COMMENTS ON "IMMIGRATION AND THE U.S. ECONOMY"

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In the 1950s, only around 250 thousand immigrants entered the U.S. annually. By the 1990s, almost 1 million legal and 300 thousand illegal aliens entered the United States annually. This resurgence of immigration has motivated many economists and other social scientists to examine how immigration affects economic opportunities in the United States. Hanson, Scheve, Slaughter, and Spilimbergo (henceforth HSSS) have written an ambitious survey of this voluminous literature.

In their survey, HSSS focus on four related issues:

1. What is the impact of immigration on the job market opportunities of native workers? It is often claimed that immigrants "take jobs away" from natives. What is the nature of the empirical evidence that supports or contradicts this assertion?

2. What factors determine illegal immigration to the United States? There are at least 6 million illegal aliens currently residing in the country. What role do economic conditions and border enforcement play in determining the size of the illegal flow?

3. What is the fiscal impact of immigration? It is well known that immigrant households have higher welfare participation rates than native households. What is the magnitude of the tax burden that immigrants impose on native taxpayers?

4. What is the political economy of immigration policy? For decades, most surveys of the U.S. population have shown that natives consistently prefer lower levels of migration. At the same time, however, policy makers have consistently opted to

admit more immigrants. Why is there such a striking discrepancy between popular preferences and policy choices?

The HSSS survey is comprehensive and touches on most of the key points that are relevant in the immigration debate. Instead of providing a point-by-point discussion of the many issues and concerns raised by HSSS, I have chosen to present a more detailed appraisal of some selected questions in the literature. In particular, I have selected to focus on two or three issues that I feel should be at the frontier of the immigration research agenda. I believe that these issues not only lie at the core of the immigration debate in the United States and in many other source countries, but also that a resolution of these issues would help us get a much better understanding of how the immigration debate will evolve in the next decade..

The labor market impact of immigration

Do immigrants have an adverse impact on the earnings and employment opportunities of native workers? If so, how large is the loss in the economic welfare of natives? And are all native groups equally affected by the entry of immigrants into the labor market? A large literature now purports to document the impact of immigrants on the native labor market in a number of host countries. As HSSS implicitly note, this literature has evolved through three different (and not entirely successful) phases in attempting to answer these important questions.

In the first phase, many economists exploited the fact that immigrants typically tend to cluster in a relatively small number of geographic areas in the host country. Each geographic area was then treated as a closed labor market. The intuition guiding the empirical analysis was that if we could observe a number of closed labor markets which immigrants penetrate randomly, we could relate the change in the wage of native workers to the proportion of immigrants in the

population, and the estimated parameters would summarize the impact of immigration on native employment opportunities.

Almost all of the early empirical studies in the literature conducted this exercise in estimating "spatial correlations" by defining a city or metropolitan area in the United States as the empirical counterpart of the closed labor market in the conceptual framework. The typical study then regressed a measure of the native wage in the locality on the relative quantity of immigrants in that locality (or the change in the wage in the locality over a specified time period on the change in the number of immigrants in the locality). As HSSS note, the spatial correlations estimated in this literature tend to be small and vary erratically over time.

The next phase of the literature pointed out the (now) obvious fact that the comparison of economic conditions across different metropolitan areas, as well as the pre- and post-immigration comparison in a particular metropolitan area, presumes that the labor markets are closed (once immigration takes place). However, metropolitan areas in the United States and abroad are not closed economies; labor, capital, and goods flow freely across localities and tend to equalize factor prices in the process. As long as native workers and firms respond to the entry of immigrants by moving to areas offering better opportunities, there is no reason to expect a correlation between the wage of natives in a local labor market and the presence of immigrants. As a result, the comparison of local labor markets may be masking the "macro" effect of immigration.

Because of these responses, Borjas, Freeman, and Katz (1992) proposed shifting the analysis to the national labor market, which was presumed to be relatively more closed than the local labor market. This shift in the unit of observation led to the factor proportions approach, which effectively simulated how the (national) wage differential between skilled and unskilled

workers responded to changes in the factor proportion of skilled and unskilled workers in the national labor force. This methodology has typically suggested that there may be sizable effects of immigration on relative wages in the United States, particularly at the bottom end of the skill distribution.

