

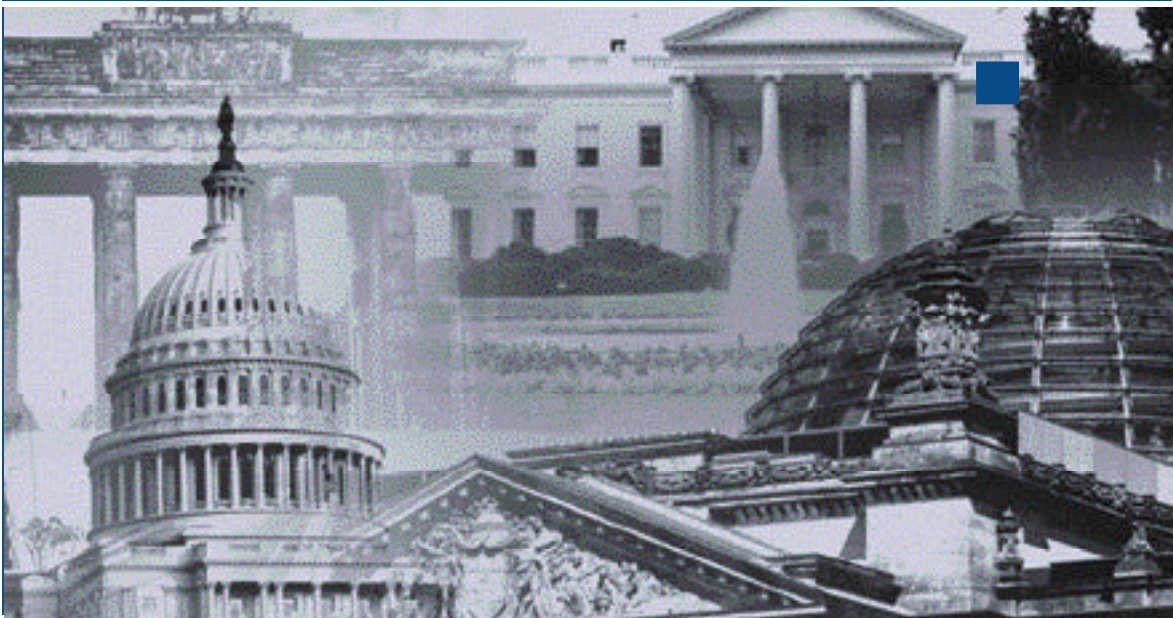


MANAGING MIGRATION FOR  
ECONOMIC GROWTH:  
GERMANY AND THE UNITED STATES  
IN COMPARATIVE PERSPECTIVE

Philip Martin, Hans Dietrich von Loeffelholz, and Thomas Straubhaar

*The American Institute for Contemporary German Studies*

The Johns Hopkins University



***AICGS POLICY REPORT #1***



MANAGING MIGRATION FOR  
ECONOMIC GROWTH:  
GERMANY AND THE  
UNITED STATES IN  
COMPARATIVE PERSPECTIVE

Philip Martin  
Hans Dietrich von Loeffelholz  
Thomas Straubhaar

**AICGS POLICY REPORT #1**

---

**The American Institute for Contemporary German Studies (AICGS)** is a center for nonpartisan, advanced research, study, and discourse relating to the Federal Republic of Germany, its politics, economy, culture and society. Founded in 1983, AICGS has been a premier source of research and analysis for the policymaking and policy-advising communities in the public and private sectors. Drawing on an international network of scholars and specialists, the Institute has consistently generated in-depth, nonpartisan assessments of Germany's policy choices and developments and their impact on the transatlantic dialogue.

Affiliated with the Johns Hopkins University, AICGS provides a comprehensive program of public fora, policy studies, research reports, and study groups designed to enrich the political, corporate and scholarly constituencies it serves.

*Executive Director:* Jackson Janes

*Board of Trustees, Cochair:* Fred H. Langhammer

*Board of Trustees, Cochair:* Dr. Eugene A. Sekulow

The views expressed in this publication are those of the author(s) alone. They do not necessarily reflect the views of the American Institute for Contemporary German Studies.

©2002 by the American Institute for Contemporary German Studies  
ISBN 0-941441-66-0

Additional copies of this Policy Report are available for \$5.00 to cover postage and handling from the American Institute for Contemporary German Studies, Suite 420, 1400 16th Street, N.W., Washington, D.C. 20036-2217. Telephone 202/332-9312, Fax 202/265-9531, E-mail: [info@aicgs.org](mailto:info@aicgs.org) Web: <http://www.aicgs.org>

---

# CONTENTS

Foreword.....	v
About the Authors.....	vii
EXECUTIVE SUMMARY.....	1
INTRODUCTION.....	3
Global Changes .....	4
Migration Developments: Germany and the United States.....	6
MIGRATION AND ECONOMIC GROWTH.....	8
Economic and Public Finance Impacts.....	8
Germany: Green Cards and Seasonals.....	12
U.S.: H-1Bs.....	15
U.S.: H-2As.....	20
ECONOMIC INTEGRATION AND MIGRATION.....	24
Germany and EU Enlargement.....	26
The United States, Mexico, and Nafta.....	27
TRANSATLANTIC LESSONS.....	36
BIBLIOGRAPHY.....	39
AGENDAS AND PARTICIPANTS.....	41
Table 1. U.S. Guest Worker Programs.....	16
Table 2. H-2A Certifications.....	21
Table 3. SAWs and Unauthorized Farm Workers.....	22



---

## *FOREWORD*

Germany and the United States are both lands of net immigration, though at times, reluctantly. Policies governing the admission and status of foreigners have gained in political importance in recent years in both the United States and Germany, as heated debates have raged regarding the impact of immigration on jobs and employment, social services and government budgets, and social stability and national identity.

The salience of immigration issues is only likely to increase in coming years. With the continuing effort to combat global terrorism, the security risks of population flows across open borders will be weighed along with other considerations and could have a decisive influence on immigration policies. In Europe, the continuing integration of national economies and expansion of the European Union will provide additional impetus for change in immigration policies.

In the complex and fractious debate about the future of immigration policy in the United States and Germany, the economic impact and dimensions of immigration will continue to figure prominently. A prolonged economic slump could heighten popular fears about the perceived negative impact of immigration on jobs and employment. Even in times of economic plenty, political leaders and publics will continue to debate the impact of foreign workers on particular industries or regions, the dynamics of labor markets, or patterns of migration. As the authors of this study demonstrate, the “common wisdom” regarding the economic effects of immigration is often faulty; there is little evidence to support the perception that immigration has had a sizeable adverse effect on earnings and employment in either the United States or Germany. The key issue for the future, however, is whether the continuing debate about immigration in both countries will be shaped primarily by perceptions and fears or by facts and analyses.

This publication presents an analysis of the economic dimensions of immigration and immigration policy in the United States and Germany. The study is part of an ongoing effort by the Institute to explore the common challenges faced by the United States, Germany, and Europe as they struggle to deal with a changing world and evolving global economy. The publication,

---

the first in the *AICGS Policy Report* series, grows out of a year-long study examining “The Economic Dimensions of Immigration Policy: Germany and the United States in Comparative Perspective.” The study was headed by Philip Martin, Professor of Economics in the Department of Agricultural and Resource Economics, University of California, Davis and drew together noted German and U.S. experts on the economic implications of immigration. The project was a collaborative effort of AICGS, in partnership with the Rhine-Westphalia Institute for Economic Research (RWI) and the Hamburg Institute of International Economics (HWWA). AICGS is grateful to the German Marshall Fund for their support of this project. We hope that this publication will help contribute to an informed debate about the future direction of U.S. and German immigration policies.

Cathleen Fisher  
Associate Director  
AICGS

July 2002

---

# *ABOUT THE AUTHORS*

**Philip Martin**, Chair, UC Comparative Immigration & Integration Program,  
Department of Agricultural and Resource Economics.

**Hans-Dietrich von Loeffelholz**, Head of Public Finance Division, Rhine-  
Westphalia Institute for Economic Research (RWI)-Essen.

**Thomas Straubhaar**, President, The Hamburg Institute of International  
Economics (HWWA)-Hamburg.





---

**MANAGING MIGRATION FOR ECONOMIC GROWTH:  
GERMANY AND THE UNITED STATES  
IN COMPARATIVE PERSPECTIVE**

Philip Martin, Hans Dietrich von Loeffelholz, and Thomas Straubhaar

**EXECUTIVE SUMMARY**

Germany and the United States generate almost 40 percent of the world's GDP, and include almost 60 percent of the 67 million migrants in the industrial democracies.<sup>1</sup> Germany and the United States are adjusting their immigration policies to increase economic growth, and are grappling with the relationship between trade and migration policies as they integrate economically with poorer neighboring countries.

This report summarizes the June 2002 German-American discussions on the effectiveness of migration policies that admit foreigners for economic and employment reasons, and evaluates the impacts of economic integration on migration between Germany and its neighbors and between the United States and its neighbors. It is based on seminars held in Germany and the United States in June 2002 that examined migration patterns and their economic impacts as well as the interactions of economic integration and migration.

The transatlantic discussion reached consensus on three points:

- Immigrants are generally admitted for economic reasons to fill labor market gaps, that is, when labor demand exceeds supply. There are alternatives to admitting immigrants to reduce demand-supply gaps in the labor market. For example, labor demand can be reduced with labor-saving mechanization or trade, and labor supply can be increased with subsidized education and training, or by raising labor force participation rates. Policies should aim to reduce the demand for low-skilled workers, such as those in agriculture and construction, and to increase the supply of high-skilled workers, such as computer programmers. The economically efficient way to deal with the demand-supply gaps is to charge employers seeking foreign workers
-

a fee for each visa issued, and to use the funds collected to subsidize efforts to reduce labor demand and to increase supply.

- Trade is generally increasing at a faster rate than migration; economic integration often results in faster economic growth in poorer emigration countries, making trade and migration long-run substitutes.<sup>2</sup> However, economic integration between nations with income differences of more than 4 or 5 to 1 tends to increase migration, at least for a transition period that can persist for several decades, that is, trade and migration can be short-run complements. Jointly managing migration during this “migration hump,” when 3 to 10 percent of the residents of the poorer country may emigrate, is vital to preserve public acceptance of the trade agreements that eventually make trade a substitute for migration.
- Many European societies were shaped by emigration, while the United States and other traditional or classical immigration countries were shaped by immigration. These different historical experiences are often adduced to explain why there has been relatively little transatlantic learning on migration as compared to exchanges on trade or labor markets. The different migration histories of Europe and North America may be less important in improving the management of twenty-first century migration, since its economic causes and consequences are similar on both sides of the Atlantic.

