Immigration and Social Security

A Public Policy Issue Paper

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Key Points:

This issue paper discusses the importance of immigration to the financial evolution of Social Security. The major points made are:

1. Immigration is a crucial component both to the trajectories of the population of the United States and the financial condition of the Social Security system.

2. Immigration favorably affects Social Security due to increased tax revenue and faster economic growth, although it is not sufficient to solve Social Security finances by itself.

3. Immigration more quickly affects system finances than fertility because of the more immediate effect on covered employment.

4. Because of a lack of information, the evolution of U.S. immigration policy and its enforcement, and relative labor market and political conditions, significant uncertainties exist concerning immigration projections.

Immigration and Social Security

Executive Summary

Immigrants represent a significant component of the population of the United States. Immigrants in covered employment favorably affect the financial condition of Social Security, both because of their contribution to economic growth and due to the taxes they pay into the system that supports the disabled and those in retirement. Their contribution to Social Security's financial condition are critical to its future financial condition.

Immigration both affects and is affected by other demographic factors (e.g., fertility and mortality) and economic factors (e.g., labor force, economic growth, and productivity) that underpin future Social Security taxes and benefits.

The number and composition of immigrants will determine how the U.S. working-age population evolves. Without immigration, our country's low fertility and aging population are projected to adversely affect the important metric of the number of workers per beneficiary.

In analyzing the effects of immigration on Social Security, it is important to assess the impact by immigrant subgroups, including differentiating lawful permanent residents (LPR) from those who are other-than-LPR immigrants.

The varied and changing characteristics of immigrants and the complexity of their effects on the population and the economy, along with limited reliable data, makes for considerable uncertainty regarding the number of immigrants and their composition. This especially applies to those who are other-than-LPR immigrants and to emigrants.

Although immigration benefits Social Security finances, the largest part of the solution to Social Security's actuarial deficits must come from other sources.

This issue paper uses footnotes, marked with Arabic numerals, for necessary clarifications and definitions. Endnotes, marked with Roman numerals, are used for technical references.

Endnotes appear on page 26.

Introduction

This issue paper describes immigration's[1] effects on the finances of the Old Age, Survivors, and Disability Insurance program (OASDI, commonly referred to as *Social Security*).

Certain characteristics of the immigrant population, such as their age distribution and rates of fertility and mortality, differ from those of the native-born population, which in turn affects the trajectory of the total population. New immigrants, whether lawful permanent residents (LPRs) or other-than-LPRs, can enhance the finances of the Social Security program when they participate in covered employment, especially in a labor-short environment. Based on the assumptions discussed in this issue paper, but absent future immigration, both the total population of the United States and its labor force will decline toward the end of the century. The immigration of workers with needed skills will favorably affect the economy and the future solvency of Social Security.

What Is Social Security?

Social Security is a U.S. social insurance program that is primarily funded by a payroll tax on the earnings of covered workers, paid equally by employers and employees.[2] The program provides monthly benefits to retired workers, their dependents, and survivors (OASI) and to disabled workers and their dependents (DI).

OASDI taxes are levied on covered earnings from employment in the United States and certain U.S. territories, as well as employment by certain U.S. citizens and permanent residents outside the United States and its territories. Covered employment includes most jobs, with certain exclusions, primarily state and local government employees. It includes work performed by non-citizens in the United States and specified territories, except for work performed by those on temporary or seasonal agricultural work visas and citizens of countries with which the United States has a totalization agreement who are on temporary assignment to a foreign employer's U.S. work location. These agreements prevent double taxation and fill benefit gaps for persons who have divided their careers between the United States and another country. About 94% of workers[i] in paid employment and self-employment in the Social Security area[3] pay into Social Security.

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1 Net immigration is the net effect of immigration (persons entering the country) and emigration (persons leaving the country). The term *migration* encompasses both immigrants and emigrants.

2 Self-employed workers pay both the employer and employee portions. There are certain non-covered state and local government workers who do not participate in Social Security.

3 The Social Security area population consists of residents of the 50 states, the District of Columbia, U.S. territories, civilian residents of Puerto Rico, and federal civilian employees and persons in the U.S. Armed Forces abroad and their dependents, non-citizens living abroad who are insured for Social Security benefits, and most other U.S. citizens abroad.

Social Security taxes serve as the basis for eligibility for benefits and determine benefit amounts. A worker needs at least 40 quarters of coverage[4] to receive retirement benefits from Social Security, beginning at age 62 or later.

Each year, the Office of the Chief Actuary at the Social Security Administration, on behalf of the Social Security Board of Trustees, projects the finances of Social Security. These projections are included in the Annual Report of the Board of Trustees of the Federal OASI and DI Trust Funds (Trustees Report). The Trustees Report contains short-term and long-term measures of the solvency of Social Security, described in the Appendix to this issue paper.

If current law is not altered, the actuarial deficit for OASI will continue to increase throughout the projection period. The trust funds on a combined basis are projected to become depleted in 2035. At that point, continuing income to Social Security would be sufficient to pay about 83% of scheduled benefits, declining somewhat thereafter.

