

# **IMMIGRATION AND THE FOOD STAMP PROGRAM**

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### **ABSTRACT**

Much of the research analyzing immigrant participation in welfare programs investigates the extent to which immigrants enroll in cash benefit programs, with little attention being paid to the trends and determinants of immigrant participation in other programs. This paper uses data drawn from the decennial Censuses, the Survey of Income and Program Participation, and the Current Population Surveys to analyze trends in immigrant participation in the Food Stamp Program. The evidence suggests that the immigrant-native gap in participation rates in the Food Stamp Program widened until about 1995. Since 1995, there has been a decline in the number of both native and immigrant households that receive food stamps, but the decline has been steeper in the immigrant population. Much of the gap in participation rates between immigrant and native households can be attributed to differences in socioeconomic characteristics between the two groups, particularly educational attainment. The evidence also indicates that immigrant households have much higher entry rates into the Food Stamp Program, but roughly the same exit rates. Finally, there is a strong link between the use of cash benefits in the immigrant generation and the use of food stamps in the second generation.

## IMMIGRATION AND THE FOOD STAMP PROGRAM

George J. Borjas\*

### 1. Introduction

The growth of the welfare state in the past few decades coincided with the resurgence of large-scale immigration to the United States, adding a new and explosive question to the already contentious debate over immigration policy: Do immigrants “pay their way” in the welfare state? The available empirical evidence suggests that immigrant participation in cash benefit programs has risen dramatically since 1970. Congress reacted to this trend by enacting welfare reform legislation in 1996 that denied many types of means-tested assistance to non-citizens, including food stamps. In fact, almost half of the \$54 billion savings in the 1996 Personal Responsibility and Work Opportunity Reconciliation Act can be traced directly to the restrictions on immigrant use of public assistance.

Because of data constraints, much of the research analyzing immigrant participation in welfare programs investigates the extent to which immigrants enroll in cash benefit programs, with little attention being typically paid to the trends and determinants of immigrant participation in other programs. This paper presents a comprehensive study of immigrant participation in the Food Stamp Program. The paper addresses three related questions: First, what are the trends in immigrant use of the Food Stamp Program? Second, what factors determine the difference in the probabilities that immigrants and natives receive food stamps? And, finally, does the receipt of public assistance in the first generation increase the likelihood that second-generation households enroll in the Food Stamp Program?

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The Food Stamp Program is one of the largest means-tested programs in the United States. In 1996, this program cost \$27.3 billion. In contrast, \$23.7 billion was spent on the AFDC program; \$21.6 billion on the Earned Income Tax Credit; \$17.2 on housing benefits; and \$16.3 billion on (means-tested) education aid, including the Pell Grants, Head Start and the Stafford Loans.<sup>1</sup> The objective of the program is to provide food assistance to needy households.<sup>2</sup> A household enrolled in the Food Stamp Program is expected to allocate a third of its income to food expenditures. The program then increases household resources by a sufficient amount so that the household can afford to buy an “adequate low-cost diet.” In 1995, the maximum food stamp voucher given to a household of four was \$397 per month. The Food Stamp Program grew rapidly in the past two decades. In 1975, the Food Stamp Program had 16.3 million beneficiaries. The number of beneficiaries peaked in 1994 at 27.5 million, and had declined to 22.8 million by 1997.

The Food Stamp program is mainly a federal program. With minor exceptions, the federal government is responsible for all the rules, and these rules are uniform across states. This fact raises some interesting issues that may play a role in an analysis of the link between immigration and food stamp reciprocity. In particular, immigrant participation in the Food Stamp Program, unlike immigrant participation in the cash benefit programs where benefits are set at the state level and hence vary widely across states, is not likely to be affected by the extreme geographic clustering of immigrants in the United States.

This paper uses data drawn from the decennial Censuses, the Survey of Income and Program Participation, and the Current Population Surveys to analyze trends in immigrant

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<sup>1</sup> U.S. Bureau of the Census (1998), p. 379.

participation in the Food Stamp Program, to explore the reasons for the large differences in the rate at which immigrant and native households receive food stamps, and to investigate whether the program is also being used extensively by the (grown) children of immigrants.

The analysis yields a number of interesting empirical results. The available evidence suggests that the immigrant-native gap in participation rates in the Food Stamp Program widened until about 1995. Since 1995, there has been a decline in the number of both native and immigrant households that receive food stamps, but the decline has been steeper in the immigrant population. Second, much of the gap in participation rates between immigrant and native households can be attributed to differences in socioeconomic characteristics between the two groups, particularly educational attainment. Third, immigrant households have much higher entry rates into the Food Stamp Program, but roughly the same exit rates. Finally, there is a strong link between the use of cash benefits in the immigrant generation and the use of food stamps in the second generation.

## **2. Trends in Use of the Food Stamp Program**

Before analyzing the link between immigration and the Food Stamp Program, it is instructive to summarize the trends in immigrant and native participation in cash benefit programs. The cash benefit programs include Aid to Families with Dependent Children (AFDC), Supplemental Security Income (SSI), and general assistance.<sup>3</sup> The U.S. decennial Census began

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<sup>2</sup> For an encyclopedic description of the Food Stamp Program and its regulations, see U.S. House of Representatives (1996), pp. 856-879.

<sup>3</sup> The 1996 welfare reform legislation replaced the AFDC program, which was targeted to single women with small children, with the Temporary Assistance for Needy Families (TANF) program. The Supplemental Security Income program is targeted mainly to disabled and elderly persons. The general assistance program is typically administered at the county level, and is targeted to families with short-run needs. See U.S. House of Representatives (1996) for an encyclopedic description of all means-tested programs.

to collect information on household participation in cash benefit programs in 1970, and these data have been used extensively in the literature that studies immigrant participation in welfare programs (Blau, 1984; Tienda and Jensen, 1986; Borjas and Trejo, 1991).<sup>4</sup>

To document the trends in participation in cash benefit programs in Census data, I constructed data extracts from the Public Use Microdata Samples (PUMS) files.<sup>5</sup> The unit of analysis is the household (which is also the basic beneficiary unit in the Food Stamp Program), and the study focuses on whether a household receives public assistance at a particular point in time. A household is 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 are classified as native households. The empirical analysis is restricted to households that do not reside in group quarters and that are headed by persons who are at least 18 years old.

As Table 1 shows, the Census data indicate that immigrant participation in cash benefit programs rose between 1969 and 1989—both in absolute levels and relative to natives.<sup>6</sup> In 1969, immigrant households were slightly less likely than native households to receive cash benefits. By 1989, however, the typical immigrant household had a substantially higher probability of receiving cash benefits. In particular, 9.1 percent of the immigrant households enumerated in the 1990 Census received cash benefits at some point during the previous calendar year, as compared to only 7.4 percent of native households.

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<sup>4</sup> Smith and Edmonston (1997) present a detailed cost-benefit analysis of the impact of immigration on expenditures in welfare programs.

<sup>5</sup> The 1970 Census extract consists of a .1 percent random sample of native households, and of a 2 percent random sample of immigrant households; the 1980 extract consist of a .1 percent random sample of native households, and of a 5 percent random sample of immigrant households; and the 1990 extract consist of a .5 percent random sample of native households, and of a 5 percent random sample of immigrant households. Borjas (1995) presents a more detailed discussion of the Census data.

<sup>6</sup> The Census data provide information on program participation in the year prior to the Census.

It has been shown that the overall trend in cash benefits in the immigrant population masks two distinct underlying trends (Borjas and Trejo, 1991). First, more recent immigrant waves are more likely to receive cash benefits than earlier waves. These cohort effects in the use of cash benefit programs mirror the well-documented cohort differences in skills—with the most recent waves being relatively less skilled (Borjas, 1985). Second, the longer immigrants live in the United States, the more likely that they receive cash benefits. In a sense, immigrant households assimilate *into* cash benefit programs.

Because the Census does not report any information on the household's receipt of non-cash benefits, such as those provided by the Food Stamp Program, the study of participation in non-cash programs has had to rely on alternative data sources. The Survey of Income and Program Participation (SIPP) is a longitudinal survey that collects data for the same households over a period of time. During the interview, each respondent is asked about his or her participation in a large number of public assistance programs during the prior four-month period. In the SIPP panels used in this study, the households were re-interviewed at four-month intervals for eight waves, providing 32 monthly observations for each household.

