Ten Economic Facts About Immigration

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Introduction

The Hamilton Project believes it is important to ground the current immigration debate in an objective economic framework based on the best available evidence. In this policy memo, we explore some of the questions frequently raised around immigration in the United States and provide facts drawn from publicly available data sets and the academic literature.

Most Americans agree that the current U.S. immigration system is flawed. Less clear, however, are the economic facts about immigration—the real effects that new immigrants have on wages, jobs, budgets, and the U.S. economy—facts that are essential to a constructive national debate.

These facts paint a more nuanced portrait of American immigration than is portrayed in today’s debate. Recent immigrants hail from many more countries than prior immigrants; they carry with them a wide range of skills from new PhDs graduating from American universities to laborers without a high school degree. Most recent immigrants have entered the United States legally, but around 11 million unauthorized immigrants currently live and work in America; the majority of these unauthorized workers settled here more than a decade ago. Each of these immigrant groups affects the U.S. economy in varied ways that should be considered in the current debate around immigration reform.

Immigrants now comprise more than 12 percent of the American population, according to recent estimates, approaching levels not seen since the early 20th century. Today’s controversies over immigration echo arguments made a century ago during the last immigration peak. While the demographics of U.S. immigrants have shifted dramatically, the concerns voiced about the social and economic impacts of immigration strike a familiar chord.
A major economic concern is how immigrants influence the wages and employment prospects of U.S. workers. The economic impacts of immigration vary tremendously, depending on whether immigrants are unskilled agricultural laborers, for example, or highly skilled PhD computer scientists. Although their consequences are often conflated, it is constructive to examine the impacts of low-skilled and high-skilled immigrants independently.

Another point of controversy in today’s debate involves the impact of unauthorized immigrants on our economic wellbeing. The best estimates suggest that 28 percent of the total foreign-born population could be unauthorized. According to the Pew Hispanic Center, roughly 60 percent of these unauthorized immigrants are from Mexico. (However, unauthorized immigrants make up only about 21 percent of U.S. residents of Mexican heritage.) When possible, we try to differentiate the figures to more closely understand the different effects—positive or negative—that unauthorized workers may have on the economy.

Of course, there are many factors at play and the economic evidence is only one piece of the puzzle. These facts are designed to provide a common ground that all participants in the policy debate can agree on. In the months and years ahead, The Hamilton Project will return to the issue of immigration as we offer policy recommendations on the economic issues facing the United States.

Note: This memo draws on the latest information available including data from the Census, Current Population Survey, Department of Homeland Security, United States Budget, research from the Pew Hispanic Center, and peer reviewed economic studies. Often, these sources do not provide direct, definitive evidence of the legal status of immigrants, making it difficult to distinguish the foreign born population (immigrants) into naturalized citizens, permanent residents, and unauthorized immigrants. In the instances where the data distinguish among the foreign born we refer to naturalized citizens and permanent residents as “legal immigrants” and other immigrants as “unauthorized immigrants.”
Today’s Immigrants Hail From More Diverse Backgrounds Than They Did A Century Ago

America’s immigrants are more diverse than they were a century ago. In 1910, immigrants from Europe and Canada comprised 95 percent of the foreign-born population in the United States. Today’s immigrants hail from a much broader array of countries, including large populations from Latin American and Asia. Not surprisingly, the single largest home country of today’s immigrants is Mexico. All told, immigrants from Latin American and the Caribbean make up 53 percent of the U.S. foreign-born population.

FIGURE 3.
Foreign Born by Place of Origin: 1910

FIGURE 4.
Foreign Born by Place of Origin: 2008-2009
Immigrants are both better and worse educated than U.S.-born citizens. At one end of the spectrum, more than 11 percent of foreign-born workers have advanced degrees—slightly above the fraction of Americans with post-college degrees. Even more striking, more than 1.9 percent of immigrants have PhDs, almost twice the share of U.S.-born citizens with doctorates (1.1 percent).