The third (and current) phase of the literature attempts to synthesize the results from the spatial correlation methodology with the factor proportion approach by documenting the existence of equilibrating flows that tend to equalize opportunities across labor markets. If these flows were sufficiently important it would then be possible for immigration to have an impact at the national level, but there would be little difference in economic outcomes across local labor markets. The equilibrating flows that have been investigated include the internal migration of native workers or the internal migration of jobs and capital (which HSSS call the "output-mix" approach). This literature is not yet fully developed and has not yet generated a widely accepted set of "stylized facts." Nevertheless, there are strong empirical suggestions, discussed in HSSS, that equilibrating flows of both workers and jobs exist across regions of the United States, so that the spatial correlation approach may be masking much of the presumed impact of immigration.

Although I have contributed to all three phases of this literature—and changed my mind about the relative attractiveness of the various methodologies a number of times in the process—there remains a fundamental question in my mind, a question that HSSS do not pose. As I first noted in my *Journal of Economics Literature* survey (Borjas, 1994, p. 1700), there is an unresolved puzzle facing those who wish to interpret the weak spatial correlation between immigration and native wages in terms of an economy-wide equilibrium process: *Why should it be that many other regional variations persist over time, but that the local impact of immigration on native workers is arbitraged away immediately?* Put differently, many economists have made

a career of documenting how regional differences across labor markets can be explained in terms of differences in unemployment rates, or unionization rates, or the industrial structure, or many other variables. Why should all of these spatial correlations be so readily observed and so easy to measure, yet the spatial correlation between immigration and wages be so difficult to find? Why should flows of native workers and capital help to equilibrate the regional wage differentials that can be attributed to immigration, but not the regional wage differentials that are due to other factors?

I suspect that part of the answer to this puzzle lies in an issue that has not yet received sufficient attention in the empirical literature: immigrants are not randomly distributed across the labor markets in the host country. Immigrants typically choose to settle in some labor markets and avoid others. It is easy to demonstrate that the spatial correlation approach would fail to yield any evidence of adverse wage effects if immigrants were income-maximizers with respect to their location decision in the host country—even if there were no equilibrating flows across labor markets.

In particular, suppose there exist sizable wage differences across regions or states in the host country (for concreteness, the United States), even for workers of particular skills looking for similar jobs. Persons born in the United States and living in a particular state often find it expensive to move across states. Suppose that migration costs are, for the most part, fixed costs—and that these fixed costs are relatively high. The existing wage differentials across states may then fail to motivate large numbers of native workers to move because the migration costs swamp the interstate differences in income opportunities. As a result, native internal migration will not arbitrage interstate wage differentials away.

In contrast, newly arrived immigrants in the United States are a self-selected sample of persons who have chosen to bear the fixed cost of the geographic move. Suppose that once this fixed cost is incurred, it costs little to choose one particular state of destination over another. Income-maximizing immigrants will obviously choose the destination that offers the best income opportunities. Newly arrived immigrants will then tend to live in the "right" state, in the sense that they are clustered in the state that offers them the highest wages.

The income-maximization hypothesis thus leads to two important insights. First, immigrants will choose to live in high wage areas. More specifically, low-skill immigrants will tend to cluster in the states that pay relatively high wages to low-skill workers, while high-skill immigrants will tend to cluster in those states that pay relatively high wages to high-skill workers. Second, immigrants may play a crucial—and neglected—role in a host country's labor market: they are "marginal" workers whose location decisions arbitrage wage differences across sectors. The immigrant population may then play a disproportionately large role in helping the national labor market attain an efficient allocation of resources.

Is there any evidence that new immigrants do, in fact, tend to locate themselves in high-wage areas? The hypothesis that immigrants tend to cluster in high-wage states would seem to contradict a well known "stylized fact": immigrants have clustered and continue to cluster in a relatively few numbers of areas in the United States. In 1990, 74 percent of newly arrived immigrants, the immigrants who had been in the country for fewer than five years, lived in one of the six main immigrant-receiving states: California, New York, Texas, Florida, Illinois, and New Jersey. In contrast, only 36 percent of natives lived in those states.

Although this clustering might raise serious doubts about the validity of the income-maximization hypothesis, it is simply not true that all immigrants cluster in the same states. It

turns out that different types of immigrants tend to live in different states. Table 1 describes the geographic distribution of newly arrived immigrants in 1990. Half of the immigrants with fewer than 9 years of schooling lived in California, as compared to only a quarter of the immigrants with a college education. In contrast, 9.2 percent of the immigrants with fewer than 9 years of schooling and 14.9 percent of college graduates lived in New York. Overall, the data reveal that although fewer than 20 percent of the immigrants who were high school dropouts lived *outside* the six main immigrant-receiving states, almost 40 percent of the immigrants with a college degree lived outside those states.

