

Issues in the Economics of

Immigration

Edited by George J. Borjas

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Introduction

George J. Borjas

There has been a resurgence of immigration in the United States and in many other countries. About 140 million persons—or roughly 2 percent of the world's population—reside in a country where they were not born (Martin 1998). Nearly 9 percent of the population in the United States, 6 percent of the population in Austria, 17 percent in Canada, 11 percent in France, and 17 percent in Switzerland is foreign-born (United Nations 1989, 61). Even Japan, which is thought of as being very homogeneous and geographically immune to immigrants, now reports major problems with illegal immigration. These sizable labor flows have altered economic opportunities for native workers in the host countries, and they have generated a great deal of debate over the economic impact of immigration and over the types of immigration policies that host countries should pursue. This debate over the economic impact of immigration policy is typically centered on three substantive questions. First, How do immigrants perform in the host country's economy? Second, What impact do immigrants have on the employment opportunities of natives? Finally, Which immigration policy most benefits the host country?

The past decade witnessed an explosion in research on many aspects of the economics of immigration. To a large extent, this literature has been motivated by the various policy concerns. The academic studies typically investigate the determinants of the immigration decision by workers in

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^{1.} There already exist a number of surveys that stress the implications of the empirical findings in the immigration literature, particularly in the U.S. context. These surveys include Borjas (1994a), Friedberg and Hunt (1995), and LaLonde and Topel (1996).

source countries and the impact of that decision on the labor market in the host country. A key insight provided by the existing literature is that the labor market impact of immigration on the host country hinges crucially on how the skills of immigrants compare to those of natives in the host country. And in fact, much of the research effort in the immigration literature has been devoted to: (1) understanding the factors that determine the relative skills of the immigrant flow; (2) measuring the relative skills of immigrants in the host country; and (3) evaluating how relative skill differentials affect economic outcomes.

Reflecting the increasing interest in the economic analysis of immigration, the National Bureau of Economic Research has held three separate research conferences on immigration issues in the past decade. The studies presented in the first two conferences (held in 1987 and 1990) emphasized the labor market impacts of immigration on the United States as well as on a number of other host and source countries. The research presented at these conferences contain studies that analyze various aspects of the economics of immigration, including the decision to migrate, the determinants of assimilation, and the labor market impact of immigration on the United States (see Abowd and Freeman 1991; Borjas and Freeman 1992).

During the time that immigration issues have become one of the core topics of modern labor economics, much has happened to the trends in immigration in the United States. First, the number of legal immigrants entering the United States has increased substantially. The United States is now admitting nearly 1 million legal immigrants annually, as compared to only about 449,000 in the 1970s. Second, the enactment of the Immigration Reform and Control Act (in 1986) failed to curtail the flow of illegal aliens. Finally, the growing concern over the economic and social consequences of legal and illegal immigration has led to drastic policy responses, including the enactment of Proposition 187 by California voters (denying most types of public assistance, including education, to illegal aliens) and the 1996 welfare reform legislation, which banned most non-citizens from receiving many types of public assistance.

This volume presents the research findings of the third NBER conference on immigration. The essays in this volume illustrate how far we have come in analyzing immigration issues in the past decade, but they also show how far away we are from obtaining answers to many policy-relevant questions. Many of the essays address a number of new issues and present new findings. A common theme running through the essays is that the economic impact of immigration on the United States stretches far beyond the labor market. Immigration can affect the education system, the financial well-being of the Social Security system, the costs of controlling crime, and the costs of running the welfare state—and many of these effects are quite subtle, working in ways that have not yet been incorporated in the traditional cost-benefit calculations that attempt to measure whether immigration is a boon or a bane for the United States.

The essays in this volume also represent a significant maturation of the research agenda, suggesting that a new phase in the analysis of the economics of immigration has been entered. The shift has begun away from the question of purely describing the labor market impact of immigration on the United States, toward a more mature analysis that addresses other types of impacts—such as on education, Social Security, and crime. Moreover, even those studies that return to such "old" questions as the assimilation of immigrants do so in a new light, stressing other aspects of the assimilation process (such as employment) or linking the concept of assimilation to the concept of convergence (conditional or otherwise) that plays a large role in studies of the "new growth" literature. Finally, the essays also ask a host of new questions, questions that are sure to motivate much further research in the future, such as stressing the differences between welfare eligibility and welfare recipiency, and a concern over the impact of immigration in the long run, as the children and grandchildren of the immigrants mature and enter the U.S. labor market.

