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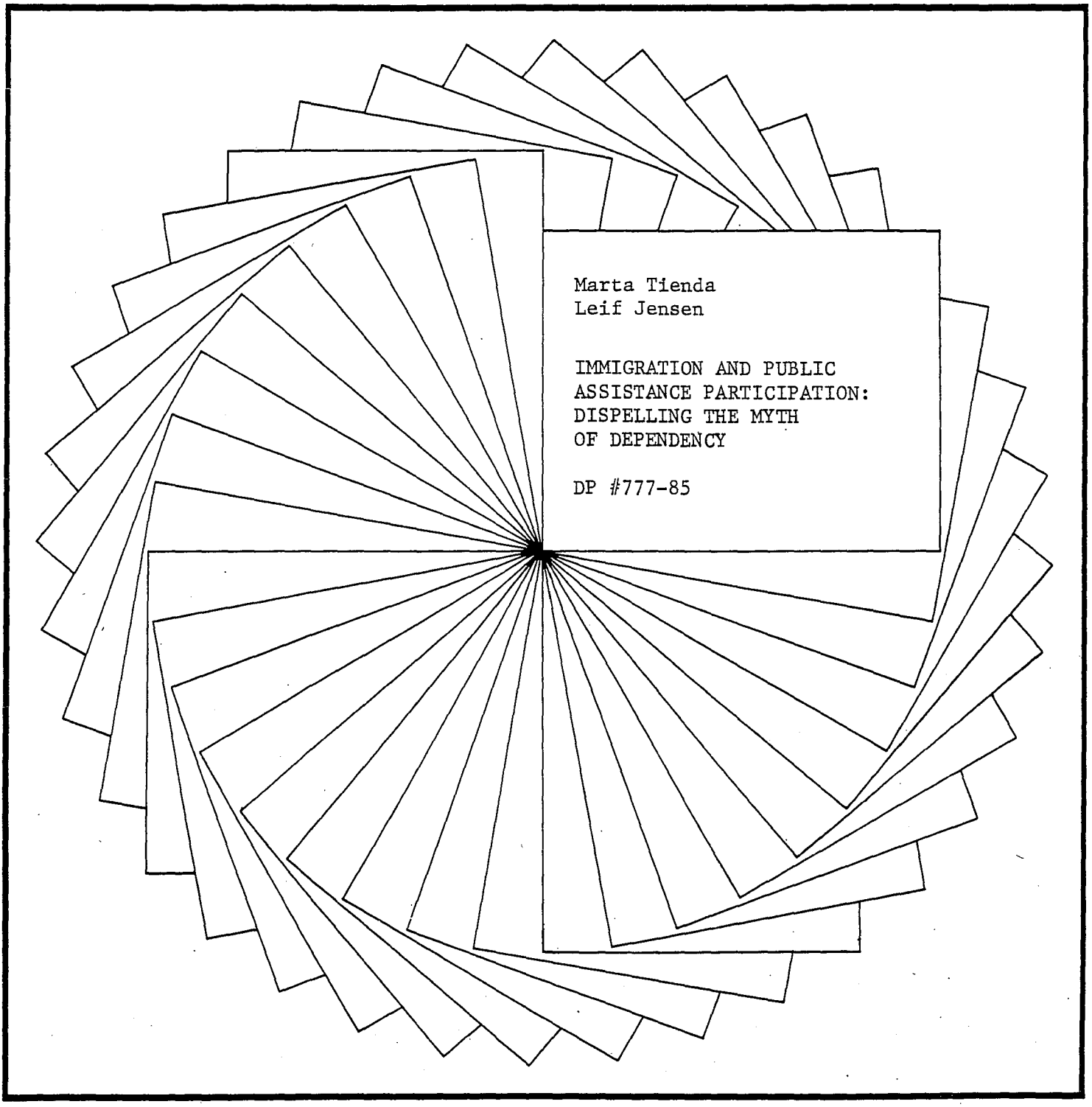

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ABSTRACT

This paper addresses the important but relatively understudied problem of immigrants' use of transfer payments. First we document differentials in the propensity of natives and immigrants to receive public assistance income using 1980 census data. Descriptive tabulations revealed considerable differences between whites, blacks, Hispanics, and Asians in poverty rates, household income, and public assistance usage. Overall, immigrants were found to have only a slightly higher aggregate rate of public assistance recipiency than natives. Multivariate logit regression analyses, however, revealed that immigrants were, other things equal, considerably less likely than natives to become welfare dependents. Also, except for Vietnam era Indochinese refugees, allegations that recent immigrants use welfare at higher rates than earlier arrivals were unsupported. Our findings therefore challenge the popular notion that immigrants prefer welfare to work, and that an amnesty program, such as that proposed in the Simpson legislation, will spawn a rush for public assistance benefits.

IMMIGRATION AND SOCIAL PROGRAM PARTICIPATION: NEW EVIDENCE FOR AN OLD QUESTION

Introduction

The resurgence of interest in immigration reform during the late 1970s revived many old questions about the net impact of immigration on the economy and society (see Cafferty et al., 1982). Academic and policy discussions spawned several heated and highly politicized debates over such issues as labor displacement of domestic workers, a heightening of ethnic tensions in immigrant communities, and the utilization of entitlement programs by recent immigrants, including those who enter the United States illegally. In deciding whether and how to modify the existing immigration legislation and how to set numerical quotas, policymakers presumably attempt to weigh the positive and negative impacts on the overall welfare of the native population.

Although such an undertaking invariably is elusive, some concrete elements that enter into the decision making process can be subjected to empirical verification. For example, one important question concerning the economic "cost" of immigration depends on the extent to which immigrants receive cash and in-kind transfers supported from federal and state taxes, versus the extent to which they contribute to the vitality of the economy and expand the tax base. On this critical and sensitive issue, the crux of the policy matter is whether immigrants' demands on social provisions relative to their tax and

statutory contributions of all kinds exceed those of the native population (Simon, 1984). Despite the centrality of this question for the current debate about the net impact of immigration, surprisingly few studies have addressed such questions as, Do immigrants participate more in public assistance programs than the native population? or Are all immigrants equally likely to participate in public assistance programs, and if not, which groups are more or less likely to do so?

Failing to support the popular claim that immigrants take more from the public coffers than they contribute, Francine Blau (1984) showed that immigrant families were less dependent on welfare income than native families with similar socioeconomic characteristics. This finding obtained for households headed by both men and women, and for more and less recent immigrants. Based on a more aggregated analysis of the same data, Julian Simon (1984) concluded that during the first 12 years following their admission to the United States, immigrants use substantially fewer public services than the native born, an outcome stemming from their lower use of social security income. Since this differential use of social security income is largely tied to age composition, and since immigrants tend to be younger than the native population on average, Simon predicted that over time, immigrants would become more similar to the native population in their use of public services.[1]

Consistent with conclusions by Blau and Simon, evidence from survey and ethnographic research also indicates that recent legal and illegal immigrants rely more on a system of informal supports provided by kinship networks than on the formal transfer system (Moore, 1971; Kritz and Gurak, 1984; Browning and Rodriguez, 1985). Unfortunately, it appears that such information is not systematically conveyed to the general public or to legislators concerned about the welfare dependency of immigrants.

Although sparse, the available evidence shows that immigrants participate less in public entitlement programs than the native born, and that many immigrant groups have higher rates of labor force participation than natives (Bach and Tienda, 1984). It is unclear, then, why officials at the Office of Management and Budget and the Immigration and Naturalization Service, members of Congress, and the general public continue to believe that immigrants prefer welfare to work and fear that an amnesty program would result in sharply increased welfare costs. Clearly, the striking absence of hard data and rigorous analyses permits legislators and the public to rely on impressions and perceptions that square with their general views about the desirability of immigration. Moreover, highly publicized incidents about the use of medical and educational services by undocumented aliens convey distorted messages about the generalized character of participation in entitlement programs by all immigrants, irrespective of legal status, country of origin, or class background.[2]

Because the general public does not distinguish clearly between refugees and other recent legal immigrants, the foreign born as a group are thought to drain the public coffers through their high levels of welfare dependency. Such views are consistent with ideas that the system of public assistance fosters dependency and perpetuates itself (Feagin, 1975), and that immigrants are relatively homogeneous with respect to their socioeconomic backgrounds, their eligibility to receive income-conditioned transfer payments, and their inclination to accept them.

In light of very limited information about the differential participation by native and immigrant households in income transfer programs, this paper analyzes the probability that immigrant and native families received public assistance income in 1979. Our basic objective is to document gross and net

differentials in the propensity of immigrants to receive public assistance income using 1980 census data. Evidence that recent immigrants, particularly those from Mexico and other parts of Latin America and the Caribbean, are less likely to receive public assistance income would challenge the widespread assumption shared by legislators and the general public that an amnesty program such as the one proposed in the recently debated Simpson-Mazzoli bill will result in dramatically increased welfare rolls.[3]

In the following section we discuss the data and basic operational definitions used for the tabular analysis. Subsequently we present descriptive tabulations of the income and poverty status of native and immigrant households in an attempt to establish differences in economic need and hardship experienced by families that differ in their headship and racial/ethnic characteristics. Descriptive tabulations indicating the proportion of native and immigrant family households that received public assistance income in 1979 provide baseline information about the gross differences in the propensity of immigrants to rely on public assistance income, and serve as a referent for evaluating the multivariate results predicting families' welfare participation decisions.

To formalize the empirical analysis, we elaborate a conceptual framework which specifies the impact on transfer payments of foreign birth. This discussion draws selectively from literature about the participation of internal migrants in welfare programs, but also builds upon and extends the work of Blau (1984) and Simon (1984) concerning the receipt of transfer payments by immigrants. The multivariate analyses which take into account differentials in the receipt of public assistance income among differing racial/ethnic groups permit us to examine untested assertions that immigrants are homogeneous with respect to their class backgrounds, and more importantly,

with respect to their propensity to receive income-conditioned transfer payments. The concluding section speculates about potential policy implications for the design of immigration policy as well as employment and training legislation.

Data and Operational Definitions

Our analysis uses a 1 percent subset of the 5 percent A-sample of the Public Use Microdata Sample files from the 1980 Census of Population and Housing (U.S. Bureau of the Census, 1983). Because of the large sample size, the A-sample permits quite detailed analyses of relatively small minority populations, such as Hispanics and Asians. Our unit of analysis is the family, which the Bureau of the Census defines as persons related by blood, marriage, or adoption, residing in the same housing unit. In the reported analyses, we exclude from consideration persons who resided in institutions and other group quarters as well as individuals living in regular households who were not related to the enumerated householder. As families, by definition, contain more than one person, residents of one-person households also were excluded from the analysis.

The 47,421 families included in our analysis come from housing units sampled differently according to the ethnicity and nativity of their members. For efficient estimation of parameters, sampling rates were chosen to yield approximately similar numbers of cases--9,000 or 10,000 per group--for the following race/nativity categories: foreign Asian; foreign Hispanic; foreign black; other foreign; native Asian; native Hispanic; native black; other native.[4] In this classification scheme, the other native (residual) group comprises households all of whose members are U.S. citizens by birth and none of whom are Asian, Hispanic, or black. The sampling rates used achieved the desired rough equality of sample sizes, except for two small groups

(foreign-born blacks and native-born Asians) who were sampled with probability one from the 1-percent tape. In the presentation which follows, all descriptive statistics are weighted in accordance with their sampling rate. However, to ensure reliable tests of statistical significance, multivariate analyses are based on unweighted parameters.

The immigrant versus native designation of family records was based on the characteristics of the head and/or the spouse, if present. Rather than adopt a restrictive definition of immigrant families requiring that both spouses or only the head be foreign born, we classified as immigrant families those in which either spouse (or both) was born abroad. While this strategy could exaggerate the extent of participation by the foreign born in income transfer programs (see rationale in Simon, 1984), it also provides the upper bounds of such participation, and thus seemed least conservative and most suitable for our purposes.[5] Accordingly, our descriptive tabulations, which distinguish between immigrant and native families, classify as foreign born all those units in which either spouse was born abroad (except for those born to U.S. citizens).