Let $M_{jk}(t)$ be the number of immigrants who arrived between 1980 and 1984, reside in state j, and belong to skill group k, and let $M_k(t)$ be the total number of the new immigrants who belong to that skill group. The variables $N_{jk}(t)$ and $N_k(t)$ give the respective number of native workers in the state-education cells at that particular time. One can define the index of relative supply for the state-education cell (j, k) as:

(1) $$R_{jk}(t) = \frac{M_{jk}(t)/M_k(t)}{N_{jk}(t)/N_k(t)}.$$

The variable $R_{jk}(t)$ measures the relative supply of newly arrived immigrants in education group k to state j. The denominator in (1) effectively "deflates" the supply of immigrant workers in a particular skill group to a particular state by the relative importance of that state in the employment of similarly skilled native workers. The relative supply index equals one when immigrant and native workers belonging to the same education group have the same geographic distribution, and would be greater than one if immigrants in education group k were over-represented in state j.

It is well known that there are significant interstate differences in real wages in the United States, and that the structure of these differences likely differs across skill levels. In other words, different states tend to offer relatively different wages to different skill groups. I used an earnings function to calculate the regional wage structure as of 1980. In particular, I calculated the average wage paid by each state (after adjusting for the age and gender of workers) to workers in each education group.

Table 2 summarizes the cross-section relationship between interstate wage differentials and the location of newly arrived immigrants. For each education group, the table differentiates between the "highest-paying" states and the "lowest-paying" states. The highest-paying states are those where the adjusted wage ranks among the top five for that skill group, while the lowest-paying states are those where the adjusted wage ranks in the bottom five. For each of these sets of states, I then calculated the average index of relative supply. The data strongly suggest a behavioral clustering effect for new immigrants. Consider, for example, the geographic distribution of workers who are high school graduates. In 1980, the relative supply index giving the number of new immigrants relative to natives in the five "best" states for high school graduates is 2.4. In contrast, new immigrants are relatively absent from the five states that offer the lowest wages for high school graduates; the relative supply index in the "worst" states is .14. Generally, new immigrants tend to be over-represented in the states that offer the highest wages, and under-represented in the states that offer the lowest wages.

It turns out that the newest immigrant arrivals are over-represented in high-wage states not only relative to natives, but also relative to immigrants who arrived in earlier waves. To show this, the last two columns of the table use a slightly different definition of the relative supply index. Let $I_{jk}(t)$ to be the number of immigrants in earlier waves who reside in state j and belong

to skill group k at time t, and $I_k(t)$ be the total number of these earlier immigrants belonging to that skill group. The "earlier" immigrants have been in the United States for at least five years prior to the measurement of the log wage index. One can then define an alternative relative supply index:

$$(2) \qquad R'_{jk}(t) = \frac{M_{jk}(t)\,/M_k(t)}{I_{jk}(t)\,/\,I_k(t)}.$$

The data reported in Table 1 suggest that the two cohorts of immigrants locate themselves in somewhat different states, with the new immigrants tending to be over-represented in the states that offer the best economic opportunities for their skills. Consider, for example, workers who have between 9 and 11 years of schooling. In 1980, the relative supply index defined in equation (2) was 1.2 in the five states offering the highest wages, but was only .5 in the five states offering the lowest wages.

The possibility that immigrants cluster in high-wage states has implications for a number of the important issues and concerns that HSSS raise about the current status of the "economics of immigration" literature. First, the income-maximization hypothesis could help resolve the empirical puzzle noted earlier. Because immigrants deliberately choose to enter those labor markets that offer the highest wages, it will be very difficult to document that increased immigration lowers the native wage in the penetrated geographic areas. The literature has sometimes attempted to control for this endogeneity problem by using instrumental variables, where the instrument for the measure of immigrant penetration in the local labor market is typically a variable indicating the number of immigrants who resided in that labor market at some point in the past. The clustering of immigrants in high-wage areas suggests that this is not a

valid instrument. Immigrants cluster in those labor markets that offer them the best opportunities for the skills that they bring to the country, and hence the size of the pre-existing stock of immigrants will not, in general, be uncorrelated with the wages offered by a particular locality.

