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Projections of Net Migration to the United States

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Projections of Net Migration to the United States

Abstract

[Excerpt] Immigration projections are subject to a large degree of uncertainty even in the near term. In fact, the two agencies' projections for net migration in 2010 range, under plausible alternative assumptions, from as low as 150,000 to more than 1.5 million people. Analysis of historical data implies an 80 percent probability that over the next decade, net migration will average between about 500,000 and 1.5 million people annually, with the range of possible outcomes narrowing somewhat over a longer horizon. This paper examines the projection methodologies and outlines the most recent projections of the Social Security trustees and the Census Bureau. The trustees' projections are higher than those of the Census Bureau in the near term but lower after 2025.

Keywords

immigration, United States, policy, Congress, citizen, foreign, government, admission, lawful, enforcement, wages, salaries, Social Security, illegal, employment

Comments

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CONGRESS OF THE UNITED STATES
CONGRESSIONAL BUDGET OFFICE

A
CBO
PAPER



A Series on Immigration

Projections of Net Migration to the United States

JUNE 2006



Projections of Net Migration to the United States

June 2006



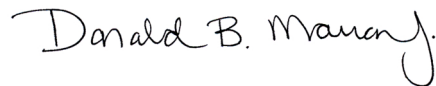
Preface

Estimates of the medium- and long-term outlook for the economy and the federal budget depend greatly on projections of the size and composition of the nation's population. One element of such projections is predicting the net flows of immigrants from abroad—an exercise subject to considerable uncertainty.

This paper, requested by the Chairman and Ranking Member of the Senate Finance Committee, is one of several reports by the Congressional Budget Office (CBO) that present facts and research on immigration to help inform the agency's projections of the economy and the federal budget. The paper examines projections of net migration. In keeping with CBO's mandate to provide objective, nonpartisan analysis, the paper makes no recommendations.

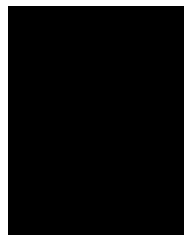
David A. Brauer wrote the paper under the supervision of Douglas Hamilton. Andrew Gisselquist provided research assistance. The paper benefited from the comments of Bob Dennis, Douglas Hamilton, Arlene Holen, Kim Kowalewski, Noah Meyerson, John Peterson, John Sabelhaus, Jonathan Schwabish, Michael Simpson, Bob Shackleton, Ralph Smith, and Julie Topoleski. Harriet Orcutt Duleep of the Urban Institute and Felicitie C. Bell of the Office of the Chief Actuary of the Social Security Administration also provided helpful comments. (The assistance of such external participants implies no responsibility for the final product, which rests solely with CBO.)

John Skeen edited the paper, and Christine Bogusz proofread it. Maureen Costantino prepared the paper for publication, and Lenny Skutnik produced the printed copies.



Donald B. Marron
Acting Director

June 2006



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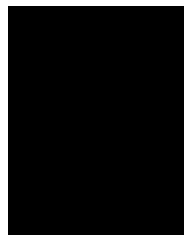
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Projections of Net Migration to the United States

Summary

Estimates of the medium- and long-term economic and budget outlook rely on projections of the size and composition of the nation's population. One challenge to such projections is forecasting how many immigrants will come to and stay in the United States. Because most immigrants are of working age when they arrive, rates of net migration are critical in determining the growth of the labor force.¹ Indeed, over the past decade, foreign-born workers accounted for more than half of the growth of the labor force.² Moreover, the composition of the immigrant population could also make a difference to the outlook.

Two federal entities—the Social Security trustees, within the Social Security Administration, and the Census Bureau—currently generate projections of net migration as a component of their population projections. The Congressional Budget Office (CBO) does not independently project either net migration or the size and composition of the population, instead relying on those agencies' expertise and access to detailed information. In particular, both CBO's 10-year projections of the growth of the labor force and its long-term projections for Social Security are based on the trustees' population projections,

which incorporate their assumptions regarding net migration.

Immigration projections are subject to a large degree of uncertainty even in the near term. In fact, the two agencies' projections for net migration in 2010 range, under plausible alternative assumptions, from as low as 150,000 to more than 1.5 million people. Analysis of historical data implies an 80 percent probability that over the next decade, net migration will average between about 500,000 and 1.5 million people annually, with the range of possible outcomes narrowing somewhat over a longer horizon.³

This paper examines the projection methodologies and outlines the most recent projections of the Social Security trustees and the Census Bureau.⁴ The trustees' projections are higher than those of the Census Bureau in the near term but lower after 2025.

The paper then addresses issues about those projections raised by the 2003 Technical Panel on Assumptions and Methods. In the panel's view, both the trustees' and the Census Bureau's projections underestimate future net migration. The Social Security trustees and the Census Bureau, along with CBO, are currently evaluating the technical panel's recommendations.

Finally, the paper discusses factors that might influence the level and composition of net migration. In principle, one might be able to improve on current projections by explicitly modeling key determinants of both the poten-

-
1. In this paper, net migration over any specified time period refers to the number of people legally admitted to the United States as permanent residents, refugees, or people seeking asylum minus the number of legal permanent residents who emigrate, plus the net increase or decrease in the number of unauthorized residents. People admitted as temporary residents—for example, as students or under the Department of State's H1 program—are not included. However, the projections do take into account the likelihood that some people initially admitted as temporary residents will subsequently become legal permanent residents.
 2. See Congressional Budget Office, *The Role of Immigrants in the U.S. Labor Market* (November 2005).