The participants agreed that the seminars provided a unique opportunity to learn more about the actual operation and impacts of the German green card and seasonal worker programs and the U.S. H-1B, H-2A and H-2B programs. Germans and Americans came away with better understandings of how freedom of movement operates in the EU, and of the migration provisions and effects of NAFTA. They also came to appreciate Adam Smith’s 200-year old observation, that “Man is of all sorts of luggage the most difficult to move over borders.”

## INTRODUCTION

Germany and the United States dominate their regional economies and both are leaders in developing economic and trade policies that affect and influence their neighbors. During the 1990s, Germany and the United States developed or revised their migration policies with the goal of increasing the contributions of immigration to economic growth:

- Germany introduced a green card program in 2000 for up to 20,000 computer professionals earning at least \$45,000 a year, and in March 2002 the German Parliament approved legislation that would allow up to 50,000 foreigners a year to be admitted for economic-employment reasons.
- The United States, in 1990, more than doubled to 140,000 a year the number of visas available for immigrants (and their families) desired by U.S. employers, and increased the annual limit of six-year H-1B visas available to professionals several times in the 1990s to the current 195,000 a year.

These efforts to adjust front and side doors to immigrants who are expected to accelerate economic growth were controversial. In 2000, a state-level political campaign in North Rhine Westphalia was based on opposition to the entry of foreign computer professionals with green cards, using the slogan *Kinder statt Inder* (Children instead of Indians). This campaign failed to bring its proponents to power, and the German green card program went into effect. However, only about 15,000 green cards were issued in its first twenty months, including 2,500 to Indians. The effort to create Germany's first-ever regulated immigration system was even more controversial and, despite a dispute over the law's approval in the upper house of the Parliament in March 2002, it was signed into law on June 20, 2002.

The economic impacts of immigration have long been the subject of debate in the United States, and the assumption that the presence of unauthorized foreigners had adverse effects on unskilled U.S. workers was a major motivation for the enactment of employer sanctions in 1986. Some 2.7 million unauthorized foreigners were legalized in the late 1980s,

and sanctions proved unable to stop continued unauthorized migration when the unemployment rate fell below what some economists called its “natural rate” of six percent in the late 1980s. Instead of taking further steps to curb unauthorized migration, the argument was made that more immigrants, especially professionals, should be admitted to fill vacant jobs, and that their presence would speed up economic growth.<sup>3</sup> As a result, there was a doubling of admissions in 1990 (workers and their families) to a maximum 140,000 a year. In addition, it was made much easier for U.S. employers to bring foreigners with a BA or more into the United States to fill jobs that require a BA or more for up to six years under the H-1B program.

Immigration was a relatively low profile issue in 1990, when these changes in legal immigration for economic and employment reasons were made. However, legal and illegal immigration surged in the early 1990s, when the United States was in recession and California experienced its most severe recession in modern history. Mexico, the major source of legal and illegal immigrants, was put on the map by Ross Perot’s participation in the 1992 presidential campaign and his opposition to NAFTA. States and cities sued the federal government to recoup some of their expenditures for providing services to unauthorized foreigners, and studies of the public finance impacts of immigration led to the conclusion that the federal government may gain from the presence of immigrants, but states and cities spend more on their education and other services than the immigrants pay in state and local taxes. California voters approved Proposition 187 in 1994 to reduce state and local expenditures on unauthorized foreigners, and many of the features of Proposition 187 were included in federal laws in 1996, reducing immigrant access to social welfare. Some legal immigrants had their access to welfare benefits restored since 1996, but the United States stands in sharp contrast to Germany in having a smaller social safety net, and far more restrictions on immigrant access to welfare benefits.

### **Global Changes**

During the 1990s, the so-called Washington consensus spread around the globe. It held that competitive markets are the best way to organize an economy, and opening the economy to trade helps to get prices right

and spurs economic growth. The World Trade Organization expanded in membership and capacity to free up trade in goods and services, and as a result, the volume of trade surged in Europe, North America, and around the world.

The consensus that competitive markets and free trade maximize economic growth stands in sharp contrast to the persistence of very different immigration policies. Industrial country immigration policies fall into three groups:

- traditional countries of immigration, such as the United States;
- largely reluctant countries of immigration in Europe; and
- newcomers to immigration such as Japan that remain largely closed to economic immigrants.

Economic theory suggests that trade and migration are substitutes, at least in the long-term as economic conditions in potential emigration and immigration areas converge. In part to curb migration, Germany led the effort to have Poland and other Eastern European countries admitted to the European Union, while the United States embraced freer trade and investment with Mexico under NAFTA.

The thinking about how economic integration and migration interact was quite different across the Atlantic:

- EU member nations, especially Germany and Austria, feared “too much” migration from the new Eastern European member states, and they insisted on what became a 2-3-2 plan for freedom of movement under which EU nations can block freedom of movement for nationals of new EU entrants for up to seven years.<sup>4</sup>
- Most Mexico-U.S. migration, which averages 150,000 to 250,000 legal immigrants and 250,000 to 350,000 unauthorized settlers a year, was not dealt with explicitly in NAFTA. In 2000, newly elected Mexican President Vicente Fox proposed EU-style freedom of movement in North America to a cool reception in both Canada and the United States. After September 11, discussions on legalizing some of the 4 to 5 million unauthorized Mexicans in the United States as immigrants or guest workers came to a stop.

The discussions in Essen, Hamburg, and Washington highlighted the contrast between the consensus among researchers that the immigration of professionals is largely an economic benefit for Germany and the United States, versus the skepticism of many politicians that there should not be immigration as long as there are unemployed, and that the unemployed should be retrained to fill vacant jobs.<sup>5</sup> Similarly, most researchers agree that the additional migration that accompanies economic integration, the migration hump, is a reasonable short-term “price to pay” for the longer-term economic benefits of freer trade and investment in nearby emigration countries. This research consensus is based on comparative statics, or comparisons of before and after economic equilibria, not the dynamics of change to which elected officials are most sensitive. The different time horizons of researchers and politicians led to the suggestion that, just as trade adjustment assistance has become an integral part of free trade agreements, so migration adjustment assistance may need to accompany freer migration policies whose overall economic benefits are positive, but which, nonetheless, impose costs on particular individuals.

### **Migration Developments: Germany and the United States**

Germany has 7.3 million foreign residents, including 1.8 million who were born in Germany. Foreigners constitute about 9 percent of the 82 million residents. An additional 3.5 million residents are ethnic Germans, newcomers from eastern Europe and the former USSR who have German passports, but often do not speak German. Some 450,000 newcomers a year continue to arrive in Germany, including the family members of settled foreign and German residents (76,000 in 2000), asylum seekers (79,000), foreign students and workers (125,000), unauthorized foreigners (75,000?), and ethnic Germans (96,000). Even though not all of these newcomers remain in Germany as immigrants, all those except ethnic Germans in Germany more than ninety days are counted as part of the foreign population (*Beauftragte*; 2001).

Germany faces four major immigration issues that have roots in past policy decisions: the integration of guest workers, dealing with asylum applicants, EU enlargement and migration, and managing migration for twenty-first century economic growth. The first issue, the integration of

guest workers and their children and grandchildren, especially Turks, reflects Max Frisch's aphorism, "We recruited workers, but got people." [*Man hat Arbeitskraefte gerufen, aber es kommen Menschen*, (Frisch, 1965, 7)]. The second issue is asylum. Germany's history gave impetus to generous asylum policies, and guest worker policies gave Germany settled communities of Turks and Yugoslavs. When there was trouble in ex-recruitment countries, as with the Kurds in Turkey or civil war in the former Yugoslavia, migrants from these areas sought shelter in Germany. There was a wave of asylum applicants from the Balkans in the 1990s that has slowed, but Germany continues to receive 6,000 to 7,000 applications for asylum a month from Turks.

The third issue is ethnic Germans and EU enlargement, or how to manage migration from poorer areas of eastern Europe and the former USSR as the EU enlarges eastwards and to the south. EU enlargement and migration are linked: should the priority be to take work to the workers, as Germany is doing at great expense to the former East Germany, should workers be encouraged to migrate to the work, or should both policies operate simultaneously? Closely related is the fourth migration issue: how should Germany develop a sustainable immigration policy for a twenty-first century economy and society that is attempting to become more flexible as the population ages? Should this policy restrict admissions to skilled and professional workers, or also allow unskilled worker migration? Until such a policy is developed, Germany, without a formal policy that explains why the arrival of foreigners is in Germany's interest and without established priorities for entry and integration, will remain the major destination for immigrants.

The United States is a nation of immigrants. Under the motto *e pluribus unum* (from many one), U.S. presidents frequently remind Americans that they share the experience of themselves or their forebears leaving another country to begin anew in the United States.<sup>6</sup> Immigration is viewed as serving the U.S. national interest, as it permits immigrants to better themselves as they enrich the United States.

Since immigrant arrivals to the United States were first recorded in 1820, the United States has accepted 66 million legal immigrants, including 11 percent from Germany and 10 percent from Mexico. However, two centuries of immigration and integration have not yielded



consensus on the three major immigration questions: how many? from where? and in what status newcomers should arrive? The U.S. immigration system recognizes 800,000 to 900,000 foreigners a year as legal immigrants, admits 35 million nonimmigrant tourist and business visitors a year, and has another 300,000 to 400,000 unauthorized foreigners settle. The 1990s witnessed contentious debates over the relationship of immigrants and their children to the U.S. educational, welfare, and political systems. More broadly, the 1990s immigration debate reflected disagreement over the question of whether the current immigration system served U.S. national interests.

Immigration to the United States is likely to continue at the current levels of 900,000 legal and 300,000 unauthorized a year. As a result, Americans will, in the words of former Census director Kenneth Prewitt, “redefine ourselves as the first country in world history which is literally made up of every part of the world” (quoted in Alvarez, 2001).

## **MIGRATION AND ECONOMIC GROWTH**

### **Economic and Public Finance Impacts**

Immigration adds to the population, labor force, and economic growth of a country; that is, countries that are open to immigrants tend to have more people, more workers, and larger economies. The most recent comprehensive study of immigration and the economy was done in 1997, and focused on the United States. The *New Americans*, a report issued by the National Research Council in May 1997, concluded that immigrants added a net \$1 to \$10 billion per year to U.S. GDP in the mid-1990s.<sup>7</sup> U.S. GDP was \$8 trillion in 1996, and GDP increases by \$200 billion a year when the economic growth rate is 2.5 percent. An additional \$10 billion due to immigration raises the economic growth rate from 2.5 and 2.6 percent, or reflects two weeks of “normal” U.S. economic growth.