More important, the clustering of immigrants in high-wage states raises a number of questions about the macroeconomic impact of immigration. The endogenous clustering of immigrants in high-wage regions suggests that the spatial distribution of new immigrants in the United States should help reduce regional wage differentials. This finding has significant macroeconomic implications for it suggests that regional wage convergence will occur at a faster rate among those skill groups and in those periods that experience high levels of immigration.

A large literature examines the rate of wage convergence across states in the United States (Barro and Sala-i-Martin, 1991; Blanchard and Katz, 1992). These studies typically find that the half-life of interstate wage differentials is roughly 35 years. The income-maximization hypothesis developed above suggests that there is a structural relationship linking the rate of regional wage convergence and the size of the immigrant flow into that market.

In Borjas (2001a), I used data drawn from the 1950-90 Censuses to estimate a particular specification of the generic convergence regression model. Consider the following regression model:

(3) $$\log w_{jk,t+1} - \log w_{jkt} = \alpha + \beta_{kt} \log w_{jkt} + \varepsilon_{jkt},$$

where $w_{jkk}(t)$ is the adjusted log wage of workers in state j and skill group k in Census year t; and the parameter β_{kt} is the convergence coefficient describing the evolution of the regional wage structure for that skill group in the $(t, t+1)$ time period. The time periods are 1950-60, 1960-70,

1970-80, and 1980-90. I annualized the dependent variable by dividing by 10, so that β gives the

annual rate of regional wage convergence. I estimated the regression model in (3) separately for

each skill group in each time period. The empirical analysis, therefore, yields a total of 20

estimated convergence coefficients (or 4 periods × 5 education groups).

The income-maximization hypothesis suggests that there should be greater wage

convergence in those labor markets (defined for a particular skill group over a particular time

period) that experience larger immigrant flows. Let the index of immigrant penetration in a

particular labor market be given by:

$$(3) \qquad m_{kt} = \log \frac{M_k(t, t+1)}{N_{kt}},$$

where $M_k(t, \text{t+1})$ gives the total number of immigrants in skill group k who entered the United

States between periods t and $t+1$, and N_{kt} gives the size of the native-born population in skill

group k at the beginning of the period.

Figure 1 presents the scatter diagram illustrating the basic data. There is a clear

downward sloping (and statistically significant) relationship between the convergence coefficient

in any particular market (defined by time period and skill group) and the relative number of

immigrants entering that labor market. It seems, therefore, that immigration "injects" the host

country's labor market with workers who are very responsive to regional wage differentials. As a

result, immigrants speed up the process of wage convergence and improve labor market

efficiency.

It is worth stressing that the clustering of immigrants in high-wage areas implies that

immigration generates a new type of gain for the host country's economy. The HSSS survey, like

most of the studies in the immigration literature, emphasizes various aspects of the cost that immigrants impose on various sectors of the host country's economy—whether they be the wage losses suffered by native workers or the increase in taxes borne by native taxpayers. Remarkably, very little attention is paid to the possibility that immigrants impart benefits to the host country's economy.

In the traditional one-sector model, immigration increases the net income accruing to native workers because immigrants enter the labor market, lower wages, and thereby raise the return to a fixed capital stock (which is typically assumed to be owned by natives). In the U.S. context, this "immigration surplus" has typically been found to be relatively small, less than 0.1 percent of GDP.

The clustering of immigrants in high-wage states implies that there are additional gains from immigration. In particular, native migration flows, perhaps because of relatively high fixed migration costs, cannot fully arbitrage the regional wage differences. The immigrant flow, in contrast, is self-targeted to those regions of the country where their productivity is highest. This clustering effect "greases the wheels of the labor market" by speeding up the process of wage convergence, and improves economic efficiency. It is important to emphasize that these gains from immigration differ conceptually from the productivity gains captured by the immigration surplus.

As indicated by the topical content of the HSSS survey, the immigration literature has paid remarkably little attention to the source and magnitude of the economic gains from immigration. This is one area of study that clearly requires much additional research.

The political economy of welfare reform

HSSS present an excellent discussion of the political economy of immigration policy. Their description of the polling data shows that most Americans consistently prefer lower levels of immigration. This description raises a fundamental question in the political economy of immigration: why has the U.S. government consistently ignored voter preferences regarding immigration and increased the size of the legal immigrant flow each time that it has reformed immigration policy in the past few decades?