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3. See Congressional Budget Office, *Quantifying Uncertainty in the Analysis of Long-Term Social Security Projections* (November 2005).
 4. The projections discussed in this paper reflect, to varying degrees, current laws and policies.

tial supply of immigrants and the potential demand for immigrant workers. Those theoretical insights may be helpful in assessing broad trends, though at present they appear to be of limited value for quantitative projections.

The Social Security Trustees' Projections

The Social Security trustees' projections for immigration are relatively straightforward. Their "intermediate" projection, which is presented as the most likely outcome, has total net migration at 1.075 million in 2005 and 2006, declining to 1 million annually beginning in 2007, 950,000 per year starting in 2016, and 900,000 per year in 2026 and thereafter.⁵ Those projections incorporate separate assumptions for legal immigration, emigration of legal foreign-born residents, and net "other" migration. The latter category comprises unauthorized residents as well as individuals who are legally admitted but not seeking permanent residence.

Under current law, the trustees are required to prepare projections of the financial solvency of the Social Security system. In those projections, the system's revenues depend on income from wages, salaries, and self-employment, which are affected by the size and composition of the working-age population. Program costs depend on the size and composition of the beneficiary population and its members' earnings history.⁶ From the agency's perspective, higher rates of immigration improve the system's solvency, at least for a time—because the immigrant population is disproportionately composed of people of prime working ages, with relatively small percentages of children and the elderly. However, outlays are also affected: those immigrants will eventually retire and become eligible to collect Social Security benefits.

The trustees' general approach in projecting the size and composition of the population is to move from recently established trends toward long-range ultimate values over

a period of five to 25 years. In the case of immigration, those ultimate values are expressed as an average annual net number of immigrants.

The trustees' projections for net legal immigration of 600,000 people beginning in 2007 are based on the assumption that current policies will continue. The Immigration Act of 1990 calls for a "flexible cap" of 675,000 immigrant admissions per year; consequently, the projections assume that, on average, that many people will be admitted as legal permanent residents each year beginning in 2007.⁷ In addition, the projections include 125,000 people admitted annually as refugees or people seeking asylum or under other miscellaneous categories. The latter figure reflects annual ceilings for admissions of refugees, which averaged about 120,000 during the mid-1990s, plus actual recent admissions of asylum-seekers and others.⁸ The trustees also assume a rate of emigration averaging 25 percent of the level of legal immigration (including by refugees and asylum-seekers), a level consistent with the best available estimates of emigration rates among the foreign-born population.⁹ The trustees' projections assume that net "other" (primarily unauthorized) immigration remains at its estimated current level of 400,000 annually through 2015, dropping to 350,000 by 2016 and to its ultimate level of 300,000 by 2026. The lower ultimate level corresponds to mid-1990s estimates of unauthorized migration between 1988 and 1992.¹⁰

The trustees recognize that projections of immigration are subject to considerable uncertainty and therefore present both "low-cost" and "high-cost" variants. The "low-cost" variant is associated with a higher rate of net migration (because immigration boosts the number of

5. Social Security Administration, *The 2006 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds* (May 1, 2006).

6. The level of an individual worker's retirement benefits under Social Security is based on his or her average level of annual earnings, adjusted for the growth of average earnings throughout the economy. A spouse of that worker is eligible for an amount equal to 50 percent of the benefits (100 percent if widowed) or a larger amount based on his or her own earnings history.

7. For a description of current policies regarding immigration, see Congressional Budget Office, *Immigration Policy in the United States* (February 2006).

8. However, since 2002 the ceiling on admissions of refugees has declined to 70,000 per year, and only about 10,000 people were granted asylum in 2003 and 2004.

9. Tammany J. Mulder, Betsy Guzman, and Angela Brittingham, *Evaluating Components of International Migration: Foreign-Born Emigration*, Working Paper No. 62 (Washington, D.C.: U.S. Census Bureau, Population Division, April 2002).

10. See Felicitie C. Bell, *Social Security Area Population Projections: 1997*, Actuarial Study No. 112 (Social Security Administration, August 1997), available at www.ssa.gov/OACT/NOTES/s1990s.html.

Table 1.**Projections of Net Migration in Selected Years**

(Thousands of people per year)

	2006	2010	2015	2020	2025	2030	2050	2100
Social Security Administration (2006)								
“Low cost”	1,270	1,400	1,400	1,350	1,350	1,300	1,300	1,300
Intermediate	1,075	1,000	1,000	950	950	900	900	900
“High cost”	810	723	723	673	673	673	673	673
U.S. Census Bureau (2000)								
High series	1,645	1,571	1,726	1,854	2,269	2,680	2,814	3,047
Interim projection (2004) ^a	920	766	796	819	996	1,161	1,097	1,058
Middle series	872	713	734	751	912	1,061	984	926
Low series	317	149	130	120	182	233	166	113

Source: Congressional Budget Office based on Social Security Administration, *The 2006 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds* (May 1, 2006), available at www.ssa.gov/OACT/TR/TR06; Frederick W. Hollmann, Tammany J. Mulder, and Jeffrey E. Kallan, *Methodology and Assumptions for the Population Projections of the United States: 1999 to 2100*, Working Paper No. 38 (Washington, D.C.: U.S. Census Bureau, Population Division, January 2000), available at www.census.gov/population/www/documentation/twps0038.html; U.S. Census Bureau, *National Population Projections, Summary Files*, “Components of Change for the Total Resident Population: Middle Series, 1999 to 2100” (January 2000), Table NP-T6, available at www.census.gov/population/www/projections/natsum-T6.html; and U.S. Census Bureau, *Interim Projections of the U.S. Population by Age, Sex, Race, and Hispanic Origin: Summary Methodology and Assumptions* (March 2004), available at www.census.gov/ipc/www/usinterimproj/idbsummeth.html.

