3 Where Immigrants Go and For How Long

Why does the United States have almost 46 million immigrants while Fiji has only 23,000? After all, Fiji sounds like a very nice place to live. But Fiji is much poorer than the United States (and perhaps white sand beaches aren't everyone's idea of paradise). So then why does Norway—one of the richest countries in the world, with a higher GDP per capita than the United States—have only 700,000 immigrants?¹

The theoretical models of migration presented in Chapter 2 predict that immigrant inflows increase as a receiving country's income increases and as its population rises. The models also predict that immigrant inflows increase if migration costs fall, migrant networks grow or immigration policy becomes less restrictive. As discussed in this chapter, empirical evidence indicates that economic conditions in potential destinations play an important role in whether people decide to migrate and where they go. Other characteristics of receiving countries, such as proximity to the sending country, appear to matter as well.

After examining where immigrants tend to go across potential destinations and why, this chapter examines where immigrants tend to go within destination countries. Whether immigrants are attracted to countries or areas within countries with relatively generous public assistance—the "welfare magnet" hypothesis—is of particular interest to many economists, policymakers and taxpayers. The chapter also discusses the determinants of whether immigrants remain in the destination country and for how long.

Immigrant destinations

A large share of immigrants go to just a handful of countries. Table 3.1 lists the countries with the largest number of immigrants. The United States tops the list. The United States accounts for less than 5 percent of the world's population but has almost 20 percent of the world's immigrants. Russia, which is second, receives large numbers of migrants from other former-Soviet Union countries. Germany is third, in large part because in the 1960s and early 1970s it recruited workers from Turkey who stayed and were joined by their families. Saudi Arabia and the United Arab Emirates, which have large numbers of temporary foreign workers who are not allowed to bring their families or stay permanently, round out the top five. The top ten destination countries account for more than one-half of all immigrants worldwide.

Immigrants go primarily to the countries listed in Table 3.1 for four main reasons. First, economic opportunities are better there than in immigrants' origin country and other

	Share of global migrants (%)	Number of migrants (millions)
United States	19.8	45.8
Russia	4.8	11.0
Germany	4.3	9.8
Saudi Arabia	3.9	9.1
United Arab Emirates	3.4	7.8
United Kingdom	3.4	7.8
France	3.2	7.4
Canada	3.2	7.3
Australia	2.8	6.5
Spain	2.8	6.5
Italy	2.5	5.7
India	2.3	5.3
Ukraine	2.2	5.2
Pakistan	1.8	4.1
Thailand	1.6	3.7

Table 3.1 Top 15 immigrant-receiving countries, 2013

Source: United Nations, Department of Economic and Social Affairs (2013) "Trends in International Migrant Stock: The 2013 revision." Available at: http://esa.un.org/unmigration/ TIMSA2013/migrantstocks2013.htm?mtotals [3 February 2014].

potential destinations. These destination countries have relatively high incomes, either globally or relative to nearby countries. Second, having large numbers of immigrants means a country has networks of family and friends that lead to yet more immigration. Third, some highimmigration countries are geographically located near other populous, poorer countries. The cost of migrating to them is therefore relatively low for large numbers of potential migrants. Lastly, most of the countries listed in Table 3.1 have fairly generous immigration policies that allow large numbers of immigrants to enter legally, although there are certainly exceptions. These four reasons are discussed in turn below.

The role of economic conditions

Economic opportunities are a powerful force behind immigration. A country's immigrant share—the fraction of its population comprised of immigrants—is strongly positively related to its GDP per capita. Figure 3.1 shows the relationship between GDP per capita, adjusted for purchasing power parity, and the immigrant share across 172 countries. Outliers and some important destination countries are individually labeled in the figure. There is a large cluster of countries with both low GDP and a low immigrant share—poor countries do not attract many immigrants. Meanwhile, the richest countries in the world have immigrant shares well above the global average. Across these 172 countries, as GDP per capita increases by \$1,000, the immigrant share rises by 0.5 percentage points.²

Economic conditions are a bigger pull factor than a push factor. Research usually finds that economic conditions in receiving countries matter more than economic conditions in sending countries (e.g., Mayda, 2010; Grogger and Hanson, 2011; Ortega and Peri, 2013). After all, billions of people live in relatively poor countries and never migrate—conditions there are



Figure 3.1 Immigrant share in 2013 and source country GDP in 2012.

Source: Immigrant share data from United Nations (2013) "Trends in international migrant stock: The 2013 revision." Available at: http://esa.un.org/unmigration/TIMSA2013/migrantstocks2013.htm?mtotals. [3 February 2014]. GDP per capita (PPP) data from World Bank (2013) "GDP per capita, PPP." Available at: http://data. worldbank.org/indicator/NY.GDP.PCAP.PP.CD [17 December 2013].

not bad enough for them to leave, or something else is holding them back. But once people decide to move, they are considerably more likely to move to a country with a higher average income than their origin than to a country with a lower average income.

Perhaps the most interesting countries in Figure 3.1 are those with relatively low GDP per capita but a high immigrant share. Jordan and Bahrain are notable outliers, for example. Jordan's central location in the Middle East makes it both a transit country and a destination. A transit country is one that migrants pass through on their way to their final destination. (See Figure 3.2 for a map of the Middle East.) Jordan has large numbers of migrants from other Middle Eastern countries, most notably Egypt, Syria and the West Bank and Gaza. Unrest in the region has caused its immigrant population to swell by 40 percent between 2010 and 2013 (United Nations, 2013). Like many other countries in the Persian Gulf region, Bahrain relies heavily on temporary foreign workers from Asia. Its immigrant share is lower than in its wealthier neighbors, such as the United Arab Emirates and Qatar, but higher than in its neighbors with lower GDP per capita, such as Saudi Arabia.

Research shows that economic factors other than average income matter as well. Immigration tends to be negatively related to a destination country's unemployment rate and its tax burden (e.g., Geis, Uebelmesser and Werding, 2013). Migrants are more likely to move to a country with a low unemployment rate than to a country with a high unemployment rate, and more likely to move to a country with low taxes than a country with high taxes. Migration flows slowed around much of the world during the 2007–2009 global financial crisis. Reduced demand for labor and higher unemployment rates in destinations reduced the incentive to



Figure 3.2 Map of the Middle East.

migrate, and many would-be migrants were less able to bear migration costs during the crisis. In addition, some countries tightened immigration policy during the crisis.

Countries can switch from being destination countries to being sending countries, on net, if their relative economic conditions worsen. Much of Latin America is an example. Argentina, Brazil, Chile, Cuba, Panama, Peru and Uruguay, among others, attracted European or Asian immigrants until about 1950. After that, relatively slow economic growth and political upheavals reduced the region's attractiveness. Emigration from much of the region began accelerating in the 1960s while immigration slowed. Spain and Ireland are examples of countries that switched from destination to sending countries in the 2000s as a result of the global financial crisis.

The role of migrant networks and migration costs

Networks play an important role in determining where migrants go. Networks provide information about potential destinations, funds that cover migration costs, and jobs and housing in the destination. Empirical studies tend to find that the number of people moving from an origin to a destination is strongly related to the number of previous immigrants from that origin living in that destination. In other words, immigrant stocks are a major predictor of immigrant flows. Research on immigration from 195 countries to 30 OECD countries finds

that diasporas—people living outside their homeland—can explain more than 70 percent of the observed variation in migration flows (Beine, Docquier and Özden, 2011). Immigrant networks tend to matter the most for immigrants coming from poor source countries (Pedersen, Pytlikova and Smith, 2008).

The number of immigrants in a destination may also provide a signal to potential immigrants about relative economic conditions. Potential immigrants who are uncertain about where to go may opt to go where recent immigrants went because they believe those immigrants had good information—their presence in a destination signals that it is a desirable destination. Economists refer to this as "herd behavior" (Bauer, Epstein and Gang, 2007).

The importance of networks can make immigration a self-perpetuating process once the number of immigrants reaches a critical threshold. Bad economic, political or social conditions in an origin country—or good conditions in a destination country—may cause some people to move. Once those migrants are settled, their friends and families may join them even if the relative conditions that stimulated the initial migration have dissipated. The Nobel prize-winning economist Gunnar Myrdal (1957) referred to this as the "cumulative causation of migration."

