344.

_____ (1991), "Immigrant Participation in the Welfare System," *Industrial and Labor Relations Review* 44(2): 195-211.

Council of Economic Advisors (1997). *Explaining the Decline in Welfare Receipt, 1993-1996*. Washington, DC: Council of Economic Advisors.

Crouse, Gil (1999). *State Implementation of Major Changes to Welfare Policies, 1992-1998*. Washington, DC: Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation.

Figlio, David N. and James P. Ziliak (1999). "Welfare Reform, the Business Cycle, and the Decline in AFDC Caseloads." In *Economic Conditions and Welfare Reform*, Sheldon Danziger (Ed.). Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

Fix, Michael E. and Jeffrey S. Passel (2002). *The Scope and Impact of Welfare Reform's Immigrant Provisions*. Assessing the New Federalism Discussion Paper 02-03. Washington, DC: The Urban Institute.

Fix, Michael E. and Jeffrey S. Passel (1999), "Trends in Noncitizens' and Citizens' Use of Public Benefits Following Welfare Reform: 1994-97." Urban Institute Research Report. Washington, DC: Urban Institute.

Greenwood, Michael J., and John M. McDowell (1999). *Legal U.S. Immigration: Influences on Gender, Age, and Skill Composition*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

Haider, Steven J., Jacob A. Klerman, and Elizabeth Roth (2003). "The Relationship Between the Economy and the Welfare Caseload: A Dynamic Approach." In *Research in Labor Economics 22*, Solomon Polachek, (Ed.). Amsterdam: Elsevier, JAI Press.

Moffitt, Robert A. (1999). "The Effect of Pre-PRWORA Waivers on AFDC Caseloads and Female Earnings, Income, and Labor Force Behavior." In *Economic Conditions and Welfare Reform*, Sheldon Danziger (Ed.). Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

Parrott, Thomas M., Lenna D. Kennedy, and Charles G. Scott (1998), "Noncitizens and the Supplemental Security Income Program," *Social Security Bulletin* 61(4): 3-31.

Social Security Administration (2003). *SSI Annual Statistical Report 2002*. Baltimore, MD: Social Security Administration.

Social Security Administration (1996). *SSI Annual Statistical Report 1995*. Baltimore, MD: Social Security Administration.

Tienda, Marta and Leif Jensen (1986), "Immigration and Public Assistance Participation: Dispelling the Myth of Dependency," *Social Science Research* 15(4): 372-400.

Van Hook, Jennifer V. W., Frank D. Bean, and Jennifer E. Glick (1996), "The Development and Assessment of Census-Based Measures of AFDC and SSI Recipiency," *Journal of Economic and Social Measurement* 22, 1-23.

Zimmermann, Wendy and Karen C. Tumlin (1999). *Patchwork Policies: State Assistance Programs for Immigrants under Welfare Reform*. Occasional Paper No. 24. Washington, DC: The Urban Institute.

Table 1: Descriptive Statistics and Variable Definitions, Foreign Born and Native Born, 1993-1999