a. The Census Bureau’s interim projection is an update of its middle-series projection.

workers paying taxes into the Social Security system more than it boosts the number of beneficiaries receiving payments); conversely, the “high-cost” variant is associated with a lower rate of net migration. Thus, while the trustees’ intermediate projection assumes total net migration of 1.075 million people in 2006 and 900,000 per year in 2026 and beyond, the alternative variants yield a range from 810,000 to 1.27 million in 2006 and from 672,500 to 1.3 million per year ultimately (see Table 1 and Figure 1). Specifically, the “low-cost” scenario has net legal immigration rising from 720,000 in 2006 to its ultimate level of 850,000 in 2007, with net other migration of 550,000 annually between 2006 and 2015, falling to its ultimate level of 450,000 in 2026; those figures are slightly above recent estimated levels of net migration, but the ultimate projected level of net migration is below the trustees’ estimated post-World War II peak that occurred in 2001 (excluding the effects of the Immigration Reform and Control Act of 1986, which temporarily raised the number of legal immigrants during the late 1980s and early 1990s).¹¹ By contrast, the “high-cost” scenario calls for net legal immigration of 560,000 people in 2006, dropping to its ultimate level of 472,500 in

2007. In that scenario, net other immigration is assumed to be just 250,000 in 2006, with an ultimate level of 200,000 in 2016.

The Census Bureau’s Projections

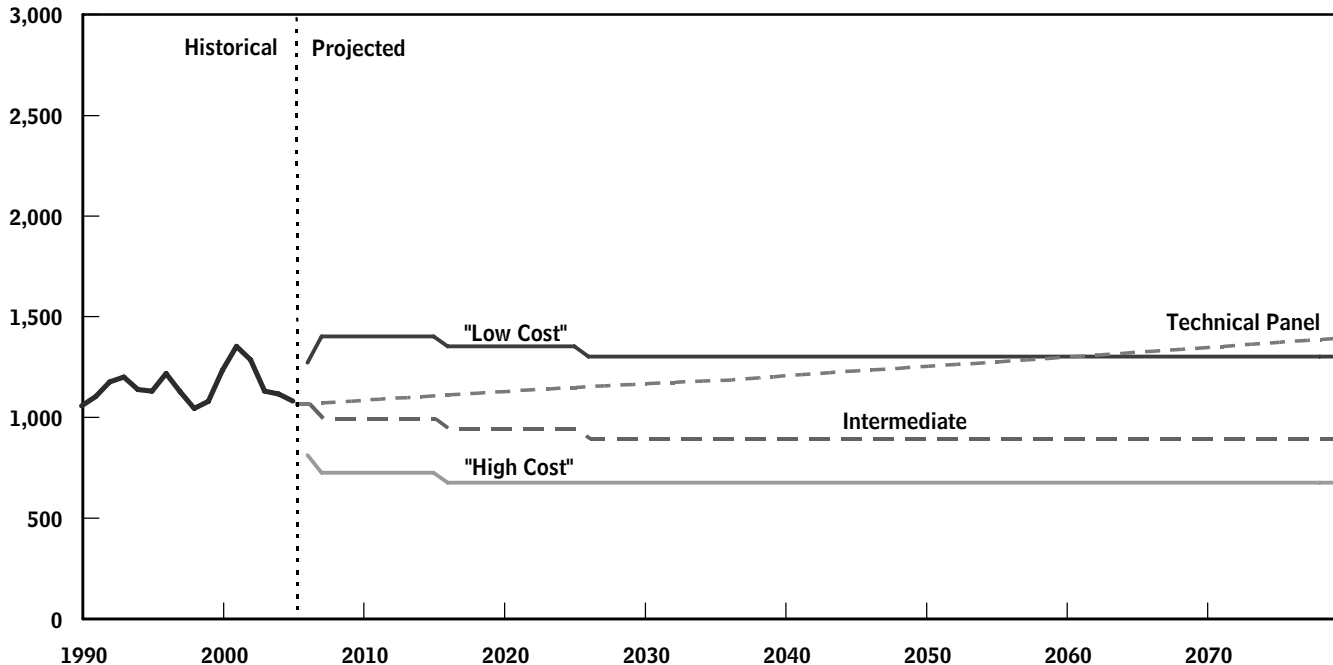
The Census Bureau’s forecast is considerably more detailed and disaggregated than that of the Social Security trustees but is based on older data. The Census Bureau’s most recent complete set of forecasts was issued in 2000, with an interim update in 2004 (whereas the trustees’ most recent forecast was prepared and issued in 2006). The bureau forecasts the numbers for various categories of migrants (including immediate relatives, refugees, unauthorized immigrants, and so forth) separately and estimates the number of “in-migrants” and “out-migrants” separately.

The number of out-migrants is specifically modeled as a function of the size and characteristics of the foreign-born

11. Social Security Administration, *The 2006 Annual Report of the Board of Trustees*.

Figure 1.**The Social Security Trustees' and Technical Panel's Projections of Net Migration**

(Thousands of people)



Source: Congressional Budget Office based on Social Security Administration, *The 2006 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds* (May 1, 2006), available at www.ssa.gov/OACT/TR/TR06; and 2003 Technical Panel on Assumptions and Methods, *Report to the Social Security Advisory Board* (October 2003), available at www.ssab.gov/documents/2003TechnicalPanelRept_000.pdf.