The SIPP data have the advantage of providing a longitudinal history of household participation in various assistance programs over the 32-month long duration of the survey.<sup>7</sup> The SIPP data, however, also have several disadvantages. First, the sample size in these surveys is relatively small, so that various SIPP panels have to be pooled in order to conduct a statistically reliable study of socioeconomic outcomes in relatively small subgroups of the population, such

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<sup>7</sup> The SIPP collects information on all persons in the household. One of these persons is called the "reference person" or "householder." The householder is the person who either owns the house or whose name it is rented under. If the house is owned jointly by a married couple, either the husband or wife may be listed as the reference person. I restricted the analysis to the sample of persons who are householders in the first month of the panel (effectively making the household the unit of analysis) and who report valid data for every month of the 32-month sample period. Borjas and Hilton (1996) provide a more detailed discussion of these data.

as immigrants. Second, because the household is followed for only 32 months, the panel is much too short to allow a detailed longitudinal analysis of program participation. Finally, it turns out that because of the sample design in the SIPP data, the program participation rates that can be calculated in the SIPP are not directly comparable to those obtained from other sources (such as the Census or the Current Population Surveys).

Table 1 reports the participation rates obtained by pooling the 1984-85 and the 1990-91 SIPP files for three selected programs (food stamps, cash benefits, and Medicaid), as well as for an overall measure of welfare participation indicating if the respondent receives “any type” of assistance.<sup>8</sup> I first calculated the probability that the typical SIPP household received a particular type of assistance *during the typical month* in the 32-month sample period. In the early 1990s, 10.8 percent of immigrant households received cash benefits during a particular month, as compared to only 7.3 percent of native households. Similarly, 9.2 percent of immigrant households received food stamps, as compared to 6.5 percent of native households.

The SIPP data also indicate that the immigrant-native gap in the receipt of public assistance—whether food stamps or cash benefits—widened substantially in the last half of the 1980s. For instance, the fraction of native households that received food stamps remained constant at about 6.5 percent from the mid-1980s to the early 1990s. In contrast, the fraction of immigrant households that received food stamps rose from 7.6 to 9.2 percent over the period.

Note, however, that these participation rates are not directly comparable to those calculated in the Census data because the Census provides information on whether the household received cash benefits at any point in the calendar year prior to the Census. I constructed “annualized” participation rates in the SIPP files by calculating the fraction of households that

participated in a specific program during the calendar years 1985 or 1990.<sup>9</sup> These annualized participation rates are also reported in Table 1. The calculations imply that 10.4 percent of immigrant households received food stamps at some point during 1990, as compared to only 8.3 percent of native households; and that 12.0 percent of immigrant households received cash benefits at some point during 1990, as compared to only 8.9 percent of native households.

The annualized participation rates in cash benefit programs calculated in the SIPP files do *not* align neatly with the participation rates that can be calculated from the 1990 Census (for the calendar year 1989). The SIPP participation rates are much higher than those obtained in the Census. For instance, the annualized participation rate for cash benefit programs in the native population jumped from 7.4 to 8.9 percent between 1989 and 1990.<sup>10</sup>

The different results provided by the two data sets could arise for two distinct reasons. First, census respondents, who are asked about benefits received in the previous calendar year, may not bother to report relatively short spells of receiving cash benefits. As a result, the Census data would underestimate the true extent of program participation. It is also well known, however, that the SIPP data exhibit a “seaming” problem (Singh, Weidman, and Shapiro, 1989). In particular, welfare spells in the SIPP files tend to begin at the start of each 4-month interview cycle and end at the close of the cycle. Put differently, if a household being interviewed at month  $t$  reports that they received a particular type of assistance at that time, this household was also likely to report that it received the same type of assistance in each of the four preceding months.

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<sup>8</sup> The programs included in the “any type of assistance” are cash benefit programs, Medicaid, voucher programs (such as the Food Stamp Program), and housing subsidies.

<sup>9</sup> These calculations are based on the 1985 and the 1990 SIPP panels.

<sup>10</sup> Interestingly, the SIPP participation rates that give the likelihood that a household receives assistance in a given *month* seem to follow the trend indicated by the Census data—particularly when one places the SIPP results in the context of the statistics calculated in both the Census and the Current Population Surveys.

The seaming bias may artificially increase the annualized program participation rate that can be calculated in the SIPP data relative to the Census data.

The Current Population Surveys (CPS) began to collect information on the immigration status of survey participants in 1994. In addition, the Annual Demographic Files (also known as the March files) of the CPS provide information on participation in various types of assistance programs, including the Food Stamp Program. I use the 1995-98 CPS surveys in the empirical analysis.<sup>11</sup> The CPS data is comparable to the Census data; they both report information on program participation in the calendar year prior to the survey. The CPS data also 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.

As Table 1 shows, the CPS data yield two key results: First, the immigrant-native gap in program participation (as measured by the probability of receiving cash benefits) widened further between 1989 and 1994. Second, there was a substantial decline in the fraction of households that received various types of public assistance programs between 1994 and 1997, and this decline was steeper in the immigrant population. Between 1994 and 1997, for example, the fraction of native households receiving food stamps fell from 8.7 to 6.8 percent, but the fraction of immigrant households receiving food stamps fell by more than three percentage points, from 12.5 to 9.3 percent. Similarly, the fraction of native households receiving cash benefits fell from 7.9 to 6.6 percent, but the fraction of immigrant households receiving cash benefits fell from 11.7 to 9.2 percent.

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<sup>11</sup> I do not use the 1994 Current Population Survey in the analysis because the survey provided limited information on the national origin of the immigrants and because there seem to be some problems with the statistics that can be calculated in the immigrant 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 representation of the immigrant and native populations in the United States. Passel (1996) provides a detailed discussion of this problem, as well as calculates

Although the available data do not permit the construction of a long time series of participation rates for native and immigrant households in the Food Stamp Program, it is worth noting that the CPS files suggest a very close correlation between the participation rate in cash benefit programs and the participation rate in the Food Stamp Program. This is not surprising since recipients of the AFDC, SSI, or general assistance program are automatically eligible for food stamps. This correlation, combined with the information provided by the SIPP files, suggests that immigrant participation in the Food Stamp Program rose from 1969 to about 1995—both in absolute terms and relative to native participation. In the late 1990s, the fraction of immigrant households receiving food stamps began to decline, again both in absolute terms and relative to native participation. Despite this decline, however, it is clear that the “welfare gap” between immigrants and natives was far larger at the end of the 1990s than it was in 1969.

### **Adjusted Differences in Participation Rates**

Although the descriptive statistics summarized in Table 1 illustrate the aggregate trends in participation in the immigrant and native populations, it is important to ascertain if immigrant households, for given characteristics, are more “prone” to enter the Food Stamp Program. I address this question by estimating the following linear probability regression model in a data set that pools all four of the CPS cross-sections:

$$(1) \quad p_i = X_i \beta + \delta I_i + \varepsilon_i,$$

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revised weights for each person in both the 1994 and 1995 surveys based on a complex algorithm. Throughout the empirical analysis, I use the “Passel weights” in calculations that involve the 1995 survey.

where  $p_i$  is a dummy variable set to unity if household  $i$  receives a particular type of public assistance;  $X_i$  is a vector of background socioeconomic characteristics; and  $I_i$  is a dummy variable set to unity if the household head is foreign-born. The coefficient  $\delta$  gives the difference between the probability that immigrant and native households receive a particular type of benefit, after adjusting for differences in socioeconomic characteristics. Table 2 reports the estimated  $\delta$ 's for various public assistance programs and using a number of alternative specifications for the vector  $X$ .

The first entry in the table reports the unadjusted difference in the probability of receiving food stamps between immigrant and native households (i.e., the vector  $X$  contains only an intercept and dummy variables indicating the CPS survey from which the observation is drawn). The coefficient reveals that the probability of receiving food stamps in the 1994-97 period was 3.0 percentage points higher for immigrant households than for native households. In view of the very large samples used in the regression analysis, it is not surprising that this difference is statistically very significant (the standard error is only .002).

Column 2 adds the gender and the age of the household head (where age is entered as a fourth-order polynomial) to the list of regressors. It is evident that inter-group differences in the sex or age of the household head are not sufficiently large to "explain" the differences between immigrant and native households. Immigrant households still have a substantially higher probability of receiving food stamps (about 2.7 percentage points higher than natives).

The third column adds three variables describing the household's composition: the number of persons residing in the household, the number of persons under age 18, and the number of persons over age 65. It seems that differences in household composition explain part of the "welfare gap" between immigrant and native households. The immigrant-native gap in the

probability of receiving food assistance falls to about 2.1 percentage points after adjusting for these inter-group differences in household composition.

The fourth column of the table controls for state of residence. It is well known that three-quarters of the immigrant population reside in only six states (California, New York, Texas, Florida, New Jersey, and Illinois). Interstate differences in eligibility and benefits provided by some public assistance programs could explain part of the difference in participation rates between immigrants and natives. The regression coefficients reported in Table 2 show that differences in location between the immigrant and native populations cannot explain the gap in participation rates in the Food Stamp Program. This is not surprising since the Food Stamp Program is mainly a federal program, with eligibility rules set at the federal level and uniform benefits across states (with only minor exceptions). Residential location, however, does influence the immigrant-native welfare gap for programs that differ substantially across states. For example, the gap in participation rates in cash benefit programs declines from 2.5 percentage points to 1.9 percentage points after controlling for state of residence.