The \$1 billion to \$10 billion additional-GDP-due-to-immigration estimate is based on a simple model of the economy in which it is assumed that the economic gains to persons who were residents before immigration is one-half of the share of U.S. GDP accruing to labor (60 to 70 percent) times the percent of the U.S. labor force that is foreign born (10 percent)

times the decline in U.S. residents' wages due to immigration, about 3 percent, or:  $0.5 \times 0.7 \times 0.1 \times -0.03 = 0.001$ , or one-tenth of one percent of the \$8 trillion GDP, or \$8 billion.

When the NRC report was released, most commentators emphasized that the most important NRC finding is that immigration has a positive economic effect. However, they agreed that immigration does not make the United States rich, and that the important economic issues surrounding immigration are distributional: who gains and who loses as a result of immigration, and how much? The NRC estimate was based on the assumption that the U.S. economy had constant returns to scale (CRTS), which means that doubling the number of workers and the amount of capital in turn doubles output, and this assumption also means that immigration cannot raise the growth rate of wages for U.S.-born persons. Immigrants benefit the United States because the value of what they produce is more than the wages they are paid, that is, owners of capital and workers who are made more productive by the presence of immigrants gain because of the presence of immigrants.

U.S. workers who compete with immigrants may have lower wages and higher unemployment, but it has been very difficult to find empirical evidence that the presence of immigrant workers reduces the wages or increases the unemployment rates of U.S. workers employed in similar sectors, such as African Americans or Hispanics. Economic theory suggests that increasing the supply of labor should reduce wages, or wage growth. The NRC report concluded that "immigration produces net economic gains for domestic residents" largely because it found that immigration lowered U.S. wages and prices and increased the efficiency of the U.S. economy (1997, pS-3-4). In 1986, the President's Council on Economic Advisors (CEA) reached a similar conclusion: "Although immigrant workers increase output, their addition to the supply of labor ... [causes] wage rates in the immediately affected market [to be] bid down ... Thus, native-born workers who compete with immigrants for jobs may experience reduced earnings or reduced employment" (1986, p. 221).

However, econometric studies that examine the interactions of immigrants and groups of workers with whom immigrants might compete in one city, or that make comparisons between immigrants and other

workers across city labor markets, find few effects of immigrants on native worker wages or employment. The starting point for such studies is the assumption that, the more immigrants in a city's labor market, the lower wages for similar U.S. workers should be, (or the higher their unemployment rate). But in the 1980s few depression and displacement effects of immigrants could be found when the wages and unemployment rates of African Americans in cities with large numbers of immigrants, like Los Angeles, were compared with their wages and unemployment rates in cities with smaller numbers of immigrants, such as Atlanta. George Borjas in 1990 summarized the literature as follows: "modern econometrics cannot detect a single shred of evidence that immigrants have a sizable adverse impact on the earnings and employment opportunities of natives in the United States"<sup>8</sup> (Borjas, 1990, p81). One of the most-cited studies concluded that the 1980 influx of Cubans to Miami had no measurable negative effect on the wages and employment of local workers. During the four months of the Mariel boatlift, Miami's labor force increased by 7 percent, but there were no significant differences in wages and job opportunities for native-born workers in Miami and in other U.S. cities, which led to the conclusion that immigrants generated enough new economic activity to offset any negative effects their presence might have on local workers (Card, 1990).

As more data became available in the 1990s, researchers began to detect the impact of immigrants. Case studies found that immigrant worker networks dominated access to some jobs, resulting in local workers not learning about job vacancies, as occurred when labor contractors and other middlemen spread from farm to non-farm labor markets (Mines and Martin, 1984). But the major factor explaining why the econometric studies of the 1980s failed to find the wage and unemployment effects predicted by economic theory is that U.S. labor markets are flexible and workers are mobile: U.S. workers who had to compete with immigrants moved away from cities with large numbers of immigrants so that any wage depression or labor displacement impacts were quickly dispersed around the United States. In the 1990s, the literature reached the conclusion that immigrants can have the depression and displacement effects predicted by economic theory, but these effects may not be observed in econometric studies.

The other major economic issue debated in the 1990s was the public finance impact of immigrants—do immigrants and their children pay more in taxes than they consume in tax-supported services? The NRC concluded that they do: the average immigrant and his or her descendants in the United States in 1996 was expected to pay \$80,000 more in taxes than he would consume in tax-supported services; in 1996 dollars, based on a series of “heroic assumptions” about the future integration of the children of immigrants, the key assumption is that the children and grandchildren of immigrants will be average Americans in terms of education and income. Furthermore, the model assumed that the federal government will stabilize the ratio of debt to gross domestic product, using a tax increase or a reduction in social spending, which increases the benefits of immigration because “the pain of higher taxes [or fewer services] is spread over a larger population.”

The NRC and most other public finance studies concluded that the major public finance impact of immigration was distributional: the federal government gains by immigration, since the taxes paid by most immigrants exceed the cost of the federally provided services they consume. However, the reverse occurs at the state and local government level. This is important, since 75 percent of U.S. immigrants are concentrated in six states: California, New York, Texas, Florida, Illinois, and New Jersey. An examination of the state and local tax impacts of immigrants in the first and sixth states highlights the diversity of immigrants and their public finance impacts. In California, over half of the immigrant households are headed by persons born in Mexico and Latin America, and these often younger and less educated immigrants consumed significantly more in tax-supported public services than they paid in state and local taxes, especially education, which is supported by about \$6,000 per child per year in taxes.

In 1996, households headed by Latin American immigrants in California consumed \$5,000 more in state and local services than they paid in state and local taxes. In New Jersey, by contrast, almost half of the immigrant heads of households, who tended to be much older than immigrant household heads in California, were born in Europe or Canada, and the average immigrant household in New Jersey received \$1,500 more in state and locally-funded services than the household paid in state

and local taxes in 1996. State and local “immigrant deficits” in California, New Jersey, and other states were offset by an additional \$1,200 in state and local taxes paid by the more numerous native-born households in California, and \$230 in New Jersey. These studies suggested that, if immigration is in the national interest but it has very different federal versus state and local fiscal impacts, it makes sense to think about some form of migration adjustment assistance to head off anti-immigrant movements such as Proposition 187. However, except for federal reimbursement of some of the costs associated with unauthorized foreigners in state and local prisons, there has been very little federal migration adjustment assistance.

German studies found that the influx of foreigners and other newcomers between 1998 and 1991 increased real GDP by 5 percent, increased employment by 80,000, and generated a new fiscal benefit equivalent to €6 billion in 1991.<sup>9</sup> German studies suggest that the 7.3 million foreigners, 9 percent of residents, generate about 5 percent of German GDP, and contribute a net €15 billion to public finances, primarily because many of the foreigners arrive with their education completed.<sup>10</sup> Many Germans note that the benefits of foreigners would increase if their unemployment rate were reduced—the cost of the “non-integration” of foreigners is estimated to be 1-2 percent of GDP.<sup>11</sup>

### **Germany: Green Cards and Seasonals**

The German green card program allows German employers to have foreigners who receive at least €50,000 (\$46,000) a year be admitted without a labor market test and with their families for up to five years. The green card program, in turn, arose from the failed effort of the SPD-Green government elected in September 1998 to quickly change German naturalization policy from one of the most restrictive in Europe to one of the most liberal. Under the new government’s original plan, foreigners who became naturalized Germans could routinely retain their original nationality. The opposition CDU-CSU parties based a winning campaign in February 1999 in the Hesse state elections on opposition to routine dual nationality (they argued it would give dual or double benefits for foreigners), and forced the SPD-Greens to compromise. Since 2000, children born to legal foreign residents of Germany are considered dual

nationals until age twenty-three, when they normally lose German citizenship unless they give up their old citizenship.

The SPD-Greens needed a way to get Germans to see immigration positively, and found it when, in February 2000, the industrial association BITKOM asked the government to allow employers to admit up to 30,000 foreign professionals from outside the EU to help fill what BITKOM said were 75,000 vacant jobs for computer programmers and engineers. The United States and other industrial countries were making it easier for foreign professionals to enter, especially to fill high-tech jobs, and Chancellor Gerhard Schröder responded positively to BITKOM, proposing what he called a “green card” program.<sup>12</sup> In May 2000, the CDU made opposition to the green card program the centerpiece of its campaign to dislodge the SPD-led coalition government in North Rhine-Westphalia, using the slogan *Kinder statt Inder* (children instead of Indians) arguing that Germans should have more children and train them for high-tech jobs instead of importing high-tech workers from India. This CDU campaign failed, the *Bundesrat* approved the green card proposal May 31, 2000, and the first foreigner issued a green card on July 31, 2000 was a twenty-five year-old Indonesian, Harianto Wijaya, who went to work for a German software firm.

German employers did not request as many green card workers as expected: of the 20,000 permits available, about 12,000 were issued by April 2002, or fewer than 600 a month, mostly to foreigners from India (22 percent) and eastern Europe (14 percent). The admissions process is relatively easy for employers—requests are to be handled within one week, but most German employers did not request green card workers—70 percent of the green cards were issued to foreign workers in Bavaria, Hesse, and Baden-Württemberg, states that generate about one-third of German GDP. Most Green card holders are employed in firms with fewer than 500 workers, and 90 percent are men.

The green card program is widely credited with making Germans more receptive to immigrants, with helping Germans to appreciate that immigrants can benefit themselves and benefit Germans. However, it did not lead to agreement between the SPD-Green government could not agree with the opposition CDU-CSU parties on a new immigration law. Immigration and unemployment are expected to be the central issues in

the 2002 elections. SPD Chancellor Gerhard Schröder asserted that: “We will establish a modern immigration law because we need one,” while CSU leader Edmund Stoiber, his conservative challenger, opposed immigration because of high unemployment: “with 4 million unemployed, we can’t have more foreign workers coming to Germany ... Who is going to pay for integrating these workers? I’ve not heard the chancellor saying he’ll give the billions it will cost to pay for this.”

Germany is well known for its 1960s guest worker programs, programs akin to using rifle blasts to import workers and then to fill jobs throughout the labor market. As is well known, most guest workers rotated in and out of Germany as planned, but many settled, prompting the aphorism that there is nothing more permanent than temporary workers. In the early 1990s, with Germany unwilling to establish a new Iron Curtain to prevent the entry of Poles and Czechs seeking jobs, new guest worker programs analogous to using rifles to fill vacancies in particular sectors were established. For example, Germany introduced a project-tied workers’ program that allowed German construction firms to sub-contract with foreign firms to e.g. erect the structure of an office building, with the foreign firm supplying both the expertise and the workers. These employer-to-employer subcontracting agreements are checked by the German Employment Service before the foreign workers arrive, and the foreign workers admitted can stay in Germany for up to two years. However, while they are in Germany, project-tied foreign workers are considered to be Polish or Czech workers, that is, they are not enrolled in the German social security system, and acquire no rights to longer-term residence in Germany. The number of project workers peaked at 95,000 in 1992, and averaged 44,000 in 2000.