Immigration in the United States

Prior to addressing the specific contributions of the essays in this volume, it is useful to begin with a summary of what earlier research has concluded about the economic impact of immigration on the United States. The size of the immigrant flow has fluctuated dramatically during the past century. The Great Migration occurred between 1881 and 1924, when 25.8 million persons entered the country. Reacting to the increase in immigration and to the widespread perception that the "new" immigrants differed from the old, Congress closed the floodgates in the 1920s by enacting the national-origins quota system. This system restricted the annual flow from Eastern Hemisphere countries to 150,000 immigrants, and allocated the visas according to the ethnic composition of the U.S. population in 1920. As a result, 60 percent of all available visas were awarded to applicants from two countries, Germany and the United Kingdom.²

During the 1930s, only 0.5 million immigrants entered the United States. Since then, the number of legal immigrants has increased at the rate of about 1 million per decade and is now nearing the historic levels reached in the early 1900s. By 1998, nearly 1 million persons were being admitted annually. There has also been a steady increase in the number of illegal aliens. The Immigration and Naturalization Service estimates that about 5 million persons were illegally present in the United States in 1996, and that the *net* flow of illegal aliens is on the order of 300,000 persons per year (U.S. Immigration and Naturalization Service 1997, 197).

The size of the immigrant flow has increased not only in absolute terms but also as a percentage of population growth. In fact, the contribution

^{2.} Borjas (1994a) presents a more detailed discussion of these trends.

of the new immigration to population growth is fast approaching the level reached during the Great Migration, when immigration accounted for 40 to 50 percent of the change in population. As a result of these trends, the fraction of the population that is foreign-born rose from 4.7 to almost 10 percent between 1970 and 1998.

The huge increase in immigration in recent decades can be attributable partly to changes in U.S. immigration policy. Prior to 1965, immigration was guided by the national-origins quota system. The 1965 amendments to the Immigration and Nationality Act (and subsequent revisions) repealed the national origin restrictions, increased the number of available visas, and made family ties to U.S. residents the key factor that determines whether an applicant is admitted into the country. As a consequence of both the 1965 amendments and major changes in economic and political conditions in the source countries relative to the United States, the national-origin mix of the immigrant flow changed substantially in the past few decades. Over two-thirds of the legal immigrants admitted during the 1950s originated in Europe or Canada, 25 percent originated in Western Hemisphere countries other than Canada, and only 6 percent originated in Asia. By the 1980s, only 13 percent of the immigrants originated in Europe or Canada, 47 percent originated in Western Hemisphere countries other than Canada, and an additional 37 percent originated in Asia.

Responding to the issues raised by these historic changes in the size and composition of the immigrant flow reaching the United States, the academic literature investigating the economic impact of immigration has grown rapidly in the past two decades. This literature has provided important insights into such diverse issues as the process of assimilation, the impact of immigration on the labor market opportunities of native workers, and the fiscal impact of immigration.

The Economic Performance of Immigrants

In 1970, the average immigrant living in the United States actually earned about 1 percent more than the average native. By 1990, the average immigrant in the country earned about 15 percent less. The worsening economic performance of immigrants is partly due to a decline in their relative skills across *successive* waves. The newest immigrants arriving in the country in 1970 earned 17 percent less than natives; by 1990, the newest immigrants earned 32 percent less (Borjas 1994a, 1674).

In short, there has been a precipitous decline in the average skills of the immigrant flow reaching the United States, relative to natives. This historic change in the skill composition of the immigrant population rekindled the debate over immigration policy, and lies at the heart of many of the symptoms of immigration that are the focus of this debate.

Although the direction of the average trend in relative skills is clear, it would be a mistake to interpret the trend as saying that *every* immigrant

who entered the country is relatively less skilled. The immigrant population is highly bifurcated; there are many immigrants with few skills and many immigrants who are highly skilled. In other words, immigrants tend to be lumped at both ends of the skill distribution. But the "bump" at the bottom end has become much more pronounced over time.

The poor economic performance of immigrants at the time of entry would have different long-run implications if the immigrant disadvantage diminished over time, as immigrants assimilated into the U.S. labor market. The available evidence, which I discuss in detail in chapter 1 in this volume, suggests that the economic gap between immigrants and natives does not narrow substantially during the immigrants' working lives. It turns out that practically all immigrants, regardless of when they arrived in the country, experience the same sluggish relative wage growth.