Income, Poverty Status, and Public Assistance: A Comparison of Natives and Immigrants

Table 1 presents average family income and poverty levels for white, black, Asian, and Hispanic families according to nativity and type of headship. Two generalizations emerge from the data shown. First, for all groups, income levels are systematically lower for families in which a spouse is absent, compared to those headed by married couples. Second, black and Hispanic units had the lowest average family income levels, while Asian and white families enjoyed the highest average income levels in 1979. In most instances immigrant households exhibited family income levels below those of

Table 1

1979 INCOME AND POVERTY STATUS OF FAMILIES BY NATIVITY AND RACE/ETHNICITY OF THE HEADS

	White	Black	Hispanic	Asian
		Married Couples		
Mean Family Income				
Native	$21,628	$16,913	$18,386	$28,275
Immigrant	19,968	19,119	16,511	24,439
All	21,503	17,035	17,352	25,325
% Below Poverty Line				
Native	4.4	13.9	12.1	3.3
Immigrant	5.0	10.6	16.7	10.1
All	4.4	13.7	14.7	8.6
% Foreign Born	7.6	5.5	55.1	76.9
(N)	(41,663)	(3,465)	(2,431)	(630)
		Spouse Absent		
Mean Family Income				
Native	$11,387	$7,881	$8,695	$15,966
Immigrant	11,640	10,601	7,815	14,199
All	11,400	7,960	8,235	14,756
% Below Poverty Line				
Native	17.4	42.1	40.5	14.2
Immigrant	15.5	29.9	42.7	22.4
All	17.3	41.8	41.6	19.8
% Foreign Born	5.0	2.9	52.2	68.5
(N)	(6,580)	(2,576)	(791)	(112)

Note: All N's are weighted and reported in thousands.

their native counterparts, but black immigrant families stand as an exception to this generalization. The income advantage of black immigrant families partly reflects the selectivity of this population (Bach and Tienda, 1984), and partly the generally lower incomes of native blacks in the United States.[6] Only Hispanic immigrant families fared worse than foreign black families in terms of income. However, among native families, Hispanics had higher incomes than blacks in 1979. Despite the higher income enjoyed by foreign compared to native black families, in 1979 average black family income (both immigrant and native) lagged far behind that of white and Asian immigrant families.

With the exception of blacks, the view that immigrant families are less well off than their native counterparts finds support in the data presented. Family income levels of immigrant units headed by married couples were between $1700 and $3800 below those received by their native counterparts, with the largest disparity in the Asian group. It is noteworthy that Asians are predominantly foreign born, with about 3 out of 4 families headed by immigrants. Among spouse-absent families, nativity differentials in family income were less pronounced, ranging from a $900 advantage for U.S. born Hispanics to $1800 advantage for U.S. born Asians. A much smaller differential in family income emerged for white spouse-absent families, with immigrants enjoying a slight advantage.

Although income data are useful to gauge the relative economic well-being of families, the poverty rates reported more clearly reveal the extent of economic deprivation experienced by the various groups. As reported by other studies (Angel and Tienda, 1982; Tienda and Angel, 1982; Tienda and Glass, 1985) black and Hispanic families, particularly those with a missing spouse, had the highest poverty rates in 1979. Poverty rates among blacks and

Hispanics, the two most disadvantaged minority groups, ranged from a low of 12 percent for native Hispanic families headed by a married couple to a high of 43 percent for spouse-absent Hispanic immigrant families. Note that among immigrant families it was whites rather than Asians who exhibited the lowest poverty rate, despite the lower average annual family incomes of whites compared to Asians. This pattern obtained for both types of headship. In part, this could reflect the presence of substantial numbers of recent Southeast Asian refugees in this group, most of whom were admitted to the United States since 1975 and who, by virtue of their concentration at the lower end of the income distribution, raise the group poverty rate. When combined with the very select group of Asians admitted under the Third and Sixth preference admission categories (see note 6), a high average income level and high rate of poverty for Asians seem less contradictory. Among the native born, Asians rather than whites exhibited the lowest rate of poverty, but the observed differential is relatively small, particularly among families with two spouses present.

What is noteworthy for our present concerns is that with the exception of blacks and spouse-absent white families, those headed by immigrants experienced higher poverty rates than their native race/ethnic counterparts. Based on this evidence, one should expect higher levels of participation in public assistance programs by immigrants, compared to their native-born race/ethnic counterparts, and higher levels for native blacks and Hispanics compared to native whites. That the data in Table 2 support these expectations is less interesting than the variation in welfare participation levels and average payment levels among the various groups. These data clearly show substantially higher levels of program participation by spouse-absent families and by minority families. Program participation rates

of spouse-absent families were roughly 4 times those observed among married-couple families. Asians stand as an exception, with welfare program participation rates of spouse-absent families only 2.5 times higher than among married couples. These findings are in accord with the higher levels of economic deprivation, and substantial empirical evidence documenting the disadvantaged labor market position of single heads (see reviews in Tienda and Glass, 1985; Tienda and Angel, 1982).

On balance, the fear that immigrants participate in income-conditioned transfer programs at a higher rate than natives finds mixed support in the data. Only among Asian and Hispanic families does this generalization hold, and in neither instance does the higher rate of participation in public assistance income programs by immigrants exceed that of their native counterparts by over 5 percent. In fact, the higher use of public assistance income by immigrant Hispanic families is almost negligible, on the order of from 1 to 3 percent for married couple and spouse-absent units, respectively. Among the Asian population, a large proportion of whom are eligible for the benefits provided by the Refugee Resettlement Program, participation in income-conditioned programs by immigrants exceeds the rate of their native headship counterparts only by 4 to 5 percent. Given the diverse socioeconomic backgrounds of the populations considered, these gross nativity differences in welfare program participation most likely reflect differences in eligibility and economic need rather than a preference for welfare over work. We demonstrate this in the multivariate section of this paper.

The data presented in Table 2 also raise questions about why the average payment levels differ among the headship and race/ethnicity groups considered. Among families headed by married couples, average payment levels received by natives and immigrants are quite similar, though black and white immigrant

Table 2

RECEIPT OF PUBLIC ASSISTANCE (P.A.) INCOME IN 1979 BY FAMILIES ACCORDING TO NATIVITY AND RACE/ETHNICITY OF THE HEADS

	White	Black	Hispanic	Asian
		Married Couples		
Proportion of Participation in P.A. Income				
Native	4.1	12.3	9.0	3.3
(N)	(38,509)	(3,273)	(1,092)	(146)
Immigrant	3.7	6.3	10.1	8.0
(N)	(3,153)	(192)	(1,340)	(485)
All	4.1	11.9	9.6	6.9
Average Amount Received, Given Participation				
Native	$2,292	$2,525	$2,988	$3,055
(N)	(1,589)	(402)	(98)	(5)
Immigrant	2,903	2,957	2,993	3,098
(N)	(116)	(12)	(135)	(388)
All	2,334	2,538	2,991	3,093
		Spouse Absent		
Proportion of Participation in P.A. Income				
Native	17.3	41.3	35.7	14.8
(N)	(6,249)	(2,501)	(378)	(35)
Immigrant	13.6	20.1	38.3	18.7
(N)	(331)	(74)	(413)	(76)
All	17.1	40.7	37.1	17.5
Average Amount Received, Given Participation				
Native	$2,820	$2,794	$2,932	$2,775
(N)	(1,079)	(1,032)	(135)	(5)
Immigrant	2,556	2,862	3,577	3,133
(N)	(45)	(15)	(158)	(14)
All	2,809	2,795	3,281	3,038

Note: All N's are weighted and reported in thousands.

families received slightly larger average payments. This is puzzling in the case of blacks, since black immigrant families have lower poverty rates than their native counterparts. Average payment levels received by spouse-absent families are patterned differently from those of married couples in two ways. First, among the single-parent families, immigrants of all groups except whites received larger benefits than their native counterparts, and second, the differential payment levels between natives and immigrants tended to be somewhat larger than comparable differentials among married couples.

One possible explanation for differences between natives and immigrants has to do with the higher benefit levels available in the states where immigrants are concentrated (e.g., New York, Illinois, California). Another equally important explanation has to do with differences between race and ethnic groups and between native and immigrant families in those characteristics which determine eligibility for program benefits. To address these tentative interpretations of the unadjusted tabulations, the following section sets forth an analytic framework for conceptualizing the determinants of the welfare participation decision. Subsequently we empirically test the hypothesis that immigrant families are more likely to participate in public assistance income programs versus the alternatives that they are equally or less likely than their racial/ethnic nonimmigrant counterparts to accept income-conditioned transfer payments.

Conceptual Framework

Following Blau (1984), we hypothesize that the probability of families receiving transfer income is a function of individual, household, and locational variables which govern economic need and eligibility for receipt of welfare benefits. That programs like AFDC (Aid to Families with Dependent Children) and SSI (Supplemental Security Income) are aimed at particular

groups, such as broken families, the disabled, and the elderly, underscores the importance of household characteristics in defining eligibility, and, depending on economic need, the welfare participation decision. Benefit levels, which vary greatly among states, are designed to bring actual family income up to a stated level of need, but the states exercise some discretion in establishing need and benefit levels. Actual payment levels reflect differences in the cost of living as well as political interests.

Our central interest is in the importance of immigrant status and three characteristics related to foreign birth--region or country of origin, year of arrival, and English proficiency--in determining a family's decision to participate in public assistance transfer programs. We are also interested in establishing how locational characteristics, especially labor market conditions and family structure, influence decisions to participate in welfare programs.

Although there is general ad hoc agreement that international migrants move in search of more promising jobs, previous research also has documented that new immigrants experience initial labor market difficulties both because of their lack of familiarity with the host country labor market and because of their limited and/or imperfectly transferable labor market skills (Chiswick, 1979; Tienda, 1983). If their disadvantaged labor market position leads newly arrived immigrants to seek income supplements in order to achieve minimally adequate living standards, we would observe a positive effect of recent arrival on the welfare participation decision. But a negative effect of recent immigrant status also is plausible if new immigrants were ineligible for welfare benefits by law, or were uninformed about their eligibility for selected income-conditioned transfers. A negative effect would also emerge if friends and relatives aid new arrivals in their adjustment process by

providing social and economic assistance, including loans and job information. Thus, while the net effect of recent immigration is potentially ambiguous, we hypothesize that it will be negative, with the qualification that its magnitude may depend on region of origin of the immigrants. Specifically, we expect recent black and Hispanic immigrants will be less likely, and recent Asian immigrants--especially those of Vietnamese nationality--will be more likely than their native counterparts to receive transfer income. Our empirical specification allows us to test these hypotheses directly.

In predicting a negative effect of recency of arrival on the welfare participation decision we emphasize the importance of friendship and kinship networks in providing aid to new arrivals (see Tienda, 1980; Browning and Rodriguez, 1985; Kritz and Gurak, 1984) and the possible significance of the sponsorship element of the Refugee Resettlement Program in encouraging high levels of public dependency. Who sponsors a refugee family clearly influences whether the head seeks and locates employment immediately, or whether the family is placed on public assistance (Bach, 1984). Both Blau (1984) and Simon (1984) examined whether the short-term net effect of foreign birth on public dependency is negative, and whether welfare participation decisions differed significantly among recent and earlier arrivals vis-à-vis the native born. However, neither analyst specified the effects of duration of residence according to region of origin or country of origin. Given the changing origin composition of the immigrant pool (Bach and Tienda, 1984), such a differentiation of immigrants would appear to be of central theoretical and policy interest.

Our specification does not consider all individual country flows within the broad groupings of region of origin represented by the Hispanic (Latin American and Caribbean countries), Asian, black, and white categories, for

this would be excessively tedious and probably meaningless. Instead, we focus on those differences that make a difference for contemporary and future debates about immigration and welfare participaton. For example, the Asian immigrant category is quite heterogeneous because it encompasses at least two groups with very different characteristics. One group includes regular immigrants from countries like South Korea, the Philippines, India, and Taiwan; another group consists of Southeast Asian refugees. The first group includes voluntary migrants, usually with above-average occupational and educational backgrounds, and whose integration in the U.S. economy is determined largely by their own competitive skills and social networks. The second group, on the other hand, is one of more modest origins and whose resettlement in the United States is organized and closely monitored by official assistance agencies. Our analyses, therefore, differentiate the Vietnamese and other Southeast Asians from Japanese, Asian Indians, and Filipinos on the one hand, and Koreans and Chinese on the other.[7]

Likewise, among Latin American and Caribbean migrants, we distinguish between immigrants from Mexico and all others. This distinction will allow us to comment on the concern that Mexicans, the group most highly represented among illegal immigrants, will make alarming use of entitlement programs in the event that an amnesty program is approved. Our decision to separate Puerto Ricans from other native-born groups was guided both by theoretical and practical concerns. As U.S. citizens Puerto Ricans are entitled to many, but not all, privileges enjoyed by other legal immigrants and native-born Americans (Nelson and Tienda, 1985). However, Puerto Ricans as a group are important from a policy standpoint because of their very high levels of welfare recipiency (Tienda and Angel, 1982) and because of their persistently poor and deteriorating labor market position (Tienda, 1984). That Puerto

Ricans often fare worse than many foreign-born groups raises key theoretical questions about the interface between ethnicity, citizenship, and socioeconomic success.[8] Accordingly, our analyses distinguish between Puerto Ricans born on the mainland and those born on the island or abroad.