The last column of the table controls for differences in the educational attainment of the household head. The inclusion of this variable in the regression model effectively “explains” the entire immigrant-native participation gap in the Food Stamp Program (as well as the participation gap in cash benefit programs). If anything, the point estimate of the coefficient  $\delta$  for the Food Stamp Program and cash benefits turns negative, suggesting that immigrant households are slightly *less* likely to receive food stamps and cash benefits than similarly educated native households. The regression analysis reported in Table 2, therefore, documents that the key reason for the relatively higher participation rate of immigrant households in the Food Stamp Program is the relatively lower educational attainment of these households.

In view of the heated debate over the impact of immigration on welfare expenditures, the empirical evidence summarized in Table 2 should be interpreted with caution. The evidence indicates that immigrants who have the same socioeconomic characteristics as natives—*particularly educational attainment*—are somewhat less likely to receive food stamps than their native counterparts. But because immigrants, on average, have less favorable socioeconomic characteristics, they also have higher participation rates in the Food Stamp Program. Put differently, it is not “immigrant-ness” *per se* that leads to high participation rates in this program; instead, it is the characteristics of the immigrants currently living in the United States.

Finally, it is well known that a relatively large number of the immigrant households that contain elderly persons receive public assistance through the Supplemental Security Income (SSI) program. Because participants in the SSI program typically qualify for food stamps, it may be the case that much of the immigrant-native difference in program participation rates would disappear if one could adjust the data for this factor. Although the regression analysis reported in Table 2 controls for the number of persons living in the household who are over 65 years of age, a “cleaner” illustration that this factor cannot explain the difference in food stamp receipt between immigrants and native households is presented in Table 3. This table shows that 17.6 percent of immigrant households that contain at least one elderly person receive cash benefits, as compared to only 8.7 percent of the immigrant households that do not have any elderly persons. The presence of elderly persons in the household, therefore, has a sizable impact on the “welfare gap” in cash benefits between immigrants and natives.

Table 3 also shows that the welfare gap in food stamp receipt is larger in households that contain elderly persons, *but for the wrong reasons*. In particular, the presence of elderly persons in the household does not increase the likelihood that immigrant households receive food stamps.

About 10 percent of immigrant households receive food stamps regardless of whether there are elderly persons present. The presence of elderly persons, however, has a negative impact on the likelihood that native households receive food assistance. In other words, the welfare gap in food stamp receipt is larger among households that contain elderly persons not because immigrant households with elderly persons are particularly prone to receive food stamps, but because native households with elderly persons are particularly prone *not* to receive them.

### **National Origin**

As with other socioeconomic outcomes, there are large differences in program participation rates among national origin groups. Table 4 uses the pooled data from the 1995-98 Current Population Surveys to illustrate the extent of these national origin differences. The data show that fewer than 2 percent of the households originating in France, Germany, or India receive food stamps, as opposed to 12 percent of those originating in Jamaica or Nicaragua, 17 percent of those originating in Mexico, 20 percent of those originating in Cuba, and over a third of those originating in the Dominican Republic.

A cursory scan at the cross-country differences suggests that immigrants originating in refugee-sending countries tend to exhibit much higher rates of food stamp receipt. About 16 percent of the households originating in Vietnam and over 20 percent of the households originating in Cuba or the former Soviet Union received food stamps in the 1994-1997 period. In fact, the last two rows of Table 4 show that refugee households are far more likely to receive food assistance than non-refugee immigrant households: 16.5 percent versus 9.2 percent.<sup>12</sup> It is

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<sup>12</sup> The Current Population Surveys do not contain any information on the type of visa used by a particular household to enter the country. To approximate the refugee population, 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 non-refugee households. The main refugee-sending countries over the 1970-90 period were:

worth noting, however, that non-refugee immigrant households still have larger participation rates in the Food Stamp Program than native households (which averages 7.9 percent during this period).

The high propensity of refugee households to receive food stamps may be the result of government policies designed to “ease” the transition of refugees into the United States. Persons who enter the country as refugees have immediate access to a wide array of social services and programs that neither other legal immigrants nor natives qualify for. For instance, needy refugees who cannot qualify for AFDC, SSI, or Medicaid, can apply for special refugee cash assistance or medical assistance.

It is also worth noting that the differences in welfare use across national origin groups cannot be completely explained in terms of observable socioeconomic characteristics. In particular, consider estimating the following regression model in the sample of immigrant households:

$$(2) \quad p_{ij} = X_{ij} \beta + n_j + \varepsilon_{ij},$$

where  $p_{ij}$  is a dummy variable set to unity if household  $i$  in national origin group  $j$  receives food stamps, and  $n_j$  is a vector of national origin fixed effects. The vector of national origin fixed effects has a significant effect on the explanatory power of the regression even after one controls for a detailed vector of socioeconomic characteristics. In particular, the  $F$  statistic testing the hypothesis that the coefficients of the national origin fixed effects are jointly equal to zero is 7.2 (far above the usual significance levels), even after controlling for differences in sex, age, the

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Afghanistan, Bulgaria, Cambodia, Cuba, Czechoslovakia, Ethiopia, Hungary, Laos, Poland, Romania, Thailand, the former U.S.S.R., and Vietnam.

number of years that the household has resided in the United States, household composition, state of residence, and educational attainment.

As noted above, it is well known that there was a substantial decline in the relative skills of successive immigrant waves. A great deal of research has linked this trend in cohort skills to the changing national origin mix of the immigrant population in the United States (Borjas, 1992; LaLonde and Topel, 1992). It would be of great interest to determine if the long-run trends in immigrant participation in the Food Stamp Program can also be linked to national origin. The available data, however, do not permit an analysis of these types of cohort effects. In particular, the 1994-98 Current Population Surveys do not span a sufficiently long span of time to reliably identify the participation rate of the various immigrant cohorts at the time of entry into the United States.<sup>13</sup> Moreover, as we have seen, the CPS data cannot be linked with the SIPP files to create a longer time series. I will show below, however, that the CPS data can be used to partly examine the extent to which immigrants “assimilate” into the Food Stamp Program.

### **Transitory versus Permanent Recipiency**

Is immigrant participation in the Food Stamp program transitory or permanent? Does the relatively high immigrant participation rate in this program arise because many immigrants receive food stamps for very short periods, or does it arise because some immigrants receive food stamps for very long spells? The distinction between short-run recipiency and long-run dependence is important from a policy perspective. The economic and social implications of having an immigrant population where many immigrants have short-term needs are very

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<sup>13</sup> Although it is possible to estimate a regression model that could, in principle, identify the cohort effects (see Borjas, 1985), this identification would depend crucially on what one chooses to assume about the linearity (or nonlinearity) of the aging effect, the rate at which the participation rate in the Food Stamp Program changes as the immigrant cohort gets older.

different from those of having immigrants who are permanently caught in the web of public assistance programs.

Unfortunately, the SIPP tracks households for only a 32-month period. As a result, it is not possible to answer the question of “reciency versus dependency” conclusively by using these data. Nevertheless, the available data hint at the possibility that immigrant participation in the Food Stamp Program is more likely to be of a “long-run” nature than that of natives.

Table 5 reports some statistics that are calculated by using the panel nature of the SIPP data. In the early 1990s, 15.2 percent of the immigrant households and 11.3 percent of the native households received food stamps at some point during the 32-month sample period, so that immigrant households were more likely to have some exposure to the program. In addition, 7.6 percent of the immigrant households and 6.0 percent of the native households were “left-censored”—that is, they were receiving food stamps at the *beginning* of the 32-month sample period. The SIPP does not provide any information on when these left-censored spells of food stamp reciency began. The fact that such a large number of spells of reciency are left-censored (note that about half of the households that received food stamps at some point during the 32-month period were already receiving food stamps at the beginning of the survey) introduces serious technical problems if one tries to analyze the extent to which the spells of food stamp reciency are “permanent.” In particular, it is difficult to incorporate these left-censored spells into an analysis of spell duration unless one makes extremely restrictive assumptions about the probability process that generated these spells in the first place (Heckman and Singer, 1985).

Finally, the SIPP data indicate that 4.6 percent of the immigrant households and 3.4 percent of the native households received food assistance during the entire 32-month period in the early 1990s. Put differently, about 30 percent of the immigrant and native households that

received food stamps at some point during the sample period received food stamps through the entire 32 months.

The CPS data can also be used to obtain some insights into the transition rates of households in and out of the Food Stamp Program. These transition rates can be calculated by matching households in the 1996-98 CPS data across consecutive years.<sup>14</sup> These matched data can then be used to determine if the reciprocity status of household  $i$  changed between calendar years  $t$  and  $t+1$ . The exit rate from the Food Stamp Program is given by the fraction of households who left the program between years  $t$  and  $t+1$ , conditional on the household receiving food stamps in year  $t$ . Similarly, the entry rate is given by the fraction of households who entered the Food Stamp Program between years  $t$  and  $t+1$ , conditional on the household not receiving food stamps in year  $t$ .