Germany stopped the recruitment of foreign workers in 1973, but this recruitment stop applied only to unskilled foreign workers coming to Germany for more than ninety days. Germany launched a seasonal foreign worker program in the early 1990s that admitted non-EU foreign workers for up to ninety days. There were 129,000 admissions in 1991, 226,000 in 1997, and 264,000 in 2000 (in some cases, the same worker returned to Germany twice in one year, so there were, e.g. 238,000 individuals involved in the seasonal worker program in 2000). Most seasonal foreign workers are requested by name by German farmers,

restaurants, or construction contractors, and their pay, housing, and travel arrangements are spelled out in bilingual contracts that must be approved by the German Employment Service, which also ensures that local workers are not available.

There were three other guest worker programs launched in the 1990s to manage inevitable migration and to fill job vacancies in particular sectors. One program allowed workers from the Czech Republic and Poland to commute to German jobs within 50 km of Germany's eastern borders, and to stay overnight in Germany up to two days a week. A work-and-learn program allowed 5,900 East Europeans aged 18 to 40 to live and work in Germany for up to 18 months; in 2000, 1,500 or 25 percent of these "new guest workers" were from Poland.<sup>13</sup> Finally, Germany launched a program to admit 1,000 nurses from the former Yugoslavia.

### **The United States: H-1Bs**

Under U.S. immigration law, foreign or guest workers are non-immigrants, meaning that they are expected to depart after their jobs in the United States end. The United States has nineteen different visas that allow foreigners to work in the U.S., and they range from A for diplomatic staff to TN for NAFTA professionals. Some 450,000 foreign workers are admitted under the fourteen major nonimmigrant visa categories that permit the employment of foreign workers by U.S. employers for U.S. wages, i.e., that lead to the foreign workers being considered U.S. workers in the U.S. labor market.

Since 1965, U.S. employers have usually been required to obtain a certification from the U.S. Department of Labor (DOL) that U.S. workers are unavailable for each vacancy that they want to fill temporarily with a foreigner. The Immigration Act of 1990 (IMMACT) more than doubled the number of visas available for permanent immigrants entering the United States for economic or employment reasons, from 54,000 to 140,000, and created the H-1B program, easing employer access to professional foreign workers but imposing a cap of 65,000 H-1B visas a year.<sup>14</sup>

H-1B workers are foreigners who can remain in the United States for up to six years but, unlike other temporary worker programs, H-1B visa



holders may adjust their status from temporary worker to immigrant. In this sense, the H-1B program is a “probationary immigrant” program, since a foreign worker who proves valuable to a U.S. employer can be sponsored by that employer for immigrant status. This happens frequently: over 90 percent of the immigrants “admitted” or sponsored by their U.S. employers to fill vacant jobs are already in the United States, and simply adjust their status from nonimmigrant, such as H-1B for F-1 student, or unauthorized to immigrant.

Non-immigrant programs for foreign workers can be compared along two major dimensions: the requirements that employers must satisfy to employ foreign workers, and the relationship between foreign workers and U.S. employers after arrival. The three major types of guest worker programs can be contrasted with illegal immigration, under which employers satisfy no government requirement before admission, and the workers are free agents in an unauthorized status after admission. In the table below, employer requirements are listed in the rows, and worker-employer relationships are in the columns.

**Table 1. U.S. Guest Worker Programs: Employer and Worker Rules**

Employer & Worker Rules	Contractual Worker	Free Agent Worker
Certification	(1) H-2A/B	(3)
Attestation	(2) H-1B	(4) Pilot student, AgJobs
No employer requirements	(5) NAFTA, J-1 Visitors	(6) Unauthorized

- **Certification/contractual worker.** Traditional guest worker programs fall into cell (1), with employers obliged to obtain certification of their need for foreign workers from DOL, and foreign workers are tied to the employer who received certification to employ them by a contract. If the U.S. employer fires a contractual foreign worker, the guest worker must normally leave the United States. The contract between the employer and the foreign worker is binding, e.g., workers can sue to enforce contract clauses.

- **Attestation/contractual worker.** Attestation means that employers file letters with DOL “attesting” that they tried and failed to find U.S. workers while offering prevailing wages and working conditions, and this employer attestation suffices to have the foreigner admitted to the United States, i.e., an employer’s attestation opens the border gate. H-1B workers normally have contracts with the employers who attested they were needed spelling out wages.
- **Certification/free agent worker.** The United States has no certification/free agent worker programs. If an employer were certified as needing a foreign worker to fill a vacant job, but the foreign worker was not tied to the job vacancy with a contract, the certification process would be subverted.
- **Attestation/free agent worker.** Employers file letters with DOL “attesting” that they tried and failed to find U.S. workers while offering prevailing wages and working conditions, and then become eligible to hire free agent foreigners, i.e., the foreigner is free to quit and retains his right to remain in the United States and seek employment with another employer who has filed an attestation. The United States currently has no attestation-free agent temporary worker programs, but did between 1992 and 1996 under the pilot student employment program, which ended on September 30, 1996.<sup>15</sup>
- **No Employer Requirements/Worker Contracts.** The NAFTA TN visa permits Canadians and Mexicans with “at least a baccalaureate degree or appropriate credentials demonstrating status as a professional” to go a U.S. port of entry, show a passport, BA credential, and an offer of “temporary” employment from a U.S. employer, and then receive a TN work visa good for one year<sup>16</sup> at the U.S. border entry point—the offer of “temporary” employment becomes the contract between the employer and the worker. TN work visas are renewable indefinitely, and there are no numerical limit on how many professionals can cross the border between the United States and Canada, but the number of TN visas for Mexicans is limited to 5,500 per year until 2003. There were 27,000 TN admissions in FY96, and 7,700 admissions of dependents of TN-visa holders.
- **No Employer Requirements/Free Agent Workers.** The sixth type of employer-worker arrangement is one in which employers do not

have to satisfy any special government requirements before hiring foreign workers, and those foreign workers are free agents in the U.S. labor market. Unauthorized workers and legal immigrants are examples of these types of arrangements: they typically have no individual contracts with employers who hire them, although they are covered by the same protective labor laws that apply to all workers employed in U.S. labor markets, including being paid the minimum wage and having unemployment insurance contributions made on their behalf. Unauthorized workers may be prevented from receiving remedies under some labor laws, including UI benefits if laid off (jobless workers collecting UI benefits must be available for work) and reinstatement and back pay if fired for e.g. protected union activities.

In order to employ H-1B workers, U.S. employers file a Labor Condition Attestation (Form ETA 9035) with DOL for the admission and employment of H-1Bs, and they make assurances in their attestation:

1. they are offering the prevailing wage
2. the working conditions offered to the H-1B foreigner will not adversely affect U.S. employees' working conditions
3. no strike or lockout exists relative to the position being filled by the H-1B.

The LCAs do not have to include the name of the H-1B worker the employer wishes to employ, and DOL generally cannot investigate employers who request or employ H-1B workers unless DOL receives a complaint. Spouses and children of an H-1B visa holder are granted H-4 visas, which permit them to attend school in the United States but not to accept employment.

The H-1B program illustrates a general trend in foreign worker programs: establishing "rifle" guest worker programs that aim to fill job vacancies in a particular industry or sector. As a result, the employers seeking the foreign workers generally gain more power, since interest in the program tends to be restricted to a smaller group and there is often a specialized vocabulary. In the United States, the high-tech industry proved

to be able to win increases in the annual quota despite evaluations of the program highlighting problems. Four questions remain unresolved: does the employer really need H-1B foreign workers, is the employer paying prevailing wages and not adversely affecting similar US workers, are tougher penalties for H-1B dependent employers (those with 15 percent or more H-1B workers) likely to be effective, and will employer-paid fees that fund scholarships help to close the demand-supply gap for high tech workers?

The first question is the most basic: are foreign H-1Bs “needed,” that is, should the employer be allowed to hire a foreign worker without a test of the labor market for U.S. workers? Employers argue that they need to move quickly, and should not be required to search for U.S. workers. Critics assert that attestation allows U.S. employers to lay off U.S. workers and replace them with cheaper or harder-working foreigners. Labor Secretary Robert B. Reich in 1995 testified that the H-1B program “has become a major means of circumventing the costs of paying skilled American workers or the costs of training them” (*Migration News*, May 1996. DOL Reports on Temporary Workers).

The United States has tried to curb such abuses in two ways. First, employers had to pay \$500 and later \$1,000 fees for each H-1B worker admitted, with the funds used to subsidize the training for U.S. workers and thus eventually increase the supply of U.S. professionals. Second, new restrictions were placed on “H-1B-dependent employers,” generally U.S. employers whose work forces are 15 percent or more H-1B workers. These 100 to 200 U.S. employers, many run by e.g. Indian or Chinese immigrants who recruit H-1B workers in their countries of origin, have had to since 1999, (1) document their efforts to recruit U.S. workers and (2) certify that U.S. workers were not laid off to make room for the H-1Bs in the previous ninety days, and that U.S. workers will not be laid off for ninety days after the arrival of the H-1Bs.

The H-1B program remains controversial, but the dot.com bust has taken it out of the limelight. In some ways, the H-1B program has become another specialized immigration channel that primarily benefits those involved: H-1Bs and their U.S. employers, the U.S. lawyers and lobbyists who complete the paperwork and lobby for the program, and especially the middlemen in the United States and abroad whose primary business

is moving high-tech workers over national borders. In the software industry, where ideas flow quickly over national borders, it is becoming less clear that the location of the work confers overwhelming multiplier benefits on the host area, as evidenced by the growing number of entry-level customer support jobs that are migrating to countries such as the Philippines and India.

### **The United States: H-2As**

The H-1B program admits foreigners with a BA or more to fill U.S. jobs that normally require a BA or more. The H-2A program aims at the other end of the labor market by admitting foreigners temporarily to fill seasonal farm jobs. The H-2A program is older and has been even more controversial than the H-1B program. The H-2A program permits U.S. farmers to recruit and admit foreign farm workers after their need for these workers is certified by the U.S. Department of Labor. DOL is charged with ensuring that: (1) U.S. workers are not available; and (2) the presence of the foreign workers will have no adverse effects on similar U.S. workers. In order to be certified, U.S. employers must promise (1) to pay the higher of the minimum, prevailing, or Adverse Effect Wage Rate (\$7-8 an hour in most states in 2002); (2) to offer U.S. and H-2A workers free approved housing; and (3) to pay for transportation from the worker's place of recruitment to the U.S. job.