Notes: The historical figures are estimated. The trustees' projections of immigration are components of their assessment of the fiscal solvency of the Social Security system.

As discussed in the text, the 2003 Technical Panel on Assumptions and Methods, appointed by the Social Security Advisory Board, offered an alternative projection to the trustees' intermediate projection.

population.¹² Like the trustees, the Census Bureau has issued alternative projections with higher and lower rates of immigration than in its baseline "middle series."

The middle-series projection assumes that total net migration was 964,000 in 2000 and that it will fall to 872,000 in 2005 and 713,000 in 2010 and rise to a peak of about 1.1 million in 2030 (see Table 1 and Figure 2). Subsequently, net migration would decline, reflecting an

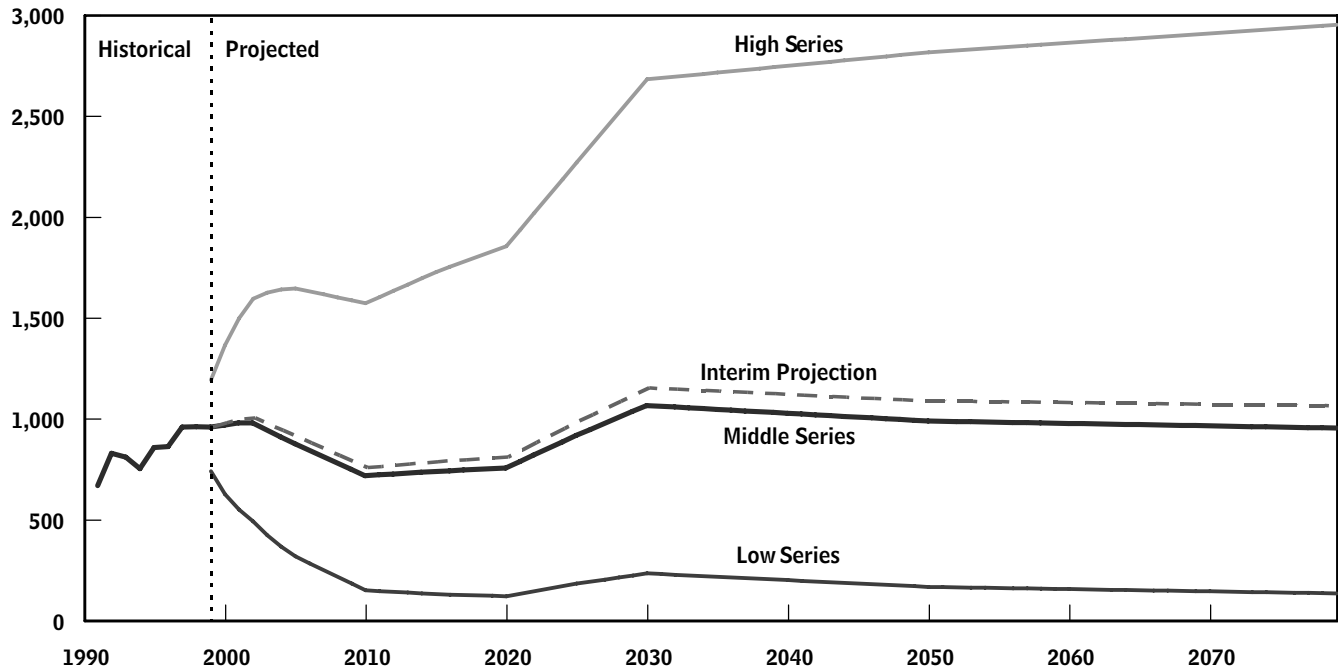
assumed constant level of immigration but a rising level of emigration.

The middle-series projection for the near term is based largely on established trends in migration to the United States from various parts of the world and an assessment as to whether those trends are likely to continue. That projection assumes that the total number of immigrant visas available in numerically limited categories will remain unchanged until 2020 but allows for variation in other categories of legal immigration. The projection for total immigration reflects several other key assumptions. Legal immigration from Mexico and Central America increased sharply during the 1990s; Census Bureau analysts attributed much of that increase to the Immigration

12. The Census Bureau's projections also take net migration between the United States and Puerto Rico into account, whereas the trustees' do not (because Puerto Rico is within the Social Security area). In addition, the Census Bureau's projections allow for the migration of native-born people, while the trustees' do not.

Figure 2.**The Census Bureau's Projections of Net Migration**

(Thousands of people)



Source: Congressional Budget Office based on U.S. Census Bureau, *National Population Projections, Summary Files*, "Components of Change for the Total Resident Population: Middle Series, 1999 to 2100" (January 2000), Table NP-T6, available at www.census.gov/population/www/projections/natsum-T6.html; and U.S. Census Bureau, *Interim Projections of the U.S. Population by Age, Sex, Race, and Hispanic Origin: Summary Methodology and Assumptions* (March 2004), available at www.census.gov/ipc/www/usinterimproj/idbsummeth.html.

Note: The historical figures are estimated.