		Foreign Born		Native Born	
Variable	**Definition**	**Mean**	**Std Err**	**Mean**	**Std Err**
SSI_CY	Receipt of SSI	0.0301	0.0001	0.0160	0.0001
SSIPMT_CY	SSI benefit (annual)	143.7142	0.7624	56.1715	0.4317
AGE	Age	41.1111	0.0122	41.1387	0.0120
FEMALE	Female	0.4649	0.0004	0.4958	0.0004
TTCOMP_TH	Total annual compensation (thousands of $)	17.1518	0.0435	20.3014	0.0403
NJOBS	Number of jobs held in a year	1.0996	0.0010	1.2568	0.0009
MOVED	Lived in a different state in the previous year	0.0570	0.0002	0.0743	0.0002
FB	Foreign born	1.0000	0.0000	0.0000	0.0000
AFFECTED	Foreign born and affected by welfare reform	0.9371	0.0002	0.0000	0.0000
CHINA	Born in China	0.0262	0.0001	----	----
CUBA	Born in Cuba	0.0330	0.0001	----	----
DOMREP	Born in the Dominican Republic	0.0245	0.0001	----	----
INDIA	Born in India	0.0325	0.0001	----	----
IRAN	Born in Iran	0.0117	0.0001	----	----
KOREAS	Born in North Korea or South Korea	0.0258	0.0001	----	----
LAOS	Born in Laos	0.0087	0.0001	----	----
MEXICO	Born in Mexico	0.2054	0.0003	----	----
PHILIP	Born in the Philippines	0.0566	0.0002	----	----
RUSSIA	Born in Russia	0.0195	0.0001	----	----
TAIWAN	Born in Taiwan	0.0197	0.0001	----	----
VIETNAM	Born in Vietnam	0.0378	0.0002	----	----
FB_OTHER	Born in a country other than those listed above	0.4984	0.0004	----	----
ENTLE39	Entered the U.S. before 1940	0.0066	0.0001	----	----
ENT4049	Entered the U.S. between 1940 and 1949	0.0076	0.0001	----	----
ENT5059	Entered the U.S. between 1950 and 1959	0.0317	0.0001	----	----
ENT6069	Entered the U.S. between 1960 and 1969	0.1046	0.0003	----	----
ENT7079	Entered the U.S. between 1970 and 1979	0.2202	0.0003	----	----
ENT8089	Entered the U.S. between 1980 and 1989	0.3729	0.0004	----	----
ENT9096	Entered the U.S. between 1990 and 1996	0.2313	0.0003	----	----
ENT9799	Entered the U.S. after 1996	0.0252	0.0001	----	----
UR	State unemployment rate	5.8603	0.0012	5.2966	0.0011
POV	State poverty rate	14.8211	0.0030	13.6016	0.0029
EARNPW_TH	State earnings per worker (thousands of $)	37.5516	0.0046	34.9048	0.0045
GENEROUS	Generous state welfare policies toward immigrants	0.7431	0.0004	0.5027	0.0004
AFDCW	State AFDC waivers implemented	0.6412	0.0004	0.5676	0.0004
TIMP	State TANF program implemented	0.4038	0.0004	0.4260	0.0004
ATMAX3	State maximum AFDC/TANF benefit for family of three	460.6195	0.1238	390.8886	0.1151
SUPP	Maximum SSI state supplement	70.8272	0.0610	37.5529	0.0485
N	Number of observations	1,455,274		1,575,576	

Table 2: Descriptive Statistics, Foreign Born and Native Born, Pre-Welfare Reform (1993-1995), Year of Welfare Reform (1996), and Post-Welfare Reform (1997-1999)

