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Unauthorized Immigration

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Abstract

One of the results of the clash between immigration policies and economic incentives is *unauthorized immigration*. There is no accurate data on unauthorized immigration, but estimates permit some empirical work. The motives for immigrants to enter the destination country without formal authorization are the same as those that lead immigrants to seek legal entry, and the static labor market model of immigration can be used to explain the flows of unauthorized immigrants. There are additional factors to consider, however. Unauthorized immigrants do not normally enjoy the same civil rights as legal immigrants, so the potential rewards from immigrating are unlikely to be the same for legal and unauthorized immigrants. There are other interesting questions, such as why so many destination countries implicitly accept substantial numbers of unauthorized immigrants, even though their formal laws and regulations call for their strict punishment and expulsion. Unfortunately, we have few answers.

If the migrants run into some new ... wall, they will simply go around it. Or over it. Or under it. Mexicans will show as much ingenuity in getting into the United States as Americans would in breaking into British Columbia if the Canadian minimum wage were \$70 an hour.¹

Introduction

The strong incentives for people to immigrate from low- to high-income countries clash with the restrictive immigration policies of high-income destination countries. One common result of this clash between policies and economic incentives is *unauthorized immigration*. We obviously do not have very accurate data on unauthorized immigration; unauthorized immigrants seldom reveal their status for fear of being detected and deported back to their native countries. Estimates do exist, though. For example, the ILO estimated

1 Cooper (2006, p. 132).

that in 1991 there were 2.6 million immigrants living illegally in Western Europe. That number was estimated to have doubled by the end of the decade.² The United States Immigration and Naturalization Service estimated that there were about 5 million unauthorized workers in the United States in 1996, and that the number had risen to 6 million by 2000.³ However, census data for 2000⁴ suggest the number was closer to 9 million.⁴ The Pew Foundation estimated that in 2005 there were between 10.5 and 7 million unauthorized immigrants in the U.S. Unauthorized immigrants may account for as much as one-third of all immigrants in the U.S., as official estimates by the Census Bureau showed slightly more than 36 million foreign-born residents in the U.S. in 2005.

Unauthorized immigration occurs not only in developed economies. There are several million unauthorized immigrants in South Africa, which itself is not a wealthy country and is the source of unauthorized immigrants to high income countries. But South Africa offers much higher wages than most of its neighbors. Even though wages are even higher in developed countries in Europe, another destination for African immigrants, it is usually much easier to get to South Africa. "There are no oceans to cross. From anywhere below the Sahara, anyone with a few rand for the truck-driver can hitch a ride south. South Africa's land border is roughly 4,000 km long and extremely porous."⁵ Foreign workers in South Africa are important to neighboring countries; miners' remittances account for about 10% of Lesotho's GDP.

The motives for immigrants to enter the destination country illegally are the same as those that lead immigrants to seek legal entry, and the static labor market model of immigration can be used to explain the flows of unauthorized immigrants. Nevertheless, unauthorized immigrants do not normally enjoy the same civil rights as legal immigrants, so the potential rewards from immigrating are unlikely to be the same for legal and unauthorized immigrants. Also, employers may face possible punishment for hiring unauthorized immigrants, which may lead employers to discount the perceived marginal productivity of unauthorized immigrant workers by the likelihood of their being punished or having production disrupted by sudden arrests of workers. There are other interesting questions, such as why so many destination countries implicitly accept substantial numbers of unauthorized immigrants, even though their formal laws and regulations call for their strict punishment and expulsion. Unfortunately, we have few answers. The quote at the start of the chapter indicates the reason for lack of understanding in the literature of the motivations for and the costs and benefits of unauthorized immigration: There has simply been very little analysis. Unauthorized immigrants are not easily identified and counted, thus there is a huge void in the data.

2 *The Economist* (1998).

3 Data from the Immigration and Naturalization Service, Office of Policy and Planning, INS website, <http://www.ins.gov>, January 21, 2001.

4 Parks and Tricks (2000), Ehrlich (2001) and Magnissou (2001).

5 *The Economist* (2000).

1 Estimating Unauthorized Immigration

Unauthorized immigrants are not easily counted, in large part because they try to avoid detection and deportation. In a country like the United States or France, where the number of unauthorized immigrants is large, population censuses seriously undercount the true populations because they miss many unauthorized immigrants. Thus, Census data are generally not very useful for studying patterns in unauthorized immigration.

1.1 The Residual Method

Hanson (2006) describes the most common method for estimating unauthorized immigration. He begins with the following formula:

$$U_t = F_t - L_t = F_t - \sum_{j=0}^{\infty} L_j(1 - d_j - im_j) \quad (1)$$

The variable U_t represents the stock of unauthorized immigrants in year t , F_t is total foreign-born population in the country in year t , L_j is the official count of legal documented immigration in each year from $j = 0$ up to the year t , d_j is the mortality rate for the group of immigrants entering each year j , and im_j is the emigration rate for each immigrant group documented as entering in each year j .

A complicating factor is the continual adjustment of an immigrant's status from unauthorized to legal, and vice versa, in many countries with complex immigration regulations. Immigrants with temporary work permits may overstay their allotted time, and unauthorized immigrants may change their status by marrying a legal resident, paying a fine, or gaining a legal visa through separate legal channels. The 1986 Immigration Reform and Control Act (IRCA) in the United States provided for an amnesty that eventually gave several million unauthorized immigrants legal resident status. Now, in the first decade of the 2000s, there is pressure for another general amnesty for at least some of the estimated 10–12 million unauthorized immigrants residing in the U.S. Ideally, we need to incorporate these flows of persons changing from legal to unauthorized, or unauthorized to legal, status to the above equation. Equation (1) can be amended as follows:

$$U_t = F_t - \sum_{j=0}^t L_j(1 - d_j - im_j - v_j + u_j) = F_t - L_t \quad (2)$$

where all variables are the same as in (1) with the addition of v_j to represent unauthorized immigrants who gain legal residence visas in year j and u_j to represent formerly legal immigrants who lose their legal status in year j .

Estimates of unauthorized immigration are inherently inaccurate because it is simply impossible to come up with accurate estimates for all, if any, of

the right hand side variables in (2). The estimate of the total unauthorized immigrant population U_t is the residual value after inserting values for all the other variables in the equation. First of all, researchers have to make assumptions about the inaccurate data available to them. For example, the estimate U_t in (2) depends critically on the accuracy of the values for F_t and L_j that are inserted into the equation. Most researchers assume that both F_t and L_j are undercounted in national censuses and other population surveys, with F_t undercounted more than L_j . In the United States, for example, there is substantial evidence suggesting minority groups are undercounted, and the Census Bureau has evidence that over 2% of Hispanics, to which the largest U.S. immigrant group belongs, are not counted in the official Census. Assumptions about the extent of undercounting must, therefore, be made. Specifically, the estimate of the total foreign-born population is

$$F_t = F_t(1 - \lambda_t) + \varepsilon_t \quad (3)$$

where λ_t is the fraction of the true total foreign population, F_t , that is not counted, and ε_t represents an unbiased random error. Hence, the best estimate of the true total foreign population would be

$$F_t = F_t / (1 - \lambda_t) \quad (4)$$

provided the fraction of undercounting λ_t is correct. Similarly, the legal immigrant population is counted as

$$L_t = L_t(1 - \zeta_t) + \varepsilon_t \quad (5)$$

where ζ_t is the fraction of the true total legal immigrant population, L_t , that is missed by the survey or count.

If the difference between the total and legal immigrant populations is relatively small, which will be the case in countries where unauthorized immigrants make up a small percentage of all immigrants, then different assumptions about the sizes of λ_t and ζ_t result in very large differences in estimates of the total unauthorized immigrant population. Table 3 below presents estimates using the residual method under alternative undercount assumptions.