One reason why networks matter so much is that family members often can sponsor their relatives for permanent residence. This can lead to substantial migration flows. Suppose a worker receives permanent resident status and brings her spouse. They both sponsor their parents and siblings. Those siblings bring their spouses, who in turn sponsor their parents and siblings, and so on. Economists and sociologists refer to this as "chain migration."

Chain migration is a major source of migration for countries that grant permanent resident status based partly on family ties to citizens or permanent residents. The United States grants more than 60 percent of its permanent resident visas based on family ties, or more than 600,000 immigrants a year in recent years. During 1996 to 2000, the average Asian immigrant who was the first in his family to move to the United States sponsored another four relatives; the average South American immigrant, more than five; the average European immigrant, one and two-thirds (Tienda, 2013). These differences by region are likely a result of differences in family size as well as relative economic opportunities and migration costs—families in Europe tend to be smaller and economic opportunities are better there than in South America and Asia, although migration costs are likely to be lower from Europe than from South America and Asia.

Migrant networks lower the cost of migrating, as do shorter distances. A study of immigration from 102 countries to 15 high-income OECD countries finds that increasing the great-circle distance—the distance "as a crow flies"—between an origin and a destination by 10 percent reduces migration flows by almost 12 percent (Grogger and Hanson, 2011).

Distance can be not only geographic but also cultural and linguistic. Immigration flows are bigger between countries that share a language or speak similar languages. Smaller cultural and linguistic distances reduce the psychic costs of migration. Immigrants who already speak the language or can easily learn it also have a significant advantage in the labor market. Having a colonial relationship leads to bigger flows between countries as well. This may reflect immigrants' preference to move to a country with a shared history and cultural ties. In some cases, it also reflects immigration policies that give admissions preference to residents of former colonies or even allow them to enter without restriction. For example, the 1962 accord that made Algeria independent from France gave Algerians relative freedom of movement to France.

The role of immigration policy

Immigration policy plays an important role in determining the number of immigrants, largely through its impact on migration costs. One study finds that when industrialized non-European countries, such as Australia, Canada and the United States, tighten immigration policy, immigration inflows fall within the same year (Ortega and Peri, 2013). Not surprisingly, research shows that the number of people who receive U.S. permanent resident visas is positively related to U.S. quotas on those visas (Clark, Hatton and Williamson, 2007). Immigration to Canada fell when the country introduced its point system in 1967, and then fell further when the country began requiring in 1982 that economic immigrants had a prearranged job offer that was approved by a Canadian employment center (Greenwood and McDowell, 1991).

Some evidence suggests that multinational agreements regarding immigration policy affect immigrant inflows. When countries joined the Schengen area, total immigration inflows into those countries dropped relative to other countries (Ortega and Peri, 2013). This may seem surprising since the Schengen agreement allows for free movement among members, which should increase inflows. However, members agreed to relatively strict border enforcement. This increased enforcement appears to have deterred immigration, on net—although inflows of citizens of other Schengen area countries increased, inflows of citizens of non-member countries decreased more. Research shows that more generally, migration flows from an origin are larger when a destination does not require that visitors from that origin have a visa (Grogger and Hanson, 2011).

Other countries' immigration policies may affect the number of immigrants to a particular destination. For example, Australia receives fewer visa applications from skilled migrants when the United States and Canada admit more skilled migrants (Cobb-Clark and Connolly, 1997). The converse was true historically: During the late nineteenth and early twentieth centuries, Australia's openness reduced flows to Canada (Timmer and Williamson, 1998). In addition, Brazil's subsidies to immigrants during that period reduced flows to Australia, and Argentina received more immigrants when the United States closed its borders in the 1920s. More recently, some EU member countries opted to allow more worker mobility than others when eight Central and Eastern European countries joined the EU in 2004. Some immigration from the new member states was diverted from EU members that restricted immigration, like Germany, to those that had relatively open borders, like the United Kingdom (Boeri and Brücker, 2005).

Immigration policy also influences how other factors affect immigration flows. Policies that regulate the number and characteristics of immigrants who can be admitted make immigration flows less responsive to changes in economic conditions. For example, a study of migration flows from 120 countries to 15 high-income destination countries shows that flows within the EU are much more responsive to destination country GDP per capita than are immigration flows overall (Ortega and Peri, 2013). EU citizens have considerable labor mobility across EU countries, allowing them to move easily in response to economic opportunities, while immigrants from non-EU countries face fairly tight restrictions that limit their responsiveness to economic opportunities.

Economic conditions, networks, immigration policy and migration costs may reinforce or offset each other when affecting where immigrants go. A major emigration episode from Ecuador offers an example. Almost 5 percent of the country's population left after an economic crisis in the late 1990s. Most of the emigrants went to Spain or the United States. Although the United States is closer, had better economic conditions and had more Ecuadorians already living there, the number of Ecuadorians who migrated to Spain was about three times bigger than the number who migrated to the United States. Several factors can explain why Ecuadorians were more likely to go to Spain: Spain is more culturally and linguistically similar to Ecuador; Spain has a more generous welfare system than the United States; and Spain initially did not require that visitors from Ecuador have a visa, a policy that changed a few years into the crisis (Bertoli, Fernández-Huertas Moraga and Ortega, 2013).

Immigration to poor countries

Developing, or low-income, countries are the destination as well as the origin of many immigrants. In economics and political science, developing countries are sometimes called the "South," and industrialized countries the "North." The largest number of migrants— 82 million people as of 2013, or 36 percent of all migrants—are South–South migrants (Martin, 2013). Important South–South migration corridors include Ukraine to Russia (which is considered a South country by the World Bank's Migration and Remittances unit) and vice versa; Kazakhstan to Bhutan and Russia; and Afghanistan to Pakistan (International Organization for Migration, 2013).

Migration costs are typically lower for South–South migrants than for South–North migrants. (South–North migrants are about 35 percent of all migrants, just slightly less than the share of migrants who are South–South.) The income gains are probably smaller as well for South–South migrants than for South–North migrants. Immigrants from developing countries may find that their skills are more transferable to other developing countries than to industrialized countries, but they may also face more competition for jobs and lower average wages. In addition, public assistance is typically much more limited in developing countries than in developed countries.

Interestingly, about 14 million people, or 6 percent of all migrants, are North–South migrants. Important North–South migration corridors include the United States to Mexico and South Africa; Germany to Turkey; and Portugal to Brazil. Some of these migrants are retirees drawn by the lower cost of living in developing countries, while others are workers seeking better opportunities. Many North–South migrants are the descendants of migrants from the country they move to.

Differences across types of immigrants

Economic migrants who move to work or study should be more affected than family-based migrants by economic factors in the origin and destination. Both groups are affected by immigration policy, albeit by different aspects. Whether an immigrant is even considered an economic migrant or a family-based migrant can depend on immigration policy. If immigration policy is more favorable toward family-based migrants than economic migrants, potential migrants may find a relative or spouse to sponsor them for admission. Marrying in order to move or remain in a destination is the plot of romantic comedy movies, but it also happens in real life.

Industrialized countries therefore may screen immigration applicants sponsored by a spouse to make sure that the marriage is legitimate, and immigrants suspected of fraudulent marriages can face deportation or criminal charges. (See Box 3.1, "Immigration and fraudulent marriages in the United States.")

The destinations of two groups of immigrants merit special attention: unauthorized immigrants, and refugees and asylum seekers.

Unauthorized immigrants

Accurate data on the number of undocumented immigrants entering or living in a country are difficult to obtain. Few large-scale government surveys ask immigrants about their legal status, and those that do may not receive truthful answers since unauthorized immigrants usually try not to make their presence known. Estimates of the number of unauthorized immigrants are often calculated using the residual method: the estimated number of legal immigrants is subtracted from the total foreign-born population. The difference, or residual, is the estimated number of unauthorized immigrants:

unauthorized immigrants = all immigrants
$$-$$
 legal immigrants (3.1)

The estimated number of legal immigrants, in turn, is based on government records of the number of people who have entered legally over time or adjusted from illegal to legal status,

Box 3.1 Immigration and fraudulent marriages in the United States

Foreigners who marry a U.S. citizen are usually eligible to receive a "green card," or legal permanent resident visa, in the United States. There is no numerical limit on the number of spouses of U.S. citizens who can receive a green card. More than 2.7 million green cards were issued to the spouses of U.S. citizens during fiscal years 2004 to 2013. This was by far the most common admissions category during that period, accounting for one-quarter of all green cards.