At the other end of the spectrum, however, immigrants are much more likely than U.S.-born citizens to have less than a high school education. Roughly 30 percent of immigrants lack a high school diploma, nearly four times the figure for U.S.-born citizens.

**FIGURE 5.**
Education of U.S. Born and Foreign Born

3. On Average, Immigrants Improve The Living Standards Of Americans

The most recent academic research suggests that, on average, immigrants raise the overall standard of living of American workers by boosting wages and lowering prices. One reason is that immigrants and U.S.-born workers generally do not compete for the same jobs; instead many immigrants complement the work of U.S. employees and increase their productivity. For example, low-skill immigrant laborers allow U.S.-born farmers, contractors, or craftsmen to expand agricultural production or to build more homes—thereby expanding employment possibilities and incomes for U.S. workers. Another reason is that businesses adjust to new immigrants by opening stores, restaurants, or production facilities to take advantage of the added supply of workers; more workers translate into more business.

Because of these factors, economists have found that immigrants raise average wages slightly for the United States as a whole. As illustrated in the chart below, estimates from opposite ends of the academic literature arrive at this same conclusion, and point to small but positive wage gains of between 0.1 and 0.6 percent for American workers.

But while immigration improves living standards on average, the economic literature is divided about whether immigration reduces wages for some groups of American workers. In particular, some estimates suggest that immigration has reduced the wages of low-skilled workers and college graduates. This research, exemplified by the purple bars in the chart below, implies that immigrant workers may have lowered the wages of low-skilled workers by 4.7 percent and college graduates by 1.7 percent. However, other estimates that examine immigration within a different economic framework (the light blue bars in the chart) find that immigration raises the wages of all U.S. workers—regardless of their level of education.

Immigrants also affect the well-being of U.S. workers by affecting the prices of the goods and services that they purchase. Recent research suggests that immigrant workers enhance the purchasing power of Americans by lowering prices of “immigrant-intensive” services like child care, gardening, and cleaning services. By making these services more affordable and more widely available, immigrant workers benefit U.S. consumers who purchase these services.

**FIGURE 6.**

Effect of Immigration on Wages of U.S.-Born Workers

![Graph showing percentage change in wages for different educational groups.](image)

Note: Ottaviano and Peri (2008), Table 7; March 2008-2009 CPS, U.S. Born Ages 25-64, numbers may not sum to 100 due to rounding
Taxes paid by immigrants and their children—both legal and unauthorized—exceed the costs of the services they use. In fact, a 2007 cost estimate by the Congressional Budget Office found that a path to legalization for unauthorized immigrants would increase federal revenues by $48 billion but would only incur $23 billion of increased costs from public services, producing a surplus of $25 billion for government coffers. According to the Social Security Administration ‘Trustees’ report, increases in immigration have also improved Social Security’s finances.

Many government expenses related to immigrants are associated with their children. From a budgetary perspective, however, the children of immigrants are just like other American children. The chart below compares the taxes paid and expenditures consumed by the children of immigrants and by the children of U.S.-born citizens over their lifetimes. Both the immigrant children and children of U.S.-born citizens are expensive when they are young because of the costs of investing in children’s education and health. Those expenses, however, are paid back through taxes received over a lifetime of work. The consensus of the economics literature is that the taxes paid by immigrants and their descendants exceed the benefits they receive—that on balance they are a net positive for the federal budget.

However, it is important to recognize that some of these budgetary costs are unequally shared across state and local governments. Education and health services for immigrant children are generally state liabilities and are concentrated in immigrant-heavy states like California, Nevada, Texas, Florida, New Mexico, and Arizona. While the federal government is a winner in terms of tax revenues, these states may be burdened with costs that will only be recouped over a number of years, or, if children move elsewhere within the United States, may never fully be recovered.