Table 6 summarizes the data on transition rates.<sup>15</sup> It is evident that immigrant households have a higher probability of entering the Food Stamp Program (as well as other types of public assistance programs). Over the 1995-97 period, the typical immigrant household that did not receive food stamps at the beginning of the period had a 4.2 percent probability of receiving food stamps a year later. This contrasts with an entry rate into the Food Stamp Program of 2.4 percent for native households. The data also indicate that immigrant and native households have roughly

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<sup>14</sup> The sample design of the CPS is as follows: a household is interviewed for four consecutive months, is rotated out of the sample for eight months, and is brought into the sample again for four more months. As a result, a household can potentially appear in two of the March files. In practice, many households cannot be matched across years because the household, for instance, might move to another location during the year. Because the CPS samples the residential location, rather than the household unit, this household would be lost in the second survey. In addition, it is not possible to match households between the 1995 and 1996 surveys because of a change in sample design.

<sup>15</sup> The statistics reported in Table 6 are obtained by pooling the two merged samples (the 1996-97 merged file and the 1997-98 merged file)

the same exit rate from the Food Stamp Program, about 47 percent of the households, regardless of their immigration status, leave the program over a 12 month period.

It is worth noting that the entry and exit rates experienced by immigrants over the 1995-97 period may not be indicative of their “steady state” values. For example, it may be the case that immigrants have relatively high exit rates during this period because of the welfare reform legislation, or because immigrants are responding to earlier attempts at denying particular groups of immigrants various types of public assistance, such as Proposition 187 in California. This intriguing hypothesis, however, cannot be explored because no comparable exit and entry data exist for earlier periods.

The difference in entry rates for the Food Assistance Program between immigrants and natives persists even after one adjusts for differences in socioeconomic characteristics between the two groups. Table 7 shows that that the 2.0 percentage point unadjusted gap in entry rates falls only slightly, to 1.6 percentage points, even after the analysis adjusts for differences in age, household composition, educational attainment, and state of residence. In contrast, the immigrant-native difference in exit rates becomes more pronounced, with immigrants having higher exit rates, after controlling for differences in socioeconomic characteristics, particularly household composition and educational attainment.

Many earlier studies have concluded that immigrants “assimilate” into welfare programs in the sense that the probability that an immigrant household receives a particular type of benefit rises the longer the household has been in the United States. The analysis of (unadjusted) entry and exit rates presented in Table 7 provides some insight into this process. Immigrant households are more likely than native households to enter the Food Stamp Program, and seem to have

roughly the same exit rates. This fact can lead to an increase in immigrant participation in this program over time—relative to that of natives.

### **Welfare Reform**

The increasing use of the Food Stamp Program and other types of public assistance by the immigrant population between 1969 and the 1990s had a substantial impact on social policy. 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 were later expanded to AFDC and other programs.

In 1996, Congress tightened the eligibility requirements for immigrant participation in public assistance programs by including a number of immigrant-related provisions in the welfare reform legislation. 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). The legislation contained two key provisions:

1. Immigrants who entered the United States after August 22, 1996 are prohibited from receiving most types of public assistance. The ban is lifted when the immigrant becomes an American citizen. Most non-citizens present in the country on August 22, 1996 were to be kicked off from the SSI and food stamp rolls within a year.
2. Immigrants who entered the country after August 22, 1996 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 is extended for up to ten years.

Many of the immigrant-related provisions of the welfare reform legislation were never enforced. The balanced budget agreement reached in 1997 repealed the most draconian aspects of the legislation, such as kicking out immigrant already living in the United States from the SSI and Food Stamp Programs. Nevertheless, the immigrant population seems to have responded to the increasingly important distinction implied by citizenship status. 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 1996, the INS received 1.3 million such petitions (Immigration and Naturalization Service, 1997, p. 146).

The period covered by the currently available CPS data is much too short to isolate the impact of the welfare reform legislation on the "welfare gap" between immigrants and natives. The available evidence, however, suggests that the decline in participation in the Food Stamp Program was particularly steep in the immigrant population, even after controlling for a detailed vector of socioeconomic characteristics. Table 8 presents the relevant regression coefficients from a regression that relates participation in the Food Stamp Program (as well as other public assistance programs) on a dummy variable indicating whether the person is an immigrant, "period effects" indicating the particular calendar year to which the data refer, interactions between the immigration dummy variable and the period effects, and a detailed vector of socioeconomic characteristics.

In this specification of the regression model, the coefficients of the period effects give the difference in the participation rate of the native population between 1994 and a particular year. It is noteworthy that all of these period effects are negative for the Food Stamp Program, indicating

that the fraction of native households receiving food stamps declined steadily between 1994 and 1997. Interestingly, the rate of decline accelerates in 1997, shortly after the enactment of the welfare reform legislation. Note that because the regression model controls for a detailed vector of socioeconomic characteristics, the steep drop in the participation of native households in the Food Stamp Program that occurred between 1996 and 1997 cannot be explained by changes in the characteristics of the native population.

The coefficients of the interaction variables between immigration status and the period effects measure how the immigrant-native gap in food stamp participation rates changes over time (relative to the base year of 1994). The data clearly shows that there was an “unexplained” drop of almost a full percentage point in this gap between 1995 and 1996—*concurrent* with the enactment of the welfare reform legislation. In fact, the trend towards a narrower immigrant-native welfare gap began as early as 1994. The timing of these changes, therefore, is not consistent with a conjecture that the welfare reform legislation helped to narrow the immigrant-native welfare gap. Although the trend may have been a reaction to the heated debate over immigrant participation in welfare programs that took place through the 1990s, and that led to the 1994 enactment of Proposition 187 in California, the data used in this paper cannot be used to isolate these effects. It is clear, however, that these questions deserve much additional research.

### **3. Food Stamps and the Children of Immigrants**

The studies that analyze the link between immigration and public assistance almost exclusively focus on measuring the extent to which immigrants participate in the various programs, and calculating by how much immigration increases expenditures in these programs. The long run economic and social impact of immigration, however, depends not only on the

extent to which immigrants make use of the various programs during their lifetimes, but also on the extent to which the children of immigrants make use of these programs.

Despite the potential importance of the intergenerational effects, little is known about the extent to which the children of immigrants participate either in the Food Stamp Program or in other public assistance programs. In recent years, the growth of the immigrant population (and the resultant growth in the size of the second-generation population) has motivated some researchers to investigate the relation between the skills of immigrants and the skills of their children (Borjas, 1993; Card, DiNardo and Estes, 2000; and Trejo, 1995). These studies typically find that there is a strong link in the skills of national origin groups in the first and second generations—the groups that have high skill levels and high earnings in the first generation are the groups that tend to have high skill levels and high earnings in the second generation. Few studies, however, investigate if there is an intergenerational link in welfare dependency. In other words, are the ethnic groups that have high participation rates in public assistance programs in the first generation the same groups that have high participation rates in the second generation?<sup>16</sup>

### **Differences Between the First and Second Generations**

The Current Population Surveys (CPS) began to collect information on the birthplace of the respondent's parents in 1994. These data allow the precise identification of two generations of Americans: the first generation, composed of the sample of persons born in a foreign-country; and the second generation, composed of the sample of persons who were born in the United States, but had at least one parent born in a foreign country. The generation of the remaining

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<sup>16</sup> See Borjas and Sueyoshi (1997) for an exception. Other studies of the intergenerational transmission of welfare dependency include Duncan, Hill, and Hoffman (1988), Gottschalk (1990), and Solon et al (1988). These studies, however, typically do not distinguish across generations.

persons in the survey, who had both parents born in the United States, cannot be determined exactly. For simplicity, I will denote this residual group as “third-generation” Americans. However, it is important to note that this residual group includes all natives who have American-born parents, regardless of racial or ethnic origin and regardless of how long the household has actually resided in the United States. Since the unit of analysis throughout my study has been the household, I use the generation of the head of the household to classify a particular household into one of the three generations.

Table 9 reports that second generation households have a lower probability of receiving food stamps than either first-generation or third-generation households. The probability that the typical second-generation household receives food stamps is only 5.1 percent, far lower than either the 10.8 percent probability of the first-generation households or the 8.2 percent probability of the third-generation households. In fact, Table 9 indicates that the second generation has a relatively low rate of participation in *all* of the public assistance programs. Only 5.5 percent of second-generation households receive cash benefits, as compared to 10.7 percent of first-generation and 7.6 percent of third-generation households. Similarly, only 10.5 percent of second-generation households are enrolled in the Medicaid program, as compared to 20.6 percent of first-generation households and 13.5 percent of third-generation households.