Although HSSS do not link their discussion of the political economy of immigration policy with another topic that they survey at length—immigrant use of welfare—recent changes in welfare policy in the United States suggest that much can be learned by considering the link between these two topics. It is well known that due to increasing concerns over the link between immigration and welfare, Congress included a number of immigrant-related provisions in the 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA). In fact, it has been estimated that almost half of the $54 billion savings attributed to the welfare reform bill can be traced directly to the restrictions on immigrant use of welfare (Primus, 1996-97, p. 14). In general terms, the legislation, as signed by President Clinton, contained three key provisions:

1. Most non-citizens who arrived in the country *before* August 22, 1996, the "pre-enactment" immigrants, were to be kicked off from the SSI and food stamp rolls within a year. (This provision of the legislation, however, was never fully enforced).

2. Immigrants who entered the United States *after* August 22, 1996, the "post-enactment" immigrants, are prohibited from receiving most types of public assistance. The ban is lifted when the immigrant becomes an American citizen.

3. Post-enactment immigrants are subject to stricter deeming regulations. The eligible income and assets of the immigrant's sponsor will be deemed to be part of the immigrant's application for most types of public assistance, and the deeming period can last up to ten years.

The restrictions on immigrant use of welfare brought together a number of powerful interest groups after the 1996 presidential election—all of which lobbied hard for their repeal. And, in fact, many of the immigrant-related provisions of the legislation were never enforced. The balanced budget agreement reached in 1997 between President Clinton and the Republican-controlled Congress effectively repealed some of the most draconian aspects of the legislation. The partial restoration of federal aid, combined with actions taken by individual states (discussed below), implies that relatively few of the pre-enactment immigrants ended up being kicked out of the SSI and Food Stamp Programs. The mandated waiting period for post-enactment immigrants, however, remained on the books.

A superficial glance at the *national* trends suggests that welfare reform was a success—at least in terms of reducing the number of immigrants on the rolls. Table 3 reports the percent of immigrant and native households that received some type of assistance (defined as cash benefits, Medicaid, or food stamps) in each year between 1994 and 1998. The probability that either immigrant or native households received some type of assistance was roughly constant prior to 1996. About 24 percent of immigrant households received some type of assistance both in 1994 and 1995, as compared to about 16 percent of native households. The participation rate of both groups fell immediately after the enactment of PRWORA, but the post-1996 decline was much steeper in the immigrant population. In particular, the participation rate dropped by about 2

percentage points among native households, but by about 4 percentage points in immigrant households.

These national trends seem to suggest that the welfare reform legislation had a particularly strong impact on the likelihood that immigrant households receive assistance, helping to create the perception that PRWORA had a "chilling effect" on immigrant participation in welfare programs. However, the national trends are quite misleading, for they do not reflect what went on in much of the country during the 1994-98 period.

The demographic importance of California, a state that is home to about a third of the immigrants, suggests that it might be of interest to examine the trends separately for California and for other states. As Table 3 also shows, it turns out that almost all of the relative decline in immigrant welfare participation at the national level can be attributed to what happened to immigrant welfare use in California. The fraction of native households in California that received some type of assistance dropped slightly by 1.6 percentage points, from 15.2 percent before PRWORA to 13.6 percent afterwards. In contrast, the fraction of immigrant households in California that received assistance fell precipitously, from 31.2 to 23.2 percent. Outside California, the welfare participation rate of native-born households declined by about 2.2 percentage points, while the participation rate of immigrant households declined by less than 2 percentage points, from about 20 percent before PRWORA to 18.7 percent by 1998. It is also interesting to note that the *timing* of the decline in immigrant welfare use differs between California and the rest of the country. The decline in California began before PRWORA, but occurred later (after PRWORA) in the rest of the country.

Why are the trends in California so distinctive? One obvious candidate is the enactment of Proposition 187 in November 1994. This proposition, supported by 59 percent of California's

voters, denied almost all types of assistance (including schooling) to *illegal* aliens. Although

most of the provisions in the proposition were never enforced, its impact on the political and

social climate in California is undeniable. Soon after the enactment of Proposition 187, there

were numerous newspaper accounts of the chilling effect that the proposition had on aliens

applying for particular types of publicly provided benefits.