**FIGURE 7.**
Net Taxpayer Cost or Benefit by Age

![Net Taxpayer Cost or Benefit by Age](image-url)
5. Both Immigration Enforcement Funding and the Number of Unauthorized Immigrants Have Increased Since 2003

The United States has dramatically raised immigration border security and enforcement funding to $17 billion over the past decade in an effort to improve national security, as well as to stem the flow of unauthorized immigrants entering the country. A secure border is required for national security and to enforce legal and customs requirements. As a tool of immigration policy, however, the available evidence suggests that this increased spending is unlikely to have had a major effect on the number of unauthorized immigrants living in the United States. Indeed, the number of unauthorized immigrants continued to rise between 2003 and 2007. The decrease in unauthorized immigration since 2007 is likely due to the Great Recession.

One reason that increases in border patrol have had modest impacts on the number of unauthorized immigrants is that most arrived before the enhanced security measures were implemented after 2001; according to estimates from the Pew Hispanic Center, more than half of unauthorized immigrants arrived here before 2000. In addition, some research suggests that increased security has resulted in unauthorized immigrants staying in the United States longer rather than risking detection by visiting home.

**Figure 8. Immigration Enforcement**

Sources: Passel and Cohn, Pew Hispanic Center 2010; Hinojosa-Ojeda, CAP (2010)
6. Immigrants Do Not Disproportionately Burden U.S. Correctional Facilities And Institutions

Immigrants are institutionalized at substantially lower rates than U.S.-born citizens. Looking at Census data covering correctional facilities and mental hospitals, U.S.-born citizens are more than five times more likely than immigrants to be institutionalized. (One study estimated that as many as 70 percent of the institutionalized population are housed in correctional facilities). This evidence suggests that immigrants impose fewer costs on taxpayers from crime and institutionalization than do U.S.-born citizens.

FIGURE 9.
Institutionalization by Place of Birth

Source: IPUMS-USA - Census 2000 5% Extract. Ages 18 to 40.
Some groups are concerned that recent immigrants choose not to integrate and assimilate into American social and economic life, in contrast to previous generations of immigrants. The data suggest this is not true. Recent waves of immigrants and their children are integrating into the U.S. economy, just as previous immigrant families did. This is true also for immigrants from Mexico and Central America, where first-generation immigrants have tended to concentrate in sectors like construction, food preparation, and agriculture. As seen in the chart below, the children of these immigrants engage in occupations more closely resembling those of U.S.-born citizens than the occupations of their parents.

Not only do immigrants assimilate into U.S. economic life, but they also integrate in other ways. In addition to being vital to gaining employment, speaking English is a measure of social assimilation into the United States. More than 90 percent of the children of recent immigrants speak English, regardless of their country of origin, according to the U.S. Census.
Countries like Canada attract a greater influx of immigrants with higher education levels and specialized skills through immigration policies that specifically favor visa applicants with advanced degrees or work experience. The composition of U.S. immigrants is the result of our immigration policies, which place more emphasis on family relationships and less consideration on skill or education than many other countries when granting permanent residence.

**Figure 12.**

Educational Attainment of Immigrants Across Countries

Compared to countries like Canada, New Zealand, and Australia, the United States has a greater proportion of low-skilled immigrants. About 30 percent of immigrants in the United States possess a low level of education and only 35 percent possess a high level of education. In Canada, only 22 percent have a low level of education (equivalent to less than high school in the United States) while more than 46 percent have a high level of education (roughly equivalent to an associate’s degree or higher in the United States).
Today’s immigrants possess a strong entrepreneurial spirit. In fact, immigrants are 30 percent more likely to form new businesses than U.S.-born citizens. Furthermore, evidence shows that foreign-born university graduates are important contributors to U.S. innovation—among people with advanced degrees, immigrants are three times more likely to file patents than U.S.-born citizens. Such investments in new businesses and in research may provide spillover benefits to U.S.-born workers by enhancing job creation and by increasing innovation among their U.S.-born peers.