Although most of these marriages are legitimate, some are not. Fraudulent marriages may involve an exchange of money, or one spouse may be deceiving the other about his intentions. The foreign-born spouse must undergo an interview with a U.S. Citizenship and Immigration Services (USCIS) official. The interview is one way that USCIS tries to determine whether a marriage is valid or fraudulent. Couples suspected of fraud must meet separately with USCIS officials, who ask them an identical set of questions under oath. Spouses' answers are then compared to see if they gave the same answers. Officials ask to see photos and other evidence that the marriage is valid.

Green cards issued to spouses of U.S. citizens are provisional for the first two years. If the marriage ends within that period, the spouse's green card is usually revoked and he must leave the United States.

minus estimates of the number who have died, the number who have left the country and the number who have moved from legal to illegal status because they overstayed their visa:

Since few reliable statistics on the number of unauthorized immigrants are available, the distribution of unauthorized immigrants across destination countries is uncertain. Globally, about 10 to 15 percent of immigrants are unauthorized (Castles et al., 2012). Virtually every country has some unauthorized immigrants. The United States probably has the greatest number of unauthorized immigrants globally given that it has the most immigrants overall and is a high-income country with many lower-income neighbors to its south. The United States has 11 to 12 million unauthorized immigrants, who comprise about one-quarter of its immigrant population (Passel, Cohn and Gonzalez-Barrera, 2013).

Unauthorized immigration is estimated to be about one-third of all migration to developing countries, on average (UNDP, 2009). This suggests that undocumented immigration is more prevalent in developing countries than in developed countries, although there are certainly exceptions. Unauthorized immigrants accounted for almost two-thirds of immigrants in southern and eastern Mediterranean countries (Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Turkey and Tunisia) in the mid-2000s (Fargues, 2009). The proximity of those countries to much poorer countries to the south plays a role in the large share of immigrants who are unauthorized there. Strong economic growth in those destinations during the late 1990s and early 2000s attracted migrants, legal and illegal alike. Legalization programs in some of those countries during the 1980s to 2000s may have encouraged further illegal migration.

The prevalence of unauthorized immigrants in developing countries may be surprising since those countries have lower incomes and are therefore less likely than industrialized countries to be attractive to immigrants. However, developing countries also tend to be near other developing countries, which are the source of most unauthorized immigrants. Immigrants who cannot afford to migrate to a far-away industrialized country may instead migrate to a closer developing country. In addition, developing countries may have more porous borders than industrialized countries that can afford more border enforcement. Migrating to another developing country may be the first step toward migrating to a developed country. Migration from Guatemala and Honduras to Mexico and then eventually to the United States is an example.

Industrialized countries may have enacted legalization programs that allow unauthorized immigrants to adjust to legal status, reducing their stock of unauthorized immigrants. On the other hand, legalization programs may attract more unauthorized immigrants. (Chapters 13 and 14 discuss legalization programs in the United States and Europe and evidence on whether legalization programs lead to bigger unauthorized inflows.)

Most unauthorized migrants move for economic reasons. Figure 3.3 shows the estimated number of unauthorized immigrants living in the United States and real GDP in the United States during 1990 to 2010. The two series follow a similar trend over time. In fact, inflows of



Figure 3.3 Unauthorized immigrants and real GDP in the United States.

Source: Warren, R. and Warren, J.R. (2013) "Unauthorized immigration to the United States: Annual estimates and components of change, by state, 1990 to 2010." *International Migration Review* 47(2), pp. 296–329; and Bureau of Economic Analysis (2014) "Gross domestic product." Available at: http://bea.gov/national/index.htm#gdp [1 July 2014].

unauthorized immigrants into the United States are more closely related to the U.S. business cycle than inflows of other groups of immigrants are (Hanson, 2006). The estimated number of unauthorized immigrants in the United States fell by almost one million during the Great Recession (Passel, Cohn and Gonzalez-Barrera, 2013). The decrease was primarily due to fewer unauthorized immigrants entering the United States, not to unauthorized immigrants leaving in large numbers.

Increased enforcement activity by a destination country is likely to reduce the number of unauthorized immigrants in that country. Enforcement can take many forms. Examples include patrolling land and sea borders; building fences; using unmanned drones; requiring people to show their legal right to be in the country in order to work, go to school or receive social services; and deporting unauthorized immigrants. (Figure 3.4 shows two men scaling the fence along the U.S.–Mexico border near Douglas, Arizona.) Increased enforcement may reduce inflows of unauthorized immigrants by making a country harder to enter (increasing migration costs) or by making it a less desirable place to live (reducing pull factors). Increased enforcement also may reduce the stock of unauthorized immigrants already in a country, either by deporting people or by making conditions worse so that people leave voluntarily.

Paradoxically, enforcement that succeeds in reducing the number of unauthorized immigrants in a destination also increases the attractiveness of that destination. An enforcementinduced decrease in labor supply raises wages, which are a pull factor for many unauthorized migrants. Figure 3.5 illustrates this in a supply and demand framework.



Figure 3.4 Border fence near Douglas, Arizona.

Source: U.S. Navy photo by Steelworker 1st Class Matthew Tyson/Released. http://en.wikipedia.org/wiki/ Mexico%E2%80%93United_States_barrier#mediaviewer/File:US_Navy_090317-N-5253T-016_Two_ men_scale_the_border_fence_into_Mexico_a_few_hundred_yards_away_from_where_Seabees_from_ Naval_Mobile_Construction_Battalions_%28NMCB%29_133_and_NMCB-14_are_building_a_1,500_ foot-long_concrete-lined_dr.jpg [3 September 2014].



Number of workers

Figure 3.5 The effect of increased enforcement on wages.

An increase in border enforcement decreases the supply of unauthorized workers. This results in a higher wage.

Refugees and asylum seekers

Most refugees and asylum seekers initially flee to nearby countries. There are then three possible outcomes: they return to their origin, they remain in the host country permanently or they move to a third country. Refugees may move to a third country on their own, or they may be resettled in a third country by the United Nations High Commissioner for Refugees or as a result of an agreement between countries.³

Table 3.2 reports the distribution of refugees and asylum seekers across regions in 2013. (The table reports stocks by current residence, not origin.) Most refugees are in Africa and Asia because those regions are also the main origin of refugees in recent years. However, the number of refugees and asylum seekers and their distribution across areas can change quickly in response to events. For example, the number of refugees in Jordan and Lebanon more than doubled from 2012 to 2013 as a result of events in Syria. Meanwhile, most asylum seekers—people who say they are refugees but whose claims have not yet been evaluated—are in Africa and Europe. Germany, South Africa and the United States have been the top recipients of new asylum seekers in recent years.

The United Nations High Commissioner for Refugees (UNHCR) works to resettle refugees in third countries when it appears that they will never be able to return to their origin and integrating them into the current host country seems infeasible. For example, in 2013 the UNHCR helped more than 23,000 refugees from Myanmar, most of them living in Thailand, resettle in other countries. Most industrialized countries voluntarily accept a certain number of refugees each year. In the United States, this number is determined by the President in consultation with Congress. The United States agreed to accept up to 70,000 refugees in fiscal year 2014, for example. Australia, Canada and the United States together accepted 90 percent of resettled refugees in 2013.

During the late 1980s and early 1990s, Western European countries received an unprecedented number of asylum seekers, many of them from the former Yugoslavia. Germany received more than 1,000 asylum applications a day in 1992 (Martin, 2013). More than 90 percent of applicants were ultimately found to not qualify for refugee status. In the wake of the flood of asylum seekers, most European countries made it more difficult for migrants to apply for asylum. They began requiring visas for migrants from countries that were major sources of unfounded asylum seekers; imposed sanctions on airlines and ships that transported

Region	Refugees	Asylum seekers
Africa	3,308,674	449,345
Asia	5,983,280	168,510
Europe	1,156,398	408,790
Latin America and the Caribbean	90,785	23,808
North America	424,011	106,491
Oceania	40,714	14,818
Total	11,003,862	1,171,762

Table 3.2 Populations of refugees and asylum seekers, 2013

Source: United Nations High Commissioner for Refugees (2014) UNHCR Global Trends 2013. Geneva, Switzerland: United Nations High Commissioner for Refugees.

migrants without visas; narrowed the grounds for awarding refugee status; and sped up the application process, among other changes. They also began requiring migrants to seek asylum in the first safe country they reach. This means that most asylum seekers now must apply—and are supposed to remain—in Greece, Italy or Spain instead of wealthier Northern European countries with more generous public assistance programs.