The most popular estimates of the U.S. unauthorized immigrant population, at least in terms of the frequency with which they are quoted in the press and by political leaders, are those published by the Pew Hispanic Center (Passel 2006). To get their estimate of the number of foreign-born American residents, Pew researchers start with the Census Bureau's annual Current Population Survey, which is based on 80,000 interviews in which households are asked where each member of their household was born.⁶ After adjusting

⁶ The Pew method is detailed in most Pew Hispanic Center reports; this and other methodologies are also discussed in Bialk (2006).

the Hispanic numbers by 10% for suspected Census Bureau underestimates, these results are then extrapolated to the estimated whole U.S. population. In 2005, this procedure yielded an estimate of 36 million foreign-born people in the U.S. Next, the Pew researchers sum the annual numbers of permanent residence visas issued, numbers that sum back for decades. Next, they assume that immigrants die at the average rates for each age group of the entire population, and they use estimates for return migration from several studies. Pew researchers admit the return migration numbers are the least reliable component in the estimation procedure. Finally, the estimated number of legal immigrants is subtracted from the estimated total foreign-born population to arrive at the residual estimate of unauthorized immigrants.

1.2 *Other Methods for Estimating Unauthorized Immigration*

Researchers have devised some other ways to estimate unauthorized immigration. These estimates of unauthorized immigration can be augmented with other data from assorted case studies, local government records of services provided to immigrants, and data from countries that supply most of the unauthorized immigrants. For example, the reduction in population in Mexican communities not compensated by increases in population in other Mexican communities most likely implies that the missing persons immigrated to the U.S. and are part of the unauthorized workforce there.

Another, potentially more accurate, estimation method was used by Snel, de Boom, Engbersen, and Weltevrede (2005), who estimated the unauthorized immigrant population in the Netherlands using the two-step capture/recapture method from the field of animal ecology. This method has been used to estimate animal stocks. Specifically, an estimate of the number of fish in a pond can be found by, first, capturing a certain number of fish, tagging them, and releasing them back into the pond. Second, after enough time has passed for the fish to randomly disperse throughout the pond, another group of fish are captured in the pond. Some of the fish in the second capture will be recaptures, as evidenced by their tags. By noting the proportion ρ of recaptures among the 100 fish captured in the second round, the total number of fish in the pond can then be approximated as the number of fish captured in the first round divided by ρ . For example, if 100 fish are captured and tagged in the first round, another 100 fish are captured in a second round, and five of the fish captured in the second round are tagged from the first catch, then the total fish population in the pond is estimated to be $100/0.05 = 2,000$. Snel et al. (2005) estimate the number of unauthorized immigrants in the Netherlands by examining police records of random identity checks in two successive periods of time.

A study by the Swiss research group GFS (2005) used a very different method, called the Delphi method, to arrive at a consensus estimate of unauthorized immigrants residing in Switzerland. This method consists of a series of meetings, discussions, and revisions of estimates by independent researchers and panels of experts. The independent researchers must justify their esti-

mates to the experts, who render judgments. Then, the researchers revise their estimates, followed by new judgments by the experts, new revisions by the researchers, etc., until there is a convergence of opinion. The accuracy of the Delphi approach depends critically on the quality of the initial estimates, the knowledge of the experts, and the personalities of the researchers and experts.

The U.S. government has generated measures of unauthorized immigrants from data on the number of detainees apprehended by the U.S. Border Patrol. These studies assume that a specific percentage of unauthorized border crossings are stopped by the Border Patrol, and thus as the actual number of detainees varies, total unauthorized crossings are assumed to vary proportionately. Of course, these numbers are then used to construct a total stock of unauthorized immigrants in the country after making further adjustments for return migration and age-specific death rates. Needless to say, these numbers are probably highly inaccurate.

Researchers in Spain, Italy, Portugal, and Greece have used the records of recent legalizations of unauthorized immigrants in those countries. When unauthorized immigrants step forward and reveal themselves during the legalization process, researchers can estimate what the unauthorized immigrant population was prior to disclosure of legal status. Of course, the method has to make assumptions about the proportion of unauthorized immigrants that volunteer to legalize their status. This proportion varies depending on the criteria that must be satisfied for legalization and the trust that immigrants have in the legalization process. For example, if there is widespread fear that the process is a pretext for their capture and deportation, few unauthorized immigrants are likely to participate.

It should be clear from this discussion that reported data on unauthorized immigration are unreliable. However, researchers have to proceed with the data they have available to them and make the best of it. It does mean that we have to treat the results of empirical studies of unauthorized immigration with some skepticism. In a practical sense, it means that unless a statistical result “stands out like a sore thumb,” we should probably refrain from making strong claims about having discovered some truth about unauthorized immigration.

2 How Many Unauthorized Immigrants are There?

Despite the difficulties of estimating unauthorized immigration, estimates are available. Given the difficulty of counting unauthorized immigrants and the inherent inaccuracy of indirect methods, estimates of unauthorized immigrants vary widely. Across the various estimates of unauthorized immigration, it is clear that the number of unauthorized immigrants has grown rapidly over the past several decades, and for most destination countries, unauthorized immigrants constitute a substantial portion of the overall population.

Table 1 presents estimates of the unauthorized immigrant populations in a number of developed economies. These estimates were derived using one or more of the methods described above, all of which have shortcom-

Table 1. Estimates of the unauthorized immigrant population: selected OECD countries, 2005^a

Country	Number	% of Population	Year
Australia	50,000	0.2	2005
Japan	210,000	0.2	2005
United States	10,300,000	3.6	2004
Netherlands	125,000–230,000	0.8–1.4	2004
Switzerland	80,000–100,000	1.1–1.5	2005
Spain	690,000	1.6	2005
Italy	700,000	1.2	2002
Portugal	185,000	1.8	2001
Greece	370,000	3.4	2001

^a The original studies from the Netherlands and Switzerland provide only ranges rather than point estimates.

Source: Table 1.6 from OECD (2006).

ings. These are all estimates with wide margins of error. Nevertheless, several things stand out from the estimates in Table 1. First, unauthorized immigration in isolated island countries like Australia and Japan is much smaller as a proportion of total population than in the United States or Western European countries. It is also clear that unauthorized immigration is more than a marginal phenomenon. With unauthorized immigrants comprising as much as three or more percent of some countries' populations, this phenomenon must have substantial economic consequences.

The unauthorized immigrant population of the United States was estimated by the Pew Hispanic Center to be between 5 and 12 million persons in 2005.⁷ Out of the total estimated foreign-born population in the U.S. in 2005, about 30% of all U.S. immigrants are in the country illegally. The Pew Center further estimates that 56% of the unauthorized immigrants, or 6.2 million, are from Mexico, 22% are from elsewhere in Latin America, and 13% are from Asia. The rest are from Canada, Europe, the Caribbean, and Africa. Compared to legal immigrants, unauthorized immigrants are much more likely to be from a neighboring country like Mexico. This conclusion reflects what Table 1 shows, namely, that distant island countries like Australia and Japan have relatively fewer unauthorized immigrants.

With a common 3,000 km border, it is difficult for the United States to stop Mexican immigrants who can increase their incomes ten-fold by crossing from one side to the other of the border. Most other unauthorized immigrants to the U.S. arrived through normal border crossings with tourist, student, or other temporary visas, although border apprehensions suggest that some unauthorized immigrants from other countries also cross the border from Mexico. The highest concentrations of unauthorized immigrants in the U.S. are in the border states of California and Texas. Table 2 presents estimates by the Pew Hispanic Center for the individual states of the United States.

⁷ See Passel (2006).