	Pre-Welfare Reform (1993-1995)				Year of Welfare Reform (1996)				Post-Welfare Reform (1997-1999)			
	Foreign Born		Native Born		Foreign Born		Native Born		Foreign Born		Native Born	
Variable	Mean	Std Err	Mean	Std Err	Mean	Std Err	Mean	Std Err	Mean	Std Err	Mean	Std Err
SSI_CY	0.0308	0.0002	0.0167	0.0002	0.0311	0.0004	0.0163	0.0003	0.0291	0.0002	0.0151	0.0001
SSIPMT_CY	141.2995	1.1890	55.5559	0.6542	149.6986	2.0543	58.2165	1.1694	143.9128	1.1335	56.0834	0.6579
AGE	40.2299	0.0192	40.2104	0.0183	41.0311	0.0323	41.1307	0.0318	41.8821	0.0181	41.9890	0.0184
FEMALE	0.4666	0.0007	0.4974	0.0006	0.4657	0.0011	0.4965	0.0011	0.4633	0.0006	0.4942	0.0006
TTCOMP_TH	15.2493	0.0510	18.8413	0.0477	16.5117	0.1228	19.9247	0.0936	18.9606	0.0742	21.7544	0.0728
NJOBS	1.0791	0.0015	1.2522	0.0014	1.0887	0.0025	1.2586	0.0025	1.1203	0.0014	1.2605	0.0014
MOVED	0.0732	0.0003	0.1018	0.0004	0.0441	0.0004	0.0528	0.0005	0.0473	0.0003	0.0559	0.0003
FB	1.0000	0.0000	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000
AFFECTED	0.9325	0.0003	0.0000	0.0000	0.9331	0.0005	0.0000	0.0000	0.9422	0.0003	0.0000	0.0000
CHINA	0.0251	0.0002	----	----	0.0263	0.0004	----	----	0.0271	0.0002	----	----
CUBA	0.0337	0.0002	----	----	0.0336	0.0004	----	----	0.0322	0.0002	----	----
DOMREP	0.0241	0.0002	----	----	0.0246	0.0003	----	----	0.0248	0.0002	----	----
INDIA	0.0303	0.0002	----	----	0.0320	0.0004	----	----	0.0346	0.0002	----	----
IRAN	0.0121	0.0001	----	----	0.0117	0.0002	----	----	0.0114	0.0001	----	----
KOREAS	0.0263	0.0002	----	----	0.0258	0.0003	----	----	0.0255	0.0002	----	----
LAOS	0.0090	0.0001	----	----	0.0087	0.0002	----	----	0.0084	0.0001	----	----
MEXICO	0.2089	0.0005	----	----	0.2050	0.0009	----	----	0.2026	0.0005	----	----
PHILIP	0.0572	0.0003	----	----	0.0569	0.0005	----	----	0.0560	0.0003	----	----
RUSSIA	0.0199	0.0002	----	----	0.0198	0.0003	----	----	0.0191	0.0002	----	----
TAIWAN	0.0206	0.0002	----	----	0.0199	0.0003	----	----	0.0189	0.0002	----	----
VIETNAM	0.0383	0.0003	----	----	0.0382	0.0004	----	----	0.0372	0.0002	----	----
FB_OTHER	0.4945	0.0007	----	----	0.4974	0.0011	----	----	0.5021	0.0006	----	----
ENTLE39	0.0072	0.0001	----	----	0.0066	0.0002	----	----	0.0061	0.0001	----	----
ENT4049	0.0083	0.0001	----	----	0.0075	0.0002	----	----	0.0070	0.0001	----	----
ENT5059	0.0347	0.0002	----	----	0.0317	0.0004	----	----	0.0292	0.0002	----	----
ENT6069	0.1142	0.0004	----	----	0.1043	0.0007	----	----	0.0965	0.0004	----	----
ENT7079	0.2391	0.0006	----	----	0.2198	0.0009	----	----	0.2042	0.0005	----	----
ENT8089	0.3937	0.0006	----	----	0.3725	0.0011	----	----	0.3553	0.0006	----	----
ENT9096	0.2028	0.0005	----	----	0.2575	0.0010	----	----	0.2474	0.0005	----	----
ENT9799	0.0000	0.0000	----	----	0.0000	0.0000	----	----	0.0543	0.0003	----	----
UR	6.9037	0.0019	6.1310	0.0017	5.9498	0.0023	5.3563	0.0022	4.9490	0.0012	4.5157	0.0012
POV	15.1549	0.0044	14.3406	0.0045	15.7416	0.0087	14.0196	0.0082	14.2543	0.0045	12.7940	0.0041
EARNPW_TH	34.4749	0.0056	32.1530	0.0055	36.8335	0.0100	34.2924	0.0101	40.3790	0.0064	37.6123	0.0066
GENEROUS	0.7502	0.0006	0.5072	0.0006	0.7446	0.0010	0.5027	0.0011	0.7367	0.0005	0.4986	0.0006
AFDCW	0.4311	0.0006	0.2814	0.0005	0.6905	0.0009	0.6607	0.0008	0.8041	0.0005	0.7993	0.0005
TIMP	0.0000	0.0000	0.0000	0.0000	0.0706	0.0002	0.0975	0.0002	0.8486	0.0004	0.9194	0.0003
ATMAX3	466.1018	0.2025	391.3417	0.1825	462.6339	0.3291	390.2700	0.3033	455.3544	0.1771	390.6717	0.1699
SUPP	73.6333	0.1003	39.1198	0.0789	68.7270	0.1540	36.4726	0.1238	69.0985	0.0881	36.4657	0.0706
N	571,825		644,862		208,322		224,534		675,127		706,180	