Immigrant destinations within countries

The same factors that determine what countries immigrants go to also determine where they go within those countries. Economic conditions, the presence of other immigrants and geography play key roles in immigrants' location choices within countries.

Immigrants are typically highly geographically concentrated within destination countries. Within the United States, for example, one in four immigrants lives in California, one in ten in New York and one in ten in Texas. In 2010–2012, the top six states (California, New York, Texas, Florida, New Jersey and Illinois) together accounted for 65 percent of all immigrants living in the United States. The bottom six states (North Dakota, Wyoming, Montana, South Dakota, Vermont and West Virginia), in contrast, together accounted for only 0.3 percent.

Figure 3.6 gives another way of looking at the concentration of immigrants within the United States by showing the fraction of the state population comprised of immigrants. The darker



Figure 3.6 Percent of population comprised of immigrants in United States, 2010–2012.

Source: Authors' calculations using 2010–2012 American Community Survey data from the U.S. Bureau of the Census.

shaded states have a higher fraction of foreign born. The three darkest shades are above the national average of 13 percent, while the three lightest shades are below the national average.

The concentration of immigrants in certain states is the result of several factors. Most high-immigration states have traditionally been gateways into the United States. Because of geographic proximity and the locations of large ports, immigrants coming from Europe historically arrived primarily in New York; from Asia, California; from Latin America, Texas; and from the Caribbean, Florida. Although some moved on to other parts of the country, many remained in these gateways.

Historically and currently, immigrants tend to go to urban areas where there are already large numbers of immigrants and where jobs are available. This explains the large immigrant share in Illinois, the outlier as the only land-locked state on the list. Illinois was the center of the Midwest economy during the "age of mass migration" at the turn of the twentieth century, and the ready availability of jobs in meatpacking and other industries there attracted immigrants. Once diasporas were established there, the state continued to attract large numbers of immigrants.

During the 1990s and 2000s, however, immigrants became more dispersed throughout the United States. Immigrants moved to new destinations, primarily in the South and West. During the 1990s and 2000s, immigrant populations grew fastest in Arkansas, Georgia, Nevada, North Carolina and Tennessee. Much of this dispersion was the result of faster economic growth in the "Sunbelt" states than in other parts of the country. California saw its share of all U.S. immigrants slide from 33 percent in 1990 to 25 percent in 2010 as the result of a prolonged economic downturn combined with a state law adopted in 1994 that aimed to prohibit unauthorized immigrants from receiving publicly funded services.⁴ Immigrants thus remain geographically concentrated in the United States, but less so than two decades ago.

The geographic concentration of immigrants is not unique to the United States. In Canada, almost 63 percent of recent immigrants live in Toronto, Montréal and Vancouver (Statistics Canada, 2013). About 35 percent of Canada's total population lives in those three metropolitan areas, in contrast. In Britain, two-fifths of immigrants live in London (The Economist, 2012). One-third of London residents are foreign born, versus 8 percent in the rest of Britain.

Within states or cities, immigrants tend to cluster in particular neighborhoods with other people from the same origin country. Such areas, termed "ethnic enclaves," often take on nicknames that reflect their demographics. New York City, for example, has neighborhoods nicknamed Chinatown, Little Italy and Spanish Harlem (comprised mainly of Puerto Ricans). Immigrants who live and work in enclaves may earn higher returns to their human capital and feel more comfortable since they live and work with other people who share their language and cultural background (Portes and Bach, 1985). Enclaves may provide immigrants with employment opportunities and protect them from discrimination. However, enclaves may offer primarily low-wage jobs and more competition for jobs from other immigrants. Living in an enclave may delay learning the language of the destination country and generally slow immigrants' assimilation. (Chapter 5 discusses this in more detail.)

The tendency of U.S. immigrants to live in enclaves has risen over the last 50 or so years. Research shows that segregation of U.S. immigrants declined from the turn of the twentieth century until the middle of the century and has been increasing since then (Cutler, Glaeser and Vigdor, 2008). Part of the reason why segregation has increased is that immigration to the

United States has increased—having more immigrants makes it easier for immigrants to live near their compatriots. In addition, immigrants whose languages are less similar to English and who are racial minorities are more segregated than other immigrants. The increasing share of immigrants from Latin America, Asia and Africa has therefore led to increased immigrant segregation.

Location choice and economic opportunities

Research shows that immigrants are attracted to areas with better economic opportunities within destination countries. For example, less-educated recent immigrants to the United States during 2000 to 2009 were more likely to go to states experiencing faster GDP growth (Simpson and Sparber, 2013). In addition, less-educated immigrants who arrived in the United States in the 1990s were less likely to settle in areas experiencing larger increases in labor force participation by less-educated U.S.-born women (Cadena, 2013). In other words, if competition for jobs was becoming tougher in an area, immigrants were less likely to go there. Less-educated immigrants also are less likely to live in states with relatively high minimum wages. A 10 percent increase in a state's minimum wage reduces the number of less-educated recent immigrants in that state by 8 percent (Cadena, 2014). All of these findings are consistent with the utility- or income-maximization models discussed in Chapter 2.

Economic migrants' location choices within a country are likely to be more responsive to local economic conditions than other migrants' choices since the former migrate primarily to work. David Jaeger (2008) shows this is indeed the case for U.S. immigrants who receive a green card on the basis of employment compared with immigrants who receive a green card based on family ties. However, Jaeger also shows that refugees' location choices within the United States are as responsive to economic conditions as employment-based immigrants' choices. This is somewhat surprising since refugees are assumed to be motivated more by push factors than pull factors. But once they are within the United States, wages and unemployment rates appear to affect their location choices. Many refugees are initially sent to a specific location in the United States, but they tend to quickly move to areas with better economic opportunities and where their compatriots have already settled.

Immigrants' location choices within a country tend to be more responsive than natives' choices to local labor market conditions. Newly arriving immigrants are essentially starting from scratch within the destination country—once immigrants have decided to move to a particular destination country, they have to decide where in that country to go. For most newly arriving immigrants, the marginal cost of choosing to go to one region of the country instead of another is small relative to the total cost of migrating. Natives, in contrast, already live in the destination country. Their marginal cost of moving to another region is also their total cost of migrating. Natives therefore may be less likely than newly arriving immigrants to respond to differences in economic opportunities across regions within a country.

Immigrants' responsiveness to local labor market conditions helps equilibrate differences in labor markets across the United States. Greater mobility speeds up economic convergence across regions of the country. George Borjas (2001) refers to immigration as "grease in the wheels of the labor market." He shows that the tendency of new immigrants to cluster in areas with better economic opportunities speeds up wage convergence and improves economic efficiency. For example, the distribution of less-educated Mexican immigrants across U.S. states changed quickly during the 2007–2009 Great Recession. This reallocation, in turn, sub-stantially reduced the impact of the downturn on less-educated U.S. natives (Cadena and Kovak, 2013).

If immigrants tend to settle in areas where earnings and employment opportunities are relatively strong or rising, estimates of immigration's impact on labor market outcomes that do not account for this are biased. Naïve estimates will underestimate any negative impacts of immigration on labor market outcomes if they do not properly control for a positive relationship between immigrant inflows and economic conditions. Economists try to control for this bias by looking for factors that determine where immigrants settle that are unrelated to economic opportunities. (Economists call these "exogenous" sources of variation in where immigrants settle.) This is harder than it may sound. Economists typically use the distribution of earlier immigrants across areas to explain the distribution of recent immigrants across areas. But the economic conditions that attracted previous immigrants may have persisted over time and continued to attract recent immigrants.