In ascertaining whether immigrants have a higher propensity to rely on transfer income, we control for several factors that systematically influence economic need and eligibility for public assistance income. Age of head is important, because, other things equal, we expect older heads, especially those past retirement age, to rely more on income-conditioned transfer payments than otherwise comparable younger heads. More highly skilled heads are likely to participate less in public assistance programs because of their greater earning possibilities and higher rates of success in the labor market. We introduce head's education and English proficiency to monitor skill differences in earning potential, but the net effect of English proficiency is unclear. A lack of proficiency in English can hinder labor market integration of the foreign born both by restricting job opportunities, particularly in better-paying, high-status occupations, and by triggering discrimination against individuals who are "obviously foreigners." The effect of English proficiency on program participation is potentially ambiguous, as its negative effects, mediated by potential wages, could be offset by a positive effect representing greater access to information about program availability and the complex application procedures.

A family's eligibility to receive public assistance payments depends on its composition, its assets, and level of economic need. To represent these dimensions in our welfare participation function, we introduce a series of family characteristics into our model. These are (1) type of headship, (2) the presence of dependents, both young and old, and (3) extended structure.

Spouse-absent families, especially those headed by single women, are more likely to participate in income transfer programs than are those headed by married couples (Tienda and Glass, 1985). This stems from the constraints on work faced by single mothers with young children as well as the disadvantaged labor market position of women vis-à-vis men. We also monitor the influence of the presence of children under 18 and adults over age 65 on the welfare participation decision, because these age groups are targeted for specific programs, such as AFDC and SSI.[9]

Our reasoning for including a measure of extended family structure draws from previous work by Tienda and her associates (Tienda and Angel, 1982; Angel and Tienda, 1982; Tienda and Glass, 1985), which shows that, by increasing the flexibility of families to reallocate their assets and resources, including labor supply, the presence of an adult relative of the head could decrease a family's need to rely on transfer income supports. Ethnographic and survey evidence indicating a greater reliance on informal rather than formal social supports by minority and immigrant populations (Browning and Rodriguez, 1985; Kritz and Gurak, 1984; Moore, 1971) makes this consideration particularly important for understanding the welfare participation decision. Bach (1984), for example, has argued that the complex living arrangements observed among Southeast Asian refugees coupled with creative income-generation strategies enable them to stretch the limited resources provided by the resettlement assistance programs. However, as Tienda and her colleagues have noted (Tienda and Angel, 1982; Tienda and Glass, 1985), it is unclear whether the adult relatives coresiding in a nuclear family benefit more from the extended living arrangements than the members of the nuclear family. Thus, the sign of the coefficient for extended family structure is potentially ambiguous.

Two family resources that could influence the welfare participation decision are assets, which we represent with a measure of nonsalary, nontransfer income received by all family members [10] and the labor pool available to meet the support needs of other members. Obviously, families whose income falls below the official poverty threshold are more likely to receive welfare payments to make up the shortfalls in their collective resources. Beyond this general statement of the relationship between economic need and program participation, it is not obvious that the low family income levels which result in high welfare dependency rates reflect the preferences of economically deprived families for leisure over work, as many economists assume (see Blau, 1984). Instead, studies showing that most of the poor are working poor (Schiller, 1980) suggest a preference for work over welfare among families in general, although certainly there exists variation in such preferences. As Schiller notes, greater reliance on transfer income by families seldom reflects a totally voluntary decision and preference for leisure over work.

Labor market commitments are important because they gauge the behavioral response of the unit to labor market conditions and the labor-leisure trade-off. Our indicator of labor market response recognizes that families, particularly those headed by individuals whose labor market position is itself precarious, may spread the family support burden among a greater number of members rather than join the welfare rolls. We use the ratio of family members in the labor force to the eligible number of persons (aged 18-64) as a measure of the alternative to the welfare participation decision.[11] Because we believe that reliance on transfer income often represents a forced response to meet economic needs of families, we predict a negative influence of this term on the welfare participation decision. A negative effect of this term would support our view that families prefer work to welfare.

Our specification also acknowledges that the welfare versus work choices faced by families are themselves circumscribed by the conditions of the labor markets in which they reside. To account for these influences, we introduce several locational variables in our models to capture employment conditions, immigrant composition of the area, and the available benefit levels, which compete with prevailing wage rates in determining a family's welfare participation decision. The labor market variables--area unemployment level and average area wage rate--are self-explanatory and need little discussion except to state our hypothesized negative influence of wage rates and positive influence of unemployment rates on families' welfare participation decisions.

However, the expected sign of the contextual variable, percent immigrant, is potentially ambiguous. If the presence of large numbers of immigrants in a labor market produces imbalances in the skills supplied and required by a specific industry structure, this variable would exert a positive influence on welfare recipiency levels. This would be especially true if discrimination against the foreign born were quite generalized. Alternatively, the concentration of immigrants in a given labor market could produce negative effects on the welfare participation decisions of individual families if the concentration of like ethnic groups resulted in the formation of ethnic enterprises which not only cater to the needs of the foreign born, but also employ recent arrivals and provide a foundation for organizing social support networks.

Finally, we introduce the average AFDC benefit level for states to control for differences in eligibility requirements, living costs, and benefit levels. Feagin (1975) has documented the widespread belief that migrants are attracted to places where welfare benefits are greater, but, as he and others note, such claims have found quite mixed evidence in the economic and

sociological literature (see Premus and Weinstein, 1977; Kumar, 1977; 1979; Cebula, 1976; Cebula and Kohn, 1975; Pack, 1973; DeJong and Donnelly, 1973). Most of the debate about whether high benefit levels attract migrants has centered on methodological issues (specification bias; identification problems; operationalization of variables; simultaneity). Virtually all the empirical analyses generated by a few articles and their companion set of comments and rejoinders have been conducted at an aggregate level using states or SMSAs as the unit of analysis and net internal migration flows as dependent variables. However no study has focused on international migration, welfare benefit levels, and settlement patterns.

Methodological problems notwithstanding, the empirical results based on the internal migration flows are robust in showing positive effects of welfare benefit levels on net migration flows, although these effects usually were considerably smaller than those associated with income and employment opportunities (see Pack, 1973; Premus and Weinstein, 1977; DeJong and Donnelly, 1973). Therefore, while our estimate of the effect of AFDC benefit level on the participation decision should be positive, its interpretation is somewhat problematic because the states offering the highest benefits usually have the most attractive employment opportunities and because these states also have the highest concentration of immigrants. With controls for labor market conditions and population composition, the estimate of this term should be less biased.

Table 3 provides a summary of the variables used in the multivariate analysis, along with a brief operational description. With the exception of the dependent variable, receipt of public assistance income (P.A. income), all variables are self-explanatory and need no further comment. Our measure of public assistance income consists of cash payments made under several transfer

Table 3

DEFINITIONS OF VARIABLES USED IN ANALYSIS

Variable	Description
Individual Characteristics	
Age of Head	
30–64 years	Head aged 30–64, coded 1
65+ years	Head aged 65 or older, coded 1
20–29 years	Head aged 20–29, coded 0
Head's Education	Years of schooling completed by head
Head's English Proficiency	Ordinal measure indicating head's ability to understand and speak English well; higher values indicate greater proficiency
Head's Ethnicity	
Mexican	If Mexican head, coded 1
Puerto Rican	If Puerto Rican head, coded 1
Other Hispanic	If other Hispanic head, coded 0
Japanese, Filipino, Indian	If Japanese, Filipino, or Asian Indian head, coded 1
Vietnamese/Other	If Vietnamese/Other head, coded 1
Korean and Chinese	If Korean or Chinese head, coded 0
Gender of Head	
Female	If female head, coded 1
Male	If male head, coded 0
Head's/Spouse's Year of Immigration	
1975–80	If head/spouse arrived 1975–80, coded 1
1970–74	If head/spouse arrived 1970–74, coded 1
1960–69	If head/spouse arrived 1960–69, coded 1
1959 or Prior	If head/spouse arrived before 1960, coded 1
Native Born	If head/spouse are native born, coded 0
Family Characteristics	
Headship Status	
Single Male	If single male, coded 1
Single Female	If single female, coded 1
Couple	If couple, coded 0
Immigrant Family	If either the head, spouse, or both are foreign born, coded 1; else, coded 0
Number of Persons $\geq$ 65	Number of persons 65
Number of Persons < 18	Number of persons 18
Other Income	Total nonsalary, nontransfer income, in thousands of dollars
Economic Dependency Ratio	Ratio of number of household workers to persons aged 18 to 64
Extended Family	If one or more adult relative of head other than spouse present, coded 1; nuclear family, coded 0
Locational Characteristics	
Area Wage Rate	Average wage rate for SMSA or remainder state areal units
Area Unemployment Rate	Unemployment rate for SMSA or remainder state areal units
Area Percent Immigrant	Percent foreign born in SMSA or remainder state areal units
State Benefit Level	1979 State Need Standard for family of 4 (1 needy adult and 3 children)
Dependent Variable	
Proportion Receiving P.A. Income	If any member of family received public assistance income in 1979, coded 1; else, coded 0

programs, including Aid to Families with Dependent Children, Supplemental Security Income, and General Assistance.[12] This measure excludes separate payments received for hospital or other medical care, and receipt of in-kind assistance, such as food stamps and housing subsidies. Rather than code families as welfare participants based only on whether the head received transfer income in 1979, we employed more inclusive criteria in coding this variable. A family was classified as a welfare recipient if any member received public assistance income in 1979. This definition permits more rigorous tests of our hypotheses, since it increased the proportion of families classified as welfare recipients in 1979.

Empirical Results

Our multivariate analysis begins with descriptive statistics which document the characteristics of our entire sample, and the subsets of welfare recipients and nonrecipients. We then estimate several equations predicting the probability of welfare participation using logistic regressions which employ coarse and more refined specifications of key variables of interest, namely immigrant status, type of headship, and race/ethnicity of the head. Because the logistic regression produces coefficients predicting the log odds of participating in transfer income programs, we transform the logit coefficients into probability increments, which lend themselves to easier interpretation.

Results reported in Tables 5 and 6 analyze the effect of immigrant status on the welfare participation decision using a dichotomous specification of immigrant family status and type of headship as an additive term. Table 6 presents disaggregated models according to headship and illustrates how the influence of several variables on the participation decision depends on whether one or two heads are present. Results reported in Table 7 expand the

dichotomous immigrant status term to include year of arrival of the head, as well as interaction terms for two groups of key policy interest--recent Mexican and Vietnamese immigrants. The interaction terms between year of arrival and Mexican or Vietnamese origin enable us to make more precise statements about whether these two groups are more or less likely than their native counterparts or previous immigrants from the same region of origin to receive transfer income in 1979.

Table 4, which presents means and standard deviations of the variables used in the logistic regression analyses for the total sample, is supplemented by Appendix A, which reports differences in individual, family, and locational characteristics for the subsamples of public assistance participants and nonparticipants. Table 4 shows that Hispanic heads, who average only 9.6 years of formal schooling, are the most disadvantaged group with respect to education, our proxy for potential earnings. The average schooling level of black family heads was one year above that of Hispanics, but even at a mean of 10.5 years, remained three to four years below the mean schooling levels of Asian and white family heads. Information in Appendix A shows that the average educational attainment of nonrecipients was about two years higher than that of recipients, but the ranking of the race/ethnic groups according to education of the head was identical for both subsamples.

With respect to age composition, note that Hispanic heads were somewhat younger than other minority or white heads, with roughly one-quarter of all female heads aged 20-29 at the time of the census, compared to one-fifth of black family heads and even smaller shares of white and Asian family heads. In contrast, white heads were twice as likely as Hispanic heads to be at or past retirement age. For the sample as a whole, the proportion of prime-aged heads was greatest for Asians, with roughly three-quarters aged 30-64 years.

Appendix A shows that public assistance recipients in 1979 were older than their nonrecipient counterparts for each race/ethnicity group. Among Hispanic and Asian recipients, the proportion of elderly heads was more than double the share of nonrecipients. This is consistent with the premise that many individuals never become poor until they are old. Because age 65 usually implies an exit from the labor force, it frequently necessitates reliance on income-conditioned transfer payments to meet basic needs, especially for individuals whose employers did not provide for adequate retirement benefits. That the proportion of elderly Hispanic families who received welfare income in 1979 was lower than other minority and nonminority groups suggests a potential greater importance of private social support networks in meeting the income shortfalls experienced by elderly Hispanic heads.