Importance of Population/Demographic Projections to Social Security

To calculate the measures of the financial status of Social Security, the trustees project a wide range of demographic and economic factors. This section addresses mortality, fertility, and migration, the key demographic assumptions[5] involved in the projection of future population size and its characteristics that underlie the financial projection of revenue and expenses of Social Security. They are also used to derive the important measure of workers per beneficiary.

Mortality rates have declined substantially in the United States since 1900, with rapid declines over some periods and slow or no improvement over others. This decline has resulted in generally increased life expectancies of both men and women (with some temporary decreases in recent years due to COVID-19 and the drug overdose crisis) and is projected to continue. Table 1 summarizes this trend. The rate of mortality improvement has also differed by socioeconomic group, reflected in Social Security projections by its impact on average benefits received.

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4 Quarters of coverage, up to four in a calendar year, are calculated by dividing covered earnings by a set dollar amount, which is $1,730 in 2024, adjusted annually by changes in the National Average Wage (NAW).
5 For a more complete discussion of the demographic and the economic assumptions, see the American Academy of Actuaries September 2023 issue brief, *Assumptions Used to Evaluate Social Security's Financial Condition*.

Table 1. Period Life Expectancy[6] at Age 65

As of the Year:	Period Life Expectancy	
	65-Year-Old Man	65-Year-Old Woman
1975	13.7	18.0
2023	17.9	20.5
2036	19.1	21.6

Source: Table V.A4 of the 2024 Trustees Report (Social Security).[ii]

The trustees developed a set of birth rates by age of mothers, from which they derive the total **fertility** rate,[7] which has fluctuated over the years, reaching a 20th-century high of 3.68 births per woman in 1957. However, the rate has been below 1.90 births from 2011 through at least 2023, when an all-time low of 1.615 was (provisionally) reached in 2023. It is projected to remain below 1.8 births through 2028, increasing to 1.9 by 2036. If the total fertility rate remains below 2.1 births for an extended period, deaths will outnumber births and the population will decline unless net immigration makes up the difference, as shown in Figure 1. Selected total period fertility rates are shown in Table 2.

Table 2. Total Period Fertility Rates

In the Year:	Total Period Fertility Rate
1950	3.03
1980	1.82
2000	2.05
2023	1.64
2036	1.90

Source: Table V.A1 of the 2024 Trustees Report. Subsequent to the 2024 Trustees Report,
the 1.64 TFR was provisionally estimated by the National Center for Health Statistics to be 1.615.

Migration assumptions are quite important in projecting the future financial condition of Social Security. For example, according to the United States Census Bureau (Census), new immigrants made up about 54%[8] of U.S. population growth between July 1, 2022, and June 30, 2023, a significant increase from earlier years. Figure 1 shows that, in a decomposition of the annual growth in the U.S. population, migration may more than offset a negative natural change (births minus deaths) in the population, at least through mid-century. Further, the migration process is both complex and dynamic, influenced by politics, economics, and the environment.

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6 The life expectancies shown here are "period life expectancies" at a given age for a given year. They are the average remaining number of years expected prior to death for a person at that exact age, born on January 1, using the mortality rates for that year over the course of his or her remaining life.

7 The total period fertility rate, the average number of births per woman over her lifetime, is calculated based on age-specific fertility rates in a given calendar year.

8 The number of new immigrants in 2023 divided by the estimated change in population between July 1, 2022, and July 1, 2023, indicated by the Census, in "2023 Population Projections for the Nation by Age, Sex, Race, Hispanic Origin and Nativity" by the U.S. Census Bureau. Note that immigration estimates differ; for example, according to the estimates underlying the 2024 Trustees Report, the number of new immigrants in 2023 represents about 80% of total population growth in 2023.

Figure 1. Sources of Population Growth

Percent
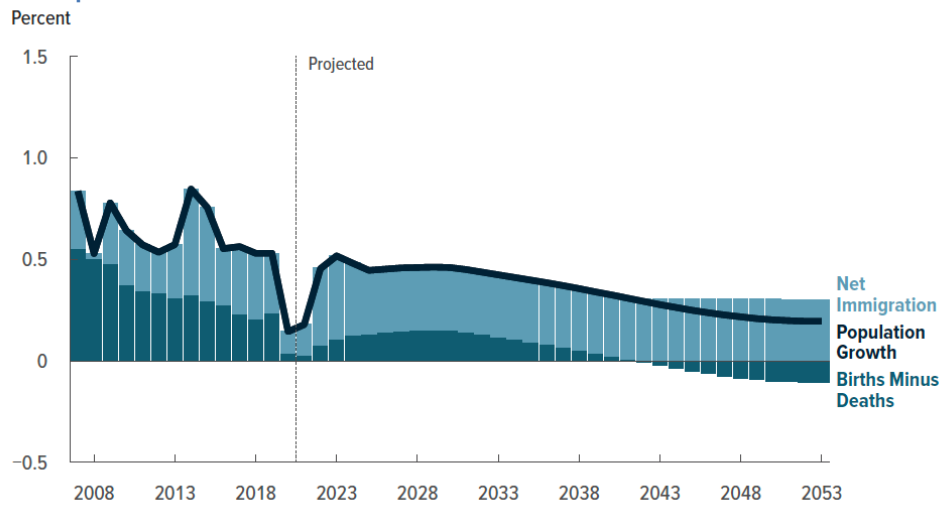
Source: CBO (2024), p1.[iii]

Because many new immigrants are of working age, a change in the number of immigrants in covered employment has an immediate impact on Social Security finances greater than would a corresponding change in the number of births.

