

# *Welfare Reform and Immigrant Participation in Welfare Programs*

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This article examines the impact of the 1996 welfare reform legislation on welfare use in immigrant households. Although the data indicate that the welfare participation rate of immigrants declined relative to that of natives at the national level, this national trend is entirely attributable to the trends in welfare participation in California. Immigrants living in California experienced a precipitous drop in their welfare participation rate (relative to natives). Immigrants living outside California experienced roughly the same decline in participation rates as natives. The potential impact of welfare reform on immigrants residing outside California was neutralized because many state governments responded to the federal legislation by offering state-funded programs to their immigrant populations and because the immigrants themselves responded by becoming naturalized citizens. The very steep decline of immigrant welfare participation in California is harder to understand, but could be a by-product of the changed political and social environment following the enactment of Proposition 187.

"It's just obvious that you can't have free immigration and a welfare state."

Milton Friedman

The concern that immigrants may become "public charges" has always been a central component of the debate over immigration policy in the United States. Two related issues have dominated recent discussions over the potential link between immigration and welfare. The first is the perception that there was a rapid rise in the number of immigrants who received public assistance between 1970 and 1990. Although early studies of immigrant participation in welfare programs concluded that immigrant households had a lower probability of receiving public assistance than U.S.-born households, many studies conducted in the 1990s documented that this "stylized fact" was no longer correct – immigrant households had become more likely to receive public assistance than native households.<sup>2</sup> By 1996, Borjas and Hilton (1996)

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<sup>2</sup>The early studies include Blau (1984) and Tienda and Jensen (1986). Borjas and Trejo (1991) provided some of the first evidence that documented the rise in welfare participation rates in the immigrant population.

reported that if one included both cash and non-cash benefits (such as Medicaid and food stamps) in the definition of welfare, nearly 21 percent of immigrants received some type of assistance, as compared to only 14 percent of natives. The increased enrollment of immigrants in welfare programs spawned a rapidly growing literature that attempts to determine if immigrants "pay their way" in the welfare state. This metric, in turn, has become an important part of any cost-benefit calculation of the economic impact of immigration.<sup>3</sup>

There is also concern over the possibility that the relatively generous welfare programs offered by the United States have become a magnet for immigrants. The magnet hypothesis has several facets. It is possible, for example, that welfare programs attract immigrants who otherwise would not have migrated to the United States; or that the safety net discourages immigrants who "fail" in the United States from returning to their source countries; or that the huge interstate disparity in welfare benefits affects the residential location choices of immigrants in the United States and places a heavy fiscal burden on relatively generous states. In short, the welfare state creates a magnet that influences the migration decisions of persons in the source countries, potentially changing the composition and geographic location of the immigrant population in the United States in ways that may not be desirable. The potential magnetic effects of welfare raise questions about both the political legitimacy and the economic viability of the welfare state: Who is entitled to the safety net that American taxpayers pay for? And can the United States afford to extend that safety net to the rest of the world? Surprisingly, and despite their potential significance, few studies attempt to determine if such magnetic effects exist or if they are empirically important.<sup>4</sup>

In 1996, Congress responded to these concerns by including key immigrant-related provisions in the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA). This legislation specified a new set of rules for determining the eligibility of foreign-born persons to receive practically all types of public assistance. In rough terms, PRWORA denies most types of means-tested assistance to noncitizens who arrived after the legislation was signed, and limited the eligibility of many noncitizens already living in the United States.

<sup>3</sup>The recent report of the National Academy of Sciences on the economic impact of immigration (Smith and Edmonston, 1997) devotes two chapters to calculating the net fiscal impact. Storesletten (2000) presents a valuable theoretical discussion of this issue.

<sup>4</sup>The exceptions include Borjas (1999b), who examines the geographic distribution of foreign-born welfare recipients in the United States, and Olsen and Reagan (1996), who analyze if welfare participation affects the probability of out-migration for foreign-born persons in the National Longitudinal Surveys of Youth.

A few studies have already examined the post-1996 trends in welfare use by immigrant households. Fix and Passel (1999) and Borjas (1999a) show that the rate of welfare participation among immigrant households declined sharply – relative to the decline experienced by native households – after the welfare reform legislation was enacted in 1996.<sup>5</sup> The decline is particularly remarkable since most of the provisions for removing immigrants already living in the United States from the welfare rolls were never enforced. Moreover, only a small part of the immigrant population present in the United States in the late 1990s arrived after 1996, making it unlikely that these ineligible new arrivals could have such a dramatic impact on the national trend. The steeper drop in the rate of welfare use experienced by immigrant households led an influential Urban Institute study to conclude that “because comparatively few legal immigrants were ineligible for public benefits as of December 1997, it appears that the steeper declines in noncitizens’ than citizens’ use of welfare . . . owe more to the ‘chilling effect’ of welfare reform and other policy changes than they do to actual eligibility changes” (Fix and Passel, 1999:8).

This article provides a detailed empirical examination of the impact of PRWORA on welfare participation in immigrant households. The data clearly indicate that the welfare participation rate of immigrants declined relative to that of natives at the national level. It turns out, however, that this national trend is entirely attributable to the trends in welfare participation in California. Although immigrants living in California experienced a precipitous drop in their welfare participation rate (relative to natives), immigrants living outside California experienced the same decline in participation rates as natives living in those states.

The empirical analysis presented in this article shows that the potential impact of welfare reform on immigrants residing outside California was neutralized because both state governments and the immigrants themselves responded to the new political landscape by altering their behavior. In particular, many immigrant-receiving states chose to provide state-funded benefits to their foreign-born populations after 1996. Further, many immigrants quickly learned that they could bypass many of the new restrictions on welfare eligibility by becoming naturalized citizens. The very steep decline of immigrant welfare participation in California is harder to understand, but

<sup>5</sup>Espenshade, Baraka and Huber (1997) presented an early assessment of the presumed effects of welfare reform on various socioeconomic outcomes in the immigrant population.

could be a by-product of the seismic shift that occurred in the mid-1990s in the social contract between California's native population and immigrants, when a large majority of California's voters enacted Proposition 187.

### *HISTORICAL PERSPECTIVE*

The limitations on immigrant welfare use included in PRWORA are but the latest in a long line of restrictions, dating back to colonial days, designed to reduce the costs that immigration imposes on resident taxpayers.<sup>6</sup> As early as 1645 and 1655, the Massachusetts colony enacted legislation that prohibited the entry of poor or indigent persons (Albright, 1928). In 1691, New York introduced a bonding system designed to discourage the entry of potential public charges: "All persons that shall come to Inhabit within this Province . . . and hath not a visible Estate, or hath not a manual occupation shall before he be admitted an Inhabitant give sufficient surety, that he shall not be a burden or charge to the respective places, he shall come to Inhabit . . . ."<sup>7</sup>

The U.S. Congress first considered the problems arising from the immigration of public charges in 1836, and reconsidered this issue several times between 1840 and 1880 without taking any action.<sup>8</sup> In 1876, however, the Supreme Court unambiguously granted the federal government the sole authority to control immigration, invalidating all the state laws that restricted the entry of poor immigrants. The states most affected by immigration lobbied Congress to grant them relief from the costs imposed by (a nonexistent) federal immigration policy, and Congress responded in 1882 by banning the entry of "any persons unable to take care of himself or herself without becoming a public charge." The wording of this exclusion was changed in 1891 to ban the entry of "persons *likely* to become a public charge" (emphasis added). In 1903, Congress went further and approved the deportation of immigrants who became public charges within two years after arrival in the United States "for causes existing prior to their landing."

The current restrictions on public charges have changed little since the beginning of the twentieth century. Section 212(a)(4) of the Immigration and Nationality Act declares that: "Any alien who, in the opinion of the consular officer at the time of application for a visa, or in the opinion of the Attorney General at the time of application for admission or adjustment of status, is

<sup>6</sup>Edwards (2001) presents a nice discussion of the role that the public charge provision has played in immigration policy throughout U.S. history.

<sup>7</sup>Hutchinson, 1981:391.