The national-origin composition of the Hispanic and Asian families corresponds to that observed among the total population, as documented in the national census reports. Consistent with our expectations, but contrary to popular fears, Mexicans were relatively underrepresented among the subsample of welfare recipients (Appendix A), while Puerto Ricans were somewhat overrepresented in this category. However, in accord with our predictions, Vietnamese were disproportionately represented among the subsample of Asian families who received income-conditioned transfer payments in 1979, reflecting the importance of the Refugee Resettlement Program in providing income support for this group of recent immigrants. Tabulations for immigration status by year of arrival provide further support for this interpretation. A comparison of the year-of-arrival composition of the foreign-born Asian and Hispanic groups (the two with nontrivial shares of immigrant heads) shows that Asian immigrants who arrived after 1975 were more highly represented among the subset of welfare recipients in 1979 compared to their share of the total

Table 4

MEANS AND STANDARD DEVIATIONS OF VARIABLES USED IN REGRESSION ANALYSES ACCORDING TO RACE/ETHNICITY OF HEAD: TOTAL SAMPLE
(Standard Deviations in Parentheses)

	White	Black	Hispanic	Asian
Individual Characteristics				
Age of Head				
20-29 years	.16	.21	.25	.14
	(.36)	(.41)	(.44)	(.34)
30-64 years	.68	.67	.67	.78
	(.47)	(.47)	(.47)	(.42)
65+ years	.16	.13	.07	.09
	(.37)	(.33)	(.26)	(.28)
Head's Education, in years	12.24	10.48	9.57	13.54
	(3.38)	(3.66)	(4.41)	(4.54)
Head's English Proficiency	3.97	3.99	3.22	3.44
	(.21)	(.11)	(.97)	(.80)
Head's Ethnicity				
Mexican			.57	
			(.50)	
Puerto Rican			.15	
			(.35)	
Other Hispanic			.28	
			(.45)	
Japanese, Filipino, Indian				.55
				(.50)
Korean and Chinese				.34
				(.47)
Vietnamese/Other				.12
				(.32)
Head's/Spouse's Year of Immigration				
1975-80	.01	.01	.07	.25
	(.08)	(.09)	(.25)	(.43)
1970-74	.01	.01	.09	.18
	(.07)	(.10)	(.29)	(.39)
1960-69	.01	.01	.14	.18
	(.11)	(.12)	(.35)	(.38)
1959 or prior	.05	.01	.11	.14
	(.21)	(.10)	(.32)	(.35)
Native born	.93	.96	.46	.24
	(.26)	(.20)	(.50)	(.43)
Family Characteristics				
Headship				
Single Male	.03	.06	.05	.05
	(.18)	(.24)	(.21)	(.22)
Single Female	.11	.37	.20	.10
	(.31)	(.48)	(.40)	(.30)
Couple	.86	.57	.76	.85
	(.34)	(.50)	(.43)	(.36)
Immigrant Family[a]	.07	.04	.54	.76
	(.26)	(.20)	(.50)	(.43)
Number of Persons ≥ 65[b]	.14	.09	.08	.12
	(.37)	(.30)	(.29)	(.37)
Number of Persons <18	.95	1.55	1.64	1.32
	(1.16)	(1.51)	(1.51)	(1.34)
Other Income, in Thousands	$2.58	$.93	$1.01	$1.82
	(6.48)	(2.87)	(3.74)	(4.96)
Economic Dependency Ratio	.70	.70	.70	.77
	(.42)	(.43)	(.40)	(.36)
Extended Family	.08	.16	.15	.19
	(.26)	(.37)	(.36)	(.39)
Locational Characteristics				
Area Wage Rate	$7.07	$7.26	$7.37	$7.79
	(.96)	(1.02)	(.94)	(.78)
Area Unemployment Rate	.07	.07	.06	.06
	(.02)	(.02)	(.02)	(.01)
Area Percent Immigrant	5.46	7.05	14.27	13.00
	(6.28)	(7.98)	(9.91)	(7.47)
State Benefit Level	$341.11	$294.73	$348.13	$429.86
	(117.31)	(126.59)	(141.86)	(111.46)
Dependent Variable				
Proportion Receiving P.A. Income	.06	.21	.16	.09
	(.24)	(.43)	(.37)	(.28)

[a] If either head or both were foreign born.
[b] Excludes the head.

Asian population (42 versus 25 percent), but this was not the case for Asians who arrived prior to 1975. Recent Hispanic immigrants, on the other hand, were less prevalent among the subset of welfare recipients (see Appendix A).

Other statistics in Table 4 worth highlighting include evidence that Asian and Hispanic heads had lower average levels of proficiency in English compared to their black and white counterparts, and that those with lower levels of proficiency in English were more highly represented among the subsample of welfare recipients (Appendix A). Single female heads were more highly represented among the recipient than the nonrecipient population by a factor of 2 to 3. Minority families contained a larger number of young dependents, and were considerably more likely to contain members other than the heads and coresiding children. A comparison of extended family patterns among recipients and nonrecipients (Appendix A) shows that the complex family forms were more prevalent among the subset of welfare recipients of all race/ethnic groups than among nonrecipients.

A final comment about the descriptive statistics reported in Table 4 concerns the group differences in locational characteristics. Note that while the groups do not differ greatly with respect to the average unemployment rates they faced, the regional distribution of minority populations, and particularly their concentration in large urban centers in prosperous states, translated to higher mean area wage rates for minorities than for whites. Whereas the average wage rate in labor markets where Asians were concentrated in 1979 was roughly $7.80 per hour, Hispanics and blacks faced average hourly wage rates between $7.25 and $7.40. For whites the comparable average was approximately $7.10.

Despite their concentration in areas with wage rates higher than those faced by whites, blacks resided in areas with welfare benefit levels below those of whites. Asians clustered in states with the highest average benefit

level in 1979, but Hispanics and whites did not differ much in this regard. A comparison of average benefit levels among the subsets of 1979 welfare recipients and nonrecipients shows slightly higher state benefit levels among the recipient subsample. While this might be construed as evidence that individuals who are prone to receive public assistance are more apt to settle in areas with higher benefit levels, there is no basis for establishing a causal linkage in these descriptive, aggregate data, nor in the models estimated below. Whether benefit levels exhibit a positive correlation with participation decisions is an empirical question we examine directly in the following multivariate analyses.

Baseline Models

Despite the slightly higher aggregate levels of welfare dependency exhibited by immigrant families relative to native families, results reported in Table 5 support our hypothesis about the negative influence of immigrant status on the welfare participation decision for all groups except Asians. That the negative effects of immigrant status on transfer probabilities were more pronounced for black and Hispanic immigrant families than for whites with similar economic need and eligibility characteristics poses a strong challenge to popular views that immigration from Third World nations, which mostly involves people of color, leads to high levels of welfare dependency.

Note that black and Hispanic immigrant families were, respectively, 13 and 9 percent less likely to participate in transfer income programs in 1979 than their native-born counterparts, while the corresponding differential for whites was less than 3 percent. Furthermore, in the case of Hispanic immigrants, the dummies representing country of origin show that Mexicans were roughly 4 percent less likely than other Hispanic-origin groups to receive welfare income in 1979, while Puerto Ricans participated in public assistance

Table 5

POOLED HEADSHIP MODEL OF 1979 PUBLIC ASSISTANCE PARTICIPATION: RAW AND TRANSFORMED LOGIT COEFFICIENTS FOR WHITE, BLACK, HISPANIC, AND ASIAN FAMILIES
(T-Statistics in Parentheses)

	White		Black		Hispanic		Asian	
	Logit Coefficient	1st Derivative[a]	Logit Coefficient	1st Derivative[a]	Logit Coefficient	1st Derivative[a]	Logit Coefficient	1st Derivative[a]
Individual Characteristics								
Age of Head								
30-64 years	-.290	-.016	-.361	-.060	.077	.010	-.217	-.017
	(-2.994)		(-4.553)		(1.037)		(-1.547)	
65+ years	-.472	-.026	-.249	-.041	.421	.055	.742	.057
	(-3.401)		(-1.957)		(3.440)		(3.764)	
Head's Education, in Years	-.110	-.006	-.114	-.019	-.064	-.008	-.036	-.003
	(-10.553)		(-11.593)		(-8.051)		(-3.181)	
Head's English Proficiency	.014	.001	-.007	-.001	-.169	-.022	-.199	-.015
	(.175)		(-.045)		(-4.939)		(-3.126)	
Head's Ethnicity								
Mexican					-.279	-.037		
					(-3.901)			
Puerto Rican					.611	.080		
					(6.838)			
Japanese, Filipino, Indian							-.096	-.007
							(-.808)	
Vietnamese/Other							1.121	.087
							(8.149)	
Family Characteristics								
Headship Status								
Single Male	.531	.029	.752	.125	.613	.081	.474	.037
	(3.150)		(5.665)		(4.589)		(2.568)	
Single Female	1.591	.087	1.622	.269	1.717	.226	1.188	.092
	(19.819)		(23.886)		(27.448)		(9.482)	
Immigrant Family[b]	-.449	-.025	-.805	-.133	-.679	-.089	.294	.023
	(-5.603)		(-8.802)		(-9.265)		(2.099)	
Number of Persons ≥ 65[c]	.440	.024	.403	.067	1.234	.162	1.194	.092
	(4.758)		(3.762)		(13.996)		(11.594)	
Number of Persons < 18	.271	.015	.321	.053	.215	.028	.264	.020
	(9.424)		(15.362)		(11.359)		(7.971)	
Other Income	-.040	-.002	-.034	-.006	-.080	-.011	-.051	-.004
	(-4.937)		(-2.672)		(-6.175)		(-3.681)	
Economic Dependency Ratio	-1.199	-.066	-1.645	-.272	-1.484	-.195	-.877	-.068
	(-13.039)		(-21.416)		(-20.050)		(-7.248)	
Extended Family	.779	.043	.450	.075	.350	.046	.714	.055
	(7.818)		(5.591)		(4.529)		(6.137)	
Locational Characteristics								
Area Wage Rate	-.065	-.004	-.062	-.010	-.082	-.011	-.045	-.003
	(-1.507)		(-1.493)		(-1.892)		(-.643)	
Area Unemployment Rate	.779	.043	3.258	.540	4.002	.526	1.913	.148
	(.464)		(1.775)		(2.305)		(.657)	
Area Percent Immigrant	.017	.001	.0009	.0001	.013	.002	.007	.001
	(3.380)		(.184)		(4.163)		(.945)	
State Benefit Level	.001	.0001	.002	.0003	.001	.0001	.002	.0002
	(4.158)		(4.276)		(3.851)		(3.123)	
Constant	-1.391		.326		-.637		-2.629	
	(-3.127)		(-.477)		(-1.882)		(-4.187)	
Degrees of Freedom	18312		8813		12838		7386	
-2 (log likelihood χ^2)	6860.68		6721.08		8398.17		3321.84	
(N)	(18329)		(8830)		(12857)		(7405)	

[a]Computed at $\bar{p}$ = .058 for whites; $\bar{p}$ = .210 for blacks; $\bar{p}$ = .156 for Hispanics; and $\bar{p}$ = .085 for Asians.
[b]If either head or both were foreign born.
[c]Excludes the head.

programs at a level 8 percent above that of other Hispanics. The positive coefficient associated with immigrant status among Asians is on the margin of statistical significance and seems largely attributable to the Vietnamese group, who participated in transfer income programs at a rate 9 percent above Chinese and Korean families.

Other variables behave in the manner expected. Above and beyond the welfare participation differentials associated with immigrant status and region or country of origin, proficiency in English reduced the propensity of Asian and Hispanic families to receive welfare income in 1979 on the order of 1.5 to 2.2 percent, but no such effects were observed among black and white families. Since the direction of effect for this variable was potentially ambiguous, the negative sign suggests that its influence operates through a positive impact on employment outcomes (Tienda and Neidert, 1984; Blau, 1984). If this is so, then the total effect of English ability (including both the direct effect and the indirect effect through labor market status) is potentially greater than the observed direct effect. Each year of schooling completed by the family head reduced the probability of participating in income-conditioned transfer programs by roughly 1 to 2 percent for blacks and Hispanics, and less than 1 percent for whites and Asians.

Contrary to our prediction, white and black families with heads aged 65 years or older were roughly 2 to 4 percent less likely to receive transfer payments compared to those with heads under 30 years of age, while among Hispanics and Asians, the expected positive effect on program participation of having post-retirement aged heads did emerge. Although it is not immediately obvious why these age differentials in participation probabilities should be observed among the region-of-origin groups, a partial explanation resides in the varying age composition of Asian and Hispanic families versus that of

black and white families. Note that the number of persons over 65 years (other than the head) positively influenced the transfer probabilities for all groups, even though the magnitudes of these probabilities were, once again, stronger for the Asian and Hispanic families. And, as hypothesized, the presence of each child under age 18 increased families' likelihood of receiving transfer payments by roughly 1 to 2 percent for whites and Asians, and 3 to 5 percent for Hispanics and blacks.