Table 3: Probit Estimates of SSI Participation among the Native Born and Foreign Born, 1993-1999

Dependent Variable: SSI_CY	(1)	(2)	(3)
Independent Variables			
AGE	-0.000002 ***	-0.000001 ***	-0.000002 ***
AGE2	0.000000 ***	0.000000 ***	0.000000 ***
FEMALE	-0.000022 ***	-0.000019 **	-0.000024 ***
FEMALE_AGE	-0.000002 ***	-0.000002 ***	-0.000002 ***
FEMALE_AGE2	0.000000 ***	0.000000 ***	0.000000 ***
TTCOMP_TH	-0.000028 ***	-0.000027 ***	-0.000027 ***
NJOBS	-0.000055 ***	-0.000054 ***	-0.000054 ***
MOVED	-0.000030 ***	-0.000029 ***	-0.000029 ***
FB	0.000067 ***		
CHINA		0.000255 ***	
CUBA		0.000479 ***	
DOMREP		0.000210 ***	
INDIA		0.000060 ***	
IRAN		0.000266 ***	
KOREAS		0.000087 ***	
LAOS		0.001752 ***	
MEXICO		0.000022 ***	
PHILIP		0.000228 ***	
RUSSIA		0.001492 ***	
TAIWAN		0.000103 ***	
VIETNAM		0.000392 ***	
FB_OTHER		-0.000011 ***	
ENTLE39			-0.000034 **
ENT4049			-0.000052 ***
ENT5059			-0.000035 ***
ENT6069			0.000040 ***
ENT7079			0.000076 ***
ENT8089			0.000153 ***
ENT9096			0.000041 ***
ENT9799			-0.000044 ***
UR	0.000004 ***	0.000004 ***	0.000004 ***
POV	0.000002 ***	0.000002 ***	0.000002 ***
EARNPW_TH	-0.000001 ***	-0.000001 ***	-0.000001 ***
GENEROUS	-0.000007 ***	-0.000009 ***	-0.000007 ***
AFDCW	0.000005 ***	0.000005 ***	0.000005 ***
TIMP	-0.000003	-0.000003	-0.000003
ATMAX3	0.000000 ***	0.000000 ***	0.000000 ***
SUPP	0.000000 ***	0.000000 ***	0.000000 ***
Observations	3030850	3030850	3030850
Log L	-196256.25	-195304.13	-196015.3
Pseudo R2	0.2534	0.257	0.2543

Coefficients have been transformed to represent marginal effects.
Year fixed effects included in all models.
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 4: Probit Estimates of SSI Participation among the Native Born and Foreign Born, Low Earner Sample, 1993-1999