The 2022 American Community Survey (ACS) indicated that there are about 46.1 million people who are not native-born,[9] about 13.9% of the total U.S. population, the ratio of which is close to its peak of 14.8% in 1890.[iv]

Using the trustees' intermediate projections, improved mortality and below-replacement fertility have led to a projected decline in covered workers per beneficiary. This ratio is projected to gradually decrease to 2.0 in 2070, and increase slightly to 2.1 in 2080 and thereafter, as shown in Table 3. This projected decline will put Social Security under increasing financial stress.

Table 3. Covered Workers per Beneficiary

In the Year:	Workers per Beneficiary
1970–2008	3.1-3.7
2023	2.7
2035	2.4
2070	2.0
2080	2.1

Source: Table IV.B3 and its Supplemental Single Year Table of the 2024 Trustees Report.

9 23.2 million from Latin America, 14.3 million from Asia, 4.7 million from Europe, 2.8 million from Africa, 0.8 million from Northern America, and 0.2 million from Oceania. Source: https://data.census.gov/table/ACSDP1Y2022.DP02.

Immigrants—A Deep Dive

To understand our immigrant population and migration issues related to their potential impact on Social Security finances, it is important to dig deeper than the aggregate number of immigrants. The 2024 Trustees Report distinguishes between LPR and other-than-LPR immigrants.

- LPR immigrants include permanent residents, who have been authorized to live and work in the United States; those granted refugee status up to an annual maximum number of refugees (ceiling); and asylees (those who entered the U.S. seeking asylum status).[10]

- Other-than-LPR immigrants are foreign workers, students, tourists with temporary visas, and undocumented immigrants. The most significant categories of other-than-LPR immigrants are:[v]
  - Non-immigrants: foreign nationals who enter the United States with authorization to stay for a temporary period for a specific purpose, such as students and exchange visitors, temporary workers, and diplomats;
  - Never-authorized: those who are unauthorized to enter and were never previously legally authorized to reside in the United States; and
  - Visa-overstays: those who at one point had temporary legal authorization to reside in the United States but who have overstayed their visas.

Lawful non-immigrant admissions[vi] have a limited impact on Social Security, although they are numerous. In 2022 there were 96.8 million in total,[11] including 44.9 million temporary workers, 34.9 million temporary visitors for pleasure, 4.2 million temporary visitors for business, 1.3 million students, 0.4 million transit individuals, 0.4 million exchange visitors, and 0.3 million diplomats and other representatives. Many of these people either do not have U.S.-based earnings or do not pay Social Security taxes.

The 2024 Trustees Report (Table V.A2 Supplemental Single Year Table) projected that, between 2025 and 2100, total annual net immigration to the United States will average about 1,260,000 (slightly decreasing over the period), with about 791,000 LPR immigrants and about 469,000 (slightly increasing over the period) other-than-LPR immigrants.

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10 The Department of Homeland Security defines a refugee as an individual who applies for refugee status before entering the United States and an asylee as an individual who enters the United States first and then requests asylum, either of whom is unable or unwilling to return to his or her country of nationality because of persecution or has a well-founded fear of persecution. Its Yearbook of Immigration Statistics of 2023 indicated that there were about 492,000 asylees in 2022, compared to about 151,000 in 2021, with about 37,000 asylum grants compared with about 17,000 in 2021; most were from Caribbean or Latin American countries.

11 Note that the number of people included in the specific categories do not equal the total number of non-immigrant admissions.

The annual number of refugees has varied each year depending on worldwide or local political or environmental events or conditions, economic attractiveness of entering the United States compared to other countries, and U.S. policy regarding the annual refugee ceiling and implementation of this policy. The ceiling is determined by the president in consultation with Congress. The 2022 Department of Homeland Security Annual Flow Report[vii] indicates that 25,519 refugees were admitted in 2022 against a ceiling of 125,000, which was an increase from 11,454 in 2021. This report indicates that "refugee admissions were slow to recover in 2022 and 2021 despite these years having much higher ceilings than 2020."

U.S. law has placed various limits on specific types of immigrants, e.g., limits on the number of permanent employment-based immigrants (140,000 per year) and the number of people who can be awarded refugee status per year (125,000 in 2023). This suggests that projections should take these limits into account.

Table 4 shows, for selected years, the ratio of the number of net new immigrants in a year to the Social Security area population in that year. Between 1980 and 2023, this ratio averaged 3.5 per 1,000 persons, with a range of 0.6 to 6.2. Between 2022 and 2025, the trustees estimated or projected this ratio would be above this average, with ratios after 2025 gradually decreasing from 4.3 per 1,000 persons as a result of a growing U.S. population.

Table 4. Net Immigrants per 1,000 People

In the Year:	Net Immigrants per 1,000 Social Security Area Population
1980–2004	3.7
2005	6.2
2008	0.6
2009–2022	2.6
2023	5.0
2024	5.3
2025	4.3
2050	3.2

Source: Supplemental Single Year Tables V.A2 (net immigrants) and V.A3 (population) of the 2024 Trustees Report.