The finding that the second generation seems to perform quite well in the United States—and hence has little need for enrolling in the Food Stamp Program or in other assistance programs—is, of course, closely related to the well-known result (first obtained using data from the 1970 Census cross-section) that second-generation workers earn more than both first-generation and third-generation workers (see Carliner, 1980, and Chiswick, 1977). It is tempting to interpret this empirical result as indicating that second-generation Americans have high skills

and lower participation rates in public assistance programs than either their parents or their children. This interpretation, however, is not necessarily correct.

In any CPS cross-section (such as the “pseudo” cross-section formed by the pooled 1995-98 surveys), the family ties among the three generations identifiable in the data are tenuous, at best. At the time these surveys were collected, many of the immigrants in the data arrived in the United States in the 1980s and 1990s, making it impossible for them to have any native-born descendants of adult age. In other words, an adult second-generation American must be the descendant of immigrants who have been in the United States for at least two or three decades. As long as cohort differences among first-generation workers are important, and as long as these cohort differences are partially transmitted to their children, the comparison of first- and second-generation earnings in a particular cross-section can provide a very misleading picture of the economic performance of the second generation relative to that of their parents.

Similarly, the persons who can be identified as members of the "third-generation" are a motley collection of various ethnic groups whose presence in the United States may date 40 or 50 years, or more than 100 or 200 years. It is very unlikely that these so-called third-generation households are direct descendants of the immigrants enumerated in any particular cross-section data set. After all, this would require that adult-age immigrants—many of whom arrived in the 1980s and 1990s—have adult-age American-born grandchildren. These data difficulties, therefore, imply that it is impossible to infer anything about the intergenerational transmission of dependency in the Food Stamp Program from the summary statistics reported in Table 9.

Nevertheless, the statistics reported in Table 9 do present an interesting puzzle. After all, the data clearly indicate that second generation workers have relatively low participation rates in many public assistance programs in the late 1990s. Why is the participation rate of second-

generation households in the Food Stamp Program so low? The answer to this puzzle lies in the fact that the second-generation households in the CPS cross-section are *not* the descendants of the sample of first generation households enumerated in the same survey. Consider, for instance, the national origin mix of the population in each of these two groups. Table 10 shows that there seems to be little in common in the ethnic background of the two generations. Even though 26.8 percent of the immigrant households in the CPS data are of Mexican origin, only 11.9 percent of the second-generation households in the same data are of Mexican origin. Similarly, only 2.5 percent of the immigrant households are of Polish origin, but 7.5 percent of the second-generation households are of Polish origin.

The substantial difference in the national origin distribution of the two generations does not arise because of differential fertility rates across national origin groups. If anything, the differences in fertility rates would likely imply that households of Mexican origin, which tend to have relatively high rates of fertility, would make up a larger fraction of the sample of second-generation households (Blau, 1992). Instead, the differences arise because the second-generation households in the pooled 1995-98 CPS data are the descendants of immigrants who arrived in the United States at least two or three decades prior to that time—and are not the descendants of the immigrants enumerated in the CPS cross sections in the late 1990s (43 percent of whom arrived in the 1980s and 1990s). Put differently, the second generation sample in these CPS data reflect the national origin mix—and potentially the skill distribution—of the immigrants who arrived two or three decades earlier, and has little in common with the national origin mix—and the skill distribution—of the immigrants who arrived after 1980.

Not surprisingly, there are large differences in participation rates in the Food Stamp Program across ethnic groups in the second generation.<sup>17</sup> Table 11 shows that only 4.0 percent of second-generation Americans of German ancestry received food stamps in 1994-97, as compared to 13.6 percent of second-generation households of Vietnamese ancestry, 15.5 percent of second-generation households of Mexican ancestry, and 27.7 percent of second-generation households of Dominican ancestry. The table also shows that the substantial dispersion in participation rates across ethnic groups in the second-generation is not restricted to the Food Stamp Program, but shows up in the other programs as well. For instance, 8.1 percent of second-generation Italian households receive Medicaid, as compared to 16.2 percent of second-generation Filipino households, and over 40 percent of second-generation Dominican households.

It is easy to show that that the differences in the national origin mix of the two populations explain almost two-thirds of the welfare gap between the first and second generations in the CPS data. In particular, consider the subsample of households that are either first- or second-generation. Using this subsample, I estimated the linear probability regression model:

$$(3) \quad p_i = X_i \beta + \gamma s_i + \varepsilon_i,$$

where  $p_i$  is a dummy variable indicating if household  $i$  received food stamps;  $X$  is a vector of socioeconomic characteristics; and  $s_i$  is a dummy variable set to unity if the household is a

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<sup>17</sup> The ethnicity of the second-generation household is determined by the ethnicity of the head of the household's father. If only the householder's mother is foreign-born, the ethnicity is determined from the mother's country of birth.

second-generation household. The coefficient  $\gamma$  gives the adjusted difference in the probability of receiving food stamps between the second generation and the first generation.

Table 12 reports the estimates of the regression coefficient  $\gamma$  using various specifications of the vector of socioeconomic characteristics. The first column of the table shows that the unadjusted gap in the probability of participating in the Food Stamp Program between second- and first-generation households is 5.9 percentage points. If the regression is expanded to include only a vector of national origin fixed effects—so that we are now measuring the gap in the participation rates *within* a particular national origin group—the estimate of the coefficient  $\gamma$  falls to 2.1 percent. Put differently, two-thirds of the gap in the reciprocity rates in the Food Stamp Program between the first and second generations can be attributed to a single factor, the different national origin mix of the two populations. If, in addition to national origin, the regression analysis controls for a more complete vector of socioeconomic characteristics, such as age, gender, household composition, state of residence, and education, the gap between the two generations falls to less than a percentage point (still statistically significant, but numerically inconsequential). In short, the fact that the two generations in the CPS cross-section are *not* related helps to explain why second-generation households in these data *seem* to have a lower chance of receiving food stamps than their “parents.”

### **Intergenerational Transmission of Reciprocity in the Food Stamp Program**

Although a single CPS cross-section (or the pseudo cross-section obtained by pooling the 1995-98 surveys) does not allow the study of economic mobility between the first and second generations, it is possible to use the available data to determine if welfare reciprocity persists across generations. The data, however, must be used judiciously to improve the chances that the

socioeconomic characteristics of the second-generation households enumerated in the CPS are compared with the characteristics of immigrants who could have potentially been their parents.

Consider, in particular, the contrast between the fraction of immigrant households in a particular ethnic group who received cash benefits in 1969 and the fraction of second-generation households in that ethnic group who receive food stamps between 1995 and 1997. The data on the fraction of immigrant households that received cash benefits in 1969 is, of course, drawn from the 1970 Census. The immigrants enumerated in the 1970 Census are likely to have been the parents of the second-generation households that appear in the CPS three decades later.

I use the available data to estimate the following regression model:

$$(4) \quad p_{ij2} = X_{ij} \theta + \beta p_{j1} + \varepsilon_{ij},$$

where  $p_{ij2}$  is a dummy variable set to unity if household  $i$  in second-generation ethnic group  $j$  receives food assistance;  $X$  is a vector of socioeconomic characteristics pertaining to the second generation household, and  $p_{j1}$  gives the fraction of the immigrant group that received cash benefits in 1969.

To facilitate the interpretation of the coefficient  $\beta$  suppose that all of the variables in the vector  $X$  have been normalized to have mean zero. Consider now an alternative derivation of the regression model in equation (4). An ethnic fixed effect can be estimated among second-generation workers in the CPS data by using the regression model:

$$(5) \quad p_{ij2} = X_{ij} \theta + d_{j2} + \varphi_{ij},$$

Because the variables in the vector  $X$  have mean zero, the fixed effect  $d_{j2}$  gives the adjusted fraction of the ethnic group in the second generation that receives food stamps. The extent to which the adjusted participation rate of second-generation type- $j$  households are related to the participation rate of their parents is summarized by:

$$(6) \quad d_{j2} = \mu + \beta p_{j1} + v_j.$$

Substituting equation (6) into (5) yields the model in (4). Note that the disturbance term in equation (4) then equals  $\varphi_{ij} + v_j$ , so that it contains a group-specific error term. Therefore, the model must adjust the standard errors for the clustering of the data that takes place within ethnic groups. This alternative derivation of the model shows that the parameter  $\beta$  is a measure of the “transmission coefficient” for the participation rate in the Food Stamp Program.

The fraction of the various immigrant groups that received cash benefits in 1969 is reported in the last column of Table 11. As documented in Borjas and Trejo (1993), there are substantial differences in the participation rates in cash benefit programs in the first generation. To illustrate the intergenerational persistence in program participation, Figure 1 shows the scatter diagram linking the fraction of second-generation households that received food stamps in 1995-97 and the fraction of first-generation households that received cash benefits in 1970. There is an obvious positive correlation between these two variables.