Despite complaints that the H-2A program is cumbersome, the number of jobs certified, mostly to fill jobs on tobacco farms in North Carolina and surrounding states, has been increasing. However, many farm employers, especially in the western states where there is little on-farm housing, say that the H-2A program is "unworkable" for them and they have been seeking an alternative to the H-2A program for at least twenty years. Western farm employers succeeded in having an alternative guest worker program included in the Immigration Reform and Control Act of 1986, the Replenishment Agricultural Worker program, but the RAW program was not used to admit farm workers because there were no farm labor shortages during its 1989-1993 life.

**Table 2. H-2A Certifications: 1985-2000**  
**H-2A Certifications: 1985-2000**

	Farm jobs			
	Certified	Sugarcane	Tobacco	Sheep
1985	20,682	10,017	831	1,433
1986	21,161	10,052	594	1,043
1987	24,532	10,616	1,333	1,639
1988	23,745	10,751	2,795	1,655
1989	26,607	10,610	3,752	1,581
1990	25,412	9,550	4,666	1,677
1991	25,702	7,978	2,257	1,557
1992	18,939	4,271	3,080	1,522
1993	17,000	2,319	3,570	1,111
1994	15,811	1,419	3,720	1,305
1995	15,117		4,116	1,350
1996	19,103		9,756	1,366
1997	23,562		14,483	1,667
1998	34,898		16,984	1,961
1999	41,827		16,206	1,443
2000	44,017		14,554	1,865

Source: U.S. Department of Labor, ETA, OWS. Annual Reports.  
 Farm jobs certified by DOL as needing to be filled with H-2A workers.

Bills that would create alternatives to or modify the H-2A program to make it more employer-friendly have been introduced in Congress since 1995, justified by the rising percentage of unauthorized workers, which made farmers vulnerable to crop losses if the Immigration and Naturalization Service inspected their operations and removed unauthorized workers. Proponents of a new guest worker program, or a revised H-2A program, argued that legal status must be better than illegal status for both farmers and workers, especially as the estimated share of farm workers who were unauthorized surpassed 50 percent in 1997. Indeed, Table 3 shows that Special Agricultural Workers (SAWs), who were supposed to have done at least ninety days of farm work as

unauthorized workers in 1985-1986, quickly got out of the farm labor market and were replaced by unauthorized workers.

**Table 3. SAWs and Unauthorized Farm Workers, 1989-98**  
**SAWs and Unauthorized Workers in the U.S.**  
**Crop Ag: 1989-1998**

	SAWs	Unauthorized
1989	37	8
1990	30	17
1991	27	19
1992	23	33
1993	12	44
1994	20	38
1995	19	40
1996	16	50
1997	17	51
1998	15	52

Source: U.S. Department of Labor, 2000

The major issue in the farmers' proposals was simple: would the employer or the U.S. government control the border gate or admissions of guest workers? Certification means that the U.S. government controls the border gate; H-2A workers cannot be admitted until DOL certifies that the farm employer has tried and failed to find U.S. workers. Farm employers preferred attestation, with the farmer self-certifying his need for foreign workers by "attesting" that he needed foreign workers in the same way that employers seeking H-1B visas attest to their need for foreigners—the workers would then arrive, and enforcement would respond to complaints.

Farmers are slowly moving toward achieving their goal of an attestation procedure to hire unskilled foreign workers. In July 1998, the U.S. Senate approved on a 68-31 vote the Agricultural Job Opportunity Benefits and Security Act (AgJOBS), which included attestation-like farm worker registries and introduced the concept of withholding some of the foreign workers' wages to encourage them to return to their country of origin at the end of the season. Under AgJOBS, employers would have paid federal FUTA (Unemployment Insurance) and FICA (Social Security) taxes to a trust fund rather than to UI

and SSA agencies, about 8.3 percent of their earnings, and this trust fund would have been used to reimburse DOL and INS for the costs of administering the program. If the Attorney General found that a significant number of AgJOBS guest workers were remaining in the United States unlawfully, 20 percent of the workers' earnings could have been paid by farm employers directly into the trust fund, and returned to the worker in his country of origin after he surrendered the visa-ID, which would include a photo and biometric information. President Clinton threatened a veto, and AgJOBS was not enacted.

The election of Vicente Fox as Mexican president in July 2000, and George Bush as president in November 2000, encouraged farmers, since both Fox and Bush favored a new guest worker program. Worker advocates who believed that President Clinton would veto most farmer-supported guest worker proposals agreed to a compromise version of AgJOBS in December 2000 that included a new concept: earned legalization, that is, unauthorized workers who had done at least 100 days of farm work the previous year would receive a temporary legal status, and they could adjust to become immigrants if they did at least 360 more days of farm work in the next six years. While they were in the temporary status, they would not be entitled to welfare benefits, etc. Earned legalization satisfied employers, since newly legalized farm workers would not immediately leave for non-farm jobs, and worker advocates, who wanted farm workers to eventually have the same rights as other workers.

The AgJOBS compromise was blocked in Congress by Republicans who opposed "rewarding lawbreakers." Led by Senator Phil Gramm (R-TX), they instead proposed a guest worker only policy that would have allowed unauthorized Mexicans already in the United States to obtain seasonal work permits that would allow them to return to the United States for up to eleven months a year indefinitely. The guest workers and their employers would continue to pay social security taxes, which total 15.3 percent of wages, but these taxes would be diverted to a trust fund and used to provide emergency medical care to guest workers. Gramm's guest worker proposal would also have allowed Mexicans to work in year-round non-farm jobs for up to three consecutive years, but then they would have to stay in Mexico at least a year before returning to the United States.

Guest workers only represent one end of the spectrum; the other is legalization only. Legalization, favored by the AFL-CIO and most church and



union groups, was introduced by Rep. Luis V. Gutierrez (D-IL) on February 7, 2001 in HR 500, the U.S. Employee, Family Unity and Legalization Act. It would grant temporary legal status to persons in the United States before February 6, 2000, and immediate immigrant status to persons in the United States before February 6, 1996. The legalization date would then roll forward a year in each of the next five years, eventually encompassing all of those now illegally in the United States.

Earned legalization has become an acceptable middle ground for many employers, migrant advocates, and others seeking an alternative to what they consider an unsatisfactory status quo. During 2001, Mexican President Fox pressed President Bush for better treatment of unauthorized Mexicans in the United States, and a U.S.-Mexican working group was created to develop “an orderly framework for migration that ensures humane treatment [and] legal security, and dignifies labor conditions.” The working group never made formal recommendations, but seemed to lean toward earned legalization, as reflected in statements by President Bush in July 2001: “when we find a willing employer and willing employee, we ought to match the two. We ought to make it easier for people who want to employ somebody, who are looking for workers, to be able to hire people who want to work. And I know we can do so in a humane way that treats people with respect [and] provides a way for some of the workers to achieve permanent status over time.”

## **ECONOMIC INTEGRATION AND MIGRATION**

Migration and trade tend to equalize wages and prices in participating countries, so that economically motivated migration decreases with economic integration. Starting with different “endowments,” or different ratios of land to workers, or capital to workers, trade and migration flows in expected directions, such as farm goods from countries with relatively more farm land, and workers from countries with lower wages. The country with abundant land can be expected to continue to export farm goods, but migration should eventually cease as wages tend to equalize.

This is the basic logic of the economic theory of comparative advantage that argues for free trade. Under free trade, the Heckscher-Ohlin-Samuelson factor price equalisation theorem concludes that trade

is a perfect substitute for migration—if there is free trade in goods, there will be no economically motivated migration in response to wage or unemployment differences. During the 1950s, European economists argued that European economies fulfilled most of the Heckscher-Ohlin-Samuelson criteria, and that a “Common Market” could allow trade to substitute for migration.

The Heckscher-Ohlin-Samuelson factor price equalization theorem is based on a simple supply-demand framework under which the exit of workers puts upward pressure on wages in emigration countries, and the entrance of workers puts downward pressure on wages in immigration countries. However, the same result can be achieved with freer trade—the low-wage country expands the production of low-wage goods, putting upward pressure on wages, and exchanges them for high-wage goods from the high-wage country.

The Heckscher-Ohlin-Samuelson theorem assumes that countries have identical production functions, that markets clear (there is no unemployment), and that there are no significant transaction costs or externalities. If these assumptions are relaxed, allowing for unemployment, different production technologies, or economies of scale, trade and migration can be complements in the medium- and long-term. The so-called new growth theory notes that migration might beget more migration if, for example, workers can migrate, so that businesses may not invest where workers are, but instead invest in the relatively rich area, encouraging more migration. In an extreme case, the periphery location with excess labor might become a depressed area with the area attracting migrants becoming a booming core economy; this is sometimes called Ricardian divergence.

In the Heckscher-Ohlin-Samuelson model, migration is a reaction to trade impediments, or a result the non-tradability of some goods. If there is incomplete trade, then migration can act to equalize wages. Similarly, migration may reflect the fact that some factors (some types of workers) are not mobile, so that even free trade may not produce complete factor price equalization, that is, wage differences may persist because services, for example, must be delivered where customers are located. Similarly, persisting differences in labor productivity due to e.g. different production technologies, economies of scale or imperfect markets can lead to persisting migration, so that trade and migration can be complements, increasing together. Economic integration tends to increase the geographic spread of markets in which goods and workers move freely, that is, economic integration increases competition within the

area being integrated. This increased competition, as well as economies of scale, tends to speed up economic growth.

### **Germany and EU Enlargement**

The EU is expanding eastward, planning to accept up to thirteen eastern and southern European countries—ten in the so-called first round, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia, and then perhaps three more—Bulgaria, Romania, and Turkey. Since wages are lower in the accession countries, migration from them to the current fifteen EU countries is expected to increase. Accession to the EU effectuates economic, political, and institutional changes, so that, when estimating how much migration could result from EU enlargement, economists must recognize that changing institutions can make predictions of effects invalid. In the so-called Lucas-critique of models of large-scale change, Lucas noted that if there are changes in institutions, it is difficult to extrapolate from past large-scale changes, so that, e.g. using the experience of integrating southern European nations may not be applicable in projecting the likely migration consequences of EU expansion eastward.<sup>17</sup>

Despite these shortcomings, there have been a variety of models developed to project east-west migration. Most begin with individuals making rational decisions about migrating based on wage and unemployment differences, and then are estimated as aggregate models. As an alternative, some models rely on opinion polls that ask people if they are planning to migrate. The surprise is that, regardless of methodology, the models reach similar conclusions—3 to 4 percent of the residents of the ten first-round East European nations may migrate west within a decade of freedom of movement, and half of the migrants are likely to come from Bulgaria and Romania, countries not likely to be among the first-round entrants, and thus not likely to achieve freedom of movement quickly.<sup>18</sup> It should be emphasized that the 3 to 4 percent migration is a gross estimate—most models project that half of the migrants will return to their countries of origin within a decade or so, so that net migration would be 1.5 to 2 percent. The bottom line of the models is that a 3 to 4 percent gross migration from eastern Europe would increase the population of the EU fifteen, about 376 million, by about one percent gross and 0.5 percent net.