Reform and Control Act of 1986, which legalized the presence of many previously unauthorized residents and made them eligible to eventually attain citizenship.¹³ Once naturalized, they could sponsor the legal immigration of immediate relatives, which is not subject to numerical limits, thereby temporarily boosting net migration. However, immigration from that source was thought to have peaked early in this decade and assumed to gradually decline to zero. Consequently, legal immigration from Mexico was assumed to return to its level of the early 1990s by 2010. Inflows of refugees were also expected to decline, primarily resulting from fewer applica-

tions from the former Yugoslavia. In the bureau's projections, other legal immigration was predicted to follow established trends, with adjustments for the perceived "supply" of potential immigrants in source countries. Emigration of legal foreign-born residents was subsequently projected on the basis of historical estimates of rates taking age, sex, and country of birth into account, multiplied by the size of the "at-risk" population.¹⁴ However, in light of evidence that most emigrants are people who have arrived in the United States recently, the bureau is currently reviewing its procedures for projecting emigration.

13. Frederick W. Hollmann, Tammany J. Mulder, and Jeffrey E. Kallan, *Methodology and Assumptions for the Population Projections of the United States: 1999 to 2100*, Working Paper No. 38 (Washington, D.C.: U.S. Census Bureau, Population Division, January 2000).

14. Those estimates were derived by comparing the number of foreign-born people enumerated in the 1980 census with the number enumerated in the 1990 census who had arrived before 1980, with adjustments for deaths and for estimated differences in the degree of underreporting between the two censuses.

For the longer term (after 2020), the Census Bureau's projections show rising immigration. In the middle series, the annual level of immigration rises from 1.09 million in 2020 to 1.45 million in 2030, then remains at that level until 2100. That jump reflects the projected rapid increase in the dependency ratio (the number of children and elderly people relative to the size of the working-age population) in the United States and resulting faster growth in the demand for labor relative to its domestic supply. The underlying notion is that the surge in labor demand will lead to a greater inflow of immigrants, either by inducing less-restrictive policies toward immigration or by raising wages so that migration to the United States (legal or otherwise) becomes more attractive. Thus, although the Census Bureau's projections are consistent with current law through 2020, that assumption is not necessarily maintained for subsequent years. Net migration levels decline after 2030, reflecting the assumption of a constant level of immigration while emigration continues to rise because of a still-growing "at-risk" population.

The Census Bureau notes that the actual level of immigration will ultimately depend on factors such as policy decisions; external economic and political conditions; and, in the long run, demographic developments in source countries. To convey the degree of uncertainty surrounding projections of immigration, the bureau also presents high and low variants. In developing the alternative projections, the bureau assumed that the spread between variants would widen over time.¹⁵ As a result, the Census Bureau's highest and lowest projections encompass a much wider range of possible outcomes than the Social Security trustees' "low-cost" and "high-cost" variants.

Since its 2000 forecast, which was prepared before the results of the 2000 census were known, the bureau has issued an "interim" forecast, which adjusts its estimates of the immigrant population using information from the 2000 census and incorporates a slightly higher probability that the high-immigration scenario in its previous forecast will occur.¹⁶ According to those results, the ac-

tual resident population of the United States on April 1, 2000, was 281.4 million, significantly higher than the figure of 274.5 million that had been estimated for that date on the basis of the 1990 census; most of the difference is attributable to higher-than-anticipated net migration during the 1990s.¹⁷ The interim projection implies net migration of 920,000 in 2005.¹⁸ Compared with the trustees' intermediate projection, both the Census Bureau's middle series and its interim projection show moderately lower net migration over the next two decades but moderately higher net migration after 2025.

Issues Raised by the 2003 Social Security Technical Panel

The 2003 Technical Panel on Assumptions and Methods was appointed by the Social Security Advisory Board to review the trustees' methodology and key demographic and economic assumptions used to project the future financial status of the system's trust funds, including assumptions about immigration. The panel's report specifically addressed the trustees' immigration projections, but the issues raised by the panel apply more generally.¹⁹

Broadly speaking, the panel identified three questions that it judged to be fundamental to projecting migration. First, should the forecasts be based on levels of migration (the number of people migrating each year) or derived as percentages of some population? The latter would imply rising levels simply resulting from the growth in the underlying population. Second, to what extent and on what basis should the projections be allowed to deviate from established historical trends? Third, to what extent should the projections be based on current laws and policies?

16. The probability reflects a weighted average of .938 times the 2000 middle series and .062 times the high series.

17. The population projections issued in early 2000 assumed a foreign-born population of 26.8 million in July 2000; the actual foreign-born population enumerated in the 2000 census was 31.1 million.