Dependent Variable: SSI_CY	(1)	(2)	(3)
Independent Variables			
AGE	-0.000209 ***	-0.000188 ***	-0.000214 ***
AGE2	0.000003 ***	0.000003 ***	0.000003 ***
FEMALE	-0.003433 ***	-0.003145 ***	-0.003696 ***
FEMALE_AGE	-0.000264 ***	-0.000280 ***	-0.000246 ***
FEMALE_AGE2	0.000008 ***	0.000008 ***	0.000007 ***
TTCOMP_TH	-0.004475 ***	-0.004444 ***	-0.004470 ***
NJOBS	-0.006155 ***	-0.006090 ***	-0.006093 ***
MOVED	-0.004304 ***	-0.004259 ***	-0.004326 ***
FB	0.007942 ***		
CHINA		0.023833 ***	
CUBA		0.038040 ***	
DOMREP		0.020343 ***	
INDIA		0.007168 ***	
IRAN		0.024467 ***	
KOREAS		0.009862 ***	
LAOS		0.090102 ***	
MEXICO		0.002952 ***	
PHILIP		0.021807 ***	
RUSSIA		0.080256 ***	
TAIWAN		0.011522 ***	
VIETNAM		0.032688 ***	
FB_OTHER		-0.001493 ***	
ENTLE39			-0.005025 **
ENT4049			-0.008658 ***
ENT5059			-0.005240 ***
ENT6069			0.004840 ***
ENT7079			0.008799 ***
ENT8089			0.016062 ***
ENT9096			0.005200 ***
ENT9799			-0.006710 ***
UR	0.000578 ***	0.000572 ***	0.000548 ***
POV	0.000312 ***	0.000299 ***	0.000310 ***
EARNPW_TH	-0.000169 ***	-0.000142 ***	-0.000164 ***
GENEROUS	-0.001027 ***	-0.001337 ***	-0.001023 ***
AFDCW	0.000649 ***	0.000641 ***	0.000573 ***
TIMP	-0.000255	-0.000299	-0.000235
ATMAX3	-0.000006 ***	-0.000007 ***	-0.000006 ***
SUPP	0.000017 ***	0.000017 ***	0.000016 ***
Observations	1615311	1615311	1615311
Log L	-205407.14	-204394.93	-205147.99
Pseudo R2	0.1425	0.1467	0.1436

Coefficients have been transformed to represent marginal effects.
Year fixed effects included in all models.
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 5: Probit Models of SSI Participation, Difference in Difference Estimates

Dependent Variable: SSI_CY	(1)	(2)	(3)	(4)
Model	Foreign born vs. native born, no controls for affected status	Foreign born only, affected vs. unaffected	Affected vs. unaffected, no controls for foreign born vs. native born	Affected vs. unaffected with controls for foreign born vs. native born
Independent Variables				
AGE	-0.000001 ***	0.000001 ***	-0.000001 ***	0.000000
AGE2	0.000000 ***	0.000000 **	0.000000 ***	0.000000 **
FEMALE	-0.000021 **	-0.000009 ***	-0.000021 ***	-0.000005
FEMALE_AGE	-0.000002 ***	0.000000 *	-0.000002 ***	-0.000002 ***
FEMALE_AGE2	0.000000 ***	0.000000	0.000000 ***	0.000000 ***
TTCOMP_TH	-0.000025 ***	-0.000003 ***	-0.000024 ***	-0.000019 ***
NJOBS	-0.000048 ***	-0.000007 ***	-0.000049 ***	-0.000036 ***
MOVED	-0.000029 ***	0.000004 **	-0.000029 ***	-0.000022 ***
AFFECTED		-0.012525 ***	-0.000078 ***	-0.000098 ***
NB				-0.006070 ***
FB	0.000044 ***			
POSTWR	-0.000006	0.000003 ***	-0.000003	0.000056 ***
POSTWR_AFFECTED		-0.000008 ***	0.000030 ***	-0.000029 ***
POSTWR_NB				-0.000063 ***
FB_POSTWR	0.000022 ***			
UR	0.000005 ***	0.000000	0.000005 ***	0.000003 ***
POV	0.000002 ***	0.000000 ***	0.000003 ***	0.000001 ***
EARNPW_TH	-0.000001 ***	0.000000 ***	0.000000 **	-0.000001 ***
GENEROUS	-0.000007 ***	0.000000	0.000001	-0.000008 ***
AFDCW	0.000005 ***	-0.000001 **	0.000009 ***	0.000002 **
TIMP	-0.000001	-0.000001	-0.000004	0.000001
ATMAX3	0.000000 ***	0.000000	0.000000 ***	0.000000 ***
SUPP	0.000000 ***	0.000000 ***	0.000000 ***	0.000000 ***
Observations	2,597,994	1,246,952	2,597,994	2,597,994
Log L				
Pseudo R2	0.2539	0.6894	0.2620	0.2985

The pre-reform period covers 1993-1995. The post reform period covers 1997-1999.
Coefficients have been transformed to represent marginal effects.
Year fixed effects included in all models.
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 6: Probit Models of SSI Participation, Difference in Difference Estimates, Low Earners