**FIGURE 13.**
Monthly Business Formation by Immigrants and U.S. Born

**FIGURE 14.**
Number of Patents Granted per 10,000 Post-College Graduates


Source: Patents granted over the period 1998-2003. Hunt and Gauthier-Loiselle (2003), Table 1
With its top-level universities, dynamic business environment, and wide-ranging economic opportunities, the United States has a history of attracting high-skill workers. However, a recent study suggests that this trend may be waning; many of today’s international students either plan to leave the United States or are uncertain about remaining, raising the potential for a reverse brain-drain of the skilled workers who contribute to U.S. global competitiveness.

As seen in the graph below, the number of high-skill visas has also declined somewhat since 2000. In 2009, 270,326 visas for high-skill workers were available, down from 301,328 in 2000.

**FIGURE 15.**
High-Skill Immigration

Most high-skilled immigrants to the United States come through two programs:

**Employment-Based Immigrant Visas:** Highly-skilled immigrants and their families can obtain permanent legal residence in the United States by qualifying for one of five “preference categories” that include professionals with advanced degrees or exceptional abilities; professors or researchers; skilled workers, professionals, and needed unskilled workers; immigrant investors; and certain other groups.

**H-1B Specialty Occupation Visa Program:** This program allows skilled workers in “specialty occupations” to work in the United States temporarily (up to six years if renewed). The H-1B visa requires the worker to have a bachelor’s degree or higher in a specific field. In 2009, approximately 86,000 new H-1B applications were approved and 128,000 H-1Bs were renewed.
Technical Appendix

PRIMARY DATA SOURCES:
The primary data sources include the United States Census (U.S. Census), the American Community Survey (ACS) produced by the U.S. Bureau of the Census, and the Current Population Survey (CPS) which is a survey conducted by the U.S. Bureau of the Census for the Bureau of Labor Statistics. Datasets were accessed through the Minnesota Population Center’s Integrated Public Use Microdata Series (IPUMS).

United States Census (U.S. Census) And American Community Survey (ACS):


INTRODUCTION

There are an estimated 11.1 million unauthorized immigrants in the U.S, constituting 28 percent of total immigration to the U.S. Of these unauthorized immigrants, 60 percent originate from Mexico.

Source: Jeffrey S. Passel and D’Vera Cohn, “U.S. Unauthorized Immigration Flows Are Down Sharply Since Mid-Decade,” Pew Hispanic Center (Sep 2010).

21 Percent of U.S. residents of Mexican heritage are unauthorized.
The DHS estimates 6,650,000 unauthorized Mexican immigrants lived in the U.S. in 2009 (table 3, p. 4). The DHS estimates that the ACS underreports non-immigrants by 10 percent, unauthorized immigrants by 10 percent, and legal permanent residents (LPRs) by 2.5 percent (Appendix 1). Total estimates of undercounting of the foreign born are provided in Table 2, p. 3.


Data on the number of people of Mexican origin who were granted LPR and asylum and the number of people of Mexican origin who came to the U.S. with non-immigrant status in 2009 are provided in the DHS’ Yearbook of Immigration Statistics, Table 3, p. 12; Table 17, p. 45; Table 26, p. 69.


To find the denominator, an estimate of the number of total U.S. residents of Mexican heritage was derived from the ACS (2008). The shares of people of Mexican origin for each of these categories were compiled from DHS (2010) and multiplied by the share of undercounting given in DHS (2009) to get an ACS undercount estimate for first-generation Mexican immigrants. This was added to estimates from the ACS on Mexicans and American citizens of Mexican origin. The DHS estimate of unauthorized Mexicans was divided by the adjusted ACS count of U.S. residents of Mexican origin and heritage.

Figure 1: U.S. Foreign-Born Population

Figure 2: Foreign-Born Population by Legal Status
Source: Jeffrey S. Passel and D’Vera Cohn, “U.S. Unauthorized Immigration Flows Are Down Sharply Since Mid-Decade,” Pew Hispanic Center (Sep 2010), Table 3, p. 2.
1. TODAY’S IMMIGRANTS HAIL FROM MORE DIVERSE BACKGROUNDS THAN THEY DID A CENTURY AGO

Figure 3 and Figure 4: Foreign Born by Place of Origin, 1910 and 2008-2009

Sources: U.S. Census (1910); March CPS (2008 and 2009).
Foreign born U.S. residents excludes individuals born abroad to U.S.-born parents. U.S. born includes all individuals born in the U.S. plus those born abroad to U.S.-born parents. “Europe” includes Western, Northern, and Eastern Europe as well as the former USSR. “Asia” category includes East, South and Southeast Asia and the Middle East. “Other” includes Canada, Oceania and other outlying countries.