Although the trends in welfare participation outside California suggest that PRWORA

had relatively little impact on immigrant welfare use, this conclusion is premature for it ignores

the fact that the states responded to the legislation. A closer look at the trends suggests that much

of the potential chilling effect of PRWORA on immigrant welfare use was undone by the

political reactions of state governments. Some states—*and particularly those states where

immigrants live*—offered state-funded benefits to their immigrant populations.

An important, though little publicized, provision in PRWORA grants states the option to

offer state-funded welfare programs to immigrants. The Urban Institute has calculated an index

of "welfare generosity" that measures the extent to which particular states offered their state-

funded safety nets to the immigrant population after 1996 (Zimmermann and Tumlin, 1999,

Table 18). The Urban Institute's index classifies states into four categories according to the

availability of the state safety net. The states where such aid was "most available" included

California and Illinois; the states where the aid was "somewhat available" included New York

and Florida; the states where the aid was "less available" included Arizona and Michigan; and

the states were the aid was "least available" included Ohio and Texas. It is worth noting that five

of the six states with the largest immigrant populations (the exception being Texas) tended to

provide above-average levels of state-funded assistance to immigrants.

Table 4 uses the Urban Institute index to classify states into "more generous" (where aid was "most available" or "somewhat available") and "less generous." The table shows how the chilling effect of welfare reform depends on these state programs. The fraction of non-citizens receiving assistance in the less generous states—the states that offered minimal levels of state-funded assistance to immigrants—dropped by 10 percentage points (from 29.4 to 19.4 percent). In contrast, the fraction of non-citizens receiving assistance in the more generous states dropped by about 5 percentage points (from 29.7 to 24.4 percent).

Moreover, much of the presumed chilling effect observed in the more generous states disappears if we look at the immigrants who live outside California. The participation rate of non-citizens living outside California dropped by about 9 percentage points if they lived in less generous states, and dropped by only 1.3 percentage points if they lived in the more generous states.

In sum, the fact the some states chose to offer a state-funded safety net to their immigrant populations helped cushion the impact of federal welfare reform on immigrant welfare use. Put differently, PRWORA could indeed have caused a chilling effect outside California, but the political reactions of individual states, and particularly the states where most immigrants live, prevented much of that chilling effect from occurring.

The political economy of welfare reform, therefore, provides an important lesson about the politics of immigration reform. In 1996, Congress granted individual states the option to supplement the federal benefits available to immigrants. Most of the states with large immigrant populations accepted this invitation and offered state-funded safety nets to immigrant households. From an economic perspective, the responses made by the states with large immigrant populations seem puzzling. One could have easily argued that once states were free to

pursue their own welfare policies, many of the states most affected by immigration would have chosen to discourage welfare use—rather than adopt policies that further encouraged it.

Why did the race to the bottom not occur? Was it perhaps because the immigrant population in these states is now sufficiently large that elected officials found it politically essential to cater to the needs of this large minority?

HSSS note that there is a great deal of evidence that large immigrant populations tend to alter the nature of how elected representatives act on immigration issues. It seems, in fact, that the clustering of immigrants in a relatively small number of places can substantially alter the intended political outcomes of federal legislation in the United States. The trends in welfare use after 1996, therefore, could well provide an excellent case study of the political constraints that are likely to frame any future reform of immigration policy.