Table 2. Pew foundation estimates of the unauthorized migrant population in the U.S.: 2005

California	2,500,000–2,750,000	Indiana	55,000–85,000
Texas	1,400,000–1,600,000	Iowa	55,000–85,000
Florida	800,000–950,000	Oklahoma	50,000–75,000
New York	550,000–650,000	New Mexico	50,000–75,000
Arizona	400,000–450,000	Kansas	40,000–70,000
Illinois	375,000–425,000	S. Carolina	35,000–75,000
Georgia	350,000–450,000	Missouri	35,000–65,000
New Jersey	350,000–425,000	Nebraska	35,000–55,000
North Carolina	300,000–400,000	Kentucky	30,000–60,000
		Alabama	30,000–50,000
Virginia	250,000–300,000	Mississippi	30,000–50,000
Maryland	225,000–275,000	Arkansas	30,000–50,000
Colorado	225,000–275,000		
Washington	200,000–250,000	Louisiana	25,000–45,000
Massachusetts	150,000–250,000	Idaho	25,000–45,000
Nevada	150,000–200,000	Rhode Island	20,000–40,000
		Hawaii	20,000–35,000
Pennsylvania	125,000–175,000	Delaware	15,000–35,000
Oregon	125,000–175,000	District of Columbia	15,000–30,000
Tennessee	100,000–150,000	N. Hampshire	10,000–30,000
Michigan	100,000–150,000		
		Alaska	<10,000
Ohio	75,000–150,000	Wyoming	<10,000
Wisconsin	75,000–115,000	South Dakota	<10,000
Minnesota	75,000–100,000	Maine	<10,000
Utah	75,000–100,000	Vermont	<10,000
Connecticut	75,000–100,000	North Dakota	<10,000
		Montana	<10,000
		West Virginia	<10,000

Based on March 2005 Current Population Survey and published by Pew Hispanic Center, A Pew Research Center Project, Washington DC 20036–5610, <http://www.pewhispanic.org>

Table 3 presents several alternative estimates of the unauthorized immigrant population in the U.S. The U.S. Immigration and Naturalization Service's (INS) estimates are based on border apprehensions, as stated earlier. The remaining estimates are based on finding the residual between legal immigrants estimated from immigration statistics and estimates of the total foreign-born population from the decennial Census and intermediate Census Bureau surveys. The variations in the estimates are due to alternative assumptions about the undercounts in Census Bureau surveys and counts. For example, in Table 3, Bean, Corona, Tuirán, Woodrow-Lafield, and Van Hook (2001) obtained estimates of the unauthorized immigrant population assuming the Census Bureau undercounts unauthorized immigrants by 15–25%; these assumptions are justified by the results from Bean and Van Hook (1998).

Table 3. Alternative estimates of unauthorized immigrants in the U.S. (thousands)

	INS	Census bureau study			Bean et al. (2001)			Pew 2006
Undercount rate:	-	10%	15%	20%	15%	20%	25%	-
1990	3,500	3,766	4,430	4,707	-	-	-	-
1995	5,146	-	-	-	-	-	-	-
2000	7,000	8,705	10,242	10,882	-	-	-	-
2001	-	-	-	-	5,918	7,751	9,864	-
2005	-	-	-	-	-	-	-	11,100

Source: Hanson (2006), Table 1, p. 875. The studies shown are: INS (2001); Costanzo, Davis, Irazi, Goodking, and Ramirez (2001), Bean, Corona, Tuirán, Woodrow-Lafield, and Van Hook (2001) and Passel (2006).

3 Some Characteristics of Unauthorized Immigrants

It is difficult to describe the characteristics of unauthorized populations residing in the principal destination countries because they are not a homogeneous group. However, the Pew Hispanic Center has taken all available data from the Census Bureau and other government agencies to compile several studies that, for the first time, shed some light on who exactly are the unauthorized immigrants in the United States (Passel 2006).

Out of the 11 million or more unauthorized immigrants in the U.S. in 2005, the Pew Center estimates that two-thirds arrived in the U.S. after 1995, 40% after 2000. This implies that between 2000 and 2005, close to 1 million immigrants entered the country illegally each year. The study estimates that during the 1980s about 200,000 immigrants entered the U.S. illegally, between 1990 and 1995 about 400,000 entered each year, and close to 600,000 entered each year in the latter half of the 1990s. The study finds that slightly over half of all unauthorized immigrants in the U.S. in 2005 were natives of Mexico, and another 20% are from elsewhere in Latin America. Asia was the source of 13% of the unauthorized U.S. population, Europe, and Canada contributed 6%, and Africa 3%. Overall, out of the total U.S. foreign-born population of 36 million, unauthorized immigrants accounted for 11 million, or 30% of the total. Also, the Pew Center's (2006) research suggests that about 60% of unauthorized immigrants entered the U.S. by crossing the border clandestinely; the other 40% entered through normal entry points and then overstayed visas, student visas, or other temporary entry permits.

In 2005, unauthorized immigrants consisted of 5.4 million adult males (49%), 3.9 million adult females (35%), and 1.8 million minors (16%). Immigrant families were not neatly divided between fully documented and unauthorized immigrants. Nearly 15 million people lived in 6.6 million families that had members who were unauthorized immigrants. Therefore, there were about 4 million legal immigrants, U.S. citizens, and native-born Americans who were part of families that included unauthorized immigrants. About 3.3 million were children born in the U.S. who were U.S. citizens. This finding complicates the policy debate over what to do about unauthorized immigrants already living in the U.S.

Another important finding by the Pew Hispanic Center's research on unauthorized immigrants is that just short of 5% of the U.S. civilian labor force consists of unauthorized immigrant workers. While 83% of all adult males in the U.S. are in the active labor force, 94% of unauthorized adult male immigrants in the U.S. were working in 2005. Finally, unauthorized immigrant workers are highly concentrated in certain U.S. industries, most notably in relatively low-wage jobs in the agriculture, construction, food processing, and service industries.

4 The Economic Analysis of Unauthorized Immigration

Very little of the early research on unauthorized immigration was done by economists. Sociologists led the way in analyzing why immigrants crossed borders illegally, where they came from, and how they survived in their destination countries.⁸ Perhaps empirically-minded economists were discouraged from analyzing unauthorized immigration due to the lack of reliable data on unauthorized immigration. Whatever the reasons, economists' focus on legal immigration flows has limited their analysis of immigration in several critical ways. First of all, since nearly one-third of all immigrants in the U.S. are in the country illegally, any analysis focusing only on legal immigration inevitably gives an incomplete picture of immigration. Second, statistical analysis using only an arbitrary two-thirds of a total sample will almost certainly result in biased conclusions, especially because the status of being unauthorized uniquely alters an immigrant's opportunities and economic outcomes. Illegality imposes costs and reduces the potential gains from immigration. Unauthorized immigrants do not enjoy the same legal protections and privileges as legal immigrants do, and they tend to have fewer employment and living options available to them. They often face various forms of discrimination and exploitation in the labor market, housing, education, and social conditions. Third, the inflows and outflows of unauthorized immigrants do not react to shifts in legal barriers to immigration in the same way as legal immigrants. In most destination countries, legal barriers to immigration cause a backlog of people seeking to immigrate.

Hence, actual annual flows of legal immigrants do not reflect current economic and social conditions as strongly as unauthorized immigration, which does seem to respond quickly to changes in current economic conditions in the source and destination countries. Given the fairly unchanging quotas on legal immigration in many immigrant destination countries, flows of unauthorized immigrants may seem to over-react to changes in conditions because unauthorized immigration is effectively a "spillover" from the constrained flow of legal immigration. For all these reasons, the study of unauthorized immigration can provide information that studies of legal immigration may not readily reveal in standard statistical studies.

⁸ See, for example, the review of the sociology literature by Espenshade (1995).

4.1 *The Supply and Demand for Unauthorized Workers*

The standard labor supply and demand model of immigration can guide our discussion of the determinants of unauthorized immigration. First, there are costs to unauthorized immigration, which may be higher or lower than legal immigration. These costs are related to time, distance, and the costs of penetrating the barriers a destination country has erected to prevent the entry of unauthorized immigrants. The bureaucratic procedures for acquiring work or residence visas in destination countries can take a long time, sometimes years. Hence, immediate illegal entry can be an attractive alternative for many immigrants who do not qualify for visa categories for which visas are quickly available, such as highly educated workers or business executives.

Legal immigration usually involves other direct costs, such as transportation and legal fees. The United States charges some immigrants up to \$5,000 for certain work visas. Unauthorized immigrants evade such legal charges, but illegal entry introduces other costs that legal immigrants do not encounter. For example, immigrants seeking illegal entry may contract the services of a trafficker, a people-smuggler, or a “coyote,” as the smugglers operating on the Mexico-U.S. border are called. Cornelius (2005) reports that coyotes charge between \$1,200 and \$1,700 (in year 2000 US\$’s) for their services, more if the immigrant’s final destination is further inland from the border. In the United Kingdom, people-smugglers who bring Chinese workers from China charge £15,000 to £20,000 (US\$ 27,500 to US\$ 35,000), which is ten times the cost of a standard airline ticket between China and Europe.⁹ The role of gangs in the trafficking of unauthorized workers results from immigration restrictions. There is no legal way for the Chinese workers to even get to Europe. Airlines will not let passengers board without valid entry visas, and the embassies and European Consulates in China only give tourist or student visas to Chinese who can prove they have the high incomes to be tourists or overseas students. Hence, poor fortune seekers must rely on traffickers.