One of the most promising exogenous sources of variation in where immigrants settle within countries is government policies that direct immigrants to settle in certain areas. Denmark, Israel and Sweden, for example, try to disperse refugees across their countries. Such settlement policies aim to accelerate immigrants' incorporation into the destination by directing them away from immigrant enclaves and to distribute the perceived burden of immigrants across the country. Germany offers an interesting example. When it began receiving large inflows of ethnic Germans from Central and Eastern Europe and the former Soviet Union in the late 1980s, Germany adopted a law that tried to disperse immigrants across counties based on their relative population sizes. However, there was no enforcement mechanism, and immigrants concentrated in certain areas. In 1996, most German states made immigrants ineligible for public assistance benefits if they did not live in their designated county. Compliance increased dramatically, and immigrants became more dispersed throughout the country (Glitz, 2012).

Effects on natives' locations

Where immigrants choose to live within destination countries may affect where natives choose to live. Natives may move out of—or not move to—areas where immigrants settle because housing costs increase, school quality worsens, their labor market outcomes worsen or they simply dislike living near immigrants, among other potential reasons. Alternatively, natives may be attracted to the same factors that attract immigrants to an area, such as good labor market opportunities or a low cost of living.

Whether immigrant inflows into an area result in native inflows or outflows is thus an empirical question. Knowing the answer to this question is important. Assessing immigration's impact on labor markets, housing costs and other economic outcomes requires understanding whether natives enter or leave areas that attract immigrants. Native outflows would reduce the strains potentially created by immigrant inflows on labor markets, housing costs, educational systems and the like. Not accounting for natives' offsetting migration would lead to an underestimate of any adverse effects of immigration. Native inflows would add to those strains, but their effects should be attributed to natives, not to immigrants.

Research findings on the question of whether immigrant inflows lead to native outflows or inflows are mixed. For the United States, some studies find that U.S. natives leave areas experiencing immigrant inflows, while other studies find that immigrant inflows do not lead to native outflows (e.g., Card and DiNardo, 2000; Borjas, 2006). One major reason why studies reach conflicting results even when they examine the same country is that they use different methodologies. This makes it difficult to know which set of results is correct. But even if research does reach a consensus on the effect of immigrant inflows on native outflows in the past in a country, the same effect may not occur in the future for that same country. Natives' response to immigration may depend on context. Under a different set of economic, political and social conditions or a different group of immigrants, natives might make different choices.

Enforcement and unauthorized immigrants' location choices

Increased enforcement is likely to discourage unauthorized immigration. It may also change where unauthorized immigrants go within a country. If enforcement is not uniform within a country, unauthorized immigrants are likely to settle in areas where enforcement is relatively lax. In the 1990s, the United States increased enforcement along the U.S.–Mexico border in California through Operation Gatekeeper and in Texas through Operation Hold the Line. Unauthorized immigrant crossings quickly shifted to Arizona. As a result, the unauthorized immigrant population grew more slowly in California and Texas and faster in Arizona and other states during the late 1990s and early 2000s (Bohn and Pugatch, 2013).

That population shift, in turn, may have spurred a number of states to adopt laws aimed at discouraging unauthorized immigrants from settling in their states. Such laws often require that employers verify workers' eligibility to work or face fines; reduce immigrants' eligibility for public assistance programs; and require that police officers verify people's legal status when arresting them or giving them a ticket. Studies indicate that such laws are effective at reducing the number of immigrants in a state. For example, a 2007 law in Arizona led to a 17 percent drop in the state's population of likely unauthorized working-age immigrants (Bohn, Lofstrom and Raphael, 2014). The laws appear to cause unauthorized immigrants to primarily move to states without such laws instead of leaving the United States (Amuedo-Dorantes and Lozano, 2014).

Welfare magnets?

One of the reasons immigration is controversial is concerns that immigrants are a fiscal drain, or that they receive more in government services than they pay in taxes. A related issue is whether countries with more generous public assistance programs attract more immigrants. This is often called the "welfare magnet" hypothesis or "benefit tourism."The welfare magnet hypothesis usually involves two related questions: are immigrants more likely than natives to receive public assistance, and do immigrants choose their destination based on the generosity of public assistance programs?

Evidence indicates that, in most industrialized countries, immigrants are more likely than natives to receive public assistance (Giulietti and Wahba, 2013). In the United States, about one-third of households headed by an immigrant participate in a major public assistance program, compared with about one-fifth of households headed by a U.S. native.⁵ This pattern does not hold in all industrialized countries, however; immigrants are not more likely to

participate in public assistance programs than natives in Ireland, for example (Barrett and McCarthy, 2008).

One important reason why immigrants are more likely than natives to receive public assistance is that they are more likely to qualify for it. Immigrants tend to be poorer than natives, making them more likely to be eligible for means-tested programs, or programs with eligibility based in part on having a low income. Immigration policies that affect the distribution of skills or other characteristics among immigrants therefore may affect immigrant–native differences in eligibility for public assistance programs.

If immigrants are attracted to destinations with relatively generous public assistance programs, countries that spend a greater share of GDP on public assistance programs should have higher shares of less-educated immigrants. Less-educated immigrants are more likely than bettereducated immigrants to be eligible for means-tested programs. Figure 3.7 shows expenditures on social programs as a percent of GDP—a measure of the generosity of public assistance—and the share of immigrants who have at most completed primary school for 24 OECD countries. If the welfare magnet hypothesis is true, the relationship should be positive across countries. However, the data points in Figure 3.7 actually indicate a negative relationship, if any.

Other cross-country comparisons also do not indicate that countries with more generous public assistance benefits attract more immigrants. A study of 26 OECD countries finds that the generosity of public assistance programs, as measured by social expenditures as a percentage of GDP, is generally not related to the magnitude of migration flows into those countries (Pedersen, Pytlikova and Smith, 2008). However, immigrants from the poorest destination countries do appear to be more likely to migrate to countries with relatively generous programs within that group of 26 countries.



Figure 3.7 Percent of immigrants with only primary education in 2001 and social expenditures as percent of GDP in 1990–1999.

Source: Social expenditures data from OECD (2014) "Stats extracts." Available at: stats.oecd.org [11 March 2014]; immigration data from OECD (2006) "Counting immigrants and expatriates in OECD countries: A new perspective." *Trends in International Migration 2004*. Paris: OECD.

Immigration policy restrictions may limit immigrants' ability to move to countries in order to participate in public assistance programs. Employment-, education- or other skill-based restrictions on immigration implicitly limit the number of immigrants who are likely to qualify for public assistance programs. EU countries with more generous public assistance programs have higher shares of less-educated immigrants from other EU countries (from which people can migrate freely) than from non-EU countries (which face immigration restrictions) (Razin andWahba, 2011). This suggests that admission restrictions may limit the welfare magnet effect.

Most evidence suggests that the generosity of public assistance programs plays relatively little role in immigrants' location choices within destination countries. For example, research finds that the generosity of means-tested program benefits does not affect the distribution of newly arrived immigrants across U.S. states (Zavodny, 1999; Kaushal, 2005). However, immigrants who receive welfare are more clustered in California, a state with relatively generous welfare benefits, than either immigrants who do not receive welfare or natives (Borjas, 1999).

Research may have difficulty finding evidence of a welfare magnet effect within or across countries if welfare magnet concerns lead to policy changes. In addition to restricting admissions of immigrants who are more likely to be eligible for public assistance, policymakers may change public assistance eligibility rules or benefits in response to concerns that immigrants disproportionately receive public assistance or migrate in order to receive public assistance. The 1996 U.S. welfare reform is a case in point.

In 1996, the United States enacted welfare reform. Changes were made to public assistance programs that affected all residents, but immigrants were specially targeted, as discussed in more detail in Chapter 10. About 45 percent of the projected savings from welfare reform were from denying benefits to immigrants (Martin, 2013). Some of the cuts were later reversed, but newly arrived immigrants continue to face more limited access to public assistance than U.S. natives or earlier immigrants.

Return and repeat migration

Not all people who migrate remain abroad. Some return migration is involuntary, such as when an unauthorized immigrant is deported or when a temporary foreign worker would like to remain in the destination but the worker's visa has expired. Some return migration is voluntary, perhaps because conditions in the origin or the destination have changed or because the immigrant had always intended to return home. Some return migration is due to migrants being overly optimistic about their prospects in the destination. Meanwhile, some immigrants who leave a destination are repeat migrants—also called secondary migrants and onward migrants—who move on to another country instead of returning to their country of origin.