<sup>8</sup>Hutchinson (1981) presents a detailed history of the public charge restrictions in U.S. immigration policy up until 1965.

likely at any time to become a public charge is inadmissible.” The legislation specifies that the factors to be taken into account in determining whether an alien is excludable include age, health, family status, assets, financial status, and education and skills. In addition, Section 237(5) states that: “Any alien who, within five years after the date of entry, has become a public charge from causes not affirmatively shown to have arisen since entry is deportable.”

Despite the presence of the public charge provisions in immigration law throughout the twentieth century, the Immigration and Naturalization Service did not interpret the receipt of public assistance by foreign-born persons in the United States as a potential ground for the deportation of immigrants. In fact, it is extremely rare for an immigrant to be deported on public charge grounds – only 39 immigrants were deported for this reason between 1961 and 1980.<sup>9</sup> In 1999, the INS published a regulation that for the first time outlined the link between the receipt of public assistance and the definition of a public charge.<sup>10</sup> In particular, a public charge is an alien who has become “primarily dependent on the government for subsistence, as demonstrated by either the receipt of public cash assistance for income maintenance, or institutionalization for long-term care at government expense.” By definition, the receipt of such non-cash benefits as Medicaid and food stamps do not enter the consideration of whether an immigrant is a public charge. Moreover, even if the immigrant receives cash benefits, immigration law requires that the INS consider other factors – such as age, assets, and skills – in making the public charge determination.<sup>11</sup>

Although the INS did not link the receipt of public assistance and the public charge provision of immigration law between the 1960s and 1990s, it became apparent that the number of immigrants receiving public assistance was rising rapidly. The U.S. Congress reacted to this trend by making it increasingly more difficult for immigrants to qualify for some types of public benefits. Beginning in 1980, immigrants began to be subject to so-called deeming requirements, where the sponsors’ income is “deemed” to be part of the immigrant’s application for particular types of assistance. This deeming procedure obviously reduces the chances that new immigrants qualify for welfare. The initial deeming rules applied only to SSI and lasted only 3 years, but

<sup>9</sup>In contrast, a total of 22,548 immigrants were deported on public charge grounds between 1908 and 1960 (see Immigration and Naturalization Service, 1997:187).

<sup>10</sup>*Federal Register*, Vol. 64, No. 101, May 26, 1999, pp. 28,675-28,688.

<sup>11</sup>The regulation also states that an alien can be deported on public charge grounds only if the alien has failed to comply “with a legally enforceable duty to reimburse the assistance agency for the costs of care.”

were later expanded to AFDC and other programs.

By 1996, Congress tightened the eligibility requirements substantially by including a number of immigrant-related provisions in PRWORA. It has been estimated that almost half of the \$54 billion savings attributed to the welfare reform bill can be traced directly to the restrictions on immigrant use of welfare (Primus, 1996-97:14). In general terms, the legislation, as signed by President Clinton, contained three key provisions:

1. Most noncitizens who arrived in the country before August 22, 1996, the "pre-enactment" immigrants, were to be kicked off the SSI and food stamp rolls within a year. (This provision of the legislation, however, was never fully enforced.)
2. Immigrants who entered the United States after August 22, 1996, the "post-enactment" immigrants, are prohibited from receiving most types of public assistance. The ban is lifted when the immigrant becomes an American citizen.
3. Post-enactment immigrants are subject to stricter deeming regulations. The eligible income and assets of the immigrant's sponsor will be deemed to be part of the immigrant's application for most types of public assistance, and the deeming period can last up to ten years.<sup>12</sup>

One can loosely interpret the second of these provisions as setting up a five-year "waiting period" before post-enactment immigrants can qualify for public assistance. After five years in the United States, the immigrant can apply for naturalization and, if the application is successful (as it typically is), the ban on immigrant use of welfare is lifted. Partly because of the increasing importance in the distinction between citizens and noncitizens, there was a rapid rise in the number of immigrants who wished to become naturalized in the early 1990s. In 1991, the INS received only 207 thousand petitions for naturalization; in 1997, the INS received 1.4 million such petitions (U.S. Immigration and Naturalization Service, 1997:142).

The restrictions on immigrant use of welfare brought together a number of powerful interest groups after the 1996 presidential election – all of which lobbied hard for their repeal. And, in fact, many of the immigrant-related provisions of the legislation were never enforced. The balanced budget agreement reached in 1997 between President Clinton and the Republi-

<sup>12</sup>The legislation also tightened the rules for sponsorship. The income of immigrants who reside legally in the United States and who wish to sponsor the entry of family members must exceed 125 percent of the poverty line. The sponsors must also file affidavits of support that are legally binding, making the sponsor financially liable for many of the expenses incurred by the immigrant.

TABLE 1  
ALIEN ELIGIBILITY FOR MEANS-TESTED FEDERAL PROGRAMS

Category of alien	Program		
	SSI	Food stamps	Medicaid
Immigrant arrived before 8/22/96	Eligible, if receiving SSI on 8/22/96, or subsequently disabled	Eligible, if age 65 or over on 8/22/96, or under age 18, or subsequently disabled	Eligible for SSI-derivative benefits; otherwise, eligibility is a state option
Immigrant arrived after 8/22/96	Not eligible	Not eligible	Eligible for emergency services only
Refugees and asylees	Eligible	Eligible	Eligible
Nonimmigrants and illegal aliens	Not eligible	Not eligible	Not eligible

Source: Valer and Eig (1998), Table 1.

Note: In this table, an "immigrant" refers to a foreign-born person who has a permanent residence visa (*i.e.*, a "green card"). Nonimmigrants include foreign-born persons who are in the United States on a temporary basis, such as foreign students and tourists. The information provided for immigrants who arrived after 8/22/96 and for refugees and asylees refers to their eligibility status during the first five years after arrival.

can-controlled Congress repealed the most draconian aspects of the legislation, such as kicking out the pre-enactment immigrants from the SSI and Food Stamp Programs. The mandated waiting period for post-enactment immigrants, however, remained on the books.

Table 1 presents a more detailed summary of the existing restrictions that the welfare reform legislation (and subsequent amendments) imposes on immigrant welfare use.

### *TRENDS IN WELFARE RECIPIENCY: 1994-98*

The Current Population Surveys (CPS) began to collect information on the immigration status of survey participants in 1994. The Annual Demographic Files (also known as the March Supplement) of the CPS provide information on participation in various types of social assistance programs during the calendar year prior to the survey. The CPS data contain relatively large numbers of observations (about 50,000 households per survey), thus permitting a statistically reliable study of socioeconomic outcomes even in relatively small populations.

I used data drawn from the 1995-99 CPS March Supplements to conduct the empirical analysis reported in this article. These surveys provide a history of participation in social assistance programs by both immigrant and native households during the 1994-98 period.<sup>13</sup> Unless otherwise noted, the household is the unit of analysis. The study is restricted to households that do not reside in group quarters. Initially, a household will be classified as an immigrant household if the household head was born outside the United States and is either an alien or a naturalized citizen. All other households will be classified as native households.