Dependent Variable: SSI_CY	(1)	(2)	(3)	(4)
Model	Foreign born vs. native born, no controls for affected status	Foreign born only, affected vs. unaffected	Affected vs. unaffected, no controls for foreign born vs. native born	Affected vs. unaffected with controls for foreign born vs. native born
Independent Variables				
AGE	-0.000210 ***	0.000194 ***	-0.000178 ***	-0.000065 *
AGE2	0.000003 ***	0.000000 ***	0.000003 ***	0.000001 ***
FEMALE	-0.003504 ***	-0.001544 ***	-0.003516 ***	-0.001166
FEMALE_AGE	-0.000253 ***	0.000021	-0.000249 ***	-0.000341 ***
FEMALE_AGE2	0.000008 ***	0.000000	0.000007 ***	0.000008 ***
TTCOMP_TH	-0.004507 ***	-0.000589 ***	-0.004175 ***	-0.004068 ***
NJOBS	-0.005895 ***	-0.001093 ***	-0.005967 ***	-0.005303 ***
MOVED	-0.004753 ***	0.000802 ***	-0.004602 ***	-0.004257 ***
AFFECTED		-0.194425 ***	-0.015153 ***	-0.021722 ***
NB				-0.195265 ***
FB	0.005976 ***			
POSTWR	-0.001036 *	0.000516 ***	-0.000658	0.009760 ***
POSTWR_AFFECTED		-0.001441 ***	0.004063 ***	-0.006010 ***
POSTWR_NB				-0.011014 ***
FB_POSTWR	0.003087 ***			
UR	0.000666 ***	-0.000024	0.000748 ***	0.000568 ***
POV	0.000298 ***	0.000064 ***	0.000439 ***	0.000244 ***
EARNPW_TH	-0.000164 ***	0.000017 **	-0.000061 ***	-0.000096 ***
GENEROUS	-0.001088 ***	0.000074	0.000033	-0.001437 ***
AFDCW	0.000686 ***	-0.000151 **	0.001238 ***	0.000340 *
TIMP	0.000035	-0.000145	-0.000381	0.000294
ATMAX3	-0.000006 ***	0.000000	-0.000005 ***	-0.000006 ***
SUPP	0.000017 ***	0.000004 ***	0.000018 ***	0.000013 ***
Observations	1,381,433	712,493	1,381,433	1,381,433
Log L				
Pseudo R2	0.1427	0.6505	0.1520	0.1945

The pre-reform period covers 1993-1995. The post reform period covers 1997-1999.
Coefficients have been transformed to represent marginal effects.
Year fixed effects included in all models.
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 7: Summary of Difference-in-Difference Estimates

	Model	Comparison groups	Difference-in-difference estimate (%)
	All individuals		
1	Foreign born vs. native born, no controls for affected status	Foreign born vs. native born	0.0022
2	Foreign born only, affected vs. unaffected	Affected vs. unaffected foreign born	-0.0008
3	Affected vs. unaffected, no controls for foreign born vs. native born	Affected vs. unaffected foreign born and native born	0.0030
4	Affected vs. unaffected with controls for foreign born vs. native born	Affected vs. unaffected foreign born	-0.0029
4	Affected vs. unaffected with controls for foreign born vs. native born	Affected vs. native born	0.0034
4	Affected vs. unaffected with controls for foreign born vs. native born	Unaffected foreign born vs. unaffected native born	0.0063
	Low Earners		
1	Foreign born vs. native born, no controls for affected status	Foreign born vs. native born	0.3087
2	Foreign born only, affected vs. unaffected	Affected vs. unaffected foreign born	-0.1441
3	Affected vs. unaffected, no controls for foreign born vs. native born	Affected vs. unaffected foreign born and native born	0.4063
4	Affected vs. unaffected with controls for foreign born vs. native born	Affected vs. unaffected foreign born	-0.6010
4	Affected vs. unaffected with controls for foreign born vs. native born	Affected vs. native born	0.5004
4	Affected vs. unaffected with controls for foreign born vs. native born	Unaffected foreign born vs. unaffected native born	1.1014