Given these projections, and the past, unfounded worries about south-north migration from Italy, Greece, Spain, and Portugal resulting from EU enlargement, why did Germany and Austria take the lead in arguing that freedom of movement from eastern Europe should be restricted to avoid “too much” immigration? One criticism is that eastern European nations are different from the southern European nations. For example, eastern European nations are poorer; southern European nations such as Greece, Portugal, and Spain had per capita incomes that were about two-thirds the EU average, while the ten eastern European candidate countries have per capita incomes that are one-third of EU levels. This means that, even if economic growth in eastern Europe is faster than in the EU-fifteen as projected, it may still take forty to fifty years for per capita incomes to converge.

### **The United States, Mexico, and NAFTA**

The major relationship between Mexico and the United States for most of the twentieth century was a migration relationship that moved primarily unskilled Mexicans into U.S. jobs. This migration relationship has been rife with problems. Mexico complained frequently about the poor treatment of Mexican citizens in the United States, but there were few mechanisms to enable the two governments to work cooperatively to improve conditions for legal or unauthorized Mexican migrants. On the U.S. side of the border, several thousand farm employers set the terms for most Mexico-U.S. migration, as U.S. farmers were allowed to recruit Mexican workers for temporary U.S. employment between 1917 and 1921 and again between 1922 and 1964. On the Mexican side, anger over the treatment of legal and unauthorized migrants and fears of being overwhelmed by the United States supported a nationalistic stance that made cooperation difficult.

The networks created by the Bracero program and the illegal migrants who accompanied Braceros laid the groundwork for increased Mexico-U.S. migration in the mid-1980s, when Mexico (1) changed its economic policies, joining GATT in 1987, proposing the North America Free Trade Agreement in 1990, and then joining the OECD, and (2) the Mexican peso was devalued several times. Increasing economic integration and increased migration went together in North America, producing an

immigration backlash in California just as NAFTA went into effect in 1994. Leaders in both Mexico and the United States urged the approval of NAFTA under the theory that, in the medium to long term, trade would act as a substitute for migration.

Mexico's President Salinas proposed a free trade agreement with the United States in 1990. Canada, which had entered into a free trade agreement with the United States in 1989, joined the negotiations for what became the North American Free Trade Agreement (NAFTA). NAFTA went into effect on January 1, 1994,<sup>19</sup> with the goal of lowering barriers to trade and investment and thus spurring job and wage growth in the three member countries. Although general agreements on migration were explicitly not part of the NAFTA, the hope that NAFTA-led economic development would reduce the volume of undesirable, illegal migration was a reason why some wavering Congressional representatives in the end voted for NAFTA.

The NAFTA debate highlights the larger question of whether trade liberalization is an effective means for reducing "unwanted" South-North migration.<sup>20</sup> The answer of most economists is of course: the standard comparative statics analysis highlights the fact that the migration of labor tends to be self-stopping because of the adjustment processes that migration sets in motion, speeding the growth of wages in the sending area and slowing the growth of wages in the receiving area. The conclusion of the standard trade model is that migration and trade are substitutes in both the short and long run [Heckscher (1949), Ohlin (1933), Mundell (1957), Stolper and Samuelson (1949), Krauss, (1976)]

The major policy-relevant question was not what would happen in the long run, after the North American economies reach a new equilibrium, but what would happen during the adjustment period. The U.S. Commission for the Study of International Migration and Cooperative Economic Development, which embraced free trade as the best long run solution for unwanted economically motivated migration—"expanded trade between the sending countries and the United States is the single most important remedy"—nonetheless concluded that "the economic development process itself tends in the short to medium term to stimulate migration" (U.S. Commission, 1990, p. xv). In other words, the same policies that reduce migration in the long run can increase migration in the short run, creating "a very real short-term versus

long-term dilemma” for a country such as the United States considering a free trade agreement as a means to curb unauthorized immigration from Mexico (U.S. Commission, 1990, p. xvi).

The Commission embraced the hypothesis that economic integration can produce a “migration hump,” meaning that, when migration flows are charted over time, migration first increases with closer economic integration and then decreases—in economic terms, migration and trade are complements in the short run and substitutes in the long run (Martin, 1993). The Commission concluded that the migration hump was a worthwhile price to pay for the adoption of policies in both Mexico and the U.S. that would reduce unwanted migration in the long run.

Generally, three factors must be present to produce a migration hump: a continued demand pull for migrant labor in the destination country despite economic integration, an increased supply push in the origin country as a result of economic integration, and pre-existing migration networks that can move workers across borders. Most economic analyses ignore the possibility of a migration hump because they tend to emphasize comparative statics—comparing before and after equilibrium points, thereby ignoring the *process* of adjustment to free trade. In neoclassical trade models, the prediction that free trade in goods offers a substitute for migration, or trade in people, is an example of a long-run comparative statics prediction. The migration hump, by contrast, is a short-run relationship between migration and economic adjustment to free trade.

The standard trade model rests on five major assumptions—identical production technologies; factor homogeneity; constant returns to scale; instantaneous adjustment; and perfect competition, full employment, and complete markets. When any or all of these assumptions do not hold, trade and migration can be complements, that is, increased trade can be associated with more migration, or there can be a migration hump when migration flows are plotted against time.

Consider two countries with different factor endowments. A country in the North (Country N) is capital rich, and a country in the South (Country S) is capital poor. Assume that the two countries share the same technologies or production functions, and that the same two factors of production, capital and labor, are used in each country to produce two goods. If the two countries engage in free trade, each country will export the good that is more intensive in

the factor that is relatively more abundant in it. That is, Country N will import labor-intensive goods from Country S, and Country S will import capital-intensive goods from Country N.

Stolper and Samuelson considered the effect on factor prices (wages and the return on capital) of an import tariff that increases the domestic price of the import-competing good relative to that of the export good. Under the Heckscher-Ohlin assumptions, and the assumption that the underlying trade pattern is not altered by the tariff, an import tariff increases the real reward of the relatively scarce factor and lowers the real reward of the other factor. Thus, a tariff levied against labor-intensive imports in Country N will increase Country-N wages relative to the return to capital compared with the free-trade case.

Both Stolper-Samuelson and the Heckscher-Ohlin theorem on which it is based assume that there is no international migration. If migration responds positively to international wage differentials, then (1) protectionism in the North (Country N) should increase migration from the South, or (2) the protection of capital-intensive industries in the South should spur emigration. Conversely, trade liberalization shifts the production of labor-intensive goods to Country S and capital-intensive goods to Country N, which in turn puts upward pressure on Country-S wages, discouraging emigration.

The standard trade model can produce a migration hump by altering some of its key underlying assumptions. The critical assumptions fall into five main categories:

- The two countries share identical production technologies;
- The two countries use the same factors of production (factor homogeneity);
- Technologies exhibit constant returns to scale in production (there are no scale economies);
- Adjustment to changes in international markets is instantaneous;
- There is perfect competition, with full employment and complete markets in both countries.

---

### Technology Differences

Suppose a labor-intensive good is produced in the emigration country behind tariff and other trade barriers, as corn was in Mexico. If herbicides and other capital inputs give the United States a comparative advantage in corn production, then freer trade should permit the United States to produce and export more corn. This has in fact happened under NAFTA: the United States produces about ten times more corn than Mexico, and the United States can export corn to Mexico for less than Mexican farmers can produce corn with labor-intensive technologies. However, half of the man-days worked in Mexican agriculture in the mid-1990s were used to produce corn. Freeing up trade in corn thus eliminated millions of man-days of work for the three million Mexican farmers and workers employed in corn production, putting downward pressure on wages in rural areas and encouraging emigration.

The Mexican corn example illustrates the fact that, if the basis for trade is differences in technology, trade and migration may be complements, as e.g. trade in computers and software is accompanied by the migration of computer specialists.

### Productivity Differences

Differences in factor productivity between countries are implicit in the standard trade model, and the *reasons* for the productivity differences can help to explain migration behavior. If the differences in factor productivity are due to the presence of complementary public and private inputs, such as education systems, public services, and transportation and communications systems, then the same worker may be more productive in the United States than in Mexico, encouraging migration. This is sometimes referred to as the “Third World labor force with First World infrastructure” productivity difference, and is used to explain why some of the Mexican shoe industry moved from Leon, Mexico to Los Angeles in the 1980s, and shoes produced with Mexican workers and U.S. capital were exported to Mexico.

Similarly, when NAFTA went into effect on January 1, 1994, Mexico lowered some of its tariff and non-tariff barriers on agricultural commodities, including fresh and processed fruits and vegetables. U.S. exports of lettuce and grapes jumped sharply, as the U.S. grower-shippers who dominate North American production learned that it was cheaper to



produce many fruits and vegetables with Mexican workers in the United States for Mexico because of better U.S. infrastructure. After five years in Mexico, the second largest U.S. vegetable grower ceased operations there with the observation that “we can even produce more efficiently for the Mexican market from the U.S.”(Ag Alert, July 14, 1993, 28).<sup>21</sup> Migration, by converting Mexican workers into U.S. workers, in this case discouraged the production of some labor-intensive goods in Mexico, and thus encouraged more migration to the United States.

### Economies of Scale

The third assumption of the standard trade model is that (identical) production functions in the two countries exhibit constant returns to scale, which means that increasing all inputs by 10 percent will increase output by 10 percent, whether a country produces 10 or 90 percent of the world’s supply of the good. However, if costs fall as production increases in the United States in industries that employ migrant workers, trade liberalization may lead to expanded production in the United States, and thereby increase the demand-pull of jobs that attract migrant workers. When trade is due to economies of scale, migration and trade are complements.

### Slow Adjustments

The fourth assumption of the standard trade model is that adjustments to changing prices and wages are instantaneous, and the process of adjustment does not affect the comparative-static outcome. In many cases, prices drop and workers are displaced when freer trade is implemented, but finding a new job takes time. For example, Mexican farmers can be displaced or have their incomes lowered with free trade in corn, but it may take several years for foreign and domestic investment to create jobs in manufacturing, where Mexico may have a true comparative advantage, and manufacturing jobs may not be created in the rural areas where farmers are being displaced.