Table 2 reports the fraction of immigrant and native households that received particular types of assistance in each year between 1994 and 1998. The first column of the table tracks the trend in a summary measure of welfare participation, indicating if the household received any type of assistance (including cash benefits, Medicaid, or food stamps). The data yield a number of interesting results. First, the probability that either immigrant or native households

<sup>13</sup>I do not use the 1994 Current Population Survey in the analysis because that survey provided limited information on the national origin of immigrants and because there seem to be some problems with the statistics that can be calculated in the foreign-born sample in this survey. In particular, the "official" person weights provided in this survey (as well as in the 1995 CPS) do not yield an accurate enumeration of the immigrant population in the United States. Passel (1996) provides a detailed discussion of this problem, and uses a complex algorithm to calculate revised weights for each person in both the 1994 and 1995 surveys. I use the "Passel weights" in all calculations that involve the 1995 survey.



received some type of assistance was roughly constant prior to 1996. About 24 percent of immigrant households received some type of assistance both in 1994 and 1995, as compared to about 16 percent of native households. Second, the reciprocity rate of both groups fell immediately after the enactment of PRWORA. By 1997 and 1998, the reciprocity rate was around 20 percent for immigrant households and around 14 percent for native households. Third, the post-1996 decline in welfare participation was much steeper in the immigrant population. In fact, one can use the data reported in Table 2 to calculate the difference-in-differences estimate of the "excess" impact of welfare reform on the propensity that immigrant households receive welfare. The reciprocity rate dropped by about 2 percentage points among native households, but by 4 per-

**TABLE 2**  
NATIONAL TRENDS IN WELFARE PARTICIPATION RATES  
(PERCENT OF HOUSEHOLDS RECEIVING ASSISTANCE)

	Program					
	Some type of assistance	Some type of cash benefit	AFDC or general assistance	SSI	Medicaid	Food stamps
Natives						
1994	15.6	7.9	4.6	4.0	13.5	8.7
1995	15.0	7.6	4.2	4.0	13.2	8.1
1996	15.3	7.5	3.9	4.3	13.5	8.0
1997	14.0	6.6	3.1	4.1	12.5	6.8
1998	13.4	6.0	2.5	3.9	12.1	6.0
Immigrants						
1994	23.4	11.7	7.1	5.7	21.3	12.5
1995	23.8	11.6	6.8	5.8	21.9	11.7
1996	21.9	10.5	5.7	5.6	20.5	10.1
1997	20.2	9.2	4.6	5.3	18.7	9.3
1998	20.0	8.8	3.9	5.4	18.8	7.5

Note: The household receives "some type of assistance" if any household member receives cash benefits, Medicaid, or food stamps.

centage points in immigrant households. It seems, therefore, that PRWORA reduced the relative immigrant reciprocity rate by about 2 percentage points.

The remaining columns of Table 2 reveal that roughly the same pattern is found for participation rates in specific welfare programs. Immigrant households experienced a steeper decline in the receipt of cash benefits (such as AFDC or SSI), Medicaid, and food stamps.

The national trends summarized in Table 2 seem to suggest that the welfare reform legislation had a particularly strong impact on the likelihood that immigrant households receive assistance. These trends helped create the current consensus that PRWORA had a "chilling effect" on immigrant participation in welfare programs – either by making some immigrant households ineligible for receiving some types of assistance, or by mistakenly raising concern among eli-

gible immigrant households that receiving welfare could have adverse repercussions on their immigration status (and perhaps lead to deportation).

However, the national trends over the 1994–98 period are quite misleading, for they do not reflect at all what went on in much of the country during that period. It is well known that immigrants in the United States are not randomly distributed around the country, but are geographically concentrated in a very small number of places. In 1998, for example, 72 percent of immigrants resided in only 6 states (California, New York, Texas, Florida, Illinois, and New Jersey). The ethnic clustering is even more striking at the level of the metropolitan area. In 1990, 42 percent of immigrants lived in just five metropolitan areas (Los Angeles, New York, Miami, Chicago, and Anaheim), yet only 13 percent of natives lived in those localities.

The demographic importance of California – the state where 29.6 percent of the immigrant households and 9.2 percent of the native households reside – suggests that it might be of interest to examine the trends separately for California and for the other states. Table 3 documents these trends for the summary welfare measure that indicates whether the household received some type of assistance; similar trends are obtained for most of the specific programs. The evidence presented in this table is dramatic. The relative decline of immigrant participation in welfare programs at the national level can be attributed entirely to what happened to immigrant welfare use in California. The fraction of native households in California that received some type of assistance dropped slightly by 1.6 percentage points, from 15.2 percent before PRWORA to 13.6 percent afterwards. In contrast, the fraction of immigrant households in California that received some type of assistance fell precipitously, from 31.2 percent before PRWORA to 23.2 percent by 1998. Outside California, the welfare participation rate of native-born households declined by about 2.2 percentage points, while the participation rate of immigrant households declined by less than 2 percentage points, from about 20 percent before PRWORA to 18.7 percent by 1998. In short, the raw data do not provide any evidence whatsoever that PRWORA had any “chilling effect” on the welfare participation of immigrant households that reside outside California.<sup>14</sup>

<sup>14</sup>As noted above, the welfare reform legislation bans immigrants who arrived after August 22, 1996 from receiving most types of public assistance. The strong differences between California and the rest of the country are also evident in the changing welfare use of the most recent cohort that entered the country. In particular, the welfare participation rate of immigrant households that have been in the country for fewer than three years (as of the time of the survey) and that lived in California dropped from 29.9 percent in the pre-PRWORA period to 19.6 percent by 1998. In contrast, the welfare participation rate of the most recent cohort that lived outside California fell only from 19.8 to 17.8 percent.

**TABLE 3**  
**WELFARE PARTICIPATION RATES IN CALIFORNIA AND IN THE REST OF THE COUNTRY**  
**(PERCENT OF HOUSEHOLDS RECEIVING SOME TYPE OF ASSISTANCE)**

Year	Native			Immigrants		
	Entire Country	California	Outside California	Entire Country	California	Outside California
1994	15.6	15.2	15.6	23.4	31.2	20.0
1995	15.0	14.5	15.1	23.8	31.1	20.6
1996	15.3	13.6	15.5	21.9	26.3	20.1
1997	14.0	13.5	14.1	20.2	23.7	18.8
1998	13.4	13.6	13.4	20.0	23.2	18.7

Note: The household receives "some type of assistance" if any household member receives cash benefits, Medicaid, or food stamps.

To better assess the role played by PRWORA in generating the relative decline in immigrant welfare use, it is instructive to conduct a more detailed analysis of the CPS data, an analysis that takes into account the fact that not all immigrants were equally affected by welfare reform. As noted earlier, the legislation made an important distinction between citizens and noncitizens. Most of the restrictions on welfare use by foreign-born persons are lifted once the immigrant becomes a naturalized citizen. Further, as Table 1 indicated, refugees and asylees were exempted from almost all of the immigrant restrictions in PRWORA (at least in the first five years after arrival).

Initially, I classify the foreign-born households in the CPS data into citizen and noncitizen status based on the naturalization status of the household head. Table 4 reports the relevant trends in the citizen and noncitizen samples. Since most of the restrictions on welfare use targeted noncitizens, it is not surprising that the nationwide decline in welfare use was very steep among noncitizens; their welfare participation rate fell from 29.4 to 22.4 percent. In contrast, the welfare participation rate of citizen households actually increased between 1994 and 1998 (from 14.3% to 16.3%). Note, however, that California still plays a crucial role in determining the national trend. Much of the decline in welfare participation in noncitizen households occurred in California. In particular, the welfare participation rate of noncitizens fell by about 10 percentage points in California, but by only about 4 percentage points in the rest of the country.

Finally, note that the differences between California and the rest of the country remain even when one considers the trend in the population of noncitizen, nonrefugee households. Although the CPS data do not report the type of visa used by a particular immigrant to enter the country, one can

<sup>15</sup>The main refugee-sending countries over the 1970–90 period were: Afghanistan, Bulgaria, Cambodia, Cuba, Czechoslovakia, Ethiopia, Hungary, Laos, Poland, Romania, Thailand, the former U.S.S.R., and Vietnam.

**TABLE 4**  
**WELFARE PARTICIPATION RATES IN FOREIGN-BORN HOUSEHOLDS, BY CITIZENSHIP STATUS**  
**(PERCENT OF HOUSEHOLDS RECEIVING SOME TYPE OF ASSISTANCE)**

Group/year	Entire country	California	Outside California
Citizen head of household			
1994	14.3	18.7	13.0
1995	15.8	19.4	14.7
1996	16.1	17.9	15.4
1997	16.5	18.7	15.8
1998	16.3	18.0	15.7
Noncitizen head of household			
1994	29.4	36.6	25.5
1995	29.3	36.4	25.4
1996	26.6	31.8	24.2
1997	23.2	27.0	21.5
1998	22.9	26.9	21.2
Noncitizen head of household and nonrefugee			
1994	27.8	33.7	24.4
1995	26.9	33.1	23.3
1996	25.1	29.8	22.8
1997	21.8	25.1	20.1
1998	21.7	26.5	19.5

Note: The household receives "some type of assistance" if any household member receives cash benefits, Medicaid, or food stamps.

approximate the refugee population by using information on the national origin of the foreign-born households.<sup>15</sup> I classified all households who originated in the main refugee-sending countries as refugee households, while households originating in all other countries were classified as nonrefugee households. The bottom panel of Table 4 shows that the participation rate for noncitizen, nonrefugee households declined by about 7 percent in California, but by only 4 percent in the rest of the country.