The supply of unauthorized immigrants is influenced by source country conditions and the particular characteristics of the immigrants. Orrenius and Zavodny (2005) find that unauthorized Mexican immigrants to the United States are neither uneducated nor highly educated; they have above-average education for Mexico but below-average education from a U.S. perspective. Unauthorized Mexican immigrants in the U.S. also tend to be related to other unauthorized immigrants already in the country, which suggests that unauthorized immigrants follow family networks, not unlike many legal immigrants. In fact, the difficulties encountered by unauthorized immigrants may make family, ethnic, and language networks even more important for them.

Both the supply and demand sides of the labor market for unauthorized immigrants are affected by overall economic conditions. Supply is driven by both source country and destination country economic conditions, and de-

9 Champion and Kaminski (2000).

mand is driven mostly by destination country economic conditions. Hanson and Spilimburgo (1999) examine the causes of unauthorized immigration to the U.S. using data on apprehensions at the border under the assumption that unauthorized immigration is directly related to the number of apprehensions by the U.S. Border Patrol. They find that decreases in Mexican wages sharply increase border apprehensions, and, by assumption, unauthorized immigration to the U.S. within months. They also find that U.S. wages have less influence on the flows of unauthorized immigrants from Mexico to the U.S. This result does not accord with the more traditional literature on immigration, which gives destination country wages a large influence. On the other hand, we use annual county data derived from census studies and updates and find that Hispanic immigration to the U.S. is more responsive to U.S. economic conditions than source country conditions. The differences in findings can easily be explained by the differences in data sources. Their weekly data gave Hanson and Spilimburgo the significant advantage of being able to measure short-term responses to changes in economic conditions, something annual census data cannot do. Espenshade (1995) points out the difficulties with using border apprehensions to proxy unauthorized immigration, although he admits that there are no alternatives to using border apprehension data to quantify weekly or monthly changes in unauthorized immigration.

Following his survey and analysis of the motivations for unauthorized immigrants from Mexico to the U.S., Hanson (2006) reaches the more general conclusion that it is income differences between source and destination countries that are directly correlated with immigrant flows. He also concludes that:

“The perspective that emerges from the data that are available is that Mexico-to-U.S. illegal migration increased in the 1970s and 1980s and averaged around 200,000 to 300,000 net unauthorized entries per year in the 1990s and early 2000s. The population of illegal immigrants from Mexico in the United States includes a substantial fraction of women, is predominantly employed in nonagricultural jobs, and has schooling levels that are comparable to or higher than nonmigrating individuals in Mexico. Though many migrants maintain ties with family members in their origin communities, a majority appear to have settled in the United States on a medium or long-term basis” (pp. 886–87).

These conclusions suggest that unauthorized immigrants in the U.S. are unlikely to leave the country soon. This presents a difficult situation for those who have suggested the U.S. needs to find and deport all unauthorized immigrants.

Hanson (2006) also concludes that there must be large unobserved costs to unauthorized immigration from Mexico to the United States because, given the income differences, there should be much more immigration. Perhaps the standard model of immigration does not capture all the relevant push, pull, stay, and stay away factors. For example, poor living conditions and working conditions for unauthorized immigrants may partially offset the higher wages they earn in the destination countries. The nature of an illegal existence has been documented in the press and books, especially in the sociology literature, but it has not always been properly incorporated in the economics literature.

4.2 Unauthorized Immigration as a Form of Labor Market Discrimination

The economic costs and benefits of unauthorized immigration can be illustrated using the standard labor supply and demand model first presented in the Introduction to Section One of the book. We use this model in its most restricted form, which models immigrants exclusively as suppliers of labor. As Figure 1 shows, immigration shifts the labor supply curves to the left in Source, and to the right in Destination. Wages rise in Source and fall in Destination, and the remaining workers increase their share of GDP by the area *e* in Source, but native workers lose a share of GDP equal to the area *E* in destination. The immigrants gain the difference between the areas *H* and *h*. This model, therefore, suggests that workers in Destination will seek restrictions on immigration.

This representation of immigration may not be accurate for unauthorized immigration, however, because the model effectively assumes immigrants and domestic workers are perfect substitutes. In general, unauthorized immigrants are not treated exactly the same as otherwise identical legal immigrants and natives. Unauthorized workers often end up working for lower wages and benefits, and in poorer working conditions, than native workers. Also, unauthorized workers cannot find employment in all sectors of the economy. Differences in labor union vigilance, selective government regulation, or just tradition often lead to sharp concentrations of unauthorized immigrant workers in certain industries and occupations, while virtually no unauthorized workers are found in many other industries and occupations. Table 4 presents some evidence of the occupational concentration of unauthorized immigrants in the United States.

Returning to the labor market model of immigration, suppose that the illegal status of immigrants results in the segmentation of the labor market into

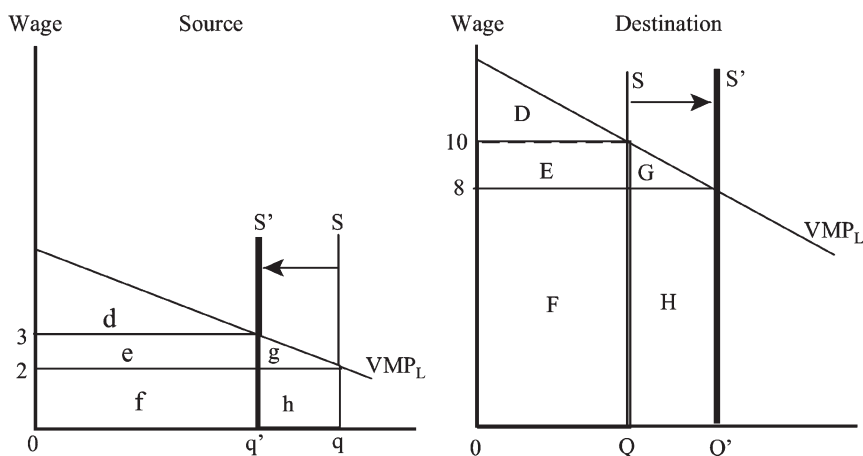


Figure 1. The gains and losses from immigration without discrimination

Table 4. Unauthorized immigrants in U.S. occupations with 20% or greater share: 2005

Occupation	Total workers	Undocumented workers	
		Number	Share
Total U.S. Civilian Workforce	148,615,000	7,255,000	4.9%
Insulation workers	56,000	20,000	36%
Agricultural workers	839,000	247,000	29%
Roofers	325,000	93,000	29%
Drywall installers	285,000	79,000	28%
Construction helpers	145,000	40,000	27%
Meat, poultry, fish processing workers	322,000	87,000	27%
Textile, garment workers	83,000	21,000	26%
Grounds maintenance workers	1,204,000	299,000	25%
Construction laborers	1,614,000	400,000	25%
Masons	198,000	49,000	25%
Dishwashers	367,000	85,000	23%
Production worker helpers	64,000	15,000	23%
Maids, housekeepers	1,531,000	342,000	22%
Graders and sorters in agriculture	74,000	16,000	22%
Painters in construction industry	768,000	167,000	22%
Cement masons and finishers	141,000	29,000	21%
Computer hardware engineers	54,000	11,000	20%
Packaging and filling machine operators	367,000	75,000	20%
Packers and packagers	548,000	111,000	20%
Cleaners of vehicles and equipment	427,000	85,000	20%
Carpet and floor installers and finishers	330,000	66,000	20%
Cooks	2,218,000	436,000	20%

Source: Jeffrey S. Passel (2006), Table 1, p. 12; downloaded from www.pewhispanic.org

legal and illegal segments, and employers pay different wages in each segment. Figure 2 illustrates how such a discriminatory scheme distributes economic welfare. In the case where immigrants are restricted to certain jobs that would not be performed at all in the absence of immigration (say butchering hogs or cows in unpleasant meat packing plants or picking oranges in hot fields), jobs listed along the labor demand curve from **a** to **b**, the wage for immigrant workers would fall to \$8. Total immigrant wages would be equal to area H in Figure 1. If authorized workers refuse to work for less than \$10 or if there is a minimum wage of \$10 that is only enforced for authorized workers, then total wage income for the 0Q native workers will remain equal to the gray shaded area E + F. The reservation wage (or minimum wage) of \$10 implies that native workers will not be employed in any of the lower-paying jobs between **a** and **b**, and the labor market will be perfectly segmented into two separate markets with wages of \$10 and \$8, respectively.