Table 13 reports the estimates of the coefficient  $\beta$  for various specifications of the regression model in equation (4). Consistent with the visual information provided by Figure 1, the data reveal a strong positive correlation between the fraction of immigrant households that received cash benefits and the fraction of the second-generation households that receive food

stamps three decades later. The transmission coefficient for the Food Stamp Program is 1.065, implying that a 10-percentage point increase in the fraction of the immigrant group that receives cash benefits is associated with a 10-percentage point increase in the fraction of the second-generation ethnic group that receives food stamps. Therefore, there does not seem to be any regression towards the mean in participation in the Food Stamp Program. The groups that had high participation rates (in cash benefit programs) in the first generation have high participation rates (in the Food Stamp Program) in the second generation; and the groups that had low participation rates in the first generation have low participation rates in the second generation.

The last column of Table 13 shows that the transmission coefficient becomes much weaker (though still statistically significant) when the regression model controls for differences in socioeconomic characteristics across ethnic groups in the second generation. The transmission coefficient for the adjusted participation rate is .431. In other words, more than half of the linkage in participation rates arises because of inter-group differences in such variables as household composition, state of residence, and educational attainment.

Finally, the remaining rows of the table show that there is also a strong transmission coefficient for other public assistance programs. For example, the unadjusted transmission coefficient is .89 for cash benefits, and about 1.5 for Medicaid. The adjusted correlations, however, drop to .44 for cash benefits and .69 for Medicaid.

Although it is tempting to interpret the “transmission coefficient” estimated in Table 13 as measuring the extent to which welfare reciprocity *per se* is transmitted across generations, this interpretation is incorrect. After all, the 1969 data on the fraction of the immigrant group that receives cash benefits is highly correlated with various measures of the national origin group’s skill level or economic potential. It is, therefore, possible that the regression coefficients reported

in Table 13 simply measure the fact that low-skill immigrant groups in 1969 are more likely to have low-skill descendants in 1995-97, and that these low-skill descendants will inevitably have high participation rates in assistance programs. In the end, therefore, it was not a “propensity for welfare” that was transmitted across generations, but rather the skill level of the group.

It is of great interest, therefore, to investigate if the participation rate of the immigrant group in 1969 has any explanatory power after one controls for the immigrant group’s skill level. This hypothesis is explored in Table 14 by using three alternative variables to describe the group’s “opportunity set” as of 1969: the average educational attainment of immigrants in the particular ethnic group, the average log wage of workers in that group, and the fraction of the immigrants who received cash benefits. The table estimates the regression model in equation (4) by introducing each of these variables separately, as well as by introducing all of the variables at the same time.

The table shows that if each variable is introduced into the regression model separately, each of the variables has a sizable impact on the probability that a second-generation household receives food stamps. As we saw earlier, a 10-percentage point increase in the fraction of the immigrant group that received cash benefits raises the probability of receiving food stamps in the second generation by 10 percent. A 2-year increase in educational attainment lowers the fraction of second-generation households receiving food stamps by 2 percent, and a 20 percent increase in the average wage of the immigrant group lowers the fraction of second generation households receiving food stamps by 3.5 percent.

The last column of the table, however, shows that when all of the variables are introduced into the regression model simultaneously, the only variable that remains statistically significant is the fraction of the immigrant group that received cash benefits in 1970. The transmission

coefficient for the cash benefit variable—after controlling for differences in the skills of the immigrant groups in 1969—is 1.012. In short, the data clearly suggest that the best predictor of a second-generation group’s propensity for receiving food stamps today is the welfare behavior of the immigrant group decades earlier, and not necessarily a set of variables that describe the skill composition of that immigrant group.

#### **4. Summary**

This paper examined the extent and determinants of immigrant participation in the Food Stamp Program using data drawn from the decennial Censuses, the Survey of Income and Program Participation, and the Current Population Surveys. The study described the differential trends in immigrant and native participation in the Food Stamp Program; explored the factors that cause these differential trends; and examined the extent to which immigrant participation in public assistance programs affects the propensity of the second generation to receive food stamps.

The empirical analysis revealed a number of interesting results. For instance, immigrant households are more likely to participate in the Food Stamp Program than native households; this “welfare gap” widened until about 1995; and although the fraction of both native and immigrant households receiving food stamps has declined since 1995, the decline has been steeper in the immigrant population. The empirical study also indicated that *all* of the difference in the probability of receiving food stamps between immigrant and native households can be attributed to differences in socioeconomic characteristics between the two groups, particularly educational attainment. It also turns out that immigrant households have higher entry rates into the Food Stamp Program, and roughly the same exit rates. Finally, there is a strong link between use of

public assistance in the immigrant generation and the use of food stamps in the second generation. In fact, a 10-percentage point difference in participation rates in cash benefit programs in the first generation is associated with a 10-percentage point different in participation rates in the Food Stamp Program in the second generation.

Although the study of the pre-1994 trends of immigrant and native participation in the Food Stamp Program is severely constrained by the lack of information on the receipt of food stamps by immigration status, these data are now collected annually as part of the Current Population Surveys. In the future, the study of the time series generated by the CPS will surely provide a lot of insight into how immigrant and native households move in and out of the Food Stamp Program, how these transition rates are affected by the business cycle and by other changes in economic conditions, and how the transition rates are affected by welfare reform as well as by changes in immigration policy.

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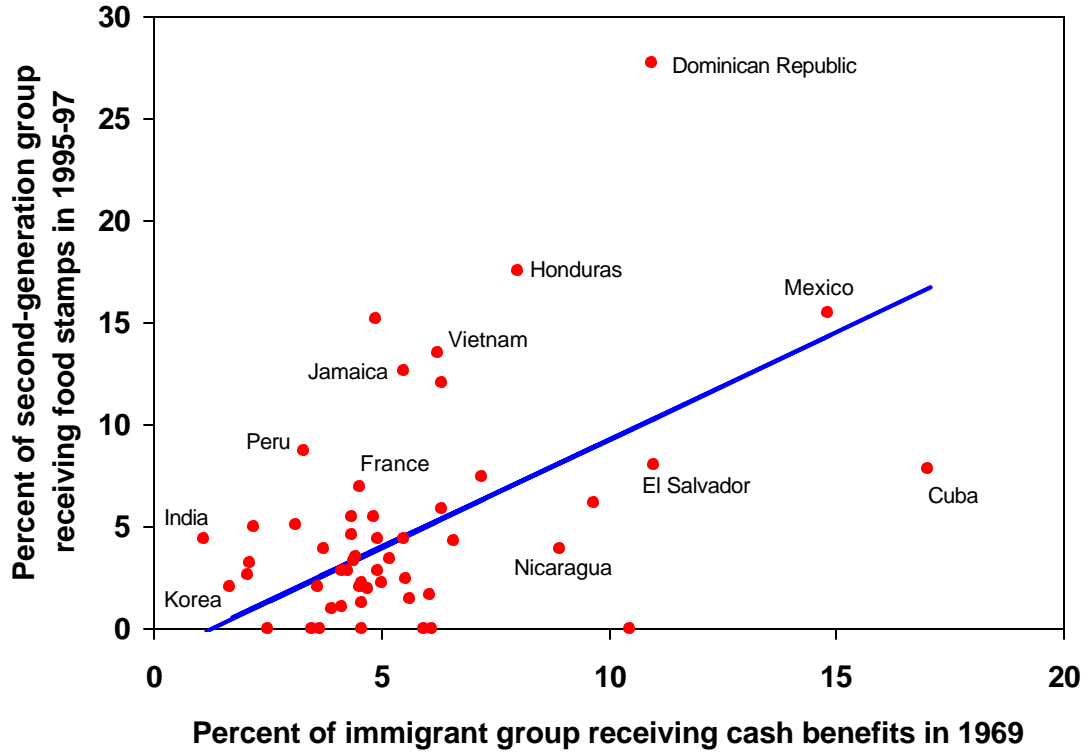
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**Figure 1. Intergenerational relation between receipt of cash benefits in 1970 and receipt of food stamps in 1995-97**



Sources: Pooled 1995-98 Current Population Surveys (March files) and the 1970 Census. The regression line illustrated in the figure is obtained from a regression that weighs each observation by the sample size in the second-generation ethnic group. The slope coefficient is 1.056, with a standard error of .079.