The classification of households into citizen and noncitizen status based solely on the naturalization status of the foreign-born household head may be somewhat misleading because some members of the household might qualify for particular types of aid even if the household head does not qualify because he or she is not a citizen. As an example, consider a household headed by someone who entered the United States illegally. Suppose further that this household head has children born in the United States. The illegal alien is ineligible for many types of assistance, but the children of the illegal alien are eligible, for they are American citizens. In other words, the naturalization and nativity status of other household members will help determine the household's eligibility for many programs.

To illustrate the importance of the citizenship composition of the household members, I classified all households into three types: "exclusively citizen" households where everyone is either a native-born person or a nat-

uralized citizen; "mixed households" where there are some citizens and some noncitizens; and "exclusively noncitizen" households where all persons are noncitizens. The first three columns of Table 5 illustrate the trends in welfare use for these different types of households.<sup>16</sup> The trends at the national level are not surprising. Exclusively noncitizen households experienced a much steeper drop in welfare participation than exclusively citizen households. The welfare participation rate in noncitizen households dropped by about 5 per-

**TABLE 5**  
WELFARE PARTICIPATION RATES, BY TYPE OF HOUSEHOLD  
(PERCENT OF HOUSEHOLDS RECEIVING SOME TYPE OF ASSISTANCE)

Sample/year	Type of household				
	All citizen	Mixed household	All noncitizen	All noncitizen and nonrefugee	All noncitizen, nonrefugee, and non-Mexican
Entire country					
1994	15.5	30.4	20.6	16.9	14.2
1995	15.0	29.9	20.9	16.1	14.7
1996	15.2	28.2	17.1	13.9	13.3
1997	14.0	25.6	15.7	12.5	11.5
1998	13.5	25.0	15.4	12.4	11.1
California					
1994	15.2	35.1	27.7	22.0	19.4
1995	14.5	37.8	25.1	19.7	17.8
1996	13.6	32.8	20.1	17.3	17.8
1997	13.5	30.2	17.2	13.7	12.8
1998	13.6	29.8	14.0	12.9	10.5
Outside California					
1994	15.5	27.6	17.7	14.7	12.2
1995	15.0	25.6	19.2	14.6	13.8
1996	15.4	25.9	16.0	12.6	12.0
1997	14.1	23.5	15.2	12.1	11.1
1998	13.4	22.6	15.8	12.2	11.3

Note: The welfare participation rates give the percent of households that receive some type of assistance, including cash benefits, Medicaid or food stamps. The types of household classification are defined as follows: an "all citizen" household is one where all members of the household are either native-born or naturalized citizens; a "mixed household" contains both citizens and noncitizens; and a "noncitizen household" is composed exclusively of noncitizens.

centage points, from almost 21 percent before PRWORA to 15.4 percent in 1998. In contrast, the participation rate of citizen households dropped by only 2 percentage points, from 15.5 percent to 13.5 percent.

The data again reveal the importance of California in generating the national trend. The participation rate of citizen households declined by the

<sup>16</sup>In the pooled 1994–1998 data, 92.0 percent of the households are exclusively citizen, 5.4 percent are mixed, and 2.7 percent are exclusively noncitizen. In contrast, 89.7 percent of the household heads are native-born, 4.4 percent are foreign-born citizens, and 5.9 percent are foreign-born noncitizens.

same amount (about 2 percentage points) both in California and outside California. In contrast, the participation rate of noncitizen households declined precipitously in California, from about 28 percent in 1994 to only 14 percent by 1998. Outside California, the participation rate declined only from about 18 percent to 16 percent. In other words, the presumed chilling effect on noncitizen households at the national level is exclusively a California phenomenon.

The data also indicate that the distinct California and non-California trends cannot be attributed to the differential geographic settlement of refugee households in the United States. Column 4 shows that the very different trends experienced by noncitizen households in California and in the rest of the country are the same even when we restrict our attention to nonrefugee households.

Finally, one could argue that the distinct California trend may reflect the possibility that the California noncitizen population contains a significant overrepresentation of illegal aliens, and particularly of Mexican illegal aliens (Immigration and Naturalization Service, 1997:200). The last column of Table 5 recalculates the trends in the sample of noncitizen, nonrefugee households that did not originate in Mexico. It is evident that California's precipitous drop in immigrant welfare remains an "outlier," even in this highly restricted sample.

### *Regression Analysis*

It is instructive to formalize and extend some of the descriptive results by estimating a simple regression model. To illustrate the methodology, pool the CPS data available for the calendar years 1994, 1995, 1997, and 1998, and consider the difference-in-differences regression specification:<sup>17</sup>

$$(1) \quad p_i = X_i \beta + \alpha t_i + \gamma_0 MX_i + \gamma_1 (MX_i \times t_i) + \delta_0 NC_i + \delta_1 (NC_i \times t_i) + \varepsilon_i,$$

where  $p_i$  is a dummy variable indicating if household  $i$  receives some type of public assistance;  $X$  is a vector of socioeconomic characteristics (including age, gender, and educational attainment of the household head, and variables describing the household's composition, such as the number of children and the number of elderly persons);  $t_i$  is a dummy variable set to unity if the observation refers to the calendar years 1997 and 1998 (representing the post-PRWORA period);  $MX_i$  is a dummy variable indicating if the household is a

<sup>17</sup>Note that the regression analysis does not use the data for the 1996 calendar year (*i.e.*, the 1997 March CPS). In effect, the data for 1994–95 represent the pre-PRWORA period, while the data for 1997–98 represent the post-PRWORA period. For simplicity, all regressions will be estimated using the linear probability model.

"mixed" household (containing both citizens and noncitizens); and  $NC_i$  is a dummy variable indicating if the household is an exclusively noncitizen household. The coefficients  $\gamma_i$  and  $\delta_i$  give the difference-in-differences estimators of the impact of welfare reform on immigrant participation in welfare programs. For instance,  $\delta_i$  measures the pre- and post-PRWORA change in welfare participation in noncitizen households relative to the respective change in citizen households.

Table 6 reports the estimated difference-in-differences coefficients. It is evident that the impact of welfare reform on noncitizen households depends entirely on whether the sample includes California or not. The coefficient  $\delta_i$  is negative, sizable, and significant in California. Even after controlling for differences in socioeconomic characteristics among the various types of households and for the country of origin of the immigrant household, the participation rate of noncitizen households in California declined by 4.8 percentage points more than that of citizen households. Outside California, however, the difference-in-differences estimate is numerically and statistically

TABLE 6  
DIFFERENCE-IN-DIFFERENCES ESTIMATE OF THE IMPACT  
OF WELFARE REFORM ON WELFARE PARTICIPATION

Sample/variable	Regression		
	(1)	(2)	(3)
Entire country: Interaction of post-1996 variable with:			
Mixed household	-.034 (.007)	-.030 (.007)	-.032 (.007)
All noncitizen household	-.037 (.010)	-.019 (.010)	-.016 (.010)
California: Interaction of post-1996 variable with:			
Mixed household	-.051 (.015)	-.040 (.015)	-.032 (.015)
All noncitizen household	-.094 (.023)	-.059 (.022)	-.048 (.022)
Outside California: Interaction of post-1996 variable with:			
Mixed household	-.021 (.008)	-.022 (.008)	-.025 (.008)
All noncitizen household	-.014 (.011)	-.002 (.011)	-.002 (.011)
List of controls:			
Demographic variables	No	Yes	Yes
Country of origin	No	No	Yes

Notes: Standard errors are reported in parentheses. The regressions estimated in the entire country have 207,752 observations; the regressions estimated within California have 17,957 observations; the regressions estimated outside California have 189,795 observations. The "demographic variables" held constant in the regressions reported in columns 2 and 3 include the age, gender, and educational attainment of the household head, the number of persons in the household, the number of children under age 18, the number of persons over age 64, and the year of migration (measured by a vector of dummy variables indicating whether the head of the immigrant household arrived after 1994, 1990-93, 1985-1989, 1980-1984, 1970-79, or before 1970). The "country of origin" fixed effects represent a vector of 103 dummy variables indicating the country where the head of the immigrant household was born.

equal to zero, indicating that citizen and noncitizen households experienced the same rate of decline in welfare participation during the 1994–98 period.