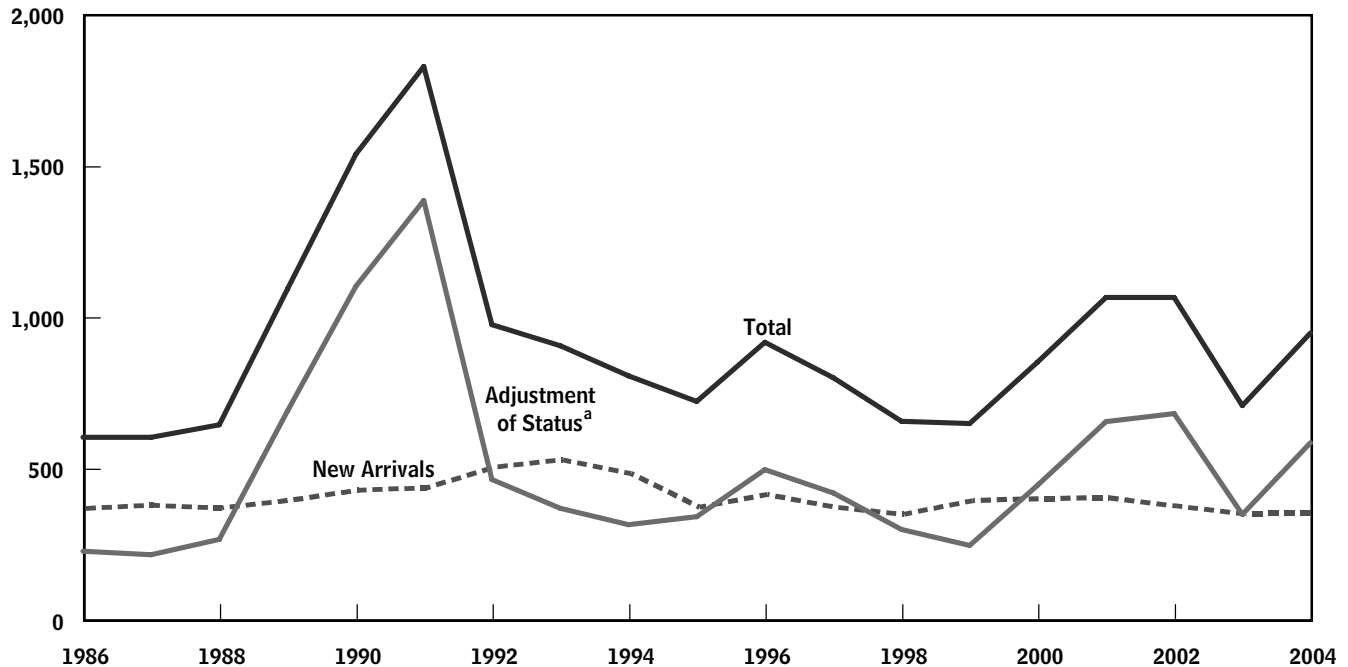
18. The bureau recently estimated that net migration was about 1.05 million between July 2004 and July 2005 and has averaged 1.2 million annually since the 2000 census. Those estimates, however, are not reflected in the bureau's near-term projections (to 2020).

19. See 2003 Technical Panel on Assumptions and Methods, *Report to the Social Security Advisory Board* (October 2003), available at www.ssa.gov/documents/2003TechnicalPanelRept_000.pdf.

15. Emigration acts to slightly dampen the deviations between the Census Bureau's alternative scenarios. Out-migration rates are higher in the low-migration series and lower in the high-migration series, but because the population at risk of emigrating is potentially much larger in the high series than in the middle or low series, the total number of emigrants is larger in the high series.

Figure 3.**The Number of Immigrants Admitted by Fiscal Year**

(Thousands of people)



Source: Congressional Budget Office based on Department of Homeland Security, Office of Immigration Statistics, *2004 Yearbook of Immigration Statistics* (2004), Table 4 (Immigrants), available at www.uscis.gov/graphics/shared/statistics/yearbook.

a. Refers to people already living in the United States when admitted as legal permanent residents.

The panel recommended that assumptions about net migration be based on an analysis of historical trends, not on current laws or policies. It noted that only one component of the trustees' projections—legal admissions excluding refugees and asylum-seekers—is based on current law. And even that flexible cap of 675,000 admissions does not apply to the largest single category of legal immigrants: immediate relatives of U.S. citizens. For that group, there is no numerical restriction on the number of people admitted. Moreover, the number of people actually admitted has exhibited significant variability from year to year, and many of those admitted had already arrived in the United States in an earlier year (see Figure 3).

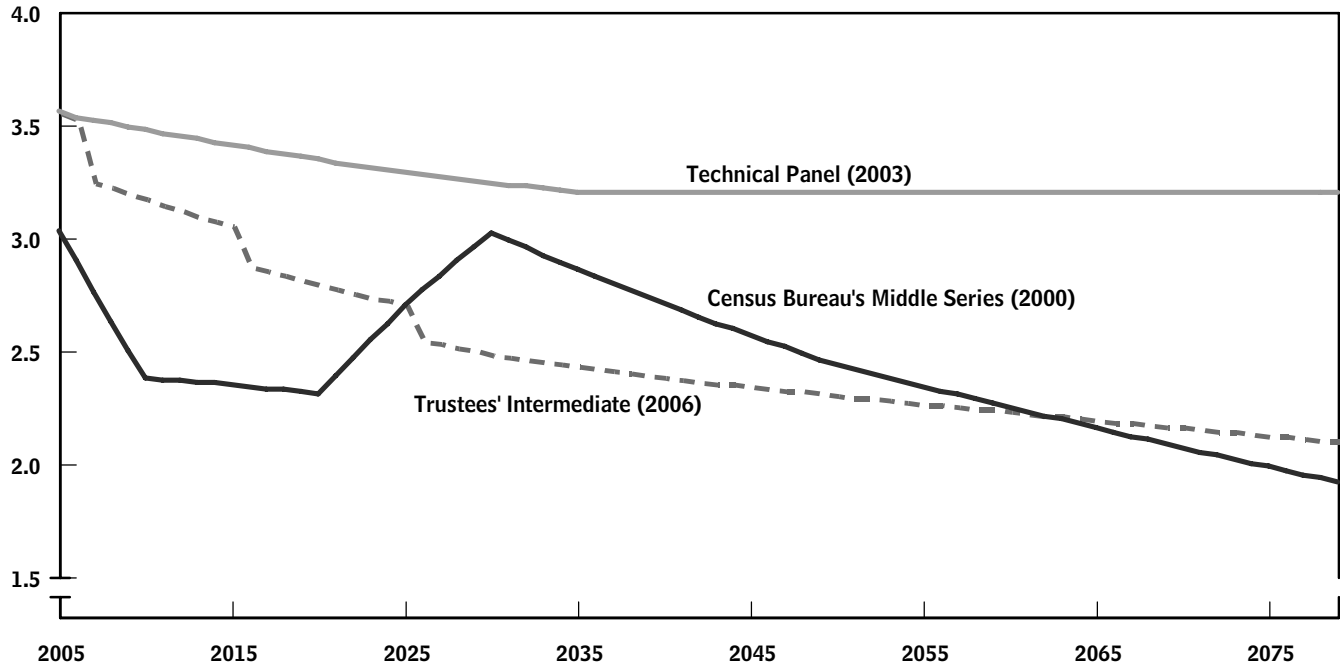
In assessing historical trends, the panel pointed to a number of factors that might influence the volume of immigration to the United States in the near term. Some of those factors would tend to boost the number of immigrants relative to recent trends. For example, the demand for immigrant labor is likely to climb along with growth in the U.S. population and economy, particularly as