An individual arriving in the United States can seek asylum status.[12] The applicable filing must be made within one year of arriving in the country. Asylum status may be granted in one of two ways: affirmatively through a Customs and Immigration Services asylum officer or defensively before an immigration judge where the applicant has been placed in removal proceedings by an immigration official. There is no aggregate ceiling on the number of asylees. An individual seeking asylum status can seek authorization to work in the United States. Historically, approval (to work) has been granted within one to two months; however, as of the date of this writing, backlogs have resulted in approvals taking from five to seven months. The median processing time for an asylum application for cases filed in 2019 was 995 days,[viii] in contrast with 280 days in 2013. There were 36,615 asylum grants in 2022.

Estimates of the number of undocumented immigrants have differed widely. The Department of Homeland Security reports that there were 2,584,220 initial enforcement encounters[13] of non-citizens in 2022, with over 88% of these encounters being individuals whose nationality is in countries in South and Central America and the Caribbean. Edelber and Watson estimated[ix] the number of what they referred to as non-legal or pending immigrants in 2023 consisting of:

- "Likely stay-overs" of about 1 million who might be considered as pre-asylees.
- An asylee backlog of over 1 million.
- Those granted humanitarian parole of 800,000 (mostly from Cuba, Haiti, Nicaragua, and the Ukraine).
- An unknown number of immigrants who were not "encountered."
- Further discussion of this backlog and related aspects of other-than-LPR immigration is outside the scope of this issue paper.

The status of some of those who are other-than-LPR immigrants may be adjusted to become LPR immigrants. These include those people living in the United States as temporary workers, students, or unauthorized immigrants who apply for and receive LPR immigrant status. The annual number who transfer status has been relatively stable over at least the past two decades ending 2022, between 396,000 and 597,000, averaging about 450,000 over that period, making up about 54% of the total new LPR immigrants in 2022. The trustees project that about 450,000 other-than-LPR immigrants will annually be adjusted (that is, their status will change or be transferred) to become LPR immigrants.

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12 However, based on June 4, 2024, remarks by President Biden: "Migrants will be restricted from receiving asylum at our southern border unless they seek it after entering through an established lawful process."
13 Encounters include people who have been encountered multiple times and those who were immediately removed from the United States.

By law, employers must withhold Social Security taxes from a worker's covered earnings, independent of whether the worker is an LPR or an other-than-LPR immigrant. Corresponding benefits are also payable as long as the worker is eligible—that is, has contributed to the system for at least 40 quarters. However, if an employer pays a worker informally without withholding Social Security taxes, no contributions to or benefits from the Social Security program are payable.

If contributions are made to a person with a false Social Security number or if the worker has an expired visa, such contributions do not result in Social Security benefits being payable. Thus, even if they contribute to Social Security, immigrants working while in an other-than-LPR immigrant status will not be eligible to receive Social Security benefits unless they later move to an LPR immigrant status and work the required number of quarters. Without a valid SSN, when their employer files Social Security taxes with the Internal Revenue Service, their wages are posted to the Social Security's earnings suspense file (ESF) by the Social Security Administration for workers who do not match Social Security's records. In 2010, according to the Office of the Chief Actuary of Social Security, the ESF received about $13 billion of taxes, less about $1 billion of benefits to other-than-LPR immigrants;[x] this amount is certainly greater than that today (out of a total of about $637 billion of total OASDI tax revenue or about 1.9%). Thus, other-than-legal LPR immigrant workers pay for benefits they will never receive unless they obtain legal authorization to work in the United States. The largest financial effect of other-than-LFR immigrants is derived from their children born in the United States.[xi]

On average, LPR immigrants generally have a higher income than those who are other-than-LPR immigrants, which results in both higher average contributions and consequential higher benefits than other-than-LPR immigrants.

Historical Experience and Trends in Immigration by Type and Source

Figure 2 shows the number of annual net LPR and other-than-LPR immigrants entering (or exiting) the Social Security area at five-year intervals from 1980 to 2010 and each year thereafter through 2023. In 2023, there were an estimated 811,000 net LPR immigrants and 914,000 net other-than-LPR immigrants.