The crucial importance of California in the analysis raises obvious questions about whether welfare reform had any chilling effect on welfare participation. And, in particular, what factors explain the “California effect?”

One possibility is that there were specific items in the PRWORA legislation, or in the waivers granted to individual states prior to 1996, that had a particularly adverse effect on the eligibility of immigrant households living in California. No such provisions, however, exist either in the welfare reform legislation or in the state-specific waivers granted before 1996.<sup>18</sup> In other words, there is no legislative or regulatory justification that can be used to explain the crucial difference in the trends between California and the rest of the country.

One could also argue that PRWORA might have a more adverse impact on California because of the over-representation of illegal aliens in California. This is an incorrect inference, however, for it was illegal for illegal aliens to receive most types of public assistance both before and after 1996. Moreover, as I showed earlier, the California trends are quite similar even when one excludes from the analysis the sample of Mexican immigrants, a population that probably contains a relatively large fraction of illegal aliens.

Finally, the Urban Institute has calculated an index of “welfare generosity” that measures the extent to which particular states offered their state-provided safety nets to the immigrant population after 1996 (Zimmermann and Tumlin, 1999:Table 18). By this measure, California was one of the most generous states, offering a wide array of benefits to immigrants who would have been kicked off the welfare rolls as well as to newly arrived immigrants. This fact makes it even more difficult to understand why immigrant welfare use in California dropped so dramatically.

Ultimately, any explanation of the California effect will have to rely on a hypothesis that there were things going on in California – unrelated to the welfare reform legislation – that did not occur in the rest of the country. One obvious candidate is the enactment of Proposition 187 by California voters in November 1994. This proposition, which denied almost all types of public assistance (including schooling) to illegal aliens residing in California, was

<sup>18</sup>Schoeni and Blank (2000) analyze how these state waivers affected socioeconomic outcomes in the targeted populations.

<sup>19</sup>David Reyes, “Prop. 187 Ruling Awaited With Confusion and Angst,” *Los Angeles Times*, December 31, 1994, p. 1.



supported by 59 percent of California voters. Although most of the provisions in the proposition were never enforced, its impact on the political and social climate in California is undeniable. It represented a seismic shift in the relation between the host population (*i.e.*, the voters of California) and a particular segment of the immigrant population. Soon after the enactment of Proposition 187, there were numerous newspaper accounts of the chilling effect that the proposition had on aliens applying for particular types of publicly provided benefits.<sup>19</sup> Although it is difficult to prove empirically that the social and political forces that culminated in Proposition 187 are an important explanation of the trends documented in this article, the possibility that such forces matter should not be easily dismissed.

### *State-Provided Safety Nets*

As noted above, some states chose to offer their safety nets to some of the immigrants adversely affected by PRWORA. For instance, the welfare reform legislation makes most immigrants who entered the United States before August 22, 1996 ineligible for many types of assistance, such as TANF and Medicaid. The legislation, however, also gives states the option to offer TANF and Medicaid to some of these immigrants, and some states chose to do so. In addition, some states also chose to offer various types of state-funded assistance to immigrants who arrived after August 22, 1996. As we have seen, these immigrants are typically ineligible for most types of federal assistance.

These state activities will further increase disparity in "welfare opportunities" available to immigrants living in different states. The Urban Institute's index of "welfare generosity" classifies states into four categories according to the availability of the state safety net. The states where such aid was "most available" included California and Illinois; the states where the aid was "somewhat available" included New York and Florida; the states where the aid was "less available" included Arizona and Michigan; and the states where the aid was "least available" included Ohio and Texas. It is worth noting that five of the six states with the largest immigrant populations tended to provide above-average levels of state-funded assistance to immigrants (the exception being Texas).

I use the Urban Institute index to classify states into two types: more generous states (*i.e.*, states where aid was most available or somewhat available), and less generous states (*i.e.*, states where aid was less available and least available). Table 7 shows how the "chilling effect" of welfare reform depends

on the actions taken by individual states. For simplicity, I classify households according to the immigration and naturalization status of the household head. The data indicate that the welfare participation rate of noncitizens living in the less generous states dropped by almost 10 percentage points (from 28.4% to 19.4%) during the period. In contrast, the participation rate of noncitizens living in the more generous states dropped only by about 5 percentage points (from 29.7% to 24.4%). It is worth noting that the participation rates of native or of citizen households do not reveal any such sensitivity to the availability of state-funded assistance.

TABLE 7  
STATE-FUNDED ASSISTANCE AND PROGRAM PARTICIPATION  
(PERCENT OF HOUSEHOLDS RECEIVING SOME TYPE OF ASSISTANCE)

Sample of households and Year	Households in:					
	Less Generous States			More Generous States		
	Native	Citizen	Noncitizen	Native	Citizen	Noncitizen
Entire sample						
Pre-1996	16.3	15.5	28.4	14.3	14.9	29.7
Post-1996	14.3	14.4	19.4	13.1	17.0	24.4
Non-California households						
Pre-1996	16.3	15.5	28.4	14.2	13.1	23.9
Post-1996	14.3	14.4	19.4	13.0	16.4	22.6
Nonrefugee households						
Pre-1996	16.3	16.0	28.8	14.3	14.6	27.0
Post-1996	14.3	14.6	19.1	13.1	15.8	22.8
Non-California and nonrefugee households						
Pre-1996	16.3	16.0	28.8	14.2	12.8	21.0
Post-1996	14.3	14.6	19.1	13.1	15.1	20.3

Notes: The welfare participation rates give the percent of households that receive some type of assistance, including cash benefits, Medicaid or food stamps. The types of household classification are defined according to the immigration and naturalization status of the household head. The more generous states are those states where the state-funded assistance was "most available" or "somewhat available." The less generous states are those states where the assistance was "less available" and "least available." See text for details.

The effect of the state-funded programs is even stronger when the sample is restricted to the households that live outside California. The welfare participation rate of noncitizen households dropped by 9 percentage points in the less generous states, while the participation rate of noncitizen households dropped by only 1.3 percentage points in the more generous states. Finally, the last row of Table 7 shows that in the most restricted sample – the nonrefugee households that live outside California – the welfare participation rate of these households dropped by almost 10 percentage points if they lived in the less generous states, but fell by less than 1 percent if they lived in the more generous states. In short, the state-funded programs offered by the more generous states seem to have prevented the chilling effect of federal welfare reform on immigrant welfare participation that would otherwise have occurred.

It is instructive to conduct a more formal analysis of the impact of the state-funded programs to determine if the differences between the more generous and the less generous states can be attributed to differences in characteristics of the populations living in the different states. Consider the linear probability regression model:

$$(2) \quad p_i = X_i \beta + \alpha_0 t_i + \alpha_1 I_i + \alpha_2 G_i + \gamma_0 (I_i \times t_i) + \gamma_1 (I_i \times G_i) + \gamma_2 (G_i \times t_i) + \theta (I_i \times G_i \times t_i) + \varepsilon_i,$$

where  $t_i$  is again a dummy variable set to unity if the observation refers to the calendar years 1997 and 1998;  $I_i$  is a dummy variable set to unity if the head of the household is an immigrant; and  $G_i$  is a dummy variable set to one if the state is a "more generous" state, and zero otherwise. The coefficient  $\theta$  then measures the impact of the state-provided safety net on the relative trend in immigrant welfare use. In particular, it measures the extent to which the relative pre- and post-PRWORA change in welfare participation differs between states that were the least generous in extending the safety net to immigrants and states that were the most generous. One would expect that the coefficient  $\theta$  is positive because the adverse impact of welfare reform on the relative probability that immigrant households receive welfare should be attenuated in those states that were most generous to immigrants.