This chapter uses the term "out-migrants" to refer to all immigrants who leave the destination country, or repeat migrants and return migrants together. Destination countries probably do not care whether out-migrants are return migrants or repeat migrants unless they want those immigrants to stay, in which case knowing where they are going is important to understanding why they are leaving. From the perspective of origin countries, return migration versus repeat migration is important since return migrants can have significant effects on their origin countries, as discussed in Chapter 11. Natives who leave—emigrants—are not included in this discussion. Understanding the extent of out-migration and the characteristics of immigrants who leave compared with those who stay is important for several reasons. Immigrants who anticipate they might leave have less incentive to acquire skills that are valuable in the destination but not valuable in other places, such as learning a language spoken only in the destination. Such decisions, in turn, are likely to affect how immigrants do in the labor market and the extent to which they compete with natives or other immigrants for jobs. The impact of immigration on labor markets, tax revenues and public expenditures will differ depending on how many immigrants leave and on whether immigrants who do poorly in the destination leave while those who succeed stay, or the reverse.

Few countries collect comprehensive data on out-migration. The United States stopped counting out-migrants in 1957. In general, countries are less concerned about who exits than who enters. Since collecting data is expensive, it makes sense to prioritize data collection efforts. However, this limits researchers' ability to study out-migration.

Researchers estimate the number of out-migrants by comparing the number of immigrants at a point in time with a later count of the number of immigrants, adjusted for the number of immigrants who entered and the number who died. The number of out-migrants between time t and time t+1—between 2000 and 2010, for example—is then

Such estimates can be calculated for specific origin countries or other demographic characteristics, such as sex, age and education. Longitudinal surveys that follow people over time

Box 3.2 Evidence on U.S. out-migration

Using methods like equation 3.3, Robert Warren and Jennifer Peck (1980) conclude that the ratio of migration from the United States to migration into the United States was about 18 percent during 1960 to 1970. George Borjas and Bernt Bratsberg (1996) report that about 22 percent of people who received permanent resident status during 1970 to 1974 had left by 1980, and about 18 percent of people who had received permanent resident status during 1975 to 1980. Guillermina Jasso and Mark Rosenzweig (1982) find that as many as one-half of people who received permanent resident status in the United States in 1971 had left by 1979. The evidence thus suggests that outmigration from the United States is substantial.

The U.S. out-migration rate may have been even higher historically. A study by Oriana Bandiera, Imran Rasul and Martina Viarengo (2013) using administrative records on immigrant arrivals and the 1900, 1910 and 1920 Censuses concludes that for every 100 immigrants who arrived in the United States during 1900 to 1910, 58 to 63 immigrants left. During 1910 to 1920, the number rises to 75 to 81. This was the period when the immigrant share—immigrants as a fraction of all U.S. residents—was at a historic high. Given such high rates of out-migration, the implied numbers of immigrants who arrived in the United States relative to the size of the U.S.-born population at the time are simply astounding. in the destination offer another way to estimate out-migration: people who no longer answer the survey may have left the country. Surveys in origin countries that include questions about whether people lived abroad are another window into return migration.

Table 3.3 reports estimated out-migration rates after five years—the fraction of immigrants who have left within five years of arrival—for several industrialized countries. All of the out-migration rates are substantial, ranging from about 19 percent to over 60 percent. Within most industrialized countries, immigrants from other industrialized countries are more likely to leave than immigrants from developing countries. For example, research finds that as income per capita doubles across origins, the out-migration rate from the United States increases by 4.9 percentage points (Borjas and Bratsberg, 1996). The earnings gains from migration are typically bigger for immigrants from developing countries than for immigrants from industrialized countries, giving the former more incentive to stay. Immigrants from closer countries are more likely than immigrants from further away to leave, all else equal.

Out-migration tends to be more common among economic migrants than among familybased migrants (Dustmann and Görlach, 2014). Refugees who have been resettled in an industrialized country are particularly unlikely to leave. This is in part because conditions in their origin country may never improve sufficiently for them to return. In addition, the standard of living in industrialized countries tends to be much higher, reducing refugees' incentive to leave. Undocumented immigrants tend to be more likely than legal immigrants to out-migrate.

The likelihood of out-migration tends to fall as immigrants' duration of residence in the destination increases. There are several possible reasons for this pattern. One is that immigrants who mistakenly believed that they would be better off in the destination quickly learn that they prefer being elsewhere, and they soon leave. Another possibility is that there are essentially two types of immigrants: those who intend to migrate only for a short period of time, perhaps to earn a certain amount of money in order to buy land or open a business in the origin, and those who plan to stay forever. As the first type leaves, the remaining immigrants stay longer in the destination, they may acquire more skills that are valued in the destination, while their skills that are valued in the origin may atrophy. In addition, immigrants tend to create networks in the destination and are joined there by friends and family, making it less likely over time that they leave.

Country	Entry period	Out-migration rate (%)
Belgium	1993–1998	50.4
Canada	1996	23.7
Ireland	1993-1998	60.4
Netherlands	1994-1998	28.2
New Zealand	1998	23.0
Norway	1996-1999	39.6
United Kingdom	1992-1998	39.9
United States	1999	19.1

Table 3.3 Estimated out-migration rates after five years

Source: OECD (2008) International Migration Outlook 2008. Paris: OECD.

Motivations for return migration

There are several reasons an immigrant may leave the destination. Economic models focus on voluntary reasons for leaving, which include a desire to live elsewhere; changes in exchange rates; having earned a targeted amount; having acquired skills that are valuable in the origin; and having failed in the destination.

Living in the origin may be cheaper and more preferable to immigrants than remaining in the destination. Lower prices and a desire to live in the origin provide a powerful reason for many immigrants to return migrate (Dustmann and Weiss, 2007). Immigrants may be particularly likely to retire to the origin country since the higher earnings in the destination that motivated them to move there are no longer relevant once they retire.

Changes in exchange rates may prompt return migration. If the value of the origin's currency increases relative to the destination's, a given amount of money earned in the destination buys less in the origin. Immigrants who migrated in order to send remittances back to the origin or to save to pay for future consumption in the origin may return migrate as the origin's currency appreciates and their earnings become less valuable. On the other hand, immigrants may remain longer in the destination as the origin's currency appreciates since they need to earn more in order to achieve the same level of purchasing power in the origin. In other words, a change in the exchange rate creates countervailing income and substitution effects. In the case of immigrants from the Philippines, the substitution effect outweighs the income effect for most migrants (Yang, 2006). For immigrants from Mexico, however, the opposite appears to be the case (Reyes, 2004).

Achieving a target level of savings is another reason immigrants may return to their origin country. As economic conditions in the destination improve, immigrants can achieve their target level of savings sooner. However, like exchange rates, changes in economic conditions in the destination have countervailing income and substitution effects. Although better economic

Box 3.3 Money isn't everything

Many factors, not just economics, determine whether people choose to migrate. Research suggests that lifestyle preferences may ultimately play a more important role than relative earnings in determining both emigration and return migration. John Gibson and David McKenzie (2011) surveyed former top students from three nations in the South Pacific about their earnings and migration histories. They find high rates of migration. They also find high rates of return migration. Among top students from New Zealand, two-thirds had ever migrated; Tonga, 83 percent; Papua New Guinea, 37 percent. Between one-fourth and one-third were return migrants. Although most of them said they can earn more abroad—they earn \$1,000 more a week, on average, if they migrate—their location decisions were based more on lifestyle and family preferences than on income, macro-economic factors or credit constraints. For many people, desire to live near family and in a familiar culture overrides purely economic motives when it comes to the migration decision.

conditions mean that target savers can leave sooner because they were able to achieve their savings goal more quickly, some immigrants may stay longer in order to save even more. Research findings are mixed, suggesting that the relationship between return migration and economic conditions may depend on the context.⁶

The possibility of earning more in the origin as a result of migrating may motivate people to migrate and then return. Immigrants may learn a new language, create new networks, get more or better education and acquire skills that are valuable in their origin country. Living abroad even appears to boost creativity (Maddux and Galinsky, 2009). Irish workers who have emigrated and returned earn 7 percent more than comparable workers who have never migrated (Barrett and Goggin, 2010). Among Mexicans who return after migrating to the United States, the labor market experience they acquired in the United States is worth twice as much as the experience they would have acquired in Mexico had they not migrated (Reinhold and Thom, 2013). However, some studies do not find that return migrants earn more than people who never left. For example, Chinese venture capitalists who have migrated and returned—termed "sea turtles"—appear to be less productive than those who never migrated (Sun, 2013).