2. IMMIGRANTS BRING A DIVERSE SET OF SKILLS AND EDUCATIONAL BACKGROUNDS

Figure 5: Education of U.S. Born and Foreign Born

Sources: 2008 and 2009 March CPS. The sample includes individuals ages 25 to 64. U.S. born includes all those born in the U.S. (or a U.S. territory). Foreign born includes all individuals born outside the U.S. and who arrived in the U.S. in 1980 or later, regardless of legal status. The workforce is defined as the population of non-institutionalized U.S. residents ages 25-64.

3. ON AVERAGE, IMMIGRANTS IMPROVE THE LIVING STANDARDS OF AMERICANS

Figure 6: Effect of Immigration on Wages of U.S.-Born Workers


The U.S. born workforce refers to the share of all non-institutionalized U.S.-born residents ages 25-64 from the 2008 and 2009 March CPS.


4. IMMIGRANTS ARE NOT A DRAIN ON THE FEDERAL GOVERNMENT BUDGET

A path to legalization for unauthorized immigrants would increase federal revenues by $48 billion but would only incur $23 billion of increased costs from public services, producing a surplus of $25 billion for government coffers.

Source: “Senate Amendment 1150 to S. 1348, the Comprehensive Immigration Reform Act of 2007,” Congressional Budget Office (CBO) Cost Estimate (June 2007).

Increases in immigration have improved Social Security’s finances.


Figure 7: Net Taxpayer Cost or Benefit by Age

Sources: March CPS (2005-2009); and U.S. Census Bureau “Public Education Finances” (2008).

Sample includes U.S. born-individuals whose parents are either U.S. born, foreign born, or born in Mexico or Central America. A person is counted as a 2nd Generation immigrant from Mexico or Central America if at least one of their parents is from Central America or Mexico. State and federal expenditures recorded in the CPS and included in the analysis include welfare, SSI, Social Security, the cash value of Medicaid and Medicare, food stamps, home energy assistance, survivors’ benefits, disability benefits, and education benefits. Children ages 6 to 18 are assumed to attend public schools at a cost of the average state per pupil expenditure on public schooling. Taxes paid include federal income and payroll taxes, property taxes, and state income taxes as estimated in the CPS. For the purposes of estimating sales taxes, individuals are assumed to spend half of their after-tax income on purchases subject to the state sales tax rate. Certain taxes and government expenditures are unavailable in the CPS data and are excluded from the analysis.

5. BOTH IMMIGRATION ENFORCEMENT FUNDING AND THE NUMBER OF UNAUTHORIZED IMMIGRANTS HAVE INCREASED SINCE 2003

Figure 8: Immigration Enforcement

Source: Jeffrey S. Passel and D’Vera Cohn, “U.S. Unauthorized Immigration Flows Are Down Sharply Since Mid-Decade,” Pew Hispanic Center (Sep 2010).

Expenditures for immigration enforcement were compiled from the Department of Homeland Security Budgets in Brief from 2003 and 2009, as quoted in Raúl Hinojosa-Ojeda, “Raising the Floor for American Workers: The Economic Benefits of Comprehensive Immigration Reform,” Center for American Progress, American Immigration Council (Jan 2010), Figure 4, p. 5.
6. IMMIGRANTS DO NOT DISPROPORTIONATELY BURDEN U.S. CORRECTIONAL FACILITIES AND INSTITUTIONS

Figure 9: Institutionalization by Place of Birth
Source: Census 2000. The sample was restricted to individuals ages 18 to 40 living in group quarters to focus on individuals living in correctional facilities (rather than institutions housing the elderly and disabled). Although these data do not allow us to differentiate the incarcerated from those housed in other institutions (e.g. institutions for the physically or mentally disabled), we follow Butcher and Piehl (2008) in assuming that most of the institutionalized population is housed in correctional institutions. See Butcher, Kristin F. and Piehl, Ann Morrison, “Why Are Immigrants’ Incarceration Rates So Low? Evidence on Selective Immigration, Deterrence, and Deportation,” NBER Working Paper 13229 (July 2007).