Figure 2. Total Net Immigration (in thousands)
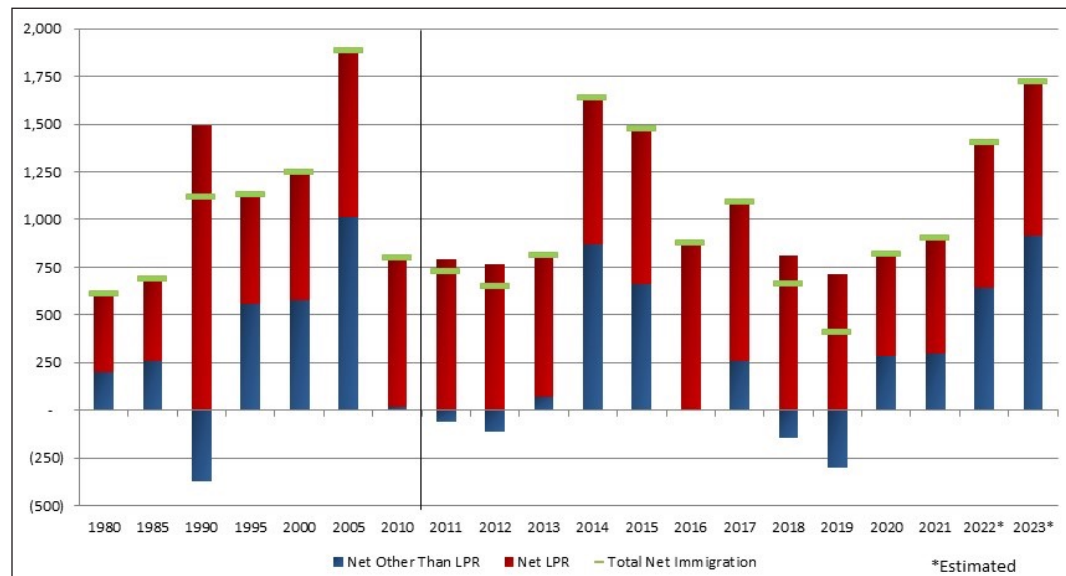
Source: 2024 Trustees Report, Table V.A2.

An increase in immigration can stabilize the size of a country's labor force in an environment where birth rates are declining. Because immigrants who work in covered employment tend to be younger, they pay taxes immediately into the Social Security program, while they receive benefits many years later—or, sometimes, not at all. Further, because immigrant women have tended to have somewhat higher birth rates than native-born women,[xii] immigration extends the favorable tax-paying effect into future generations.

Table 5 shows the total number of people who attained LPR immigrant status during fiscal years 2013 to 2022, including those who were adjusted from an other-than-LPR immigrant to LPR immigrant status, excluding emigrants who had an LPR immigrant status.

Table 5. Number of Immigrants Who Attained LPR Immigrant Status Between 2013 and 2022

Fiscal Year	Immigrants Obtaining LPR Immigrant Status
2013	990,553
2014	1.026,518
2015	1,051,031
2016	1,183,505
2017	1,127.167
2018	1,096,611
2019	1,031,765
2020	707,362
2021	740,002
2022	1,018,349

Source: Department of Homeland Security.[xiii]

Table 6 shows the origin of new LPR immigrants by region and country. Of the 1,018,349 immigrants who obtained LPR immigrant status in 2022, about 78% were of working age (age 18 to 65), in comparison to about 61% of the total U.S. population in this range of ages. These LPR immigrants consisted of about 428,000 immediate family[14] members, 270,000 employment-based, 166,000 family-sponsored, 83,000 refugees or asylees, 43,000 admitted under the diversity program primarily from Central America, and 27,000 under other programs. The continent from which the largest number of LPR immigrants originated is Asia, followed by North America (including Central America and the Caribbean).

Table 6. New Lawful Permanent Residents by Continent and Countries of Birth With a Large Number of Immigrants for Fiscal Years 2015, 2020 to 2022

	2015		2020		2021		2022	
Total	1,051,031		707,362		740,002		1,018,349	
Asia	430,508	41.0%	272,597	38.5%	295,306	39.9%	414,951	40.7%
India	65,116	6.2%	46,363	6.6%	93,450	12.6%	127,012	12.5%
China-Mainland	74,558	7.1%	41,483	5.9%	49,847	6.7%	67,950	6.7%
Other	291,834	27.8%	184,751	26.1%	152,009	20.5%	219,989	21.6%
North America	366,126	34.8%	333,372	47.1%	240,435	32.5%	332,672	32.7%
Mexico	158,619	15.1%	107,230	15.2%	138,772	18.8%	138,772	13.6%
Other	207,507	19.7%	226,142	32.0%	101,663	13.7%	193,900	19.0%
South America	72,309	6.9%	62,219	8.8%	71,331	9.6%	99,900	9.7%
Africa	101,415	9.6%	76,649	10.8%	61,521	8.9%	75,606	8.8%
Europe	85,803	8.2%	68,994	9.8%	61,521	8.3%	75,606	7.4%
Oceana	5,404	0.5%	3,998	0.6%	4,147	0.6%	5,132	0.5%
Unknown	677	0.1%	633	0.1%	1,011	0.1%	1,392	0.1%

Source: *2022 Yearbook of Immigration Statistics*; Office of Homeland Security; Tables 3 and 10.