**Table 1. Trends in program participation, 1969-97**  
**(Percent receiving particular types of benefits)**

<u>Data file/Calendar year</u>	<u>Food stamps</u>		<u>Cash benefits</u>		<u>Medicaid</u>		<u>Any type of assistance</u>	
	<u>Natives</u>	<u>Imm.</u>	<u>Natives</u>	<u>Imm.</u>	<u>Natives</u>	<u>Imm.</u>	<u>Natives</u>	<u>Imm.</u>
Census								
1969	---	---	6.0	5.9	---	---	---	---
1979	---	---	5.9	8.7	---	---	---	---
1989	---	---	7.4	9.1	---	---	---	---
SIPP: percent receiving benefits during typical month:								
1984-85	6.6	7.6	8.1	8.7	8.3	11.0	14.6	17.7
1990-91	6.5	9.2	7.3	10.8	9.4	15.4	14.1	20.7
SIPP: percent receiving benefits at some point during calendar year:								
1985	9.5	9.7	11.6	10.6	11.5	15.5	21.7	26.5
1990	8.3	10.4	8.9	12.0	11.5	16.6	18.4	13.8
CPS								
1994	8.7	12.5	7.9	11.7	13.5	21.3	16.4	24.1
1995	8.1	11.7	7.6	11.6	13.2	21.9	15.7	24.4
1996	8.0	10.1	7.5	10.5	13.5	20.5	16.0	22.5
1997	6.8	9.3	6.6	9.2	12.5	18.7	14.6	20.0

**Table 2. Adjusted difference between immigrants and natives in the probability of participating in assistance programs, 1994-97**

<u>Program</u>	Regression				
	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(4)</u>	<u>(5)</u>
Food stamps	.030 (.002)	.027 (.002)	.021 (.002)	.023 (.002)	-.002 (.002)
Cash benefits	.033 (.002)	.034 (.002)	.025 (.002)	.019 (.002)	-.005 (.002)
Medicaid	.074 (.003)	.073 (.002)	.054 (.002)	.050 (.003)	.019 (.002)
Any type of assistance	.072 (.003)	.072 (.003)	.054 (.003)	.054 (.003)	.017 (.003)
Adjusted for differences in:					
Age, sex of head	No	Yes	Yes	Yes	Yes
Household composition	No	No	Yes	Yes	Yes
State of residence	No	No	No	Yes	Yes
Education of head	No	No	No	No	Yes

Notes: Standard errors are reported in parentheses. The regressions use data drawn from the pooled 1995-98 Current Population Surveys (March files). The pooled sample has 150,341 observations. All of the regressions include dummy variables indicating the survey from which the observation is drawn. The age of the household head is included as a fourth-order polynomial and the "household composition" vector includes the number of persons residing in the household, the number of persons in the household under age 18, and the number of persons over age 65.

**Table 3. Program participation by presence of elderly persons, 1994-1997**

Sample of households that:	Food stamps		Cash benefits		Medicaid		Any type of assistance	
	<u>Native</u>	<u>Imm.</u>	<u>Native</u>	<u>Imm.</u>	<u>Native</u>	<u>Imm.</u>	<u>Native</u>	<u>Imm.</u>
Have at least one elderly person	4.8	10.1	6.1	17.6	12.1	27.1	15.2	30.2
Do not have any elderly persons	8.5	10.3	7.6	8.7	13.4	18.7	15.5	20.6

Source: Pooled 1995-98 Current Population Surveys (March files).

**Table 4. Participation rates in public assistance programs  
in the immigrant population, 1994-97  
(By national origin group)**

<u>Country of origin:</u>	<u>Food stamps</u>	<u>Cash benefits</u>	<u>Medicaid</u>	<u>Any type of assistance</u>
Canada	3.5	4.1	8.1	12.9
China	3.8	10.0	18.0	22.4
Colombia	9.3	9.5	19.0	23.3
Cuba	20.4	20.9	28.3	32.3
Denmark	0.0	13.7	13.7	15.3
Dominican Republic	37.7	40.3	51.9	59.3
El Salvador	10.2	9.1	22.8	27.2
France	0.8	2.1	7.7	12.4
Germany	2.0	1.7	5.8	10.1
Greece	6.6	8.1	9.9	12.4
Haiti	9.7	9.3	19.7	28.8
India	1.5	1.1	4.5	6.4
Iran	2.7	6.1	16.3	18.7
Ireland	2.9	2.4	4.8	12.6
Israel	2.2	4.7	7.6	8.9
Italy	2.7	4.3	9.2	12.6
Jamaica	11.4	11.4	20.6	24.7
Korea	3.9	9.7	15.4	17.3
Mexico	17.4	13.5	31.8	37.3
Nicaragua	12.8	14.2	21.9	27.6
Philippines	1.9	5.4	12.4	14.6
Poland	2.3	1.7	5.9	7.6
Portugal	3.8	8.2	11.8	18.6
Spain	4.7	6.8	10.6	12.8
UK	3.5	2.5	6.8	11.0
USSR	22.5	24.6	34.3	38.0
Vietnam	16.1	17.5	29.1	33.3
Refugees	9.2	9.0	19.2	21.4
Non-refugees	16.5	18.3	26.5	28.5

Source: Pooled 1995-98 Current Population Surveys (March files).

**Table 5. Panel evidence on food stamp receipt in the SIPP data**

	1984-85		1990-991	
	<u>Natives</u>	<u>Immigrants</u>	<u>Natives</u>	<u>Immigrants</u>
Percent of households that received food stamps at some point during the entire 32-month survey	12.1	13.3	11.3	15.2
Percent receiving food stamps at beginning of survey	7.0	8.1	6.0	7.6
Percent receiving food stamps in every month of the survey	2.9	4.2	3.4	4.6
Percent distribution in subsample of households that received food stamps at some point in the survey:				
Percent receiving food assistance 1-8 months	34.4	38.1	32.7	27.5
Percent receiving food assistance 9-16 months	15.6	9.5	14.7	15.6
Percent receiving food assistance 17-24 months	12.8	11.4	11.5	12.1
Percent receiving food assistance 24-32 months	37.2	41.1	41.1	44.8

Sources: The 1984-85 statistics use data drawn from the pooled 1984 and 1985 panels of the SIPP files. The 1990-91 statistics use data drawn from the pooled 1990 and 1991 panels .

**Table 6. Transition rates in and out of public assistance programs, 1995-97**

	<u>Food stamps</u>	<u>Cash benefits</u>	<u>Medicaid</u>	<u>Any type of assistance</u>
Entry rates:				
Immigrant households	4.6	4.5	10.6	11.9
Native households	2.6	2.9	5.9	6.7
Exit rates:				
Immigrant households	46.7	55.9	46.7	45.4
Native households	47.1	45.2	45.7	42.7

Source: Merged 1995-96 and 1996-97 Current Population Surveys (March files). The entry rate gives the fraction of households that entered the particular program, conditional on their being off the program at the beginning of the year. The exit rate gives the fraction of households that exited the particular program, conditional on their being on the program at the beginning of the year.

**Table 7. Adjusted immigrant-native differential in entry and exit rates, 1995-97**

	Regression				
	(1)	(2)	(3)	(4)	(5)
Food stamps					
Entry rates	.020 (.006)	.020 (.006)	.021 (.006)	.022 (.006)	.016 (.006)
Exit rates	-.001 (.057)	-.022 (.057)	-.000 (.057)	.027 (.062)	.070 (.062)
Cash benefits					
Entry rates	.017 (.006)	.017 (.006)	.017 (.006)	.016 (.007)	.011 (.007)
Exit rates	.107 (.057)	.115 (.056)	.135 (.058)	.172 (.061)	.203 (.061)
Medicaid					
Entry rates	.047 (.009)	.048 (.009)	.045 (.009)	.043 (.010)	.036 (.010)
Exit rates	.010 (.040)	.007 (.040)	.017 (.040)	.092 (.043)	.135 (.043)
Any type of assistance					
Entry rates	.052 (.010)	.053 (.010)	.051 (.010)	.048 (.010)	.041 (.010)
Exit rates	.026 (.038)	.022 (.037)	.028 (.038)	.074 (.040)	.125 (.040)
Adjusted for differences in:					
Age, sex of head	No	Yes	Yes	Yes	Yes
Household composition	No	No	Yes	Yes	Yes
State of residence	No	No	No	Yes	Yes
Education of head	No	No	No	No	Yes

Notes: Standard errors are reported in parentheses. The regressions use data drawn from the merged 1995-96 and 1996-97 Current Population Surveys (March files). The pooled sample for the entry rate regressions has 8,862 observations, while the pooled sample for the exit rate regressions has 1,631 observations. All of the regressions include dummy variables indicating the merged survey from which the observation is drawn. The age of the household head is included as a fourth-order polynomial and the "household composition" vector includes the number of persons residing in the household, the number of persons in the household under age 18, and the number of persons over age 65.