Notice also that owners of other factors such as capital will still gain from the immigration. They will not capture area E, which remains with native workers, but the owners of other factors do gain area G by employing immigrant workers at the lower wage of \$8. Thus, schemes whereby immigrants are

allowed to work only in sectors of the economy where native workers earning pre-immigration wages would not be employed will prove beneficial to immigrants and employers without lowering the welfare of native workers.

The model in Figure 2 can be used to explain the political economy model of Hillman and Weiss (1999), in which an equilibrium is reached where unauthorized immigration is concentrated in sectors of the economy where domestic labor interests are not strong while the majority of voters continues to support curbs on legal immigration because they do not want immigrants to compete in the labor markets where they work.

Hillman and Weiss point out that in most European countries that attract unauthorized immigrants, undocumented foreign workers usually occupy jobs that native workers are not very interested in performing. Vigilance against unauthorized immigrants is higher in the higher wage segments of the labor market for the simple reason that domestic workers demand that unauthorized immigrants be barred from applying for those jobs. Thus, undocumented workers end up in certain low-paying segments of the labor market where they do not compete directly with native workers and employers actually gain surplus from employing unauthorized workers. Restrictions on unauthorized immigrants' use of public services, such as those passed by the federal and many state governments in the U.S. during the 1990s, also serve to keep the inflow of unauthorized foreign workers from having a negative impact on the welfare of native workers.

4.3 Oppression of Unauthorized Workers

The illegal status of unauthorized immigrants gives employers in the destination country added labor market power. Unauthorized workers are in constant danger of being deported and, possibly, punished for their hav-

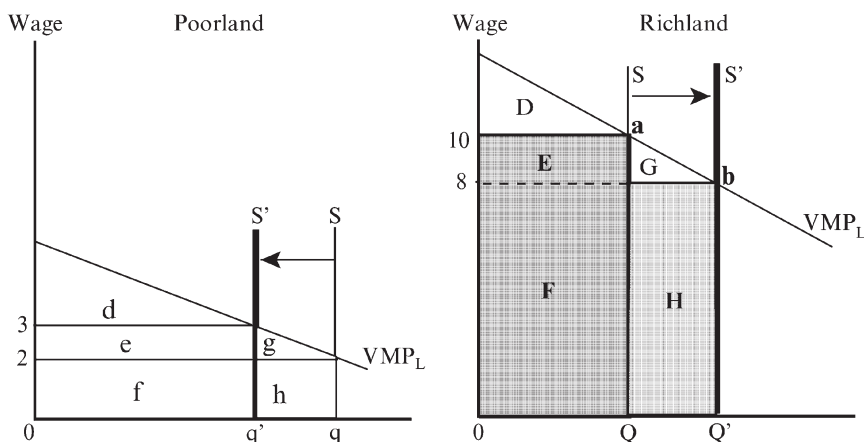


Figure 2. The gains and losses from immigration with discrimination

ing entered the country illegally. Employers can dismiss the unauthorized workers by simply reporting them to the authorities, who will then escort the workers out of the country and out of the normal range of responsibilities that employers have toward legal workers. The unauthorized workers know this, and they accordingly tend to avoid conflict with their employers. They also tend to accept lower wages, poorer working conditions and hours, and more abuse in the workplace.

The casual evidence suggests that many employers treat unauthorized immigrants on par with legal immigrants. Employers fearful of government punishment have an incentive to act as though they are not aware of unauthorized immigrants' illegal status. Many employers of unauthorized workers even contribute their share of social security payments and forward deducted taxes to the government from the immigrants' paychecks.¹⁰ On the other hand, the press has reported numerous cases of mistreatment and underpayment. A 2003 *Financial Times* story describes the plight of unauthorized Burmese workers in the border city of Mae Sot in Thailand:

Most Burmese workers receive just a fraction of Thailand's minimum wage, and risk prompt deportation by local authorities—often acting in league with enterprise owners—if they demand better conditions. Police routinely arrest, beat and threaten to deport Burmese migrants who fail to pay bribes. Deadly violence is also a growing danger. In January 2002, 17 migrants, their hands bound and throats slit, were discovered in a stream near Mea Sot. Thai police, who dubbed the murders as the “normal killing” of Burmese workers, advised villagers to float the bodies downstream, though a public outcry forced an investigation. ... In June, police in Mae Sot deported 34 Burmese workers after a labor court ordered their employer to pay them back wages.¹¹

Some of the worst labor conditions for unauthorized immigrants have been found in Western Europe and the United States. For example, the *Associated Press* reported many cases of unauthorized immigrants not receiving full, or in some cases, any, payments for weeks of work for contractors hired to clean up after Hurricane Katrina damaged towns and cities along the U.S. Gulf Coast in 2005.¹² And *Business Week* reported that in 2000¹³, as many as 100,000 unauthorized immigrants were working in Europe in closed sweatshops and denied any contact with the outside world. In contrast, not all studies show that unauthorized immigrants are at a serious disadvantage to legal immigrants. For example, Massey (1987) found that undocumented immigrants in the U.S. earned lower wages because of their characteristics, not because they were undocumented per se. Massey explains immigrants' lower wages by their skill levels, the types of jobs that they hold, and length of tenure in their jobs. The types of jobs immigrants hold and their job tenure are

10 Potter (2006), Jordan (2007).

11 Kazmin (2003).

12 Pritchard (2005).

13 *Business Week* (2000), “Workers in Bondage,” November 27.

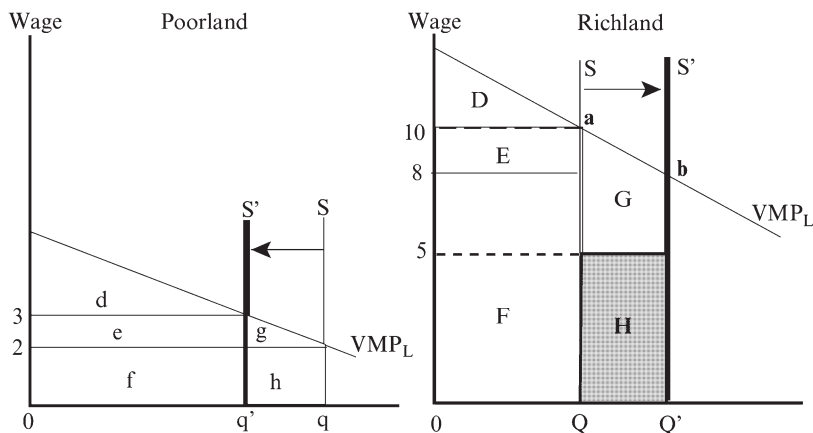


Figure 3. The gains and losses from immigration with discrimination

influenced by their legal status, so it is still likely that the status of being an illegal worker causes wages to be lower compared to legal workers.

The models in Figures 1 and 2 suggested that employers gain the area G from the presence of unauthorized workers willing to work at \$8. Suppose, however, that there are many foreign workers ready to work at wages below \$8, say for any wage higher than they can earn in their native countries. If employers can collude, exploit unauthorized immigrants' inability to shop around for jobs because of language barriers, threaten the workers with arrest, or if they can simply exploit the workers' lack of knowledge about the labor market in the destination country, then employers could lower the wage for unauthorized, illegal workers to say \$5, as shown in Figure 3. Now the area G is much larger. The immigrants still accept the work because the wage is well above the source country wage.