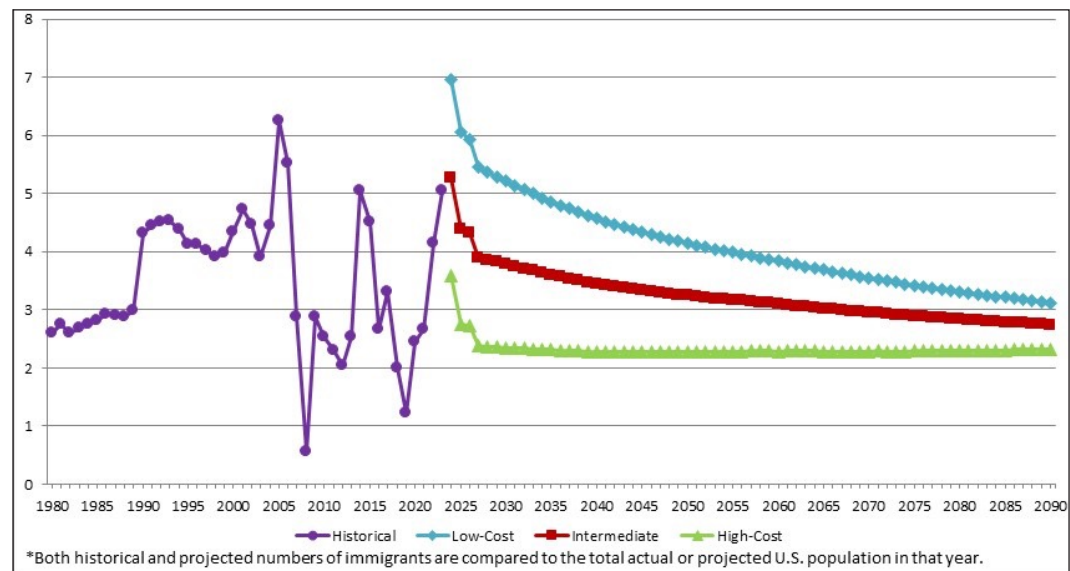| By type of program:		
Immediate relatives of U.S. citizens	428,268	42.1%
Family-sponsored preferences	166,041	16.3%
Employment-based preferences	270,284	26.5%
Diversity	43,233	4.2%
Refugees/asylees	83,082	8.2%
Other	22,441	2.2%

14 The OECD[xvii] estimated the composition of the 2021 immigrants by type: family: 533,200 (64%); work-related: 104,800 (12%); accompanying family of workers: 102,000 (12%); humanitarian: 48,200 (6%); and other: 47,000 (6%).

Future Immigration

The trustees expect a greater-than-average number of immigrants in 2023 and 2024, in part as a result of working through the review backlogs that resulted from factors including a lack of sufficient immigration processing staff and COVID-19 impacts. The trustees project a relatively constant number of LPR migrants (immigrants less emigrants) from 2027 onward and a slightly declining number of other-than-LPR immigrants due to a corresponding increase in the number of emigrants.

Figure 3 shows the annual number of net immigrants per 1,000 of the Social Security Area Population (under the three sets of assumptions as shown in the 2024 Trustees Report). The spike in 2023 and 2024 is largely due to the projected recovery from backlogs after low levels during the COVID-19 pandemic.

Figure 3. Net Immigration Rate per 1,000 U.S. Population

*Both historical and projected numbers of immigrants are compared to the total actual or projected U.S. population in that year.

Source: Tables V.A2 and V.A3 of the 2024 Trustees Report.

Figure 3 illustrates several features of historical and projected annual net immigration under three trustee scenarios. These rates have historically varied widely each year, depending on U.S. immigration policy, as well as worldwide economic and political conditions. Expressed as a ratio to the U.S. population, the trustees' intermediate and low-cost immigration projections gradually decline in the future, although the absolute difference remains constant over time. The net immigration rates per 1,000 of population in 2020 are 4.2 for the intermediate assumption, declining to 2.6 per 1,000 by 2095. This decline is primarily the result of projected increases in the total U.S. population.

Three U.S. government agencies independently project the number of immigrants to the United States. The Social Security trustees project the average number of immigrants of about 1.3 million per year for 2027 through 2054, in comparison to that of the Congressional Budget Office[xiv] of about 1.1 million and that of the Census[xv] of about 0.9 million.

Expressing the projected number of immigrants after the first few years after the projection as a constant number represents a "fixed level" assumption—that is, the fixed number of immigrants as indicated in current law. This contrasts with a "fixed rate" assumption based on a ratio to a benchmark, such as the total U.S. population, the existing immigrant population, or the size of the economy.

Some demographers believe the projection of a constant number of immigrants (the fixed-level approach) in a growing national economy or U.S. population) is unrealistic. Rather, they support projecting immigration as a constant percentage of the projected population. In their view, if the population of the United States grows, at least much further into the 21st century, this would mean that there will be a growing number of projected immigrants during this period. In this view, immigration is one response to meet the high demand for (shortage of) labor in the United States, as well as helping Social Security's financial situation. Thus, as GDP grows and the non-immigrant population ages, more workers will lead to faster economic growth and a larger support base for the growing aged population, which in turn may lead to policies that support more immigration.

The 2019 Technical Panel[xvi] recommended, among other things, that for years after 2029, the net immigration assumption should be set to maintain a constant ratio of the total net immigration to the total population. This would lead to higher levels of net immigration than those assumed in the 2024 Trustees Report. The trustees rejected this suggestion because this implies a change to immigration law to allow more immigration as the population increases. All data and projections presented in the Trustees Report are based on current law and do not reflect future changes in the law or its enforcement.

Immigrants to the United States have generally been younger and somewhat more fertile than the native population. This suggests that more immigration will lead to an increase in the number of workers per beneficiary. If additional workers are in covered employment and thus contribute to Social Security, it will reduce Social Security's short- and medium-term actuarial deficits and enhance its financial prospects. For example, Table VI.D3 of the 2024 Trustees Report indicates that the low-cost immigration assumption could reduce the actuarial deficit by 0.38% of taxable payroll (or about 11% of the full actuarial deficit).