Finally, note that the regression model in equation (2) reverts to using immigration status – rather than the citizen/noncitizen breakdown – to estimate the impact of the state-funded programs. I do this for two distinct reasons. First, as I showed earlier, the type of breakdown chosen to display the data does not affect most of the key findings presented in this article. The differential trends between California and the rest of the country are the same regardless of whether one looks at the difference between immigrants and natives, or at the difference between citizens and noncitizens. More importantly, the analysis of the citizen/noncitizen distinction ignores an important endogenous decision that immigrants can make to bypass many of the restrictions imposed by welfare reform – namely, immigrants can become naturalized citizens. As I noted earlier, there was a substantial increase in citizenship rates and the welfare participation rate of households headed by foreign-born citizens rose between 1994 and 1998. As a result, the reduced-form impact of welfare reform is best measured by analyzing the differential trends experienced by native and immigrant households.

Table 8 reports the regression coefficient  $\theta$  from alternative specifica-

tions of the regression model in equation (2). As expected, the state-funded programs have a positive impact on the relative rate of change in immigrant welfare participation. The coefficient reported in the first row (for the entire sample) and in the first column (without any controls for socioeconomic differences in the population) is .022, with a standard error of .012. The numerical value of the coefficient implies that the welfare participation rate of immigrant households fell by 2.2 percentage points less in those states that provided generous assistance to their immigrant populations than in those states that were less generous. Note, moreover, that this effect actually becomes stronger (both numerically and statistically) if the regression model controls for differences in socioeconomic characteristics, including state of residence and the country of origin of the immigrant household. In the sample of nonrefugee households living outside California, and after controlling for all of the socioeconomic background variables, the welfare participation rate of immigrant households fell by 6.3 percentage points more in the less generous states than in the more generous states.

TABLE 8  
IMPACT OF STATE-PROVIDED ASSISTANCE TO IMMIGRANTS  
(IMMIGRANT HOUSEHOLDS RELATIVE TO NATIVE HOUSEHOLDS)

Sample	Regression model			
	(1)	(2)	(3)	(4)
Entire sample	.022 (.012)	.029 (.012)	.028 (.011)	.033 (.011)
Non-California households	.055 (.012)	.057 (.012)	.057 (.012)	.058 (.012)
Nonrefugee households	.030 (.013)	.034 (.012)	.034 (.012)	.038 (.012)
Non-California and nonrefugee households	.060 (.013)	.062 (.013)	.061 (.013)	.063 (.013)
Controls for:				
Socioeconomic characteristics	No	Yes	Yes	Yes
State of residence fixed effects	No	No	Yes	Yes
Country of origin fixed effects	No	No	No	Yes

Notes: Standard errors are reported in parentheses. The regressions estimated in the entire country have 207,752 observations; the regressions estimated outside California have 189,795 observations; the regressions estimated in the refugee sample have 204,563 observations; and the regressions estimated in the nonrefugee, non-California sample have 187,053 observations. The "demographic variables" held constant in the regressions reported in column 3 include the age, gender, and educational attainment of the household head, the number of persons in the household, the number of children under age 18, the number of persons over age 64, and the year of migration (measured by a vector of dummy variables indicating whether the head of the immigrant household arrived after 1994, 1990-93, 1985-1989, 1980-1984, 1970-79, or before 1970).

In sum, the fact that some states chose to offer a state-funded safety net to their immigrant populations helped cushion the impact of federal welfare reform. Put differently, PRWORA could indeed have caused a chilling effect outside California, but the actions of individual states, and particularly the

states where most immigrants live, prevented much of that chilling effect from occurring.

### *WELFARE REFORM AND NATURALIZATION*

As we have seen, the impact of PRWORA on immigrant participation in welfare programs was attenuated by the responses of individual states to the legislation. There is an additional behavioral response that could further attenuate the impact – the actions of the immigrants themselves. The welfare reform legislation drew an important distinction between citizen and noncitizen status. In rough terms, naturalized citizens are eligible for most programs, while noncitizens are not. This fact obviously raises the incentives for immigrants to become naturalized.<sup>20</sup> I now turn to an investigation of this issue.

It is well known that there was a dramatic increase in naturalization applications in the 1990s. The evidence summarized in the previous section raises two distinct questions about the possible link between naturalization and welfare use in the immigrant population. First, did the immigrants most likely to be affected by the welfare reform legislation experience the highest increases in naturalization rates after 1996? Second, can the relatively steeper drop in welfare receipt experienced by California's immigrants be explained in terms of differential trends in naturalization?

Before proceeding to the empirical analysis, it is worth noting that a number of data problems prevent a definitive study of these questions. First, the available data do not allow one to determine if welfare receipt by a particular immigrant was an important factor that determined whether that person chose to become naturalized after 1996. In particular, the CPS does not provide any longitudinal information on whether a foreign-born respondent is a naturalized citizen. The naturalization question is asked only once throughout the 16-month rotation period that the person is tracked by the survey. As a result, one cannot analyze – at the micro level – which specific individuals chose to file a naturalization petition after 1996.

Second, it is unlikely that PRWORA was responsible for much of the observed increase in naturalization petitions in the period leading up to 1996.

The INS, through the Citizenship USA initiative, took steps to speed up the naturalization of foreign-born persons prior to the 1996 presidential

<sup>20</sup>Immigrants could also respond by migrating to those states that offered state-provided benefits. This migration response will probably be very weak because most of the immigrants present in the United States in 1996 (with the exception of those who lived in Texas) already lived in states that expanded the safety net available to immigrants.

election (Wasem, 1998). It is well known that political factors and fraud motivated and marred many of the activities in this program. For instance, nearly 20 percent of the 1.05 million immigrants naturalized in 1996 did not receive the standard FBI fingerprint check for criminal records prior to their naturalization.<sup>21</sup>

Because of the rapid increase in naturalization applications, the INS quickly developed long queues for processing the naturalization petitions. By the end of 1997, more than 1 million persons awaited a decision on their naturalization applications (INS, 1997:134). These queues imply that the available data on naturalization is "truncated" since the information available does not indicate whether the immigrant applied for naturalization, but only whether the immigrant is naturalized.

### *Trends in Naturalization Rates*

I used the 1995–99 CPS to calculate the naturalization status of foreign-born persons aged 18 or higher. The analysis is restricted to persons who migrated before 1990 so that the foreign-born persons could, in principle, have become naturalized citizens.

Table 9 documents some of the key trends in naturalization rates between 1994 and 1998. There was a rapid increase in the fraction of the foreign-born population that was naturalized in this period. The naturalization rate rose from 40.9 to 53.6 percent, with about half of the increase occurring before the welfare reform legislation was enacted. The timing of the increase in naturalization rates suggests that either the chilling effect of Proposition 187 or the impetus provided by the Citizenship USA initiative are responsible for much of the increase.

As noted above, a simple hypothesis that could potentially explain the steeper drop in welfare participation rates in California is that foreign-born persons in that state did not rush towards naturalization as quickly as foreign-born persons in other states. However, Table 9 shows that naturalization rates increased faster in California than in the rest of the country. The naturalization rate rose from 28.5 to 45.2 percent in California, and from 47.2 to 57.7 percent in the rest of the nation. Moreover, the naturalization rate in California rose very rapidly among "potential" welfare recipients. Table 9 illus-

<sup>21</sup>William Branigin, "INS Say It May Never Find Naturalized Criminals," *Washington Post*, May 1, 1997, p. A21; Kevin Galvin, "Democrats Reaching Out for Immigrant Support," Associated Press Political Service, May 3, 1997; and David P. Schippers, "Abusing the INS," *Wall Street Journal*, August 23, 2000, p. A22.