NAFTA provides for a fifteen-year phase in of free trade in corn by 2009, but Mexico phased out input subsidies in the early 1990s, permitted *ejido* farmers to sell or rent their land (*Ejidors* were created from plantations or haciendas seized during and after the Mexican revolution. *Ejido* members may farm their land and pass it on to their heirs, but could not sell,

rent, or use it for security for loans until 1992), and “decoupled” farm production from government supports. New job growth in Mexico is concentrated in the northern regions—about 40 percent of Mexico’s 2.5 million manufacturing jobs are in the 3000 *maquiladoras* that are usually located in border cities and tend to hire young women. The adjustment to free trade in agricultural commodities is complicated by factor specificity—many of those displaced from Mexican agriculture are men, and the *maquiladoras* tend to hire women. For this reason, many of the Mexican men migrate across the border, to seek work in U.S. farm fields.

Guanajuato, an agricultural state in west central Mexico, estimates that 20 percent of the 250,000 farm families in the state left the land between 1990 and 1999. There are 4.4 million residents of Guanajuato, and another two million adults and their U.S.-born children – equal to 45 percent of Guanajuato’s population – living in or migrating regularly to the United States, legally or illegally. Remittances to Guanajuato are estimated to be \$1 billion a year, the mainstay of the economy. The removal of farm subsidies and freer trade in farm commodities has spawned many protests movements, including one group, El Barzon, a group demanding a moratorium on debt repayments. On November 28, 1999, El Barzon retraced the 1,000-mile December 1914 march of Pancho Villa from the border city of Juarez to Mexico City, demonstrating the depth of problems in Mexican agriculture.

### Imperfect Markets

The fifth assumption of standard trade theory is perfect markets, including full information, no risk, and no transaction costs. This assumption is rarely fulfilled, giving rise to insights that have been collected under the rubric of the new economics of labor migration. For example, suppose that the benefits of migration are significant, but that there are no legal means to cross borders to take advantage of wage differences, so that the migrant must utilize the services of a smuggler who demands an up-front fee. In such situations, freer trade that speeds job and economic growth may also increase migration, as rising incomes mean that more migrants can afford smugglers fees (Schiff, 1996). This seems to have happened in the southwestern Chinese province of Fujian.

Families in the rural areas of sending countries dependent on agriculture may treat family members as a portfolio of income earners, and deploy sons and daughters in a manner that maximizes earnings and minimizes risks. This

means that Mexican families may send daughters to border-area *maquiladoras* and sons to the United States: if both succeed in getting jobs, the family can be much better off. However, even if the son is apprehended, the daughter's near 100 percent probability of getting a *maquiladora* job acts as insurance for the son's attempted illegal entry.

Proponents of NAFTA knew that Mexico would obtain (1) the greatest benefits from NAFTA in the form of more jobs and higher wages and (2) Mexican would experience the greatest adjustments to free trade as well. No one knew how quickly Mexico-U.S. migration flows would be affected by adjustments and job creation. However, political arguments in support of NAFTA often assumed that reductions in migration would be immediate, or noticeable after a relative short period of adjustment: U.S. Attorney General Janet Reno in 1993 said: "If NAFTA passes, my job guarding the border will be easier. If NAFTA fails, my job stopping the flow of illegal immigrants will become even more difficult." Mexican President Carlos Salinas similarly asserted that, "We want NAFTA because we want to export goods, not people."

NAFTA got off to a rocky start. Foreign capital had flowed into Mexico in anticipation of NAFTA in the early 1990s, and Mexico permitted the peso to become overvalued in 1993-1994, making imports of both capital and consumer goods cheap. U.S. and other foreign investors lent billions of dollars to Mexico, and Mexicans used many of these foreign savings to buy U.S. and other foreign goods, not to build factories and create jobs. In 1994 a series of events dampened investor enthusiasm. Zapatista rebels launched an armed campaign in the state of Chiapas on January 1, 1994; the leading presidential candidate was assassinated in March 1994; and the Mexican money supply was increased sharply in summer 1994 in support of the ruling party's candidates in July elections. President Salinas resisted an "orderly" devaluation of the peso in the fall of 1994, but in December 1994, just after Salinas left office, Mexican and foreign investors began converting pesos into dollars at the fixed, 3.45 to \$1 rate. Mexico ran out of reserves to support the peso, and the peso was devalued in December 1994.

The economic crisis in Mexico sharply increased unemployment. Mexico, a country with about 10 million formal sector private jobs for a paid labor force of 30 million, experienced almost one million layoffs from formal sector jobs in 1995. In the villages from which many migrants

come, economic models projected a migration elasticity with respect to peso devaluations of 0.7 percent—that is, a 7 percent increase in emigration for every 10 percent devaluation of the Mexican peso—which fell almost 60 percent between November 1994 and November 1995. Many Mexicans responded to the 1994-1995 crisis by migrating to the United States despite stepped up border controls. The United States apprehended 1.1 million foreigners, over 95 percent Mexicans, in FY94; 1.4 million in FY95; 1.6 million in FY96; 1.5 million in FY97; 1.7 million in FY98; and 1.5 million in FY99.

Mexico-U.S. migration may fall much faster than many pessimists in both countries expect for demographic and economic reasons, which may result in the curious effect of the United States constructing an elaborate system of border controls just as Mexico-U.S. migration falls. Mexico's population of almost 100 million is growing by 2 percent a year. About 300,000 Mexicans migrate to the United States each year, equivalent to 15 percent of Mexico's population growth. U.S. efforts to prevent such migration have made the Immigration and Naturalization Service one of the fastest-growing federal agencies, with a year 2000 budget of \$4.3 billion.

The Mexican population growth rate peaked at 3.3 percent in 1970, when 45 percent of Mexican residents were under fifteen years of age. In 1974, the Mexican government launched an enterprising program to persuade families to have fewer children, and birth rates fell sharply in the 1980s and 1990s—fertility dropped from seven children per woman in 1965 to 2.5 in 1998—so that the number of new job seekers will be 500,000 to 550,000 per year by 2010. Mexico's population is expected to stabilize at about 141 million in 2025, when the U.S. population is projected to be 335 million. The number of persons turning fifteen is projected to drop by 50 percent between 1996 and 2010, from about 1 million a year to 500,000 a year. Declining fertility reduces migration directly, with fewer people, and indirectly, because households with fewer children tend to keep them in school longer, reducing the need for jobs for young people entering the labor market, and reducing the probability of emigration.

Second, each 1.35 percent increment to economic growth was associated with 1 percent job growth in Mexico between 1988 and 1995. If this ratio

persists, then 5 percent economic growth can generate 3.7 percent job growth, or 1.1 million new jobs each year, enough to employ new job seekers and begin to reduce un- and underemployment. Mexico had 14 million workers in formal sector jobs enrolled in the social security system IMSS in March 1999, up from 13 million a year earlier. This combination of declining fertility and faster job creation create an X in the Mexican fertility/jobs figure—a point in time when enough new jobs are created to employ fully new work force entrants. Figure 2 highlights two such points—the optimistic one already occurred in 1998, and the more pessimistic one will occur in 2006. If job growth persists as fewer teens seek first jobs, Mexico can begin to reduce unemployment and underemployment.

### TRANSATLANTIC LESSONS

International migration has great potential for increasing economic integration and cooperation between nations, as well as the potential for disrupting orderly relations between nations. In a world of six billion, the number of international migrants—persons living outside their country of birth or citizenship for twelve months or more—was about 170 million in 2000, meaning that just about 2.8 percent of the world's residents were legal or unauthorized immigrants, nonimmigrant guest workers, students, business people, or refugees or asylum seekers. However, the number and type of migrants has increased faster than the capacity of national governments, regional bodies, or international organizations and agreements to deal with international migration. Several responses are apparent: increased expenditures on immigration control and new regional forums to discuss migration issues.

Over time, freer trade and investment should increase the rate of income and job growth in the emigration country, thus diminishing migration pressures. When viewed over a decade or two, the number of migrants first increases and then decreases, producing a migration hump, which can be relatively small and short. In southern Europe and Asia, when wage differences decreased to 4 or 5 to 1 and economic and wage growth seemed assured in the emigration country, economically-motivated migration dropped dramatically, as in Italy after 1968 or Korea in the 1980s. This offers a powerful argument for freer trade and investment.

**ENDNOTES**

<sup>1</sup> World GDP was \$31 trillion in 2001, including \$10 trillion in the United States and \$2 trillion in Germany. The UN put the world's migrant population at 168 million in 2000, including 67 million or 40 percent in the industrial countries. The United States had about 31 million foreign-born residents in 2000, and Germany had 7 million.

<sup>2</sup> During the 1990s, the value of world trade in goods doubled to \$6.5 trillion, while the number of migrants as defined by the UN increased almost 50 percent to 170 million.

<sup>3</sup> A 1990 report of the House Judiciary Committee (quoted in Aleinikoff, Martin, and Motomura, 1995, 221-2) asserted: "The U.S. labor market is now faced with two problems that immigration policy can help to correct. The first is the need of American business for highly skilled, specially trained personnel to fill increasingly sophisticated jobs for which domestic workers cannot be found ... The second problem concerns the skills gap in the current and projected U.S. labor pool ... it is unlikely that enough U.S. workers will be trained quickly enough to meet legitimate employment needs ... immigration can and should be incorporated into an overall strategy that promotes the creation of the type of work force needed in an increasingly competitive global economy without adversely impacting on the wages and working conditions of American workers."

<sup>4</sup> EU nations may prevent eastern European nationals from migrating for at least two years, 2005-2006, if Poland and other entries occur January 1, 2004 as expected. After this two-year wait, the current 15-EU members could individually prevent freedom of movement for another three years (2007-2009), and then a further two years, for a maximum seven-year wait (2010-2011).

<sup>5</sup> As the discussion below emphasizes, many researchers emphasized that there are always alternatives to importing foreign workers or professionals.

<sup>6</sup> The exceptions are American Indians, slaves, and people who became U.S. citizens when the United States acquired the territory in which they were living (Martin and Midgley, 1999).

<sup>7</sup> The NRC report estimated that U.S. GDP was \$200 billion a year larger because of immigration, but most of this \$200 billion accrued to immigrants—the net addition to the U.S. GDP for non-immigrants was \$1 billion to \$10 billion.

<sup>8</sup> Borjas, George. 1990. *Friends or Strangers*. p 81

<sup>9</sup> Gieseck et al. 1995.

<sup>10</sup> von Loeffelholz and Köpp. 1998.