4.4 Discussion of the Labor Segmentation Hypothesis

To summarize the above discussion, employers gain from being able to employ less expensive unauthorized workers, and workers and employers in other segments of the economy are not too troubled by the presence in the country of unauthorized immigrants who work mostly in a few specific industries where they would not themselves care to work. Representative of this view are the comments by Rosie Olivares, a labor organizer in Fremont, Nebraska, who reacted to the presence of unauthorized workers in Nebraska's growing meat-packing industry as follows: "They're not taking jobs from anybody."¹⁴ "There are only so many people who want to do that at the given pay scale," claimed a manager of the Nebraska Turkey Grow-

¹⁴ Quoted in Orenstein (1995).

ers Cooperative.¹⁵ Economists will be somewhat leery of accepting this market segmentation argument, and the suggestion that the work performed by unauthorized Mexican workers at Nebraska meat packing plants would not be performed at all if unauthorized workers were all deported has been contested by many anti-immigrant groups and labor organizations. Workers are not so easily segmented into exclusive markets. And, the increased total supply of labor would, in the absence of strong positive externalities and demand-side effects, be likely to cause wages to fall elsewhere in the economy. But, in the case of unauthorized immigrants, there seem to be some implicit barriers to unauthorized immigrants competing in other labor markets, most likely by labor unions and, perhaps, by firms interested in avoiding labor conflicts. Governments may vary enforcement of immigration laws on an industry-by-industry basis in response to the different interests of firms, organized labor groups, and consumers in each industry.

There are obvious political implications of the market segmentation hypothesis discussed above. Potential employers who stand to gain G will lobby hard for legislators to close their eyes to the entry of unauthorized immigrants, and labor groups opposing the legalization of unauthorized immigrants would be willing to overlook unauthorized workers in segments of the market that would probably not exist without cheap exploited labor.

4.5 *Close Variations on Illegality*

Various immigration policies have been devised that directly attempt to legally achieve exactly the outcome shown in Figure 2. Such schemes effectively require employers to discriminate between native and immigrant workers. For example, many countries permit foreign workers to enter the country temporarily to work at specific jobs where they do not compete directly with domestic workers, and often these jobs pay substantially less than other domestic jobs. Sometimes, temporary contract workers do not have to be paid the same benefits, and certain employment taxes are waived. Seasonal jobs in agriculture and tourism often pay wages and offer work conditions that reflect effective discrimination against foreign workers.

In the 1960s, a number of Western European countries instituted temporary worker programs that brought large numbers of foreign workers from Southern European and Mediterranean countries to specific jobs in certain industries, e.g. construction. Interestingly, the strong social welfare policies and the high levels of civil and human rights in these Western European countries soon undermined the discriminatory immigration system that was intended to only temporarily bring foreign workers to perform certain jobs for which nationals were not available. Family members of the immigrants began to arrive, families formed and grew, and the temporary work permits soon began to be converted to permanent residence visas. Formerly homogeneous Euro-

¹⁵ Quoted in Orenstein (1995).

pean societies have become much more diverse, and foreign-born residents have come to account for high proportions of the populations of most Western European countries.

The United States authorized the *Bracero* Program during World War II, which permitted Mexican workers to do seasonal work in the United States. This program was instituted because native U.S. workers were being drafted into the armed forces for the war, and fruits and vegetables were rotting in the fields of California and Texas. Clearly, the program covered jobs that would not otherwise have been done. The program also permitted employers to pay lower wages and avoid paying other benefits. The program continued after the war, but by the early 1960s strong opposition to it had developed. Unions sought to organize native agricultural workers, and the availability of temporary workers willing to work for low wages under the special provisions of the Bracero Program undermined organized labor's ability to press for higher wages and better working conditions in the fields of California. In the early 1960s, with labor-friendly politicians leading the U.S. Congress, the Bracero Program was ended. In 2006 and 2007, the inclusion of a temporary worker program in a comprehensive immigration bill before the U.S. Congress undermined support and, ultimately, led to the bill's rejection. A number of industries had pressed for the temporary worker program as part of a grand bargain that also included stronger measures to curb unauthorized immigration, but organized labor groups strongly opposed the discriminatory temporary worker provision, and the bargain unraveled.

This discussion suggests that unauthorized immigration is the logical result of the destination country's political process, not an unintended or unexpected outcome. Indeed, a number of political scientists have described immigration policy from this perspective, e.g. Andreas (2000), Massey, Durand, and Malone (2002), and Cornelius, Truda, Martin, and Hollifield (2004). This literature recognizes that authorities have some freedom to vary the enforcement of immigration laws and regulations. Decisions on how to patrol the borders, whether to pursue employers or the immigrants themselves after they have crossed the border, and whether to punish unauthorized immigrants, their employers, or their other accomplices within the country, are all open to considerable variation. The choices made by the authorities are, therefore, political decisions that reflect the various interest groups within the destination country and how those groups are able to translate their interests into political outcomes. Employers of unauthorized immigrants seem to have been able to reduce the enforcement of immigration laws in many countries. Many articles and studies show that U.S. immigration authorities have for many years simply not pursued unauthorized immigrants at their places of employment, although it seems to be one of the obvious places to look for unauthorized immigrants. Incidentally, there is nothing in U.S. law that prevents U.S. immigration authorities from visiting firms and inspecting identification and other types of required documents.¹⁶

16 See, for example, the discussion in Hanson (2006, pp. 909–910).

4.6 *Unauthorized Immigration can be Deadly*

In June of 2000, the world was stunned by the death by suffocation of 58 Chinese migrants locked in an airtight cargo truck during a ferry crossing of the English Channel from France to the United Kingdom. Only two of the passengers survived to tell the story of their ill-fated trip from China. The 60 passengers had spent 4 months traveling from China's Fujian province via Moscow and Eastern Europe. They had paid traffickers to carry them to London, where they had been promised jobs that would pay wages well above what they could earn in their native China. European leaders replied to the tragedy by reiterating their determination to stop the trafficking of humans. But, as two reporters for the *Wall Street Journal* wrote just after the tragic event, "Despite the predictable promises of action from EU leaders, no easy solutions are on offer."¹⁷ This tragedy reflects the strong incentives for immigration created by the large differences in wages between countries.

In Japan, companies who need low-wage workers have gotten around very firm barriers against immigration by taking advantage of a 1993 program that lets Japanese firms bring in foreign trainees for up to 3 years. Many of these trainees are in fact underpaid workers performing menial, repetitive jobs. More likely, as Figure 2 suggests, the program was set up with the specific intention of segmenting the Japanese labor market to let foreigners perform certain jobs without impacting native workers' wages. A member of the Japanese parliament was recently caught accepting a large bribe from an organization that actively recruits overseas "trainees" for Japanese companies; the parliamentarian had pushed legislation to extend the training period from 2 to 3 years. Life for these trainees is difficult and many run away and take unauthorized work in Japan's underground economy.¹⁸

Increased spending on border patrols has made it more difficult for Mexicans and Central Americans to cross the Mexico-U.S. border at the most convenient, and safe, places. Therefore, traffickers are more frequently crossing the 2,000 mile-long border in remote areas. In 2000, 369 people died of hunger or thirst trying to cross into the United States by walking across remote deserts or riding in the backs of airtight, sealed trucks. In 2005 an estimated 472 would-be immigrants died trying to cross into the U.S.¹⁹ In an ironic twist, the Mexican government has launched a program to equip unauthorized immigrants with survival kits containing water, medicines, bandages, and anti-dehydration powder.²⁰ This is a case of the government of the source country spending money to help immigrants overcome barriers paid for by the taxpayers in the destination country. In the meantime, unauthorized Mexican immigrants continue to enter the United States.

17 Champion and Kaminski (2000).

18 Nakamoto (2001).

19 *The Economist* (2007).

20 *The Economist* (2001).