members of the baby-boom generation begin to retire. Other factors might dampen immigration. For instance, heightened security concerns following the September 11 terrorist attacks might slow the process of admitting immigrants and refugees and lead to increased border enforcement. Nonetheless, the panel noted that the average growth of the annual net inflow had been about 4 percent since 1950 and concluded that, on balance, there was no strong reason to anticipate a break in that trend. The continuation of that rising trend is at odds with the trustees' and Census Bureau's projections, both of which assume a roughly constant level of net migration in the near term.²⁰

20. The panel admitted to some uncertainty as to what the appropriate starting point should be. It adopted the trustees' estimated net number of about 1.2 million migrants in 2002—the last full year for which data were available at the time of the panel's report. However, the trustees' latest projections, issued in May 2006, start from a lower base of an estimated 1.075 million migrants in 2005.

Figure 4.**Alternative Projections of Net Migration Rates**

(Migrants per thousand people of the U.S. population)



Source: Congressional Budget Office based on Social Security Administration, *The 2006 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds* (May 1, 2006), available at www.ssa.gov/OACT/TR/TR06; 2003 Technical Panel on Assumptions and Methods, *Report to the Social Security Advisory Board* (October 2003), available at www.ssab.gov/documents/2003TechnicalPanelRept_000.pdf; U.S. Census Bureau, *National Population Projections, Summary Files*, "Components of Change for the Total Resident Population: Middle Series, 1999 to 2100" (January 2000), Table NP-T6, and "Annual Projections of the Total Resident Population as of July 1: Middle, Lowest, Highest, and Zero International Migration Series, 1999 to 2100," Table NP-T1, available at www.census.gov/population/www/projections.

The panel recommended that the long-run projections for net migration should be expressed not as a level, but rather as a rate—the annual net number of migrants divided by the size of the population. That rate had risen from a very low level in the 1940s and 1950s to around 4 per thousand in recent years—roughly comparable to the average rate during the previous period of high net inflows of immigrants between 1840 and 1910. The panel suggested that the rate be assumed to gradually decline to its historical (1821-2002) average of 3.2 per thousand (see Figure 4). But with the population continuing to grow, that assumption would still yield a steady increase in the net number of immigrants, which would reach about 1.4 million by 2080 (see Figure 1 on page 4). For a “low-cost” variant, the panel suggested a net migration rate held constant at its 2002 level of 4.15 per thousand, resulting in a net migration level of close to 2.1 million annually by 2080 and to 2.3 million annually by 2100.

The panel viewed the trustees’ assumption for its middle series of a constant net number of migrants as appropriate in a “high-cost” scenario.

Other Analyses of Future Immigration

Some experts take an approach to forecasting immigration that differs from that of the technical panel. For example, Lee, Miller, and Anderson use a statistical time-series model to assess alternative net immigration projections and conclude that the preferred projection model should be based on the level of immigration rather than on its rate.²¹ The authors base their analysis on data from 1925 through 2002—a period in which the average im-

21. Ronald Lee, Timothy Miller, and Michael Anderson, *Stochastic Infinite Horizon Forecasts for Social Security and Related Studies*, Working Paper No. 10917 (Cambridge, Mass.: National Bureau of Economic Research, November 2004).

migration rate was below that of the 1821-2002 period cited by the technical panel. They chose 1925 as their starting point because it represents the first full year following the adoption of the restrictive Federal Immigration Act of 1924; immigration patterns before that year, the authors argue, are irrelevant for purposes of projecting into the 21st century. In their model, the projected net number of immigrants (legal and illegal) falls from the estimated 2002 level of 1.2 million to about 1 million in 2020, then slowly rises back to about 1.2 million. Those projections are generally higher than those of the Social Security trustees and the Census Bureau but below those of the technical panel.

Beyond methods that generally extend either levels or trends, it may be possible to improve projections by explicitly taking into account factors that are believed to influence rates of immigration. Indeed, there are numerous potential influences on the number of immigrants to the United States, although how those factors will play out and in some cases interact may in practice be quite difficult to predict.