<sup>11</sup> von Loeffelholz. 2001.

<sup>12</sup> Schröder originally called it a red-green card, to reflect the colors of the parties in his coalition government—red for SPD, green for the Greens. Opinion within the Schroeder cabinet was initially divided, with Federal Minister of Education and Research Edelgard Bulmahn (SPD) arguing in favor to keep jobs in Germany: "We cannot allow companies to move abroad because of the shortage of highly skilled personnel in information technology," and Economy Minister Werner Müller arguing that green card holders will have job-multiplier effects in Germany, using the example: "If you need a

pianist, you can't just hire a piano tuner. But when you employ a new pianist, you'll also need additional piano tuners." However, Labor Minister Walter Riester (SPD) countered: "We cannot allow a general international opening of the job market. We have over four million unemployed people, among them very qualified people in the information technology field." There were 31,000 unemployed IT workers in December 1999.

<sup>13</sup> To obtain "new guest workers," German employers submit work-and-learn offers to local ES offices, which transmit them to an ES office in Eastern Europe; there is no test of the German labor market.

<sup>14</sup> IMMACT also created the non-capped O, P, Q, and R visa programs for, inter alia, foreign entertainers and athletes.

<sup>15</sup> Section 221 of the IMMACT of 1990 permitted U.S. employers who unsuccessfully tried to recruit U.S. workers for at least sixty days at prevailing wages to hire foreign students who had completed at least one academic year of U.S. study.

<sup>16</sup> The TN visa can be extended in one-year increments indefinitely.

<sup>17</sup> Some researchers try to overcome this fundamental methodological problem by the inclusion of so-called country-specific effects in their models, using a country-specific intercept that remains constant over time. However, it is hard to define such an intercept for Eastern European nations when assessing the effects of freedom of movement, since they have had no historical experience of free migration for decades, and because East Europeans have not had freedom of movement rights in the EU.

<sup>18</sup> The ten are Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, and Slovenia.

<sup>19</sup> In 2001, the *maquiladora* will be incorporated into the Mexican economy and, under NAFTA, restrictions on Mexican sales and temporary imports from the United States and Canada will be no more. New Mexican laws passed in the last decade also stand to stimulate joint ventures and manufacturing employment.

<sup>20</sup> We use "unwanted" rather than illegal to describe the migration industrial countries are trying to reduce because much of the migration most amenable to being reduced with trade and other economic development measures involves legal but not necessarily wanted foreigners, such as "economic refugees" in Western Europe, and Salvadorans with a "Temporary Protected Status" in the United States. In both cases, the host countries would like to reduce the number of such aliens, but their presence is not unlawful.

<sup>21</sup> Mexican tomato pickers pick tomatoes into buckets about twice as fast in the United States as in Mexico, in part because piece-rate wages in the United States tend to attract Mexican workers who prefer to be paid by how much work they accomplish, while many farm workers in Mexico are paid by the day.

## BIBLIOGRAPHY

- Borjas, George. 1990. *Friends or Strangers. The Impact of Immigrants on the U.S. Economy*. Basic Books.
- Card, David. 1990. The Impact of the Mariel Boatlift on the Miami Labor Market. *Industrial and Labor Relations Review*. Vol. 43. 245-257.
- Frisch, Max. 1965. Vorwort in Seiler, Alexander J. *Siamo Italiani (Die Italiener or The Italians)*. Zürich: EVZ-Verlag. pp7-10.
- Gieseck, Arne, Ullrich Heilemann and Hans Dietrich von Loeffelholz. 1995. Economic Implications of Migration into the Federal Republic of Germany, 1988-1992. *International Migration Review* Vol. 29, 693-709.
- Heckscher, Eli. 1949. "The Effects of Foreign Trade on the Distribution of Income." In *Readings in the Theory of International Trade*, H.S. Ellis and L.A. Metzler (eds.). Philadelphia: Blakiston.
- Hinojosa-Ojeda, Raul and Sherman Robinson. 1992. "Labor Issues in a North American Free Trade Area," in Nora Lustig et al. Eds. *North American Free Trade: Assessing the Impact*. Washington, D.C The Brookings Institution.
- INS. Immigration and Naturalization Service. *Annual Statistical Yearbook*. Washington, D.C.
- Krauss, M.B. 1976. "The Economics of the 'Guest Worker' Problem: A Neo-Heckscher-Ohlin Approach." *Scandinavian Journal of Economics* 78:470-76.
- Loeffelholz, Hans Dietrich von. 2001. "Kosten der Nichtintegration ausländischer Zuwanderer 2001." *Beihefte der Konjunkturpolitik* 52. 191-212.



- Loeffelholz, Hans Dietrich von and Günter Köpp. 1998. "Ökonomische Wirkungen der Zuwanderungen in die Bundesrepublik Deutschland." *RWI-Schriftenreihe* 63. Berlin.
- Martin, P.L. 1993. *Trade and Migration: NAFTA and Agriculture*. Washington, D.C.: Institute for International Economics.
- Massey, D.S., J. Arango, G. Hugo, A. Kouaouci, A. Pellegrino and J.E. Taylor. 1998. *Worlds in Motion: Understanding International Migration at the End of the Millennium*. Oxford: Oxford University Press.
- Mines, Richard and Philip L. Martin. 1984. "Immigrant workers and the California citrus industry." *Industrial Relations*, Vol. 23, No 1. January: 139-149.
- Mundell, R.A. 1957. "International Trade and Factor Mobility." *American Economic Review* Vol. 47, pp 321-35.
- Ohlin, Bertil. 1933. *Interregional and International Trade*. Cambridge, MA: Harvard University Press.
- Schröder, Gerhard: Eröffnungsrede an der CeBIT, Hannover, February 23, 2000 ([http://www.bundesregierung.de/dokumente/Rede/ix\\_13024.htm](http://www.bundesregierung.de/dokumente/Rede/ix_13024.htm)).
- Stolper, Wolfgang F. and Paul A. Samuelson. 1941. "Protection and Real Wages." *Review of Economic Studies* Vol 9, pp58-73. November.
- U.S. Commission for the Study of International Migration and Cooperative Economic Development. 1990. *Unauthorized Migration: An Economic Development Response*. Washington, D.C.

---

## **Agendas and Participants**

### **Managing Immigration for Economic Growth:**

#### **Case Studies in Germany and the U.S.**

Monday-Tuesday, June 10-11, 2002

RWI-Essen, Germany

#### **Trade and Migration:**

#### **Transatlantic Experiences and Expectations**

Wednesday, June 12, 2002

HWWA-Hamburg, Germany

#### **Immigration, Growth and Trade:**

#### **Transatlantic Experiences and Policy Implications**

Friday, June 14, 2002

AICGS, Washington, D.C.

### **Managing Immigration for Economic Growth**

There is a debate in Germany and the United States about how to revise immigration policies that currently admit primarily family members, refugees, and other foreigners for non-labor market reasons, and admit more foreigners who can increase economic and job growth:

- Germany introduced a green card program in 2000 for up to 20,000 computer professionals, and a federal commission in 2001 recommended that an additional 50,000 foreigners a year be admitted for economic-employment reasons.
- The United States more than doubled the number of visas available for immigrants (and their families) desired by U.S. employers in 1990 to 140,000 a year, and increased the annual limit of six-year H-1B visas available to professionals to the current 195,000 a year.

This seminar explores how immigration affected the evolution of the labor market in Germany and the United States during the 1990s in particular industries (case studies) and the policy options for using immigration policy changes to affect general or particular labor markets.

---

**Trade and Migration**

The EU is expanding eastward, and Germany is one of the front-line states that expects increased migration from eastern and southern Europe. The United States entered into a free trade agreement with Canada in 1989, and Nafta added Mexico in 1994.

How much migration is there currently from eastern and southern Europe to Germany and other EU countries? How much more is likely with EU enlargement, under various freedom-of-movement scenarios? Which sectors are most likely to be affected by this increased migration in Germany and the old EU countries, and in the new EU countries and their neighbors? Are there any lessons from EU enlargement for the proposed 34-nation Free Trade Area of the Americas?

The United States had significant migration from Mexico before Nafta went into effect. Did migration patterns evolve as expected? Why or why not? This seminar will explore these issues.

---

**MONDAY, JUNE 10, 2002 SEMINAR AT RWI-ESSEN**

**Welcome and Introductions**

Hans Dietrich von Loeffelholz, RWI, and Philip Martin, UC-Davis

**Trends in Immigration and the Labor Market in the 1990s**

Werner Sesselmeier, TU Darmstadt  
Roger Kramer, U.S. Department of Labor

**Computer Professionals**

H.D. von Loeffelholz, RWI and Ruhr-University Bochum  
Susan Martin, Georgetown University

**Agriculture, Construction and Services**

Elmar Hönekopp, IAB  
Philip Martin, UC-Davis

**Similarities and Differences**

Panel chaired by Hans Dietrich von Loeffelholz, RWI, and Philip Martin, UC-Davis

\*\*\*\*

**WEDNESDAY, JUNE 12, 2002 SEMINAR AT HWWA-HAMBURG**

**Welcome and Introductions**

Thomas Straubhaar, HWWA and Philip Martin, UC-Davis

**Trade and Migration: Theoretical Predictions and Policy Implications**

Peter Fischer, HWWA research fellow, Moscow

**EU Enlargement:**

**Lessons from southern Europe and implications for enlargement**

Thomas Straubhaar, HWWA  
Jarek Oszki, University of Torun, Poland

---

**Nafta: Trade and Mexico-US Migration**

Agustin Escobar, Ciesas Occidente, Guadalajara, Mexico  
Philip Martin, University of California, Davis

**Implications and Transatlantic Lessons**

Elmar Hönekopp, IAB Nürnberg  
Friedrich Heckmann, Universität Bamberg  
Philip Martin, University of California, Davis

\*\*\*\*

**FRIDAY, JUNE 13, 2002 SEMINAR AT AICGS, WASHINGTON,  
D.C.**

**Welcome and Introductions**

**Demographic Forecasts and Labor Markets in the 21<sup>st</sup> Century**

Jeff Passel, Urban Institute, Washington, D.C.

**Transatlantic lessons and their policy implications**

Philip Martin  
Hans Dietrich von Loeffelholz  
Werner Sesselmeier  
Thomas Straubhaar  
Elmar Hönekopp

Lunch with speaker Fred Bergsten, Institute for International Economics



---

*The American Institute for Contemporary German Studies*

The Johns Hopkins University

*1400 16th Street, N.W., Suite 420  
Washington, D.C. 20036-2216*

*Phone: 202.332.9312  
Fax: 202.265.9531  
Web: [www.aicgs.org](http://www.aicgs.org)*

---