5 The Fiscal Costs and Benefits of Unauthorized Immigration

Unauthorized immigrants are expected to generate various externalities, and the most often discussed externalities are the fiscal costs to local, state, and national governments. Evidence for the U.S. does not support the popular belief that immigrants are a fiscal burden, however. Except for refugees and elderly immigrants, the remaining immigrants, including unauthorized ones, use government services to a lesser degree than natives. Even when we include refugees, who are high users of government services and recipients of government transfers, immigrants as a group still use government services only slightly more often and receive only slightly more welfare payments than natives. For example, according to the 1990 census, 9% of immigrant families received welfare payments, a percentage that was only slightly more than the 7.4% of U.S.-born families that received welfare payments. A 1992 study for the United States Department of Health and Human Services by Kirchner and Baldwin (1992) found that pre-1982 legal immigrants to the United States living in the six states with the largest immigrant populations were found to pay more in total taxes than they received in government-provided benefits.

Not all levels of government are affected the same way by immigrants, however. The 1992 study determined that the fiscal burden of immigrants fell mostly on state and local governments. The federal government actually enjoyed net gains from increased income tax and social security tax revenues. Apparently the average immigrant is less educated and has a larger family compared to natives, so immigrants were more likely to use state and local government services. But, because immigrants are also younger than natives, they are large contributors to Social Security, a federal program.

A study of immigration in European countries suggests that the tax-transfers ratio is not as burdensome as is often feared because governments adjust both taxes and transfer programs in order to improve the balance for native workers. Razin, Sadka, and Swagel (1998) show that for 11 European countries, taxes on workers and transfers to the poor were reduced as the percentage of immigrants in the population increased. The recent welfare reforms in the United States, which reduced benefits to non-citizens, are further evidence that the political process adjusts immigrants' access to welfare benefits as immigration rises. Hence, the fiscal burden of immigrants appears to be an endogenous variable, and politics is unlikely to let the fiscal burden become more burdensome for voting native workers.

While the evidence on the fiscal effects of immigrants is sparse, there is almost no evidence on the fiscal effects of unauthorized immigrants. Unauthorized immigrants do not readily reveal themselves to the government authorities. Also, in many destination countries, especially those with strict civil rights laws and traditions, government service providers such as health clinics and schools do not ask immigrants to reveal their legal status.

Table 5. Major government-sponsored programs and their availability to undocumented immigrants

Unavailable	Available
Medicare	K-12 Education, Higher Ed. In some states
Medicaid	Emergency Medicaid Care
Children's Health Insurance (CHIP)	Substance Abuse Services
Food stamps	Mental Health Services
Supplemental Security Income (SSI)	Immunizations
Public housing assistance	Women and Children's Health Services
Job opp. for low income individuals	Public health
Child care and development	EMS

Source: United States Department of Health and Human Services; published as Exhibit 1 in Special Report (2006).

There is a Special Report (2006) by the Texas Comptroller of Public Accounts that estimates the financial impacts of unauthorized immigrants on the Texas state budget and economy. During 2004–05, there were an estimated 1.4 million unauthorized immigrants in Texas. Table 5 shows which of Texas' major government-sponsored social and educational programs that unauthorized immigrants are denied access to and which ones for which they can qualify. Note that in Texas, unauthorized children can attend college at in-state tuition rates if they graduate from a Texas High School.

In its estimates, the authors of the Special Report included law enforcement and criminal justice costs generated by these immigrants. Total state expenditures for unauthorized immigrants were estimated to be \$1,156 billion. Total revenue paid by unauthorized immigrants was calculated using a method that arrived at total state revenue under the assumption that immigrants suddenly disappeared. This exercise led to the conclusion that the unauthorized immigrants' presence increased the gross state product by \$17.7 billion, which, in turn, increased property taxes, sales taxes, fees for services, etc., by \$1.581 billion. Therefore, the state government enjoyed a net gain of \$425 million from the presence of 1.4 million unauthorized immigrants in Texas. Table 6 summarizes the study's results.

The conclusion from the Special Report is that unauthorized immigrants are not a drain on state government coffers, as so many critics of illegal im-

Table 6. Costs, revenues and economic impact of undocumented immigrants in Texas, 2005 (In millions of \$'s)

Costs		Revenues	
Education	\$967.8	State Revenue	\$999.0
Healthcare	\$58.0	School Property Tax	\$582.1
Incarceration	\$130.6		
Total	\$1,156.4	Total	\$1,581.1
		Surplus/Deficit:	+ \$425 million

Source: Exhibit 18 in Special Report (2006).

migration suggest. To the contrary, because unauthorized immigrants do not have access to as many government services and programs as legal immigrants do and they actually pay many state and local taxes, for example sales taxes, property taxes, automobile registrations, and income tax deductions from paychecks, unauthorized immigrants were net contributors to Texas' fiscal budget.

6 Unauthorized Immigration: Policy Options

Immigration policy has generated controversy in most of the destination countries in Europe, North America, and the Pacific region. Given the huge differences in wages across countries, the restrictions on legal immigration that most countries have instituted almost inevitably result in people crossing borders without permission. The static labor supply and demand model suggests that there will be groups who find unauthorized immigration to work in their economic favor, so there is liable to be implicit support for unauthorized immigrants in the form of jobs. The demand effects of immigration also imply that there will be landlords willing to rent housing and retailers willing to provide goods and services to the immigrants. The opposing interests within the destination country thus place policymakers in the position of having to make difficult choices.

Among the measures that have been suggested to stop unauthorized immigration are: (1) placing barriers on the border, (2) preventing unauthorized immigrants from taking the jobs that they seek once they are in the country; or (3) creating better jobs in the would-be immigrants' own country. The latter is not a short-term option, since that would require investment flows and encouragement of international trade, among other things. The first two options are the ones commonly targeted by policymakers.

6.1 *Border Controls*

Border controls are easier for immigrant destination countries far away from source countries. For example, Australia receives relatively few unauthorized immigrants because it is an island that is thousands of miles from the most common sources of immigrants. The United States, however, shares 2,000 miles of border with Mexico, the source of over half of its immigrants over the past two decades. Western Europe receives unauthorized immigrants from Eastern Europe, and it increasingly receives unauthorized immigrants from Africa, most of whom cross the Mediterranean Sea to Spain or Italy. Some African migrants climb the fence into Ceuta, the Spanish enclave in Northern Africa. Like the desert along the Mexican-U.S. border, the Mediterranean has caused numerous deaths when overloaded boats sank or high waves overwhelmed small boats inappropriate for sea crossings.

Europe and the United States also receive unauthorized immigrants from further away. Increasingly, Western Europe and the United States receive un-

authorized immigrants from China. The U.S. and Spain are destinations for Latin American immigrants from Central and South America. Some of these Latin American immigrants travel through numerous countries before crossing the Mexico-U.S. border, making Mexico now also one of the main transit countries for unauthorized immigrants. Immigrant trafficking has become a large business for Mexican “coyotes.”

Many unauthorized immigrants do not actually sneak across the borders of the destination countries. Evidence suggests that half of all unauthorized immigrants enter destination countries legally with tourist visas, student visas, or other temporary entry visas. Sometimes such visas are obtained under false information; often, tourists and students decide to remain in the destination country.

6.2 *Employer Sanctions*

Sanctioning employers is often viewed as a more effective way to stop unauthorized immigration. This will be the case only if unauthorized immigrants come for work, of course, but that does seem to be the most common reason for unauthorized immigration. One reason employer sanctions are not used more frequently is that they directly confront an important domestic political constituency in the destination country. Furthermore, civil rights issues arise. To avoid charges of discrimination, the legality of all workers, including natives and legal immigrants, would have to be checked with equal seriousness. Hence, another important domestic political constituency is inconvenienced. If mistakes are made, natives and legal immigrants will be swept up in raids on employers. For example, if immigration authorities only check workers on a selective basis, say according to whether they fit some profile or are employed in jobs where unauthorized immigrants are most likely found, then natives and legal immigrants are likely to face occasional harassment, incarceration, and even deportation.

Ethier (1986) famously showed that successful border enforcement hurts the would-be immigrants but helps competing native and legal immigrant workers. Employer enforcement, on the other hand, is likely to hurt both unauthorized immigrants and legal immigrants when employers have trouble distinguishing between legal and illegal immigrants. If the employer sanctions are very costly, employers may refrain from hiring any immigrants for fear that they might be discovered to be unauthorized.