The Labor Market Impact of Immigration

Immigrants tend to cluster geographically in a small number of cities and states, and this concentration has increased over time. By 1990, nearly 70 percent of the immigrant population lived in only six states (California, New York, Texas, Florida, New Jersey, and Illinois).

Beginning in the early 1980s, a number of empirical studies began to estimate the impact of immigration on native earnings by comparing the earnings of natives who reside in immigrant cities (such as Los Angeles and San Diego) with the earnings of natives who reside in cities where few immigrants live (such as Atlanta and Pittsburgh) (Grossman 1982; Borjas 1983). The prototypical studies in this literature include the papers by Altonji and Card (1991) and LaLonde and Topel (1991), both published in the first NBER immigration volume (Abowd and Freeman 1991). For the most part, these "spatial correlations" suggested that the average native wage is only slightly lower in labor markets where immigrants tend to cluster. If one city has 10 percent more immigrants than another, the native wage in the city with more immigrants is only about 0.2 percent lower.

This spatial correlation, however, does not necessarily indicate that immigrants have a numerically inconsequential impact on native workers. Suppose, for example, that immigration into California lowers the earnings of natives in California substantially. Native workers are not likely to stand idly by and watch their economic opportunities evaporate. Many will move out of California into other regions, and persons who were considering moving to California will now move somewhere else instead. As native workers respond to immigration by voting with their feet (and hence creating what has already been dubbed "the new white flight"), the adverse impact of immigration on California's labor market is transmitted to the entire economy. In the end, *all* native workers are worse off from immigration, not simply those residing in the areas where immigrants clus-

ter. Filer's (1992) analysis provided what is perhaps the first study to link the native migration decision and the presence of immigrants in local labor markets. Since then, studies by Frey (1995) and Borjas, Freeman, and Katz (1997) indicate that there indeed seems to be a native response to immigration, essentially invalidating the conclusions of the spatial correlations approach.

Because labor (or capital) flows can diffuse the impact of immigration from the affected local labor markets to the national economy, Borjas, Freeman, and Katz (1992) proposed an alternative methodology to estimate the impact. The "factor proportions approach" compares a nation's actual supplies of workers in particular skill groups to those it would have had in the absence of immigration, and then uses outside information on how the wages of particular skill groups respond to increases in supply to compute the relative wage consequences of immigration. This approach predicts that almost half of the 10.9 percentage point decline in the relative wage of high school dropouts observed between 1980 and 1995 can be attributed to immigration. This perspective thus implies that the adverse impact of immigration on the well-being of workers at the bottom end of the skill distribution has been substantial.

Immigration and Welfare

In 1970, immigrants were slightly less likely to receive cash benefits (such as Aid to Families with Dependent Children [AFDC] and Supplemental Security Income [SSI]) than natives. By 1990, however, the fraction of immigrant households receiving public assistance was 9.1 percent, or 1.7 percentage points higher than the fraction of native households (Borjas 1994a, 1701). In fact, if one adds noncash programs (such as Medicaid, food stamps, and housing assistance) to the definition of welfare, it turns out that 21 percent of immigrant households receive some type of aid, as compared to 14 percent of native households, and 10 percent of white, non-Hispanic native households (Borjas and Hilton 1996).

Two distinct factors account for the disproportionate increase in welfare use among immigrant households. Because more recent immigrant waves are less skilled than earlier waves, it is not surprising that more recent immigrant waves are also more likely to use welfare than earlier waves. In addition, the welfare participation rate of a specific immigrant wave *increases* over time. It seems that the assimilation process involves not only learning about labor market opportunities but also learning about the income opportunities provided by the welfare state.

There is little doubt, therefore, that immigrants are making increasing use of public assistance programs. This trend, as well as the expense of providing immigrants with a host of public services, particularly education, has added a new and potentially explosive question to the immigration debate: Do immigrants "pay their way" in the welfare state? A com-

prehensive study of this issue by the National Academy of Sciences recently concluded that in California, the main destination for immigrants in the post-1965 period, immigration has raised the annual taxes of the typical native household by about \$1,200 a year.³ The fiscal impact of immigration on the affected states, therefore, can be quite severe. Moreover, the welfare reform legislation enacted in 1996 gives states much more leeway in setting benefit levels. States will now "compete" when setting welfare benefits. Immigrant-receiving states, such as California, have a huge incentive to race to the bottom as they attempt to reduce the fiscal burden imposed by the immigration of less-skilled workers.