Immigrants may leave because they have not succeeded in the destination. However, earning less than expected in the destination may paradoxically prevent some immigrants from leaving. Much like potential immigrants may be too poor to migrate in the first place, immigrants who have not done well in the destination may not have the funds to finance their out-migration.

Circular migration

Some migrants engage in circular migration, or repeated moves between an origin and a destination. Immigrants who work in seasonal jobs, such as agriculture or construction, are particularly likely to engage in circular migration. Many programs that allow firms to hire low-skilled temporary foreign workers are designed to encourage circular migration. For example, Canada's program for seasonal agricultural workers allows workers from Mexico and the Caribbean to remain in Canada for up to eight months of a calendar year. Workers must return to their home country in order to be eligible to return to Canada, and workers from the Caribbean receive part of their pay only after returning to their home country. The *bracero* program that allowed Mexicans to do temporary agricultural work in the United States during 1942 to 1964 similarly withheld part of workers' pay until they returned to Mexico. Because of a combination of corruption and poor record keeping, Mexicans never received much of the funds that were withheld.

Research shows that stricter border enforcement reduces circular migration and increases duration of stay among unauthorized immigrants in the United States. Stricter border enforcement increases the cost of crossing the border illicitly. Some unauthorized immigrants who would otherwise return home to visit instead stay in the United States longer or even permanently as reentry becomes more difficult (Angelucci, 2012).

Chapters 2 and 3 focused on why people become immigrants, where they are from, where they go and for how long. The next chapter switches the focus to the characteristics of immigrants and out-migrants by looking at selection.

Problems and discussion questions

- 1 Explain how immigration policy can affect the number and type (economic, family-based, refugees, legal, illegal, etc.) of immigrants. Why might destination countries want to use immigration policy to affect the number and type of immigrants?
- 2 Why do immigrants go to poor countries?
- 3 Why do immigrants tend to be geographically concentrated within destination countries?
- 4 What factors led to the dispersion of immigrants across the United States during the 1990s and 2000s? What do you think happened to this dispersion after the 2007–2009 housing and financial crisis?
- 5 Why do some immigrants leave the destination country? Use the utility- or incomemaximization model and the gravity model from Chapter 2 to explain out-migration.
- 6 How can countries reduce the likelihood of being a welfare magnet?

Notes

- 1 Based on United Nations (2013) and World Bank (2014).
- 2 This estimate is not controlling for other origin or destination country factors. Controlling for other observable factors, Mayda (2010) finds that a 10 percent increase in destination country GDP per capita increases an origin country's emigration rate by 20 percent.
- 3 For example, asylum seekers who arrive in Australia by boat are sent to a refugee-processing center in Papua New Guinea. If they are found to be refugees, they are resettled in Papua New Guinea, not in Australia. This so-called Pacific Solution is aimed at discouraging asylum seekers who undertake a risky sea journey to Australia from Indonesia.
- 4 Proposition 187 was a ballot initiative passed in California in 1994 that aimed to prohibit unauthorized immigrants from receiving publicly funded education, health care or other social services. The law was ultimately found to be unconstitutional but was an indicator of anti-immigrant sentiment in the state.
- 5 Major public assistance programs include public health insurance (primarily Medicaid and SCHIP; Medicare is not included), food stamps (SNAP), cash welfare (TANF or SSI) and subsidized housing. Calculations are based on 2011–2013 March Current Population Survey data for benefits received during the previous calendar year using data from IPUMS (King et al., 2010).
- 6 Some research finds that duration of stay is shorter when economic conditions in the destination country are better (e.g., Lindstrom, 1996). However, some studies find that the probability of leaving is lower when economic conditions are better (e.g., Aydemir and Robinson, 2008).

Internet resources

The Database on Immigrants in OECD Countries has data on a broad range of demographic and labor market characteristics of immigrants living in OECD countries and is available at http://www.oecd. org/els/mig/databaseonimmigrantsinoecdcountriesdioc.htm. Data that include non-OECD countries are available at http://www.oecd.org/migration/databaseonimmigrantsinoecdandnon-oecdcountriesdioc-e.htm.

Suggestions for further reading

Dustmann, C. and Görlach, J.S. (2014) "Selective outmigration and the estimation of immigrants' earnings profiles." In: Chiswick, B. and Miller, P.W. (eds.) *Handbook of the Economics of International Migration*, vol. 1A. Amsterdam: Elsevier.

- Giulietti, C. and Wahba, J. (2013) "Welfare migration," in Constant, A.F. and Zimmermann, K.F. (eds.) International Handbook on the Economics of Migration. Cheltenham, UK: Edward Elgar, pp. 489–504.
- Hatton, T. (2013) "Refugee and asylum migration," in Constant, A.F. and Zimmermann, K.F. (eds.) *International Handbook on the Economics of Migration*. Cheltenham, UK: Edward Elgar, pp. 453–469.

References

- Amuedo-Dorantes, C. and Lozano, F. (2014) "On the effectiveness of SB1070 in Arizona." CreAM Discussion Paper No. 1423. London: University College London.
- Angelucci, M. (2012) "US border enforcement and the new flow of Mexican illegal migration." Economic Development and Cultural Change 60(2), pp. 311–357.
- Aydemir, A. and Robinson, C. (2008) "Global labour markets, return, and onward migration." Canadian Journal of Economics 41(4), pp. 1285–1311.
- Bandiera, O., Rasul, I. and Viarengo, M. (2013) "The making of modern America: Migratory flows in the age of mass migration." *Journal of Development Economics* 102, pp. 23–47.
- Barrett, A. and Goggin, J. (2010) "Returning to the question of a wage premium for returning migrants." National Institute Economic Review 213, pp. R43–R51.
- Barrett, A. and McCarthy, Y. (2008) "Immigrants and welfare programmes: Exploring the interactions between immigrant characteristics, immigrant welfare dependence, and welfare policy." Oxford Review of Economic Policy 24(3), pp. 543–560.
- Bauer, T, Epstein, G.S. and Gang, I.N. (2007) "The influence of stocks and flows on migrants' location choices." *Research in Labor Economics* 26, pp.199–229.
- Beine, M., Docquier, F. and Özden, Ç. (2011) "Diasporas." Journal of Development Economics 95(1), pp. 30–41.
- Bertoli, S., Fernández-Huertas Moraga, J. and Ortega, F. (2013) "Crossing the border: Self-selection, earnings and individual migration decisions." *Journal of Development Economics* 101, pp. 75–91.
- Boeri, T. and Brücker, H. (2005) "Why are Europeans so tough on migrants?" *Economic Policy* 44, pp. 629–703.
- Bohn, S. and Pugatch, T. (2013) "U.S. border enforcement and Mexican immigration location choice," *IZA Discussion Paper* No. 7842. Bonn, Germany: Institute for the Study of Labor.
- Bohn, S., Lofstrom, M. and Raphael, S. (2014) "Did the 2007 Legal Arizona Workers Act reduce the state's unauthorized immigrant population?" *Review of Economics and Statistics* 96(2), pp. 258–269.
- Borjas, G.J. (1999) "Immigration and welfare magnets." Journal of Labor Economics 17(4), pp. 607-637.
- Borjas, G.J. (2001) "Does immigration grease the wheels of the labor market?" *Brookings Papers on Economic Activity*, pp. 69–119.
- Borjas, G.J. (2006) "Native internal migration and the labor market impact of immigration." Journal of Human Resources 41(2), pp. 221–258.
- Borjas, G.J. and Bratsberg, B. (1996) "Who leaves? The outmigration of the foreign-born." Review of Economics and Statistics 78(1), pp. 165–176.
- Cadena, B.C. (2013) "Native competition and low-skilled immigrant inflows." Journal of Human Resources 48(4), pp. 910–944.
- Cadena, B.C. (2014) "Recent immigrants as labor market arbitrageurs: Evidence from the minimum wage." *Journal of Urban Economics* 80, pp.1–12.
- Cadena, B.C. and Kovak, B.K. (2013) "Immigrants equilibrate local labor markets: Evidence from the Great Recession." *National Bureau of Economic Research Working Paper* No. 19272. Cambridge, MA: National Bureau of Economic Research.
- Card, D. and DiNardo, J. (2000) "Do immigrant inflows lead to native outflows?" American Economic Review Papers & Proceedings 90(2), pp. 360–367.