These differences among the race/ethnicity groups also probably reflect patterned variation in the living arrangements of blacks, Hispanics, and Asians vis-a-vis whites, with the minority groups (especially Asians and Hispanics) exhibiting greater tendencies toward extended living arrangements than whites (see Table 4). Although our data do not permit conclusive generalizations about culturally patterned responses toward the needs of the elderly, minority populations tend to rely less on institutionalized care of the elderly than whites. Our data seem to support this interpretation, but the differential importance of the presence of aged members among the race/ethnicity groups could also reflect the varying eligibility of whites versus minorities and immigrants for other social support programs which cater to the elderly, such as social security and medical assistance. Neither of these were included in our measure of public assistance income.

Other family characteristics determining eligibility for and likelihood of receipt of income-conditioned transfer payments behaved as predicted by our theoretical arguments. For example, spouse-absent families participated in welfare programs at rates significantly above those of families headed by married couples, but the race/ethnicity groups exhibited some variance in this regard. The positive effect of female headship was particularly pronounced

for black and Hispanic families, which were, respectively, 27 and 23 percent more likely to participate in welfare programs in 1979 than their race/ethnic counterparts who were couples. Among white and Asian families, who also exhibit the lowest rates of female headship (Table 4), the positive effect of female headship was considerably lower, roughly one-third the magnitude of that corresponding to blacks and Hispanics.

Extended households are typically rare in the general population, but they are more common among minority populations. The positive effect on the transfer income decision of extended family structure was uniformly positive and statistically significant for all groups, although the relative magnitude was strongest for blacks. That extended families were roughly 4.5 to 7.5 percent more likely to have received public assistance income in 1979 suggests that the relatives of the head may benefit more from complex coresidence patterns than the nuclear family members. It is unclear from this analysis, however, whether extended families would have qualified for transfer income in the absence of the additional members, or whether the welfare participation decisions involved only the nuclear family members. This question can be more suitably addressed through an analysis of the payment levels, which takes into account which family members were eligible for and received benefits.

Our measured effects of other income, a proxy for family assets, were consistently negative for all groups, showing that financially better off families were less inclined (and probably ineligible) to receive income-conditioned transfer payments. These effects, while statistically significant, were substantively trivial. What is more interesting, both substantively and theoretically, are the strong negative effects of the economic dependency ratio on families' welfare participation decisions. That the reduction in the probability of receiving transfer income was strongest

among the two most disadvantaged groups--blacks and Hispanics--provides an important challenge to social scientists and policy analysts who believe that most families prefer welfare payments to work. Even when labor market conditions are not favorable to the economic success of the primary breadwinner, families can become more economically viable than they would be otherwise by spreading market work responsibilities among a greater number of eligible adults. This explanation is consistent with previous work by Tienda and her associates (Tienda and Glass, 1985; Tienda and Angel, 1982; Angel and Tienda, 1982), which uncovered a complex relationship between poverty status of the nuclear unit, racial/ethnic differentials in extended living arrangements, and multi-earner labor supply responses.

Effects of the locational variables on the welfare participation decision were generally in accord with expectations except that not all point estimates were statistically reliable. Although the logit parameters were statistically insignificant, the area wage rate and area unemployment rates had offsetting influences on families' welfare participation probabilities. Only for Hispanics did the point estimates attain statistical significance, and in the case of the area wage rate, the estimate was on the margin of statistical significance. Likewise, the point estimate of the immigrant composition of an area failed to reach statistical significance for two of the four groups, but its measured effect on the welfare participation decision was significantly positive for both Hispanics and whites. Despite their statistical significance, the probability increments in welfare participation associated with residence in areas where immigrants were concentrated were extremely small.

In accord with other research, the effect of the benefit level on the welfare participation decision was positive and statistically significant for all groups. Again, its magnitude was quite small in comparison to that of

other individual and family charcteristics which determine economic need and eligibility to participate in income transfer programs. The positive logit in no way establishes the propensity of either native or immigrant families to make residential choices in order to take advantage of more liberal public assistance payments. Such an inference would require longitudinal data showing changes in families' program participation and employment statuses prior to and after a move. Since the areas with high benefit levels also tend to have high wages, it is possible that the lack of statistical significance for the area wage rate variable reflects the extensive covariation among these terms.

Table 6 reports disaggregated results of the additive specification of immigrant family status for couples and single heads. For simplicity in reporting and discussing these results, we present only the transformed effects (first derivatives) of each variable. So as not to belabor and repeat the discussion of Table 5, we highlight only those aspects which differ between the two types of headship.

Estimating the transfer probability functions separately for married couples and single heads uncovered some differences in the determinants of welfare participation. For example, the presence of elderly heads (i.e., over 65 years) increased a family's likelihood of receiving public assistance income in 1979 for Asian and Hispanic families of both headship types, but the negative influence observed among white families only mattered for the subset of single heads. Also noteworthy are the different probability increments associated with age among married versus single heads. For both Asians and Hispanics the presence of an elderly single head increased the probability of welfare participation by a factor of 2 compared to their married counterparts over 65. Higher levels of education decreased program participation among all

Table 6

HEADSHIP-SPECIFIC MODEL OF 1979 PUBLIC ASSISTANCE PARTICIPATION: FIRST DERIVATIVES FOR WHITE, BLACK, HISPANIC, AND ASIAN FAMILIES

	Married Couples[a]				Single Heads[b]			
	White	Black	Hispanic	Asian	White	Black	Hispanic	Asian
Individual Characteristics								
Age of Head								
30-64 years	-.004	-.027	.024	-.016	-.056	-.083	-.024	-.052
65+ years	.003	-.020	.055	.054	-.105	-.050	.107	.128
Head's Education, in Years	-.004	-.010	-.005	-.002	-.017	-.026	-.015	-.003
Head's English Proficiency	-.003	-.002	-.024	-.020	.031	.010	-.005	.003
Head's Ethnicity								
Mexican			-.025				-.055	
Puerto Rican			.049				.133	
Japanese, Filipino, Indian				-.010				.009
Vietnamese/Other				.085				.151
Family Characteristics								
Immigrant Family[c]	-.017	-.062	-.061	.029	-.057	-.211	-.134	.027
Female Head	—[d]	—[d]	—[d]	—[d]	.122	.177	.217	.052
Number of Persons ≥65[e]	.011	.037	.094	.080	.024	.040	.289	.187
Number of Persons <18	.008	.024	.014	.014	.050	.086	.057	.047
Other Income	-.001	-.0002	-.001	-.002	-.020	-.024	-.032	-.016
Economic Dependency Ratio	-.045	-.160	-.118	-.051	-.186	-.378	-.347	-.172
Extended Family	.063	.105	.071	.075	.026	.054	-.033	-.034
Locational Characteristics								
Area Wage Rate	-.004	-.002	-.007	.0008	-.006	-.018	-.018	-.019
Area Unemployment Rate	.055	.347	.520	.247	.216	.859	.245	-.597
Area Percent Immigrant	.001	.001	.001	.001	.001	-.001	.003	-.0001
State Benefit Level	.00003	.0001	.0001	.0001	.0004	.001	.001	.0003

Note: Appendix B provides logit parameters for the net probability increments reported for this table.

[a]Evaluated at $p' = .040$ for whites; $p' = .103$ for blacks; $p' = .094$ for Hispanics; and $p' = .069$ for Asians.

[b]Evaluated at $p' = .182$ for whites; $p' = .368$ for blacks; $p' = .354$ for Hispanics; and $p' = .175$ for Asians.

[c]If either head or both were foreign born.

[d]Not entered in equations.

[e]Excludes the head.

groups, but more so for single heads than for married couples. The notable exception was Asian single head families, for whom this factor did not influence the likelihood of receiving welfare transfers in 1979. As in the pooled model, proficiency in English influenced program participation only for Asian and Hispanic families, but this effect was significant only among couple families.

Differentials in program participation by Mexicans and Puerto Ricans vis-a-vis other Hispanics generally were consistent with those obtained by the pooled models, except that disaggregation by headship illustrates important contrasts between these two groups. Apparently type of headship accentuates the influence of national origin on welfare participation among Hispanics and Asians. The impact of Mexican and Puerto Rican ethnicity on program participation was stronger among single heads than married couples. That is, Mexican single heads were 5.5 percent less likely and Puerto Rican single heads 13 percent more likely to receive income-conditioned transfer payments in 1979. Among the subset of families headed by married couples, the participation probabilities were 2.5 percent lower and 5 percent higher for Mexican and Puerto Rican families, respectively. Note that belonging both to a Vietnamese and single-head family increased the likelihood of welfare participation by 15 percent relative to other Asian single-head families; among the subset of Asian families headed by a married couple, those of Vietnamese origin were 8.5 percent more likely to participate in public assistance programs relative to other Asians.

Overall, the disaggregation of the baseline model by type of headship served to accentuate the relative importance of family characteristics that determined eligibility for and receipt of public assistance income. As in the pooled analyses, the partial effect of immigrant status on program

participation was negative for all groups except Asian married couples, who were 3 percent more likely than other Asian families of like headship to receive income-conditioned transfer payments. The negative effect of immigrant status on program participation was relatively more pronounced among single heads than among married couples. Moreover, among the subset of parent-absent families, those headed by single women were between 12 and 22 percent more likely to receive welfare assistance compared to their single male counterparts. Asians were an exception to this generalization. The gender effect captures the differential earning capacity of men and women, which makes income supports more essential for single female heads.

That the positive impact of extended family structure on welfare dependency was only statistically relevant for married-couple families, even though spouse-absent families were more likely to be extended, is consistent with arguments (and evidence) that extended family structure helps families cope with economic need by facilitating the reallocation of market and domestic roles among family members (Angel and Tienda, 1982; Tienda and Glass, 1985). One plausible interpretation of this finding is that among families with married heads, the additional relatives are probably benefitting more from the extended coresidence patterns than the nuclear family members. In contrast, among single-head families, the spouse-replacement mechanism underlying the formation of complex families enhances the ability of the unit to take advantage of labor market opportunities, thereby reducing their need to rely on income-conditioned transfer payments. Further verification of this premise requires a detailed examination of the age and labor market status of the members of the extended family along the lines pursued by Tienda and Glass (1985). Such an inquiry should prove fruitful, as the different effects of the economic dependency ratio on the welfare participation decisions for

single compared to married heads suggests a complex interaction between the composition of the unit and the corresponding work versus welfare responses possible.

The effects of the locational variables differed in minor ways between single heads and married couples. For example, the positive effect on program participation of the area unemployment rate observed among Hispanics was statistically significant only for married couples, but no such effect emerged for single heads of any origin. Although properly signed, none of the point estimates for the area wage rate reached statistical significance (see Appendix B). The immigrant composition locational variable was statistically significant for whites and Hispanics, as in the pooled analysis, but the probability increments remained extremely low and did not vary by type of headship. Finally, the influence of the state benefit level on welfare participation decisions, while consistently positive for all groups, failed to attain statistical significance for all but one of the married-couple families (Asians). This locational variable significantly influenced welfare participation decisions for all spouse-absent families. Despite its statistical significance, the increased likelihood of welfare participation in states with high benefit levels relative to those with low benefit levels was substantively trivial for all groups when compared to the effects of the individual and family determinants included in the model.

Timing of Immigration and Welfare Recipiency: Interaction Models

Given our interest in testing the hypothesis that recent immigrant families participate in public assistance programs at higher rates than nonimmigrant families, we reestimated the baseline model using a more fine-grained variable for immigrant family status. This variable differentiates immigrants according to the year of arrival of the head (or

spouse). Moreover, because much of the policy discussion about the immigration-welfare dependency issue has focused on the potential utilization of welfare benefits by Mexican immigrants in the advent of an amnesty program, we included additional terms in the Hispanic model to test this premise. Popular accounts of the immigration-welfare dependency issue suggest that recent Mexican immigrants are more likely to receive transfer income than their native counterparts, or earlier Hispanic immigrants. Based on the limited available evidence, we predict the opposite. Also, the consistently positive effects of immigrant status on welfare dependency observed among Asians (both in the pooled and headship-specific models) require further analysis to ascertain whether, in fact, the higher program participation among Asian immigrants stems entirely from the government-sponsored resettlement assistance available to Southeast Asian refugees. A set of interaction terms representing recent Vietnamese/other refugees addresses this question.

Results reported in Table 7 disconfirm the popular image of immigrants as a welfare-dependent population. Not only did statistically significant negative effects on welfare participation emerge for most immigrant cohorts, but among blacks and Hispanics, the most recent cohort (arriving after 1974) participated in income-conditioned transfer programs at, respectively, rates of 12 and 9 percent <u>below</u> their native counterparts. That the cohort differences in welfare participation rates did not exhibit a monotonic pattern with length of U.S. residence only requires that we qualify, rather than dismiss outright the generalization about an inverse relationship between recency of arrival and receipt of welfare payments. For blacks and Hispanics our results clearly demonstrate that the foreign born were less likely than their native counterparts to receive transfer income in 1979.