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FIGURE 1. THE RELATION BETWEEN THE CONVERGENCE COEFFICIENT AND IMMIGRATION
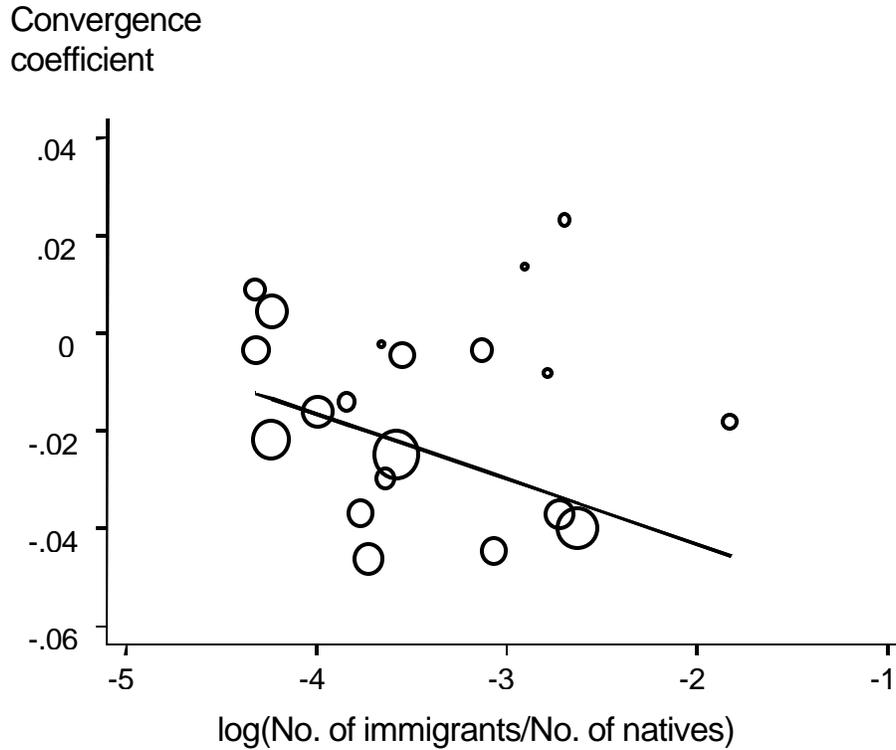
Source: Borjas (2001a). Each observation represents a convergence coefficient estimated in a particular decade for a particular skill group. The measure of immigrant penetration gives the log of the number of immigrants in a particular skill group who arrived during a particular decade relative to the number of natives in that skill group at the beginning of the decade. The points on the scatter diagram are weighted by the inverse of the squared of the standard error of the convergence coefficient.

**TABLE 1. GEOGRAPHIC DISTRIBUTION OF THE IMMIGRANT POPULATION
IN THE UNITED STATES IN 1990**

Percent of immigrants living in:	Educational attainment				
	Less than 9 years	**9-11 years**	**12 years**	**13-15 years**	**At least 16 years**
California	50.1	41.9	32.7	33.2	26.5
New York	9.2	14.8	18.6	14.1	14.9
Florida	5.6	8.1	8.1	7.8	5.0
Texas	10.1	7.2	5.1	5.4	5.2
New Jersey	2.9	4.1	5.8	4.7	6.3
Illinois	4.4	3.9	5.0	4.3	4.7

Source: Borjas (2001a).

**TABLE 2. CROSS-SECTION RELATION BETWEEN RELATIVE SUPPLY
OF NEW IMMIGRANTS AND WAGES IN 1980**

	Measure of relative supply			
	New immigrants relative to natives		New immigrants relative to earlier immigrants	
Education group:	5 high-wage states	5 low-wage states	5 high-wage states	5 low-wage states
Less than 9 years	4.964	0.045	1.210	0.691
9 to 11 years	2.709	0.082	1.196	0.513
12 years	2.360	0.143	1.217	0.523
13 to 15 years	1.880	0.192	1.134	0.721
At least 16 years	1.920	0.312	1.143	0.850

Source: Borjas (2001a). The 5 high-wage states pool data from the states with the five highest values for the adjusted log wage in 1980 for a particular skill group. The 5 low-wage states pool data from the states with the five lowest values for the adjusted log wage. The "new" immigrants entered the United States between 1980 and 1984; the "earlier" immigrants entered the country before 1975.

TABLE 3. TRENDS IN WELFARE PARTICIPATION RATES, 1994-98
(Percent of households receiving some type of assistance)

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

Source: Borjas (2001b).

**TABLE 4. IMPACT OF STATE-FUNDED PROGRAMS
ON WELFARE PARTICIPATION RATES
(Percent of households receiving some type of assistance)**

	Households in:					
	Less Generous States			More Generous States		
Sample and period:	Native	Citizen	Non-citizen	Native	Citizen	Non-citizen
All households						
Pre-1996	16.3	15.5	29.4	14.3	14.9	29.7
Post-1996	14.3	14.4	19.4	13.1	17.0	24.4
Non-California households						
Pre-1996	16.3	15.5	28.4	14.2	13.1	23.9
Post-1996	14.3	14.4	19.4	13.0	16.4	22.6

Source: Borjas (2001b). The household is defined as a native, citizen, or non-citizen household depending on the birthplace and naturalization status of the household head.