A further complicating factor over the long term is the low global fertility rate in many countries. If this continues, an imbalance in supply and demand for labor may lead to a competitive market for new immigrants, which may affect the amount and type of future immigration. Offsetting this factor are the strong views of some against other-than-LPR immigration.

Emigrants

With a few minor exceptions,[15] American citizens who emigrate can receive Social Security benefits for which they are eligible. That said, emigration can affect some people's eligibility for benefits, because in most situations, benefit eligibility requires at least 40 quarters of taxable earnings. Those who emigrate before meeting the benefit eligibility requirements will not receive benefits despite having had some taxable earnings.

Under the trustees' intermediate estimates, the assumed ratio of the number of LPR emigrants to the number of LPR immigrants (including those whose status was adjusted from a non-LPR immigrant status) is 25%. The gross emigration rate (the number of other-than-LPR emigrants divided by the number of the other-than-LPR immigrant population) is expected to be about 1.7% in 2024, reaching a maximum of about 1.8% in 2027. This rate is estimated to then decline to about 1.3% at the end of the 75-year projection period.[xvii] The average age of emigrants is older than that of immigrants.

Available data relating to the number and characteristics of emigrants from the United States is limited. Nevertheless, studies have shown that the rate of emigration of those who previously immigrated to the United States is higher during the years immediately after immigration.[xviii] These emigrants may then have contributed to Social Security without being eligible to receive any corresponding benefits.

According to the Organisation for Economic Co-operation and Development (OECD), the 102,000 U.S. emigrants of U.S. citizens in 2021 were 36% greater than that in 2020. The primary countries that these emigrants went to were 12% to Canada, 9% to Spain, 9% to the United Kingdom, 9% to Germany, 7% to Mexico, and 5% each to Türkiye, South Korea, France, and Japan.[xix]

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15 Current residents of Cuba or North Korea if deported.

Impact on Other Demographic Factors

In addition to the effect of net immigration on the total population, the extent and sources of immigration also affect the other two major demographic assumptions.

Mortality: The "healthy immigrant effect" will have, at least over the short term, a favorable effect on overall U.S. mortality. That is, those who move voluntarily to the United States tend to be healthier than the native-born. For LPR immigrants, reasons include U.S. immigration restrictions and a preference for those in "valuable" occupations who tend to be healthier than the existing population, and that people with chronic medical conditions are more likely to remain in their country of origin. Figure 4 indicates a 6.1-year difference in life expectancy at age 1 (a 5.7- and 6.5-year difference for women and men, respectively).

For those immigrants whose country of origin has poor health services or who require immediate medical treatment upon arrival, such adverse effects tend to wear off over time, with mortality gradually converging with the host country's mortality patterns across many disease categories.[xx]

Separately, over the 2000–2009 period, the foreign-born population had a 2.4-year advantage in life expectancy at age 65 relative to the native-born population.[xxi]

Figure 4. Life Expectancy of Foreign-Born and Native-Born Population by Sex
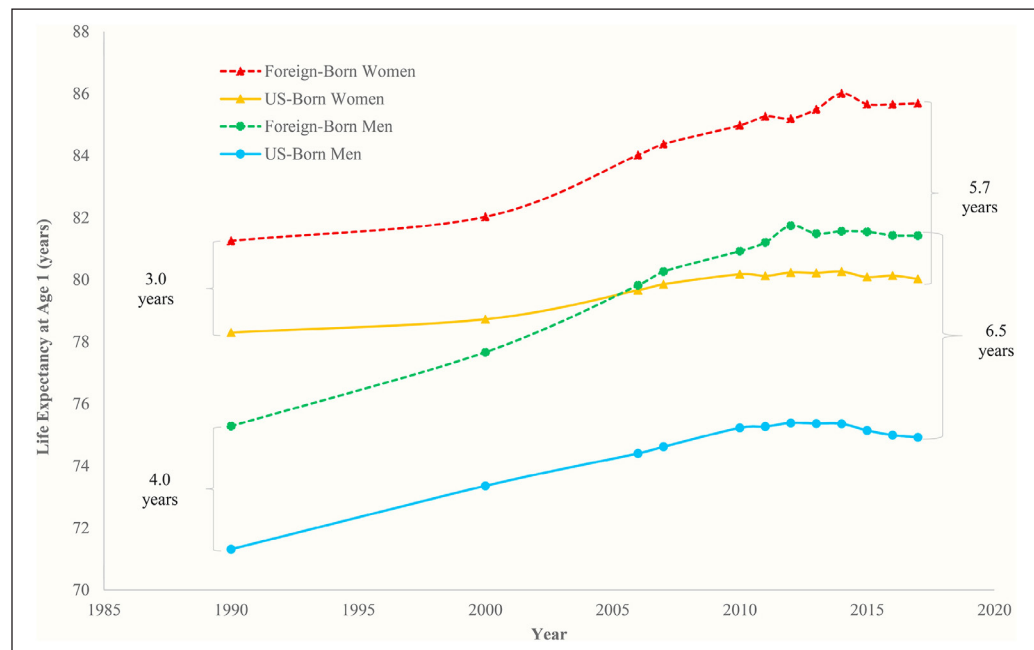
Source: Hendi and Ho (2021).