Table 7

POOLED HEADSHIP MODEL OF 1979 PUBLIC ASSISTANCE PARTICIPATION FOR NATIVE AND IMMIGRANT FAMILIES: RAW AND TRANSFORMED LOGIT COEFFICIENTS FOR WHITE, BLACK, HISPANIC, AND ASIAN FAMILIES
(T-Statistics in Parentheses)

	White		Black		Hispanic		Asian	
	Logit Coefficient	1st Derivative[a]	Logit Coefficient	1st Derivative[a]	Logit Coefficient	1st Derivative[a]	Logit Coefficient	1st Derivative[a]
Individual Characteristics								
Age of Head								
30-64 years	-.278	-.015	-.361	-.060	-.055	-.007	-.138	-.011
	(-2.843)		(-4.523)		(-.714)		(-.967)	
65+ years	-.438	-.024	-.273	-.045	.207	.027	.949	.073
	(-3.072)		(-2.130)		(1.613)		(4.557)	
Head's Education, in Years	-.111	-.006	-.114	-.019	-.064	-.008	-.041	-.003
	(-10.585)		(-11.632)		(-8.004)		(-3.524)	
Head's English Proficiency	.030	.002	-.041	-.007	-.212	-.028	-.132	-.010
	(.374)		(-.267)		(-5.940)		(-1.981)	
Head's Ethnicity								
Mexican					-.150	-.020		
					(-1.852)			
Puerto Rican					.172	.023		
					(.913)			
Japanese, Filipino, Indian							-.125	-.010
							(-1.045)	
Vietnamese/Other							.526	.041
							(1.817)	
Head's/Spouse's Year of Immigration								
1975-80	-.366	-.020	-.739	-.122	-.665	-.087	.454	.035
	(-1.908)		(-3.963)		(-3.647)		(2.432)	
1970-74	-.257	-.014	-1.104	-.183	-.504	-.066	.227	.018
	(1.423)		(-6.418)		(-3.279)		(1.190)	
1960-69	-.442	-.024	-.873	-.145	-.713	-.094	.268	.021
	(-3.083)		(-6.003)		(-7.097)		(1.519)	
1959 or prior	-.496	-.027	-.581	-.096	-.485	-.064	-.035	-.003
	(-5.240)		(-4.094)		(-5.082)		(-.193)	
Year of Immigration by Ethnicity Interaction								
(Mexican) (1975-80)					-.973	-.128		
					(-3.922)			
(Mexican) (1970-74)					-.777	-.102		
					(-3.932)			
(Puerto Rican) (Island Born)					-.118	-.016		
					(-.629)			
(Vietnamese/Other) (1975-80)							.652	.050
							(2.047)	
(Vietnamese/Other) (1970-74)							.044	.003
							(.090)	
Family Characteristics								
Headship Status								
Single Male	.539	.030	.746	.124	.626	.082	.446	.035
	(3.191)		(5.623)		(4.656)		(2.404)	
Single Female	1.600	.088	1.620	.268	1.702	.224	1.185	.092
	(19.829)		(23.827)		(27.126)		(9.399)	
Number of Persons ≥ 65[b]	.447	.025	.399	.066	1.215	.160	1.205	.093
	(4.823)		(3.729)		(13.712)		(11.677)	
Number of Persons < 18	.269	.015	.323	.053	.224	.029	.251	.019
	(9.286)		(15.406)		(11.709)		(7.468)	
Other Income	-.040	-.002	-.035	-.006	-.081	-.011	-.048	-.004
	(-4.917)		(-2.735)		(-6.201)		(-3.483)	
Economic Dependency Ratio	-1.195	-.066	-1.638	-.271	-1.466	-.193	-.837	-.065
	(-12.974)		(-21.288)		(-19.771)		(-6.908)	
Extended Family	.767	.042	.456	.076	.385	.051	.723	.056
	(7.644)		(5.661)		(4.948)		(6.174)	
Locational Characteristics								
Area Wage Rate	-.063	-.003	-.061	-.010	-.074	-.010	-.041	-.003
	(-1.454)		(-1.484)		(-1.681)		(-.584)	
Area Unemployment Rate	.792	.044	3.213	.532	3.549	.467	2.683	.208
	(.471)		(1.750)		(2.037)		(.916)	
Area Percent Immigrant	.016	.0009	.002	.0003	.014	.002	.008	.0006
	(3.304)		(.338)		(4.263)		(1.071)	
State Benefit Level	.001	.00005	.002	.0003	.001	.0001	.002	.0002
	(4.186)		(4.367)		(4.074)		(3.427)	
Constant	-1.480		-.201		-.534		-3.016	
	(-3.265)		(-.292)		(-1.563)		(-4.704)	
Degrees of Freedom	18309		8810		12832		7381	
-2 (log likelihood, χ^2)	6859.01		6714.55		8340.74		3304.29	
(N)	(18329)		(8830)		(12857)		(7405)	

[a]Computed at $p' = .058$ for whites; $p' = .210$ for blacks; $p' = .156$ for Hispanics; and $p' = .085$ for Asians.
[b]Excludes the head.

White and Asian families did not conform with this pattern, however. Among whites, recent immigrant families participated in public assistance programs at a rate comparable to their native counterparts, which in the aggregate, was relatively low (5.8 percent) compared to blacks (21.0 percent) and Hispanics (15.6 percent). However, white immigrants who arrived during the sixties or earlier participated in welfare programs at rates slightly below native whites.

With the exception of the most recent arrivals (i.e., the 1975-80 cohort), Asian immigrants were no more nor less likely to receive welfare payments than native Asians. (Note that while most year-of-arrival coefficients are positive, the point estimates are not significant at conventional levels.) The most striking result concerning length of U.S. residence and welfare dependency is the positive influence on program participation of the 1975-80 Asian entry cohort. Further support for this premise derives from the reinforcing positive influence of the interaction term denoting recent immigrants of Vietnamese origin. These effects, not discerned directly from the baseline additive model, support arguments about the impact of the government-sponsored Refugee Resettlement Program in promoting welfare participation among a subset of the Asian population. However, we hasten to add that the resettlement assistance is designed to promote economic self-sufficiency (Bach, 1984), thus its strong positive influence on welfare participation should be a short-term effect.

Because the debate about immigration and welfare dependency has capitalized on the large and growing volume of illegal immigrants, most of whom are of Mexican origin, we must call attention to the logits estimating the impact of recent Mexican immigrants on welfare participation. Our results clearly and unequivocally show strong, negative transfer-payment probabilities

for this highly controversial segment of the immigrant population. Specifically, Mexican immigrants who arrived after 1975 were almost 13 percent less likely to receive income-conditioned transfer payments in 1979 than were other Hispanic immigrant or native-born families, and those who arrived during the previous five years (1970-74) were 10 percent less likely to participate in welfare programs than otherwise comparable Hispanic immigrant or native families. That these decrements in the welfare participation probability were more pronounced than those of many other eligibility-determining factors should dispel fears among members of Congress and the OMB about the likelihood of a rush to secure welfare benefits in the event of an amnesty program for undocumented workers.

By and large, the relationship between length of U.S. residence and program participation was unaltered when the cohort-arrival model was disaggregated by type of headship (see Table 8). Some noteworthy differences and similarities between married and single heads warrant discussion, however. First, the generalization of an inverse relationship between recency of arrival and welfare participation finds strongest support among single-head black families, but results for Hispanic families with single heads as well as black and Hispanic families with married heads also support this generalization. Second, the positive influence on welfare dependency of membership in the most recent cohort of Asian immigrants was significant for married heads, but not for single heads. This finding is contrary to expectation, given that single heads experience greater economic hardships than married heads, and this circumstance often qualifies them for income-conditioned transfer payments. This peculiar result may tie into specific provisions of the resettlement assistance programs which determine

Table 8

HEADSHIP-SPECIFIC MODEL OF 1979 PUBLIC ASSISTANCE PARTICIPATION: FIRST DERIVATIVES FOR WHITE, BLACK, HISPANIC, AND ASIAN FAMILIES

	Married Couples[a]				Single Heads[b]			
	White	Black	Hispanic	Asian	White	Black	Hispanic	Asian
Individual Characteristics								
Age of Head								
30–64 years	-.002	-.026	.011	-.009	-.060	-.085	-.055	-.047
65+ years	.007	-.020	.038	.067	-.120	-.059	.037	.147
Head's Education, in Years	-.004	-.010	-.005	-.003	-.017	-.026	-.015	-.003
Head's English Proficiency	-.001	-.003	-.028	-.012	.014	.002	-.016	.008
Head's Ethnicity								
Mexican			-.012				-.039	
Puerto Rican			.015				-.0007	
Japanese, Filipino, Indian				-.012				.010
Vietnamese/Other				.018				.139
Head's/Spouse's Year of Immigration								
1975–80	-.002	-.034	-.042	.041	-.276	-.274	-.193	.038
1970–74	-.009	-.121	-.050	.016	.021	-.222	-.089	.061
1960–69	-.014	-.062	-.053	.026	-.098	-.237	-.201	.021
1959 or prior	-.022	-.049	-.047	.0003	-.042	-.146	-.068	-.011
Year of Immigration by Ethnicity Interaction								
(Mexican) (1975–80)			-.091				-.205	
(Mexican) (1970–74)			-.064				-.182	
(Puerto Rican) (Island Born)			-.015				.012	
(Vietnamese/Other) (1975–80)				.062				.029
(Vietnamese/Other) (1970–74)				.031				-.091
Family Characteristics								
Female Head	—[c]	—[c]	—[c]	—[c]	.124	.177	.209	.049
Number of Persons $\geq$ 65[d]	.012	.037	.092	.075	.022	.039	.285	.187
Number of Persons < 18	.008	.024	.015	.013	.051	.086	.059	.045
Other Income	-.001	-.0003	-.005	-.002	-.020	-.025	-.033	-.016
Economic Dependency Ratio	-.045	-.159	-.118	-.044	-.189	-.376	-.341	-.169
Extended Family	.062	.105	.074	.072	.028	.056	-.024	-.037
Locational Characteristics								
Area Wage Rate	-.003	-.002	-.006	.002	-.006	-.018	-.018	-.023
Area Unemployment Rate	.055	.338	.490	.300	.230	.850	.096	-.598
Area Percent Immigrant	.001	.001	.001	.001	.001	-.001	.004	-.00001
State Benefit Level	.00003	.0001	.0001	.0001	.0004	.001	.001	.0003

Note: Appendix C provides logit parameters for the net probability increments reported in this table.
[a]Evaluated at $p' = .040$ for whites; $p' = .103$ for blacks; $p' = .094$ for Hispanics; and $p' = .069$ for Asians.
[b]Evaluated at $p' = .182$ for whites; $p' = .368$ for blacks; $p' = .354$ for Hispanics; and $p' = .175$ for Asians.
[c]Not entered in equations.
[d]Excludes the head.

eligibility and benefits differently from the general public assistance programs, but it could also reflect a low incidence of single headship among recent immigrants.

Finally, the results for headship-specific models substantiate further the claim that recent Mexican immigrant families were considerably less likely and recent Vietnamese immigrant families more likely to participate in welfare programs than their race/ethnic counterparts who were native born. Among Asian single heads, Vietnamese origin was associated with a 14 percent greater likelihood of welfare participation, but no additional increase in welfare dependency resulted from length of U.S. residence, or the conditional effect of recent arrival and Vietnamese origin. Recent Vietnamese immigrant families with a married head were roughly 10 percent more likely to receive transfer payments in 1979 than other Asian immigrant and native families. Among the Hispanics, membership in the most recent cohort lowered the likelihood of program participation by 19 percent for single heads and 4 percent for married heads. Program participation probabilities observed among recent Mexican immigrants were larger still, 13 percent for married heads and almost 50 percent for single heads.

Effects of other eligibility-determining factors reported in Tables 7 and 8 are similar to those discussed for Table 5, and need no further repetition. An exception, given our interest in policy-relevant factors associated with immigrant status, is the persisting negative effects on program participation associated with high levels of proficiency in English among the Hispanic and Asian populations. That these effects were generally less pronounced for Asians than for Hispanics may partly reflect the positive outcomes of the Refugee Resettlement Program in providing various forms of assistance, including language training, to facilitate their social integration and

achievement of economic self-sufficiency. No such programs are available for Hispanic immigrants, but our findings suggest that investment in English-language training programs might prove to be a cost-effective investment via enhanced labor market opportunities and lowered levels of welfare utilization among the Hispanic population. (See Bach and Tienda, 1984, for further discussion of this issue.)