The NBER Project: A Maturation of the Research Agenda

The papers presented in this volume reflect a maturation of the research agenda on the economics of immigration, illustrating two distinct trends. First, some of the studies that revisit "old" questions, such as assimilation and immigrant welfare use, recast the problems in a way that links the analysis to related questions in other areas of economics. This reformulation, it turns out, teaches us much about the underlying issues. Second, some of the studies address a number of topics that have not received sufficient attention in the immigration literature.

In chapter 1, I provide a new analysis of an old question: What factors determine the trend in the economic performance of immigrants over time, as they assimilate in the United States? My theoretical framework argues that the relationship between the entry wage of immigrants and the subsequent rate of wage growth depends on the technology of the human capital production function, particularly the extent of substitution or complementarity between "pre-existing" human capital and postmigration investments. Complementarity would suggest that higher initial wage levels would be associated with faster wage growth after entry into the United States. This would imply, for instance, that the wages of different immigrant groups would tend to diverge over time.

I stress that the empirical analysis of wage convergence in the immigrant population has much in common with the literature that estimates cross-country regressions to determine if there is convergence in per capita income across countries.⁴ These studies typically find that the unadjusted

^{3.} Smith and Edmonston (1997). The National Academy report also estimated the long-run fiscal impact by "tracking" the fiscal consequences over a 300-year period after an immigrant is admitted into the United States (as the descendants of immigrants enter the labor market). This dynamic exercise revealed that admitting one immigrant today yields an \$80,000 fiscal surplus at the *national* level. The long-run net benefit from immigration, however, arises solely because the exercise assumes that the federal government will put its fiscal house in order in the year 2016, and pass a huge tax increase to ensure that the debt-GDP ratio remains constant after that point.

^{4.} See, for example, Barro (1991) and Mankiw, Romer, and Weil (1992).

correlation between the growth rate in per capita GDP and the initial level of per capita GDP is positive, but weak. There is, however, "conditional convergence," a strong negative correlation between growth rates and initial levels of per capita income, when the regression controls for measures of the country's human capital endowment. The differentiation between convergence and conditional convergence is also useful for understanding the economic progress of immigrants. As in the economic growth literature, the data reveal a positive unadjusted correlation between the log entry wage of immigrants and the subsequent rate of wage growth. This positive correlation, however, turns negative when one compares immigrant groups who start out with similar human capital endowments. The empirical evidence, therefore, indicates that even though immigrant groups with the same level of human capital will have similar earnings over the long haul, the sizable wage differentials observed among the various immigrant groups at the time of entry may well diverge over time.

Julian R. Betts and Magnus Lofstrom use data drawn from the decennial censuses to study trends in educational attainment and subsequent earnings of immigrants relative to those of natives. An important lesson of the empirical evidence—one that has not been sufficiently appreciated in earlier work—is the importance of differences in educational attainment between immigrants and natives, as well as among immigrant groups, in determining wage differences among the various populations.

Betts and Lofstrom document the familiar result that the gap in educational attainment between immigrants and natives widened between 1970 and 1990, with immigrants experiencing an ever larger disadvantage. More important, they show that much of this widening in the gap is driven by changes in the bottom half of the education distribution, with a larger number of immigrants arriving in the United States with relatively little schooling. The analysis concludes that differences in educational attainment can explain more than half of the observed wage gap between immigrants and natives, and that the rate of return to schooling of natives exceeds the rate of return of immigrants, regardless of whether the schooling was acquired in the United States or abroad.

Betts and Lofstrom also address a question that is sure to attract more attention in the future: Do the increasing number of immigrants and the changes in their relative skills "crowd out" natives from educational opportunities? The authors argue that there is some evidence that immigrants crowd out some natives, particularly at the secondary education level, in the sense that changes in the size of the immigrant population in a particular state are correlated with changes in the educational attainment of natives in that state.

Edward P. Lazear's essay introduces a number of new—and provocative—questions into the immigration literature. In particular, he advances the hypothesis that an important economic benefit from immigration