7. RECENT IMMIGRANTS REFLECT AMERICA’S MELTING POT

Figure 10: Occupations of U.S. Born, First and Second-Generation Immigrants
Source: March CPS (2003-2009). Sample includes all individuals ages 25 to 64 in the labor force. U.S. born includes all individuals born in the U.S. or to U.S.-born parents living abroad. First generation immigrants from Mexican or Central American refers to all those born in Mexico, Guatemala, Honduras, Belize, Nicaragua, Costa Rica, or El Salvador to non-U.S. born-parents in the labor force. Second generation immigrants from Mexico and Central American refers to all U.S.-born individuals with at least one parent from Mexico or Central America. Occupational categories were derived from the IPUMS Standard Occupational Classification (SOC).

Figure 11: English Proficiency Among U.S.-Born Children of Immigrants
Source: Census 2000. Sample includes individuals ages 6 and 15 with at least one parent born abroad. When the child had two parents born abroad from different regions, the mother’s country of birth was used. The fraction speaking English includes individuals who report that they “only speak English,” “speak English very well,” or “speak English well.”

8. THE SKILL COMPOSITION OF U.S. IMMIGRANTS DIFFERS FROM THAT OF OTHER COUNTRIES

Figure 12: Educational Attainment of Immigrants Across Countries
Source: International Migration Outlook: Annual Report 2007 Edition, Organization for Economic Cooperation and Development (OECD) (2007), Table II.1, p. 133. Data refer to population ages 15-64 for Australia, and 25-64 for all other countries. Reference years are 2001 for Canada and New Zealand, and 2003-2004 for other countries. Low education and college education levels are defined based upon UNESCO’s International Standard Classification of Education (ISCED). Low education corresponds to individuals having completed ISCED 0/1/2 and high education corresponds to individuals having completed ISCED 5/6.

9. IMMIGRANTS START NEW BUSINESSES AND FILE PATENTS AT HIGHER RATES THAN U.S.-BORN CITIZENS

Figure 13: Monthly Business Formation by Immigrants and U.S. Born

Figure 14: Number of Patents Granted per 10,000 Post-College Graduates

10. AMERICA IS ISSUING A DECLINING NUMBER OF VISAS FOR HIGH-SKILL WORKERS

Many of today’s international students either plan to leave the United States or are uncertain about remaining
Source: Vivek Wadhwa, Guillermina Jasso, Ben Rissing, Gary Gereffi and Richard Freeman, “Intellectual Property, the Immigration Backlog, and a Reverse Brain-Drain: America’s New Immigrant Entrepreneurs, Part III,” Pratt School of Engineering, Duke University, New York University, Harvard Law School, Kauffman Foundation (August 2007). According to the New Immigrant Survey 21.7 percent of new legal immigrants and 34.5 percent of employment principals either plan to leave the United States or are uncertain about remaining.

Figure 15: High-Skill Immigration
The number of recent college graduates is the total number of bachelor’s degrees awarded in the reference year minus bachelor’s degrees awarded to non-resident aliens. Source: U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey (HEGIS), “Degrees and Other Formal Awards Conferred” surveys, 1976-77 and 1980-81; and 1989-90 through 2007-08 Integrated Postsecondary Education Data System, “Completions Survey” (IPEDS-C:90-99), and Fall 2000 through Fall 2008 (Table prepared June 2009), Table 285, “Bachelor’s degrees conferred by degree-granting institutions, by race/ethnicity and sex of student: Selected years, 1976-77 through 2007-08.”