**TABLE 9**  
**TRENDS IN NATURALIZATION RATES**  
**(PERCENT OF IMMIGRANTS WHO ARE NATURALIZED)**

Group/year	Entire country	California	Outside California
All foreign-born persons			
1994	40.9	28.5	47.2
1995	43.4	34.4	48.0
1996	47.7	40.6	51.3
1997	51.7	42.0	56.4
1998	53.6	45.2	57.7
Foreign-born persons with 12 or fewer years of schooling			
1994	32.2	17.5	40.7
1995	33.8	21.0	40.8
1996	37.5	24.9	43.7
1997	42.4	30.0	48.7
1998	44.7	33.5	50.6
Foreign-born persons with at least 12 years of schooling			
1994	54.9	50.7	56.7
1995	57.4	56.8	57.7
1996	62.3	63.3	61.8
1997	65.5	61.3	67.4
1998	66.4	64.0	67.6

Note: The naturalization rates are calculated in the sample of foreign-born persons who are at least 18 years old and who migrated to the United States before 1990.

trates the trends in naturalization rates by educational attainment, and the data indicate that the naturalization rate of persons with 12 or fewer years of schooling – the pool from which most welfare recipients would be drawn – rose at least as much as the naturalization rates of persons with more education. Therefore, the evidence does not provide any support for the conjecture that differences in naturalization behavior between California and the rest of the country can explain the particularly steep decline in welfare reciprocity rates observed in California. The trend in California's welfare participation rates remains a puzzle: it cannot be attributed to an endogenous cutback in immigrant benefits by California's state government or to an endogenous response in naturalization behavior by California's immigrants.

Even though the outlying experience of California cannot be attributed to the trends in naturalization rates, it is still possible that the impact of PRWORA on welfare participation among immigrant households was attenuated by the naturalization response of immigrants. Although the CPS does not provide the requisite longitudinal data that would allow one to ascertain if immigrants who were welfare recipients in the pre-PRWORA period were also the ones who were most likely to naturalize in the post-PRWORA period, an alternative strategy for addressing this question can be developed. In particular, it is well known that citizenship rates vary dramatically by country of origin. Table 10 illustrates some of those differences, both "before" and

**TABLE 10**  
**NATURALIZATION RATES, BY NATIONAL ORIGIN**

Country of origin	Percent of immigrants who are naturalized		Sample size in 1997-98
	1994-95	1997-98	
Cambodia	29.1	57.8	69
Canada	54.1	54.3	460
China	47.6	69.1	401
Colombia	35.5	51.6	417
Cuba	52.5	72.7	947
Dominican Republic	28.8	44.5	595
Ecuador	29.9	38.6	245
El Salvador	18.4	25.4	691
Germany	78.9	75.7	417
Greece	75.2	72.5	184
Guatemala	14.9	21.6	365
Guyana	43.7	63.4	127
Haiti	35.8	43.7	203
Honduras	27.4	33.1	166
India	53.4	59.7	347
Iran	48.9	66.6	179
Ireland	68.2	69.6	121
Italy	72.5	77.5	388
Jamaica	41.5	60.1	222
Japan	47.2	38.0	117
Korea	39.4	55.2	318
Laos	33.2	40.4	108
Mexico	16.5	28.2	5555
Nicaragua	16.5	36.2	186
Peru	37.1	51.0	178
Philippines	65.4	75.9	761
Poland	65.5	69.7	214
Portugal	59.2	46.8	185
Taiwan	71.8	73.9	177
Thailand	37.5	65.5	48
U.S.S.R.	65.7	81.2	226
United Kingdom	54.7	46.3	437
Vietnam	64.0	73.1	374

Note: The naturalization rates reported in this table are obtained by pooling the 1995-96 CPS and the 1998-99 CPS.

"after" the welfare reform legislation. Even though the naturalization rate of immigrants rose dramatically between 1994 and 1998, there was a great deal of diversity in the rate of increase across national origin groups. For instance, the naturalization rate increased from 54.1 to 54.3 percent for Canadian immigrants, from 16.5 to 28.2 percent for Mexican immigrants, and from

<sup>22</sup>The data reported in Table 9 contain some puzzling trends. For a small number of national origin groups, the naturalization rate of the immigrants who arrived prior to 1990 actually declined during the 1990s. For instance, the naturalization rate of British immigrants fell from 54.7 to 46.3 percent. This result could be due to the measurement error that will inevitably arise when foreign-born persons are asked to report if they are naturalized, or may reflect the changing age distribution of the immigrant "cohort" over the five-year sample period (as older immigrants exit the sample and immigrants who arrived as young children enter it).



65.7 to 81.2 percent for immigrants from the former Soviet Union.<sup>22</sup>

Let  $n_{ij}(t_0)$  be the pre-PRWORA (*i.e.*, 1994–95) naturalization rate of a group of immigrants born in country  $i$  who arrived in the United States at time  $j$ , and let  $n_{ij}(t_1)$  be the post-PRWORA (*i.e.*, 1997–98) naturalization rate of that group. Consider the regression model:

$$(3) \quad n_{ij}(t_1) - n_{ij}(t_0) = X\beta + \alpha p_{ij}(t_0) + \varepsilon_{ij}$$

where  $X$  is a vector of socioeconomic characteristics; and  $p_{ij}(t_0)$  gives the fraction of immigrants in cell  $(i, j)$  who received some type of welfare assistance in 1994–95. The cohorts defined by the index  $j$  are the immigrants who arrived between 1985 and 1989, between 1980 and 1984, between 1970 and 1979, and before 1970. The coefficient  $\alpha$  would be positive if the immigrant groups most likely to be affected by PRWORA were also the ones most likely to resort to naturalization to “neutralize” the impact of the legislation.

Table 11 reports the regression results. The evidence is striking. There is a strong and positive correlation between the fraction of the immigrant group that received welfare before 1996 and the increase in the naturalization rate experienced by the immigrant cohort. Moreover, this positive correlation is positive and significant regardless of the controls that are included in the regression. The estimate of the coefficient  $\alpha$  typically ranges around .2, indicating that a 20 percentage point difference in the pre-1996 welfare participation rates is associated with a 4 percentage point increase in the rate of naturalization during the 1994–98 period. The regressions reported in the table also indicate that the immigrant groups more likely to have children in the household experienced a faster increase in the naturalization rate, while those groups that are more likely to have native-born persons in the household experienced a slower increase in the naturalization rate. Finally, the last column of the table shows that the coefficient  $\alpha$  remains positive and significant even when the regression controls for the initial level of the naturalization rate of the group.

The positive correlation between the immigrant group's pre-PRWORA welfare use and post-PRWORA naturalization rates can be interpreted in two different ways. First, the correlation could be measuring an individual behavioral response. In particular, those immigrants who were most likely to be adversely affected by the welfare reform legislation took a simple (and cheap) action that would neutralize the impact of PRWORA: they filed a naturalization petition and became naturalized citizens. It is also possible, however, that the political activists who ran the Citizenship USA initiative, with its

**TABLE 11**  
**DETERMINANTS OF GROWTH IN NATURALIZATION RATES**

Independent variable:	Regression			
	(1)	(2)	(3)	(4)
Fraction of immigrant cohort receiving public assistance in 1994-95	.178 (.045)	.291 (.062)	.236 (.065)	.204 (.058)
Mean family income of cohort	-	-.001 (.001)	-.000 (.001)	.001 (.001)
Mean education of cohort	-	.013 (.006)	.011 (.006)	.024 (.005)
Mean age of cohort	-	.002 (.002)	.004 (.003)	.004 (.003)
Fraction of cohort that is male	-	.095 (.073)	.065 (.073)	.124 (.065)
Fraction of cohort living in California	-	.023 (.040)	.023 (.041)	-.008 (.036)
Fraction of households in cohort that have native-born persons	-	-	-.219 (.077)	-.256 (.068)
Fraction of households with children	-	-	.194 (.080)	.214 (.071)
Fraction of households with elderly persons	-	-	-.096 (.103)	.087 (.093)
Fraction of cohort naturalized in 1994-95	-	-	-	-.442 (.047)
R-squared	.094	.125	.149	.337

Notes: Standard errors are reported in parentheses. All regressions are weighted by  $(N_0 + N_1)^{-1}$  where  $N_0$  gives the sample size used in calculating the naturalization rate of the cohort in 1994-95, and  $N_1$  gives the respective sample size in 1997-98. The regressions have 325 observations. All regressions include a vector of fixed effects indicating the year of migration of the cohort.

goal of naturalizing 1 million foreign-born persons in 1996, targeted particular groups of immigrants, groups that would be the most likely to support the incumbent Democratic administration in the 1996 presidential election. A simple model of statistical discrimination suggests that the welfare participation rate of the ethnic group could serve as a cheap signal to distinguish which groups should be targeted by the initiative. The available data, however, cannot be used to measure the relative importance of these two alternative hypotheses.