Some countries have used employer sanctions successfully, however. Japan has apparently been able to keep unauthorized immigrant numbers quite low (See Table 1) by using employer sanctions and frequent document checks in the workplace. Opponents to immigration in the United States increasingly call for the U.S. government to carry out more employee checks and, where unauthorized immigrants are found, more employer sanctions. After 2007, authorities increasingly targeted industries in the U.S. known for hiring undocumented workers.

7 Conclusions

The issue of unauthorized immigration is perhaps best summarized by the 2004 bill brought before the California legislature that would have allowed the estimated 2.5 million illegal immigrants residing in California to apply for a California driver's license. After proponents of the bill ran television commercials showing a fictional nanny riding the bus telling how she is welcomed into her employers' home and trusted to care for their children, but not allowed to drive their car, the bill was promptly dubbed the "let my illegal nanny drive my SUV" bill.²¹ Note that California is the U.S. state with the highest proportion of foreign born and the largest number of unauthorized immigrants.

To the outside observer, the question of whether to issue an official driver's license to a person not legally in the country may seem absurd. However, the United States is a country designed around the automobile, and it is simply difficult for anyone to hold a job, shop, attend to family matters, and effectively live a normal life without being able to drive a car. In fact, in 2004, 10 U.S. states already permitted people who could not prove legal residence to acquire driver's licenses.²² Critics charged that a driver's license effectively gives the holder a picture identification document that is used for many other things, such as getting on an airplane or train, cashing a check, or registering a car. A driver's license practically gives a person legal status. State driver's license agencies thus become *de facto* issuers of immigrant visas! In the case of the California bill to permit driver's licenses for undocumented immigrants, Governor Arnold Schwarzenegger, who is himself an immigrant, vetoed the measure.

Our models of immigration show that the benefits and costs of immigration are complex and spread in an uneven fashion across the economy and over time. Unauthorized immigration is, therefore, tolerated by some and strongly opposed by others. This chapter shows that there are some important differences between legal immigration and unauthorized immigration, which further complicates the question of who tolerates and who opposes unauthorized immigration. How the destination country should treat unauthorized immigrants when they are effectively tolerated, as is the case in many destination countries, is a difficult and uncomfortable issue. In later chapters on immigration policy, the issue will be discussed again. Recent political battles about whether to legalize the status of unauthorized immigrants with some form of amnesty and legalization of their status is similar to California's debate about driver's licenses for unauthorized immigrants. In 1986, the United States approved a broad amnesty. In 2007, the U.S. Congress refused to consider an amnesty for even some of the 11 million unauthorized immigrants. It is not clear how 2007 was different from 1986, but the decisions on how to deal with unauthorized immigrants were noticeably different.

²¹ Alden (2005).

²² Edds (2004).

References

- Andreas, P.(2000). *Border games: Policing the U.S.-Mexico divide*. Ithaca, NY: Cornell University Press.
- Alden, E. (2005, March 8). Illegal immigrants divide US as backers seek their right to drive. *Financial Times*.
- Bean, F., & Van Hook, J.(1998). Estimating unauthorized migration to the United States: Issues and results. In Mexican Ministry of Foreign Affairs and U.S. Commission of Immigration Reform, *Migration between Mexico and the United States, binational study* (vol. 2, pp. 211–550). Austin, TX: Morgan Printing.
- Bean, F. D., Corona, R., Tuirán, R., Woodrow-Lafield, K. A., & Van Hook, J.(2001). Circular, invisible, and ambiguous migrants: Components of difference in estimates of the number of unauthorized Mexican migrants in the United States. *Demography*, 38(3), 411–422
- Bialk, C. (2006, 5 April). Fuzzy math on illegal immigration. *The Wall Street Journal*.
- Champion, M., & Kaminski, M. (2000, 21 June). Availability of work in London lures Chinese migrants. *The Wall Street Journal*.
- Cooper, M. (2006, May). Exodus, the ominous push and pull of the U.S.–Mexico border. *The Atlantic Monthly*, 132.
- Cornelius, W.(2005). Controlling ‘unwanted’ immigration: Lessons from the United States, 1993–2004. *Journal of Ethnic and Migration Studies*, 31(4), 775–794.
- Cornelius, W., Tsuda, T., Martin, P., & Hollifield, J. (Eds.) (2004). *Controlling immigration: A global perspective* (2nd Ed.). Stanford: Stanford University Press.
- The Economist*, (1998, 4 April). Millions want to come.
- The Economist*, (2000, 2 September). South Africa’s migrant workers, a ticket to prosperity.
- The Economist*, (2001, 24 May). Sex, death and desert snafus.
- The Economist*, (2007, 24 August). Death in the desert.
- Edds, K. (2004, 24 September). No driver’s licenses for California illegal immigrants. *Washington Post*.
- Ehrlich, E. (2001, 7 March). The mystery of the missing millions. *Financial Times*.
- Espenshade, T. J.(1995). Unauthorized immigration to the United States. *Annual Review of Sociology*, 21, 195–216.
- Ethier, W.(1986). Illegal immigration: The host-country problem. *American Economic Review*, 76(1):56–71.
- GFS (2005). *Nombre de sans-papiers en Suisse*. GFS Research Institute, Bern.
- Hanson, G. H.(2006). Illegal immigration from Mexico to the United States. *Journal of Economic Literature*, 44(4), 869–924.
- Hanson, G. H., & Spilimburgo, A.(1999). Illegal immigration, border enforcement, and relative wages: Evidence from apprehensions at the U.S.-Mexico border. *American Economic Review*, 89(5), 1337–1357.
- Hillman, A. L., & Weiss, A.(1999). A theory of permissible illegal immigration. *European Journal of Political Economy*, 15(4):585–604.
- Jordan, M. (2007). Even workers in U.S. illegally pay tax man. *The Economist*, April 4.
- Kazmin, A. (2003), “Burmese workers Find Life Brutal in Thailand,” *Financial Times*.

- Kirchner, J., & Baldwin, S. E. (1992). *The fiscal impact of eligible legalized aliens*. A study performed under a contract between the KRA Corporation and the U.S. Department of Health and Human Services.
- Magnisson, P. (2001, 9 April). The border is more porous than you think. *Business Week*, April 9.
- Massey, D. (1987). Do undocumented migrants earn lower wages than legal immigrants? New evidence from Mexico. *International Migration Review*, 21(2), 236-274.
- Massey, D. S., Durand, J., & Malone, N. (2002). *Beyond smoke and mirrors: Mexican immigration in an era of economic integration*. New York: Russell Sage Foundation.
- Nakamoto, M. (2001, January 19). Spotlight falls on Japan's illegal workers. *Financial Times*.
- OECD (2006). *International migration outlook 2006*. Paris: Organisation for Economic Co-Operation and Development.
- Orenstein, D. (1995, March 12). Raids won't deter illegal work force. *Lincoln Journal Star*.
- Orrenius, P. M., & Zavodny, M. (2005). Self-selection among undocumented immigrants from Mexico. *Journal of Development Economics*, 78(1), 215-240.
- Parks, C., & Tricks, H. (2000, 23 February). Illicit angels of America's economic miracle. *Financial Times*.
- Passel, J. S. (2006). *The size and characteristics of the unauthorized migrant population in the U.S., estimates based on the March 2005 Current Population Survey*. Research Report, Pew Hispanic Center, March 7.
- Pew Hispanic Center (2006). *Fact sheet, estimates based on the March 2005 Current Population Survey*, April 26.
- Potter, E., (2006, June 19). Here illegally, working hard and paying taxes. *New York Times*.
- Pritchard, P. (2005, November 5) Immigrants often unpaid for Katrina work. *Associate Press Wire Report*.
- Ramirez, R. (2001). *Evaluating components of International migration. The residual Foreign born population*. U.S. Bureau of the Census Working Paper No. 6
- Razin, A., Sadka, E., & Swagel, P. (1998). Tax burden and migration: A political economy theory and evidence. *Journal of Public Economics*, 85(2):167-190.
- Snel, E., de Boom, J., Engbersen, G., & Weltevrede, A. (2005). *SOPEMI Report for the Netherlands*. Paris: Organisation for Economic Co-Operation and Development.
- Special Report (2006). *Undocumented immigrants in Texas: A financial analysis of the impact to the state budget and economy*. Austin, TX: Texas Comptroller of Public Accounts, December.