- Castles, S., Cubas, M.A., Kim, C. and Ozkul, D. (2012) "Irregular migration: causes, patterns, and strategies." In: Omelaniuk, I. (ed.) *Global Perspectives on Migration and Development: GFMD Puerto Vallarta and Beyond*. New York: Springer, pp. 117–151.
- Clark, X., Hatton, T.J. and Williamson, J.G. (2007) "Explaining U.S. immigration, 1971–1998." Review of Economics and Statistics 89(2), pp. 359–373.
- Cobb-Clark, D.A. and Connolly, M.D. (1997) "The worldwide market for skilled migrants: Can Australia compete?" *International Migration Review* 31(3), pp. 670–693.
- Cutler, D.M., Glaeser, E.J. and Vigdor, J.L. (2008) "Is the melting pot still hot? Explaining the resurgence of immigration segregation." *Review of Economics and Statistics* 30(3), pp. 478–497.
- Dustmann, C. and Görlach, J.S. (2014) "Selective outmigration and the estimation of immigrants' earnings profiles." In: Chiswick, B. and Miller, P.W. (eds.) Handbook of the Economics of International Migration, vol. 1A. Amsterdam: Elsevier.
- Dustmann, C. and Weiss, Y. (2007) "Return migration: Theory and empirical evidence from the UK." British Journal of Industrial Relations 45(2), pp. 236–256.
- The Economist (2012) "Hello, world: Growth has brought foreigners, and foreigners have brought growth." June 30.
- Fargues, P. (2009) "Work, refuge, transit: An emerging pattern of irregular immigration south and east of the Mediterranean." *International Migration Review* 43(3), pp. 544–577.
- Geis, W., Uebelmesser, S. and Werding, M. (2013) "How do migrants choose their destination country? An analysis of institutional determinants." *Review of International Economics* 21(5), pp. 825–840.
- Gibson, J. and McKenzie, D. (2011) "The microeconomic determinants of emigration and return migration of the best and brightest: Evidence from the Pacific." *Journal of Development Economics* 95(1), pp. 18–29.
- Giulietti, C. and Wahba, J. (2013) "Welfare migration." In: Constant, A.F. and Zimmermann, K.F. (eds.) International Handbook on the Economics of Migration. Cheltenham, UK: Edward Elgar, pp. 489–504.
- Glitz, A. (2012) "The labor market impact of immigration: A quasi-experiment exploiting immigrant location rules in Germany." *Journal of Labor Economics* 30(1), pp. 175–213.
- Greenwood, M.J. and McDowell, J.M. (1991) "Differential economic opportunity, transferability of skills, and immigration to the United States and Canada." *Review of Economics and Statistics* 73(4), pp. 612–623.
- Grogger, J. and Hanson, G.H. (2011) "Income maximization and the selection and sorting of international migrants." *Journal of Development Economics* 95(1), pp. 42–57.
- Hanson, G.H. (2006) "Illegal migration from Mexico to the United States." *Journal of Economic Literature* 44(4), pp. 869–924.
- International Organization for Migration (2013) World Migration Report 2013: Migrant Well-being and Development. Geneva: International Organization for Migration.
- Jaeger, D.A. (2008) "Green cards and the location choices of immigrants in the United States, 1971–2000." *Research in Labor Economics* 27, pp. 131–183.
- Jasso, G. and Rosenzweig, M.R. (1982) "Estimating the emigration rates of legal immigrants using administrative and survey data: The 1971 cohort of immigrants to the United States." *Demography* 19(3), pp. 279–290.
- Kaushal, N. (2005) "New immigrants' location choices: Magnets without welfare." Journal of Labor Economics 23(1), pp. 59–80.
- King, M., Ruggles, S., Alexander, J.T., Flood, S., Genadek, K., Schroeder, M., Trampe, B. and Vick, R. (2010) Integrated Public Use Microdata Series, Current Population Survey: Version 3.0. [Machinereadable database]. Minneapolis: University of Minnesota.
- Lindstrom, D.P. (1996) "Economic opportunity in Mexico and return migration from the United States." Demography 33(3), pp. 357–374.

- Maddux, W.M. and Galinsky, A.D. (2009) "Cultural borders and mental barriers: The relationship between living abroad and creativity." *Journal of Personality and Social Psychology* 96, pp. 1047–1061.
- Martin, P. (2013) "The global challenge of managing migration." Population Bulletin 68, pp. 1–16.
- Mayda, A.M. (2010) "International migration: A panel analysis of the determinants of bilateral flows." *Journal of Population Economics* 23(4), pp. 1249–1274.
- Myrdal, G. (1957) Rich Lands and Poor: The Road to World Prosperity. New York: Harper & Brothers.
- Ortega, F. and Peri, G. (2013) "The effect of income and immigration policies on international migration." *Migration Studies* 1, pp. 47–74.
- Passel, J.S., Cohn, D. and Gonzalez-Barrera, A. (2013) Population Decline of Unauthorized Immigrants Stalls, May Have Reversed. Washington, DC: Pew Research Center. Retrieved from: http://www. pewhispanic.org/files/2013/09/Unauthorized-Sept-2013-FINAL.pdf [10 January 2014].
- Pedersen, P.J., Pytlikova, M. and Smith, N. (2008) "Selection and network effects: migration flows into OECD countries 1999–2000." *European Economic Review* 52(7), pp. 1160–1186.
- Portes, A. and Bach, R.L. (1985) *Latin Journey: Cuban and Mexican Immigrants in the United States*. Berkeley: University of California Press.
- Razin, A. and Wahba, J. (2011) "Welfare magnet hypothesis, fiscal burden and immigration skill selectivity." *National Bureau of Economic ResearchWorking Paper* No. 17515. Cambridge, MA: National Bureau of Economic Research.
- Reinhold, S. and Thom, K. (2013) "Migration experience and earnings in the Mexican labor market." *Journal of Human Resources* 48(3), pp. 768–820.
- Reyes, B.I. (2004). "Changes in trip duration for Mexican immigrants to the United States." *Population Research and Policy Review* 23(3), pp. 235–252.
- Simpson, N.B. and Sparber, C. (2013) "The short- and long-run determinants of less-educated immigrant flows into U.S. states." *Southern Economic Journal* 80(2), pp. 414–438.
- Statistics Canada (2013) 2011 National Household Survey: Immigration, place of birth, citizenship, ethnic origin, visible minorities, language and religion. Available at: http://www.statcan.gc.ca/daily-quotidien/ 130508/dq130508b-eng.htm [10 March 2014].
- Sun, W. (2013) "The productivity of return migrants: The case of China's 'sea turtles." IZA Journal of Migration 2.
- Tienda, M. (2013) "Multiplying diversity: Family reunification and the regional origins of late-age immigrants, 1981–2009." *IZA Working Paper* No. 2390. Bonn: Institute for the Study of Labor.
- Timmer, A.S. and Williamson, J.G. (1998) "Immigration policy prior to the 1930s: Labor markets, policy interactions, and globalization backlash." *Population and Development Review* 24(4), pp. 739–771.
- United Nations (2013) "Total international migrant stock." Available at: http://esa.un.org/unmigration/ TIMSA2013/migrantstocks2013.htm?mtotals [9 January 2014].
- United Nations Development Programme (UNDP) (2009) *Human Development Report 2009*. New York, NY: United Nations Development Programme.
- Warren, R. and Peck, J.M. (1980) "Foreign-born emigration from the United States: 1960 to 1970." Demography 17(1), pp. 71–84.
- World Bank (2014) "GDP per capita." Available at: http://data.worldbank.org/indicator/NY.GDP. PCAP.CD [20 February 2014].
- Yang, D. (2006) "Why do migrants return to poor countries? Evidence from Philippine migrants' responses to exchange rate shocks." *Review of Economics and Statistics* 88(4), pp. 715–735.
- Zavodny, M. (1999) "Determinants of recent immigrants' locational choices." International Migration Review 33(4), pp. 1014–1030.