A recent analysis by Howe and Jackson lays out a number of broad theoretical frameworks that could help to assess both “push” factors—factors influencing the potential supply of immigrants to the United States and other countries—and “pull” factors—factors influencing the attractiveness of the United States and other countries as a destination for immigrants.²² Push factors typically refer to conditions in potential source countries, such as demographics, wages and employment opportunities, and the degree of political freedom. Pull factors include wages and employment opportunities in the United States, the presence of an existing community of earlier immigrants, and policies that either promote or inhibit immigration.²³

One framework for analysis focuses on how policies toward migration influence behavior. For example, some analysts operating within that framework have concluded that tighter border enforcement can at least for a time

paradoxically boost net unauthorized migration. Members of a large unauthorized population already present in the United States are deterred from returning to their home country for fear that they will be unable to reenter, and that effect outweighs the direct effect on entry. However, a key insight is that in the long run, policy and enforcement are influenced by underlying social, economic, and demographic trends.

Economic analysis of migration patterns emphasizes the function of an increasingly global labor market. In that view, people will choose to migrate from low-wage to high-wage countries if and to the extent that higher earnings are expected to compensate for the costs of moving. That framework takes into account both push and pull factors and lends itself well to quantitative projections. Migration to the United States will be positively correlated with wage growth and perceived employment opportunities here and negatively correlated with the pace of economic development in source countries and with the expected costs and risks of moving.

A limitation of traditional economic analysis, at least according to some analysts, is that it ignores the roles of culture and social ties (except to the extent that they are implicitly included in estimates of moving costs). Other theories attempt to incorporate such factors—as exemplified by one that gauges societies’ integration into the global economy. Immigrants typically come not from the poorest societies, but rather from those that have already been integrated to some degree into the global market economy. Once that integration occurs, migration begins as people recognize that they can improve their standard of living. As the first wave of immigrants sends remittances home, the standard of living of remaining family members rises, but at the same time so do their aspirations for further gains, thus leading to additional waves of immigrants.²⁴ The supply of potential immigrants will then depend in part on the rate at which the remaining traditional societies are integrated into the global economy.

Another approach emphasizes the role of family subgroups, treating migration as reflecting a series of decisions made within the family over a period of a number of years. Migration not only generates income in the form of remittances but also offers diversification of in-

22. Neil Howe and Richard Jackson, *Long-Term Immigration Projection Methods: Current Practice and How to Improve It*, Working Paper No. 2006-3 (Boston, Mass.: Boston College, Center for Retirement Research, February 2006).

23. For more information on the determinants of migration, see Congressional Budget Office, *Global Population Aging in the 21st Century and its Economic Implications* (December 2005).

24. For a discussion of remittances, see Congressional Budget Office, *Remittances: International Payments by Migrants* (May 2005).

come sources. Over time, family subgroups move back and forth between the sending and receiving communities. Wage differentials between the source and receiving countries continue to play a role, but that role is secondary to the objective of reducing the uncertainty of income. Moreover, the family and community linkages that arise as people from a particular source community migrate to a particular receiving community serve to reduce the risks and moving costs associated with migration. Such analysis implies that migration patterns are likely to persist for some time even if the original precipitating factors are no longer present.

Several other factors are likely to affect future immigration patterns. One is fertility in key source countries. According to data from the 2000 census, about 30 percent of the foreign-born population came from Mexico. However, the fertility rate in Mexico, which stood at 6.8 children per woman in 1970, had fallen to 2.4 per woman by 2000 and is expected to continue declining.²⁵ Consequently, the population of potential immigrants is currently growing at a much slower rate than in the recent past, which could slow the growth of migration from Mexico. In addition to economic and demographic factors, potential immigration to the United States from any source country depends on political factors, including freedom and stability as well as policies regarding the ease of emigration. And an array of noneconomic and economic factors could influence the perceived attractiveness of the United States as a destination for immigrants relative to alternative destinations (such as Canada, Europe, Japan, and Australia).

Conclusions

Immigration projections are subject to a high degree of uncertainty. Predicting future levels of net migration requires assumptions not only about whether immigration

will rise or fall relative to its current level but also about what that current level is. Unfortunately, that level—particularly its unauthorized component—can be estimated only imprecisely. The Census Bureau's projections, at least in the near term, reflect estimates of recent net migration levels that appear to be too low. The Social Security trustees' projections, on which CBO's 10-year projections for the labor force are based, are more consistent with recent estimated levels of net migration. However, the trustees' assumption that net unauthorized migration will decline from estimated recent levels can be questioned.

There is no consensus among experts regarding the issues raised by the Social Security Technical Panel, particularly whether to project net migration using levels or rates. For preparing a projection of the most likely scenario, it is probably reasonable to deviate from an assumption that extends current laws and policies, particularly over longer time horizons. If that assumption about current laws and policies is required for analytical reasons, it need be applied only to numerically limited categories. For other categories of legal immigration—by immediate relatives of U.S. citizens, refugees, and asylum-seekers, for instance—projections can be based on historical trends and averages and on an assessment of the potential inflows of such immigrants.

The most important source of uncertainty will be in projecting unauthorized migration. Here, it would be appropriate to begin with historical trends, adjusting them where possible on the basis of an assessment of the various push and pull factors. But such an exercise would probably be difficult, both because many of the factors are themselves difficult to predict and because there may be complex interactions among them. Finally, although the theoretical framework is useful in highlighting factors that can influence the rate of net migration, it offers little guidance as to how quantitatively important any of the effects are.

25. Jeffrey S. Passel, "Unauthorized Migrants: Numbers and Characteristics" (background briefing prepared for the Task Force on Immigration and America's Future, June 2005).