Discussion

Our study was motivated by a widespread, but relatively understudied concern that immigrants pose a substantial drain on public resources because of their disporportionate participation in welfare programs. Despite the marginally higher average participation in income transfer programs and the observed higher average transfer payments received by immigrant households (Table 2), the multivariate analysis of the participation decision revealed that immigrants were, other things equal, considerably less likely than natives to become welfare dependents. Moreover, with the exception of recent Asian immigrants, allegations that recent immigrants participate in welfare programs at rates higher than earlier arrivals found no empirical support in our analyses. This conclusion holds despite the higher representation of minorities and lower-skilled workers among immigrants who arrived during the late sixties and throughout the seventies. The notable exceptions were the recent Asian immigrants, notably those who arrived after 1974. This group not only comprises a small share of the total foreign-born population, but also poses a unique problem with respect to receipt of income transfers. Many of the Asians who arrived during the seventies were admitted for political reasons as refugees and were provided varying amounts of relocation assistance

to facilitate their social and economic integration into the United States, hence the positive effects on welfare dependency associated with this subset of Asian immigrants.

There is no single explanation for the generalized beliefs about the extent to which foreign-born groups rely on income-conditioned transfer payments. In searching for explanations, one must acknowledge the role of resettlement programs in nurturing these beliefs. The federally funded resettlement assistance currently extended to refugees from Southeast Asia is not the first large-scale program of its kind; Cuban refugees who arrived during the early 1960s also were provided resettlement assistance by the federal government, as were those who arrived during the 1980 Mariel exodus. All of these programs, however, differ in form and duration. The Refugee Resettlement Program established by the 1980 legislation provides food stamps and direct cash assistance to refugee households for a period of three years. At that point, households are eligible to participate in the regular programs supported by state, local and federal funds. Furthermore, congressionally mandated annual reports by the Office of Refugee Resettlement keep national and local officials informed about the cost of this income maintenance program, which caters to a specific subset of the foreign born, that is, the "legitimate" political exiles as determined by U.S. foreign policy.

The strong findings that immigrant families were <u>less</u> likely to receive public assistance income than their native-born counterparts of the same race/ethnic background should provide some relief to policymakers concerned about the net aggregate public dependency imposed by the foreign born, and particularly the most recent arrivals. However, if continued immigration brings to the United States an increasing share of individuals with low levels of human capital who thus have lower prospects for success in the U.S. labor

market, then it is conceivable that total aggregate public-dependency burden of immigrants could increase because both the share of eligible participants and their potentially greater need levels could rise.

Since many recent immigrants are from lower socioeconomic backgrounds than was true of immigrants who arrived during the fifties and sixties, the long-term effect of immigration on the welfare budget could rise because the overall cost of such participation is governed not only by the need and benefit levels established by states, but also by the proportions of participants among those who are eligible to receive payments. Even with rates of welfare participation below those of natives with similar characteristics, the total use of transfer income by the foreign born probably is not a trivial amount. The economic contributions immigrants make through their high rates of labor force participation and business activity are likely to be nontrivial, even on the margin. When evaluated in this light, the negative effects of immigrant status on welfare participation are all the more impressive.

In conclusion, our analyses and findings challenge the popular restraining myth that immigrants, conceived as an undifferentiated group with respect to class background or region of origin, prefer welfare to work; they also challenge the widely shared belief that an amnesty program will spawn a "rush" for public assistance benefits. Overall, our study provides no basis for concluding that further immigration restrictions are the best way to reduce public assistance caseloads. Rather, our policy recommendations take a more constructive approach.

In light of much evidence that immigrants participate extensively in the labor force, our finding that low education and limited English skills increase the probability of receiving income transfers suggests that

investment in resettlement programs which emphasize improving the employability of new immigrants (rather than direct cash assistance as provided to refugees) would go a long way toward reducing the extent and level of welfare benefits paid to immigrants. That educational and English-language training programs would be a cost-effective social investment is undeniable, particularly among young immigrants who will have longer periods of time to reap the benefits of the increased human capital. Not only will such investments enhance the earnings and productivity of foreign-born workers, thereby contributing to aggregate output, but they will also lower federal outlays for unproductive social welfare payments in the long run. Moreover, as the earnings of immigrants increase, so also do their tax contributions.

Our results are, of course, tentative. While we are quite confident about the robustness of our finding that immigrants rely <u>less</u> on transfer income than otherwise comparable natives, a great deal more research and analysis is needed to address the broader question concerning the participation of immigrants in other types of income transfer programs. Future research endeavors should include an analysis of the participation of immigrants in social security as well as the determinants of the average payment levels of all kinds of programs. We must also devote further attention to solving the puzzling results with respect to the differential importance of single headship on welfare recipiency according to national origin, and probe more deeply into the linkages between family labor supply patterns and welfare dependency. These endeavors should help resolve our unexplained results with respect to the lower participation of some elderly heads in income transfer programs.

A final issue to be pursued in further analyses concerns the influence of welfare benefit levels on the participation decision. Our statistically significant, but substantively trivial, positive effect on the welfare

participation decision of the state benefits must be evaluated against evidence about the influence of labor market conditions on welfare dependency. Such analyses should also evaluate the influence of benefit levels on welfare participation by taking into account the recent internal migration behavior of natives and immigrants. At a minimum, a comparison of differential program participation propensities between natives and immigrants who did and did not move to states with higher benefit levels and/or better employment opportunities is needed to tighten the link between labor market behavior and welfare participation. We believe, based on our preliminary results and in light of the evidence presented by Blau (1984) and Simon (1984), that we will be able to demonstrate even more forcefully that immigrants and natives alike prefer gainful employment to welfare payments of any kind.

Appendix A

MEANS AND STANDARD DEVIATIONS OF VARIABLES USED IN REGRESSION ANALYSES ACCORDING TO RACE/ETHNICITY OF HEAD: PUBLIC ASSISTANCE RECIPIENTS AND NONRECIPIENTS
(Standard Deviations in Parentheses)

	Public Assistance Recipients				Nonrecipients			
	White	Black	Hispanic	Asian	White	Black	Hispanic	Asian
Individual Characteristics								
Age of Head								
20-29 years	.17	.24	.22	.15	.16	.20	.26	.14
	(.37)	(.43)	(.41)	(.36)	(.36)	(.40)	(.44)	(.34)
30-64 years	.57	.59	.65	.66	.69	.69	.68	.79
	(.50)	(.49)	(.48)	(.47)	(.46)	(.46)	(.47)	(.41)
65+ years	.27	.17	.14	.19	.16	.11	.06	.08
	(.44)	(.38)	(.34)	(.39)	(.36)	(.31)	(.24)	(.27)
Head's Education, in Years	9.97	9.28	7.92	11.13	12.38	10.86	9.89	13.77
	(3.26)	(3.51)	(4.20)	(5.02)	(3.34)	(3.63)	(4.38)	(4.42)
Head's English Proficiency	3.96	3.99	2.94	3.00	3.97	3.99	3.28	3.48
	(.25)	(.10)	(1.08)	(.99)	(.21)	(.12)	(.93)	(.77)
Head's Ethnicity								
Mexican			.48				.59	
			(.50)				(.49)	
Puerto Rican			.27				.12	
			(.45)				(.33)	
Other Hispanic			.25				.29	
			(.43)				(.45)	
Japanese, Filipino, Indian				.37				.56
				(.48)				(.50)
Korean and Chinese				.31				.34
				(.46)				(.47)
Vietnamese/Other				.32				.10
				(.47)				(.30)
Head's/Spouse's Year of Immigration								
1975-80	.01	.003	.04	.42	.01	.01	.07	.23
	(.07)	(.05)	(.19)	(.49)	(.08)	(.10)	(.26)	(.42)
1970-74	.01	.004	.07	.13	.01	.01	.10	.19
	(.07)	(.06)	(.25)	(.34)	(.07)	(.11)	(.30)	(.39)
1960-69	.01	.01	.11	.14	.01	.02	.15	.18
	(.09)	(.07)	(.31)	(.35)	(.12)	(.13)	(.36)	(.39)
1959 or prior	.04	.01	.11	.14	.05	.01	.11	.14
	(.19)	(.08)	(.31)	(.35)	(.21)	(.11)	(.32)	(.35)
Native Born	.94	.98	.44	.16	.93	.95	.46	.25
	(.23)	(.13)	(.50)	(.37)	(.26)	(.22)	(.50)	(.43)
Family Characteristics								
Headship								
Single Male	.04	.06	.04	.08	.03	.06	.05	.05
	(.20)	(.24)	(.20)	(.27)	(.17)	(.24)	(.21)	(.22)
Single Female	.36	.66	.52	.23	.09	.28	.14	.09
	(.48)	(.47)	(.50)	(.42)	(.29)	(.45)	(.34)	(.28)
Couple	.60	.28	.44	.69	.88	.67	.82	.86
	(.49)	(.45)	(.50)	(.46)	(.33)	(.47)	(.39)	(.34)
Immigrant Family[a]	.06	.02	.56	.84	.07	.05	.54	.75
	(.23)	(.13)	(.50)	(.37)	(.26)	(.22)	(.50)	(.43)
Number of Persons ≥ 65[b]	.25	.13	.18	.41	.13	.08	.06	.10
	(.48)	(.35)	(.44)	(.64)	(.36)	(.29)	(.25)	(.32)
Number of Persons < 18	1.16	2.01	1.95	1.82	.94	1.40	1.58	1.28
	(1.32)	(1.76)	(1.63)	(1.74)	(1.14)	(1.39)	(1.48)	(1.28)
Other Income, in Thousands	$1.76	$.69	$.61	$1.45	$2.63	$1.01	$1.09	$1.86
	(5.06)	(2.49)	(2.21)	(3.70)	(6.55)	(2.98)	(3.96)	(5.06)
Economic Dependency Ratio	.48	.45	.44	.60	.72	.78	.75	.78
	(.45)	(.44)	(.46)	(.45)	(.41)	(.39)	(.36)	(.35)
Extended Family	.20	.24	.23	.44	.07	.14	.13	.17
	(.40)	(.43)	(.42)	(.50)	(.25)	(.34)	(.34)	(.37)
Locational Characteristics								
Area Wage Rate	$7.01	$7.24	$7.44	$7.79	$7.07	$7.27	$7.36	$7.79
	(.94)	(1.02)	(.93)	(.78)	(.96)	(1.02)	(.94)	(.78)
Area Unemployment Rate	.07	.07	.07	.06	.07	.07	.06	.06
	(.02)	(.02)	(.02)	(.02)	(.02)	(.02)	(.02)	(.02)
Area Percent Immigrant	5.60	7.04	15.76	13.46	5.45	7.06	13.97	12.96
	(6.74)	(8.02)	(9.85)	(7.36)	(6.25)	(7.97)	(9.89)	(7.47)
State Benefit Level	$345.10	$303.30	$372.15	$442.54	$340.86	$291.99	$343.44	$428.68
	(121.05)	(127.34)	(134.63)	(106.25)	(117.07)	(126.23)	(142.76)	(111.85)

[a]If either or both were foreign born.
[b]Excludes the head.