### *POLICY IMPLICATIONS*

From a historical perspective, the 1996 welfare reform legislation represents only the latest attempt to minimize the costs imposed by the potential immigration of public charges. The U.S. Congress could just as easily have chosen to achieve many of the same objectives by simply enforcing the public charge provisions of current immigration law – both in terms of denying entry to potential welfare recipients, or by deporting immigrants who make extensive use of welfare programs. Instead, the welfare reform legislation hoped to

achieve these aims in a more circuitous way. By setting up a five-year waiting period before newly arrived immigrants qualify for many types of assistance, the legislation presumably discourages the immigration of potential public charges. By tightening the eligibility requirements for immigrants already living in the United States, the legislation presumably increases the incentives for some immigrants to return to their home countries.

The empirical analysis presented in this article yields four major findings:

- Even though immigrant participation in welfare programs – relative to that of natives – declined at the national level, the national trend can be entirely accounted for by what was happening in the state of California. In particular, the relative participation rate of immigrants dropped precipitously in California, but remained roughly constant in the rest of the country.
- Much of the potential impact of PRWORA on welfare use by immigrants residing outside California was undone by the actions of state governments. Some states – and particularly those states where immigrants reside – chose to offer state-provided benefits to the immigrants adversely affected by welfare reform.
- It seems that immigrants quickly learned that the naturalization certificate held the key to many types of public assistance denied to noncitizens. The national origin groups most likely to receive public assistance in the pre-PRWORA period experienced relatively larger increases in naturalization rates after 1996. This endogenous response by immigrants further served to neutralize the potential impact of PRWORA on immigrant welfare use.
- There do not seem to be any measurable factors that can explain the precipitous drop in immigrant welfare participation in California. The California experience may indeed reflect a chilling effect – but the chilling effect has nothing to do with welfare reform, and may have much to do with the enactment of Proposition 187.

What have we learned from the trends in immigrant welfare participation in the post-PRWORA period? Should Congress amend the legislation so as to get more noncitizens on the rolls and remove the burden from the generous states? Or should the restrictions on immigrant welfare use be tightened even further?

The answer to all of these questions depends on the objectives of immigration policy. Since colonial days, immigration policy has been partly motivated by a desire to protect native taxpayers. This policy objective obviously

conflicts with a humanitarian desire that would open up economic and social opportunities in the United States – including the opportunities provided by the welfare state – to poor persons from around the world.

Welfare programs in the United States – though not generous by Western European standards – stack up pretty well when compared to the standard of living in most of the world's less developed countries. In 1997, the typical TANF household with two children in California could receive a maximum of \$6,780 in cash benefits.<sup>23</sup> This household probably qualified for food stamps worth another \$3,132 annually. And if this household also participated in the Medicaid program, it received additional benefits valued at over \$2,700. At the same time, per-capita income in China was \$3,600, in Colombia it was \$6,600, and in the Philippines it was \$3,500.<sup>24</sup>

Income differences across countries influence a person's decision of whether to move to the United States – regardless of whether these differences arise in the labor market or in the safety net provided by the welfare state. As a result, there are valid reasons to be concerned with the possibility that generous welfare programs might attract a particular type of immigrant. After all, welfare programs will probably attract persons who qualify for subsidies and repel persons who have to pay for them. A strong magnetic effect, combined with an ineffective border control policy, can literally break the bank.

Put bluntly, the immigration of potential public charges can easily fracture the political legitimacy of the social contract that created and sustains the welfare state. No group of native citizens can be reasonably expected to pick up the tab for subsidizing tens of millions of "the huddled masses."

It is inevitable, therefore, that immigration policy impose some restriction on the entry of potential public charges. But how should the restrictions work?

One major problem with PRWORA is its explicit link between the receipt of welfare benefits and the immigrant's naturalization status. It is well known that many immigrants in the United States do not bother to naturalize: only 52.8 percent of the immigrants who entered the country in 1977 had naturalized by 1997 (INS, 1997:140). The welfare reform legislation changed the incentives facing different types of immigrants to become U.S. citizens. Not surprisingly, it seems that the immigrant groups that have relatively high propensities for receiving public assistance also have larger incen-

<sup>23</sup>U.S. House of Representatives, *Background Material and Data on Programs within the Jurisdiction of the Committee on Ways and Means*, 1998, pp. 416,985.

<sup>24</sup>U.S. Central Intelligence Agency, *Handbook of International Economic Statistics* (Washington, D.C., 1999). The per-capita income data adjust for international differences in purchasing power.

tives to naturalize in the post-PRWORA era.

One could reasonably argue that such a link between citizenship and welfare is problematic. Many immigrants will choose to become citizens not because they want to fully participate in the U.S. political system, but because naturalization is the price that they have to pay to receive welfare benefits. It obviously does not constitute good social policy to equate a naturalization certificate with a welfare check. In addition, the sample of immigrants who naturalize will be self-selected to include large numbers of persons who qualify to make claims on the welfare state. Combined with the very large size of the current immigrant flow, there is a real possibility that the linkage between naturalization and welfare receipt can significantly alter the nature of the political equilibrium in many localities and states.

In 1996, Congress gave individual states the option to supplement the federal benefits available to immigrants with state-provided benefits. It turned out that almost all of the states with large immigrant populations chose to extend the state-provided safety nets to immigrant households. The political choices made by these states prevented many immigrant households from being removed from the welfare rolls, and helped attenuate the impact of welfare reform on immigrant welfare use.

From an economic perspective, the responses made by the states with large immigrant populations seem puzzling. One could have easily argued that once Congress gave states the opportunity to choose state-specific policies, many of the states most affected by immigration would have chosen to discourage welfare use by immigrants residing within their borders – rather than pursue policies that further encouraged welfare use. Why did the race to the bottom not occur? Was it perhaps because the immigrant population in these states is now sufficiently large that elected officials found it essential – from a political perspective – to cater to the needs of this large minority?

The possibility that the immigrants themselves altered the political equilibrium in these states is worrisome, and raises doubts about the wisdom of granting states the right to enhance the benefits that are available to immigrants. Since 1876, immigration policy has been the sole purview of the federal government. By allowing states to offer more generous safety nets to the immigrants than the one provided by the federal government, some states could easily become a magnet for immigration from other countries. The state's actions, though sensible from the narrow perspective of state politicians running for elected office, may not be sensible from a national perspective. After all, the state is responsible for the cost of admitting immigrants only in the very short run. As soon as the immigrants become naturalized citizens,

many of the responsibilities shift to the federal government. The state's generosity, therefore, could potentially impose a negative externality on the rest of the country.

Finally, it is worth noting that some of the key immigrant-related provisions in PRWORA – dealing with removing noncitizens who already lived in the United States from the welfare rolls – were revoked soon after they were signed into law. Major social policies seldom unravel in the United States, so that the partial unraveling of this key provision of the welfare reform legislation provides an important lesson. There is little disagreement over the fact that immigrant use of public assistance grew rapidly in the past three decades. So it is hard to argue that the immigrant provisions in the welfare reform bill were based on faulty data or analysis. Congress saw an actual problem – rising welfare use by immigrants – and tried to do something about it.

It seems, however, that the American people do not wish to bear the political, social, and economic costs of removing immigrants already in the United States from the welfare rolls. It is naïve, after all, to assume that there are no long-run consequences from denying needy immigrants access to food stamps or medical services. In the end, it is probably easier and cheaper to address the problem raised by the immigration of public charges not by “ending welfare as we know it,” but by reforming immigration policy instead.

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