**Table 8. The decline in participation in public assistance programs between 1994 and 1997**

<u>Variable:</u>	<u>Food stamps</u>	<u>Cash benefits</u>	<u>Medicaid</u>	<u>Any type of assistance</u>
Immigration dummy	.007 (.004)	-.001 (.004)	.019 (.005)	.019 (.005)
1994 period effect	Reference group	Reference group	Reference group	Reference group
1995 period effect	-.006 (.002)	-.003 (.002)	-.003 (.002)	-.007 (.002)
1996 period effect	-.007 (.002)	-.004 (.002)	-.001 (.002)	-.005 (.002)
1997 period effect	-.018 (.002)	-.012 (.002)	-.010 (.002)	-.018 (.002)
Interaction between immigration dummy and:				
1995 period effect	-.004 (.005)	-.0003 (.005)	.008 (.007)	.007 (.007)
1996 period effect	-.013 (.006)	-.004 (.005)	-.001 (.007)	-.005 (.007)
1997 period effect	-.011 (.005)	-.009 (.005)	-.010 (.007)	-.010 (.007)

Notes: Standard errors are reported in parentheses. The regressions use data drawn from the pooled 1995-98 Current Population Surveys (March files). The pooled sample has 150,341 observations. All of the regressions include dummy variables indicating the survey from which the observation is drawn, the sex and gender of the household head, the number of persons residing in the household, the number of persons in the household under age 18, the number of persons over age 65, the state of residence, and the household head's educational attainment.

**Table 9. Intergenerational differences in program participation, 1994-97**

	<u>First generation</u>	<u>Second generation</u>	<u>Third generation</u>
Food stamps	10.8	5.1	8.2
Cash benefits	10.7	5.5	7.6
Medicaid	20.6	10.5	13.5
Any type of assistance	22.8	13.0	16.0

Source: Pooled 1995-98 Current Population Surveys (March files).

**Table 10. National origin distribution in the CPS, 1994-97  
(By generation)**

<u>Country of origin</u>	<u>First generation</u>	<u>Second generation</u>
Canada	3.4	9.8
China	3.8	0.9
Cuba	4.5	1.0
Dominican Republic	2.8	0.3
El Salvador	2.6	2.0
France	0.7	1.2
Germany	3.4	9.3
Greece	1.0	1.3
Haiti	1.8	0.2
India	3.2	0.3
Iran	1.3	0.1
Ireland	1.1	4.1
Israel	0.5	0.1
Italy	2.7	14.4
Jamaica	2.3	0.4
Mexico	26.8	11.9
Nicaragua	0.8	0.2
Philippines	4.5	1.1
Poland	2.5	7.5
Portugal	0.9	1.0
UK	3.3	6.7
USSR	3.3	7.1
Vietnam	3.0	0.2

Source: Pooled 1995-98 Current Population Surveys (March files).

**Table 11. Participation rates in public assistance programs  
in the second generation, 1994-97  
(By national origin group)**

<u>Country of origin:</u>	<u>Food stamps</u>	<u>Cash benefits</u>	<u>Medicaid</u>	<u>Any type of assistance</u>	<u>Percent of immigrant group receiving cash benefits in 1969</u>
Canada	4.5	4.0	9.4	14.4	4.9
China	1.5	2.9	4.7	7.0	5.6
Cuba	7.9	5.5	10.2	14.7	17.0
Denmark	3.4	1.7	8.0	12.0	5.2
Dominican Republic	27.7	31.3	40.4	43.4	10.9
El Salvador	8.1	7.0	14.4	17.4	11.0
France	6.9	6.4	12.5	19.3	4.5
Germany	4.0	4.4	10.0	14.4	3.7
Greece	4.6	5.1	8.6	12.1	4.4
Haiti	2.3	0.0	5.2	5.2	5.0
Honduras	17.6	12.1	20.6	21.2	8.0
Hungary	4.4	5.1	7.8	13.6	5.5
India	4.4	2.7	7.6	8.7	1.1
Iran	0.0	16.2	16.2	25.1	3.7
Ireland	2.5	3.6	7.9	12.8	5.5
Israel	3.2	7.7	10.9	24.1	2.1
Italy	3.5	4.3	8.1	13.2	4.4
Jamaica	12.6	16.0	19.8	28.4	5.5
Korea	2.1	0.9	9.3	13.4	1.7
Mexico	15.5	14.2	25.4	30.4	14.8
Nicaragua	3.9	8.6	14.6	16.9	8.9
Philippines	7.5	8.7	16.2	20.4	7.2
Poland	2.0	3.5	7.0	12.8	4.7
Portugal	5.8	8.1	14.9	19.4	6.3
UK	2.8	3.5	7.3	11.3	4.1
USSR	2.1	3.3	6.4	10.4	4.5
Vietnam	13.6	18.1	25.5	28.9	6.2

Source: Pooled 1995-98 Current Population Surveys (March files).

**Table 12. Adjusted differences in program participation  
between the second and first generations**

	(1)	(2)	(3)	(4)	(5)
<b>Food stamps</b>					
Not controlling for place of birth	-.059 (.003)	-.049 (.003)	-.039 (.003)	-.035 (.003)	-.019 (.003)
Controlling for place of birth	-.021 (.003)	-.021 (.003)	-.016 (.003)	-.018 (.003)	-.006 (.003)
<b>Cash benefits</b>					
Not controlling for place of birth	-.053 (.003)	-.057 (.003)	-.049 (.003)	-.040 (.003)	-.024 (.003)
Controlling for place of birth	-.017 (.003)	-.022 (.003)	-.019 (.003)	-.015 (.003)	-.003 (.003)
<b>Medicaid</b>					
Not controlling for place of birth	-.105 (.004)	-.101 (.004)	-.079 (.004)	-.068 (.004)	-.044 (.004)
Controlling for place of birth	-.045 (.004)	-.051 (.004)	-.040 (.004)	-.037 (.004)	-.019 (.004)
<b>Any type of assistance</b>					
Not controlling for place of birth	-.102 (.004)	-.109 (.004)	-.088 (.004)	-.082 (.004)	-.051 (.004)
Controlling for place of birth	-.043 (.005)	-.054 (.005)	-.044 (.004)	-.044 (.005)	-.021 (.005)
<b>Adjusted for differences in:</b>					
Age, sex of head	No	Yes	Yes	Yes	Yes
Household composition	No	No	Yes	Yes	Yes
State of residence	No	No	No	Yes	Yes
Education of head	No	No	No	No	Yes

Notes: Standard errors are reported in parentheses. The regressions use data drawn from the pooled 1995-98 Current Population Surveys (March files). The pooled sample has 41,650 observations. All of the regressions include dummy variables indicating the survey from which the observation is drawn. The age of the household head is included as a fourth-order polynomial and the "household composition" vector includes the number of persons residing in the household, the number of persons in the household under age 18, and the number of persons over age 65.

**Table 13. Intergenerational correlations between the first and second generations**

<u>Program:</u>	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(4)</u>	<u>(5)</u>
Food stamps	1.065 (.120)	.912 (.115)	.777 (.074)	.642 (.080)	.431 (.101)
Cash benefits	.888 (.119)	.824 (.130)	.722 (.108)	.683 (.094)	.436 (.079)
Medicaid	1.480 (.215)	1.375 (.214)	1.165 (.163)	1.019 (.134)	.691 (.120)
Any type of assistance	1.489 (.227)	1.375 (.224)	1.330 (.171)	1.247 (.145)	.784 (.121)
Adjusted for differences in:					
Age, sex of head	No	Yes	Yes	Yes	Yes
Household composition	No	No	Yes	Yes	Yes
State of residence	No	No	No	Yes	Yes
Education of head	No	No	No	No	Yes

Notes: Standard errors are reported in parentheses and are corrected for sample clustering within ethnic groups. The regressions use data drawn from the pooled 1995-98 Current Population Surveys (March files) and the 1970 Census. The pooled sample has 20,628 observations. All of the regressions include dummy variables indicating the survey from which the observation is drawn. The age of the household head is included as a fourth-order polynomial and the "household composition" vector includes the number of persons residing in the household, the number of persons in the household under age 18, and the number of persons over age 65.

**Table 14. Isolating effect of welfare use in the first generation on the second generation's use of the Food Stamp Program**

<u>Independent variable:</u>	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(4)</u>
No socioeconomic controls:				
Fraction of immigrant group receiving cash benefits in 1970	1.065 (.120)	---	---	1.012 (.178)
Mean educational attainment of immigrant group in 1970	---	-.010 (.006)	---	-.0004 (.002)
Mean log wage of immigrant group in 1970	---	---	-.175 (.056)	-.010 (.041)
Full set of socioeconomic controls:				
Fraction of immigrant group receiving cash benefits in 1970	.431 (.101)	---	---	.376 (.119)
Mean educational attainment of immigrant group in 1970	---	-.004 (.001)	---	.0002 (.002)
Mean log wage of immigrant group in 1970	---	---	-.065 (.012)	-.016 (.030)

Notes: Standard errors are reported in parentheses and are corrected for sample clustering within ethnic groups. The regressions use data drawn from the pooled 1995-98 Current Population Surveys (March files) and the 1970 Census. The pooled sample has 20,628 observations. All of the regressions include dummy variables indicating the survey from which the observation is drawn. The regression with the "full set of socioeconomic controls" includes the age (as a fourth order polynomial) and sex of head, the number of persons in the household, the number of persons under age 18, the number of persons over age 65, the state of residence, and educational attainment.