Appendix B

HEADSHIP-SPECIFIC MODEL OF 1979 PUBLIC ASSISTANCE PARTICIPATION: TRANSFORMED LOGIT COEFFICIENTS FOR WHITE, BLACK, HISPANIC, AND ASIAN FAMILIES
(T-Statistics in Parentheses)

	Married Couples				Single Heads			
	White	Black	Hispanic	Asian	White	Black	Hispanic	Asian
Individual Characteristics								
Age of Head								
30-64 years	-.111	-.297	.278	-.239	-.379	-.358	-.106	-.361
	(-.816)	(-2.063)	(2.574)	(-1.315)	(-2.438)	(-3.686)	(-.968)	(-1.565)
65+ years	.080	-.213	.642	.791	-.702	-.214	.469	.890
	(.419)	(-.976)	(3.802)	(3.293)	(-3.103)	(-1.286)	(2.411)	(2.424)
Head's Education, in Years	-.097	-.111	-.059	-.033	-.117	-.112	-.066	-.019
	(-7.891)	(-8.090)	(-5.963)	(-2.466)	(-5.694)	(7.897)	(-5.011)	(-.836)
Head's English Proficiency	-.073	-.027	-.286	-.290	.208	.041	-.022	.024
	(-.790)	(-.114)	(-6.331)	(-3.802)	(1.305)	(.203)	(-.408)	(.196)
Head's Ethnicity								
Mexican			-.296				-.242	
			(-3.179)				(-2.137)	
Puerto Rican			.572				.580	
			(4.530)				(4.453)	
Japanese, Filipino, Indian				-.150				.063
				(-1.061)				(.276)
Vietnamese/Other				1.241				1.047
				(7.416)				(4.149)
Family Characteristics								
Immigrant Family[a]	-.442	-.672	-.717	.427	-.384	-.906	-.588	.187
	(-4.696)	(-4.957)	(-7.420)	(2.273)	(-2.392)	(-7.262)	(-5.054)	(.835)
Female Head	--b	--b	--b	--b	.819	.762	.950	.357
					(4.774)	(5.911)	(6.968)	(1.715)
Number of Persons ≥ 65[c]	.278	.401	1.102	1.162	.162	.174	1.266	1.297
	(2.516)	(2.550)	(10.039)	(9.524)	(.866)	(1.087)	(7.716)	(6.283)
Number of Persons < 18	.209	.255	.167	.211	.338	.372	.251	.325
	(5.798)	(8.228)	(6.916)	(5.421)	(6.054)	(12.466)	(7.753)	(4.695)
Other Income	-.023	-.002	-.054	-.027	-.131	-.105	-.141	-.114
	(-2.929)	(-.171)	(-3.775)	(-1.762)	(-5.676)	(-4.438)	(-5.442)	(-3.700)
Economic Dependency Ratio	-1.159	-1.734	-1.383	-.738	-1.247	-1.626	-1.516	-1.190
	(-8.747)	(-11.644)	(-11.921)	(-4.920)	(-9.624)	(-17.819)	(-15.496)	(-5.716)
Extended Family	1.632	1.131	.829	1.088	.173	.231	-.144	-.238
	(13.320)	(8.402)	(8.087)	(7.926)	(1.030)	(2.274)	(-1.243)	(-1.040)
Locational Characteristics								
Area Wage Rate	-.091	-.026	-.084	.012	-.039	-.077	-.080	-.134
	(-1.700)	(-.408)	(-1.503)	(.139)	(-.502)	(-1.402)	(-1.125)	(-1.031)
Area Unemployment Rate	1.424	3.756	6.091	3.604	1.451	3.693	1.070	-4.134
	(.687)	(1.296)	(2.824)	(1.039)	(.476)	(1.525)	(.362)	(-.736)
Area Percent Immigrant	.022	.009	.011	.010	.006	-.004	.014	-.001
	(3.805)	(1.512)	(2.646)	(1.130)	(.697)	(-.668)	(2.549)	(-.102)
State Benefit Level	.0007	.0007	.0006	.001	.003	.002	.002	.002
	(1.694)	(1.104)	(1.598)	(2.262)	(4.233)	(4.381)	(3.967)	(2.242)
Constant	-1.186	-.402	-.411	-3.156	-1.495	.311	-.251	-1.108
	(-2.201)	(-.377)	(-.947)	(-4.125)	(-1.777)	(.348)	(-.449)	(-.959)
Degrees of Freedom	15977	5264	9790	6273	2321	3535	3032	1097
-2 (log likelihood X^2)	4814.11	2934.56	5194.47	2405.71	1858.09	3710.74	3100.77	850.35
(N)	(15992)	(5279)	(9807)	(6290)	(2337)	(3551)	(3050)	(1115)

[a]If either head or both were foreign born.
[b]Not entered in equations.
[c]Excludes the head.

Appendix C

HEADSHIP-SPECIFIC MODEL OF 1979 PUBLIC ASSISTANCE PARTICIPATION: TRANSFORMED LOGIT COEFFICIENTS FOR WHITE, BLACK, HISPANIC, AND ASIAN FAMILIES
(T-Statistics in Parentheses)

	Married Couples				Single Heads			
	White	Black	Hispanic	Asian	White	Black	Hispanic	Asian
Individual Characteristics								
Age of Head								
30-64 years	-.063	-.286	.126	-.147	-.402	-.364	-.240	-.328
	(-.456)	(-1.961)	(1.125)	(-.795)	(-2.565)	(-3.720)	(-2.109)	(-1.394)
65+ years	.182	-.214	.440	1.057	-.804	-.252	.162	1.020
	(.935)	(-.971)	(2.514)	(4.169)	(-3.434)	(-1.505)	(.784)	(2.665)
Head's Education, in Years	-.100	-.112	-.060	-.041	-.115	-.113	-.066	-.020
	(-8.098)	(-8.151)	(-5.964)	(-2.967)	(-5.551)	(-7.923)	(-4.937)	(-.894)
Head's English Proficiency	-.025	-.032	-.324	-.194	.096	.007	-.072	.054
	(-.265)	(-.132)	(-6.884)	(-2.413)	(.570)	(.035)	(-1.300)	(.431)
Head's Ethnicity								
Mexican			-.145				-.170	
			(-1.378)				(-1.314)	
Puerto Rican			.180				-.003	
			(.593)				(-.011)	
Japanese, Filipino, Indian				-.186				.072
				(-1.311)				(.307)
Vietnamese/Other				.277				.960
				(.691)				(2.094)
Head's/Spouse's Year of Immigration								
1975-80	-.064	-.368	-.487	.647	-1.853	-1.178	-.844	.262
	(-.319)	(-1.534)	(-2.081)	(2.669)	(-2.648)	(-4.042)	(-2.955)	(.826)
1970-74	-.241	-1.305	-.584	.252	.141	-.956	-.388	.422
	(-1.207)	(-4.488)	(-2.860)	(1.027)	(.284)	(-4.356)	(-1.610)	(1.295)
1960-69	-.375	-.675	-.626	.415	-.655	-1.020	-.881	.148
	(-2.262)	(-3.122)	(-4.906)	(1.832)	(-2.148)	(-5.209)	(-5.289)	(.473)
1959 or prior	-.570	-.532	-.552	.004	-.279	-.627	-.299	-.073
	(-5.068)	(-2.684)	(-4.635)	(.020)	(-1.532)	(-3.080)	(-1.814)	(-.210)
Year of Immigration by Ethnicity Interaction								
(Mexican) (1975-80)			-1.069				-.897	
			(-3.487)				(-2.131)	
(Mexican) (1970-74)			-.749				-.795	
			(-2.924)				(-2.497)	
(Puerto Rican) (Island Born)			-.178				.051	
			(-.580)				(.202)	
(Vietnamese/Other) (1975-80)				.976				.199
				(2.276)				(.372)
(Vietnamese/Other) (1970-74)				.489				-.629
				(.761)				(-.798)
Family Characteristics								
Female Head	--[a]	--[a]	--[a]	--[a]	.833	.760	.914	.342
					(4.827)	(5.889)	(6.661)	(1.626)
Number of Persons $\geq$ 65[b]	.298	.400	1.083	1.182	.150	.168	1.245	1.297
	(2.688)	(2.533)	(9.833)	(9.628)	(.801)	(1.054)	(7.497)	(6.262)
Number of Persons < 18	.204	.262	.177	.198	.340	.371	.256	.311
	(5.602)	(8.393)	(7.260)	(4.992)	(6.069)	(12.405)	(7.775)	(4.432)
Other Income	-.023	-.003	-.054	-.025	-.133	-.106	-.146	-.111
	(-2.899)	(-.201)	(-3.751)	(-1.687)	(-5.713)	(-4.513)	(-5.538)	(-3.566)
Economic Dependency Ratio	-1.152	-1.720	-1.380	-.693	-1.270	-1.618	-1.493	-1.169
	(-8.701)	(-11.545)	(-11.877)	(-4.634)	(-9.692)	(-17.693)	(-15.149)	(-5.572)
Extended Family	1.608	1.139	.871	1.124	.189	.240	-.107	-.256
	(13.047)	(8.444)	(8.427)	(8.122)	(1.114)	(2.352)	(-.920)	(-1.112)
Locational Characteristics								
Area Wage Rate	-.083	-.025	-.073	.033	-.040	-.078	-.078	-.158
	(-1.558)	(-.385)	(-1.308)	(.386)	(-.515)	(-1.423)	(-1.089)	(-1.198)
Area Unemployment Rate	1.418	3.655	5.744	4.700	1.541	3.654	.420	-4.146
	(.684)	(1.260)	(2.648)	(1.350)	(.504)	(1.509)	(.142)	(-.732)
Area Percent Immigrant	.022	.010	.010	.011	.007	-.003	.016	-.0001
	(3.649)	(1.312)	(2.474)	(1.192)	(.731)	(-.517)	(2.946)	(-.008)
State Benefit Level	.0008	.0007	.0007	.002	.003	.002	.002	.002
	(1.772)	(1.161)	(1.764)	(2.525)	(4.139)	(4.434)	(4.089)	(2.394)
Constant	-1.454	-.421	-.344	-3.753	-1.029	.455	.020	-1.153
	(-2.647)	(-.388)	(-.786)	(-4.773)	(-1.172)	(.502)	(.035)	(-.994)
Degrees of Freedom	15974	5261	9784	6268	2318	3532	3026	1092
-2 (log likelihood X^2)	4807.79	2925.85	5163.99	2385.48	1849.22	3707.48	3065.47	847.46
(N)	(15992)	(5279)	(9807)	(6290)	2337	3551	3050	1115

[a]Not entered in equations.
[b]Excludes the head.

NOTES

1. In a review article about the economic effects of immigration in European countries, Macmillen (1982) also concluded that there exists no empirical evidence indicating that when compared to the indigenous population, immigrants impose a net burden on social provisions relative to their statutory contributions of all kinds.

2. A recent example is the legal debate concerning the "right" of the State of Texas to deny educational services to the children of undocumented aliens.

3. Legislation which restricts access of immigrants (except refugees) to Supplemental Security Income or public assistance benefits for a period of three years following their legal admission to the United States provides stark testimony of the widespread belief that immigrants prefer welfare to work. A current example is found in the provision of the last version of the Simpson-Mazzoli bill, approved by the House of Representatives, which prohibited individuals granted amnesty from participating in public assistance programs for five years following their legalization. Another important aspect of the ill-fated Simpson-Mazzoli bill was the stipulation that permanent residency be granted only to those who could verify being employed (thus, ineligible for public assistance) during the first two years following the petition for legalization. This work requirement, which is reminiscent of the workfare provisions of the Job Training Partnership Act (JTPA) and a similar work requirement passed during the Nixon administration was motivated by a fear that immigrants prefer welfare to work. That allegation has yet to receive empirical scrutiny.

4. The sampling rate for each of the 8 groups was as follows:

Group	Sampling Rate	Housing Units
Foreign Asian	1.0	10,153
Foreign Hispanic	0.5	9,669
Foreign black	1.0	4,014
Other foreign	0.2	10,125
Native Asian	1.0	4,728
Native Hispanic	0.3	8,980
Native black	0.1	8,784
Other native	0.015	9,840

5. We experimented with a more restrictive definition of immigrant families and found essentially unchanged descriptive or multivariate results. In light of this evidence, we opted to present the most general definition of immigrant families, which rendered the highest possible estimate of program participation by immigrants.

6. In a recent study, Bach and Tienda (1984) showed that immigrants from Africa have higher educational attainment levels than the general U.S. population. More than likely, these individuals enter under the 3rd and 6th admission categories to fill highly skilled jobs for which domestic workers are allegedly in short supply. Both 3rd and 6th preference admission categories require labor certification and are the only admission categories not geared to family reunification, that is, relatives of U.S. residents and citizens. These changes resulted from the 1965 Amendments to the Immigration and Nationality Act.

7. Our categorization of Asians is designed to distinguish the "successful" Asians from those who have entered most recently and under a refugee status. Because of the small sample size of Vietnamese, we grouped them

with "others" who also include individuals from other parts of Southeast Asia, but exclude Hawaii. A more refined specification of the effect of Vietnamese nationality (refugee status) is possible through the computation of interaction terms with the year-of-arrival variable.

8. This group was problematic for others as well. Rather than attempt to allocate the mainland and island-born Puerto Ricans as natives and immigrants, respectively, both Blau (1984) and Simon (1984) excluded Puerto Ricans altogether from their analyses. Although Simon stated that this made little difference for his conclusions, from a policy standpoint his procedure may be less justifiable.

9. In representing the presence of elderly members on a family's participation decision, we excluded the head from the count if he or she was 65 or older in order to distinguish those families whose receipt of public assistance income may be due to the presence of an adult elderly member other than the head. This proved necessary in light of the inclusiveness of the dependent variable used in the analysis. Failure to do so would have resulted in double counting of the effects of the head's age on the welfare participation decision and distorted the coefficients.

10. We experimented with other measures of family assets, including home ownership, but found these to be insignificant in influencing the welfare participation decision. The other-income measure is suitable for our purposes because it is exogeneous to both the welfare and labor force participation decisions.

11. This is, in effect, a family's economic dependency ratio.

12. Supplemental Security Income includes several programs catering to the old, the blind, and the disabled under one general umbrella. Unfortunately, the census coding does not differentiate these various transfer programs.

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