In 2017, foreign-born men and women contributed 0.94 years and 0.83 years, respectively, to U.S. life expectancy.[xxii] Globally, immigrants have had a mortality advantage compared with general populations for a majority of disease categories.[xxiii] Note that the comparative advantage of immigrant mortality may be somewhat exaggerated by the so-called "salmon bias"[xxiv] (immigrants who return to their country of origin when they are in poor health or near death); people returning home would be included as emigrants when they leave the United States prior to death.

Fertility: The fertility rate for immigrant women has been consistently higher than for native-born women, although this differential has diminished in recent years. From 2008 to 2019, the total fertility rate for immigrant women fell by 0.73, from 2.75 to 2.02, while that for native-born women fell by 0.38, from 2.07 to 1.69. The 2019 rate for immigrant women is below both the rate for native-born women in 2008 and the replacement rate of about 2.1. This differential will likely continue to decrease, as the source of immigration has shifted from predominantly Hispanic to more Asian, who have experienced a lower fertility rate than both native-born and Hispanic Americans.[xxv] In addition, women in many of the origin countries have experienced significant decreases in fertility. Also, the children and future descendants of immigrants have fertility rates similar to U.S. women, all of whom are expected to experience below-replacement-level fertility.

Thus, the relatively small fertility boost provided by immigrant women in the past to the overall U.S. fertility rate is not likely to continue. This, combined with the lower mortality of immigrants compared to the native-born population, will ultimately contribute to population aging, which in turn will continue to challenge Social Security's financial condition.

Impact on the Economy

Large movements of people tend to lead to large economic consequences. The first-order effects of LPR and other-than-LPR immigrants include an increase in both the size of the American labor force and the demand for goods and services. The second-order effects will be felt by their children's and subsequent generations.

The extent that these effects increase economic growth depends on the degree of the tightness of the market for labor, the extent that demand for the type of labor that immigrants can provide, and how productivity affects the relationship between supply and demand. For example, between 2022 and 2023, there was a 4.2% increase in the foreign-born labor force, compared with a corresponding increase in the native-born labor force of 1.2%.[xxvi] Nevertheless, In OECD countries, large immigration waves have raised domestic output and productivity in both the short and the medium term, pointing to significant dynamic gains for the host economy.[xxvii]

Therefore, an influx of workers can contribute to economic growth. The size of this growth depends, among other things, on the skills of immigrants, their willingness and ability to fill available jobs, and how successfully they find these jobs—that is, their labor force participation.

Note that the majority of LPR immigrants to the United States have been family-related, rather than employment- or skills-related, unlike certain other countries that have adopted a points-based set of skills for new LPR immigrants, such as Australia and Canada.

The foreign-born, in the aggregate, are also more likely to start a company than the native-born.[xxviii] The labor pool for highly skilled and entrepreneurial workers, being crucial to the economy, now is global and highly competitive among countries and is likely to become more competitive as the effect of low fertility begins to be felt in high-income countries. As a result, in the future, it may prove more difficult to attract highly skilled immigrants.

According to the Bureau of Labor Statistics (BLS),[xxix] on an overall basis for 2023, the foreign-born population tend to participate in the labor force (LFP) at a higher rate than the native-born population (66.6%[16] compared with 61.8% LFP, while the male LFP was 77.5% compared with 66.1% and female LFP was 56.1% compared with 57.6%). However, looking at each age group separately, the labor force participation of the foreign-born is currently up to 5.1 percentage points greater for age groups through age 54, although the opposite currently holds for age groups over 55. However, it is important to note that the median weekly wage in 2023 of those who were foreign-born was 86.6% of those who were native-born.[xxx]

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16 Edelber and Watson (2024), op. cit., indicated that early employment data from the 2021 and 2022 immigration cohorts appear similar to earlier immigration cohorts, suggesting that the skills and willingness to work of recent arrivals have not deteriorated, with a LFP rate of 66%, about same as BLS' published estimate of the LFP of the average foreign-born.

Currently, many labor markets are tight, exhibiting historically low unemployment rates. In this type of situation, in the aggregate or in a specific working segment, an excess of demand for labor and its supply can be met by either increased LFP at young or older ages, productivity gains through increased capital or enhanced technological applications, increased immigrant workers, or a combination of these sources. This labor imbalance could arise, for example, from the retirement of the native-born population (baby boomers) in the short term or low fertility over the longer term. In contrast, where there is an excess of supply over demand for labor, wage pressure or a decrease in immigration or even more emigration may arise. In either case, more worker immigrants can, with appropriate action, help address labor or talent shortages as they arise.

Demand for certain types of workers, both skilled and non-skilled, will continue to exist, whether in business-sponsored positions as currently provided for or in other jobs, such as agricultural, construction, and hospitality workers and caregivers for the increasing number of American elderly. The supply of people who would like to work in the United States is apparent from, for example, the large excess of applications for an H-1B visa over its maximum annual limit.[17,xxxi] Because it is quite difficult for governments to increase fertility rates,[xxxii] in the intermediate- and long-term future, immigration may be a significant lever of working-age population growth for the United States and most high-income countries.

A larger labor shortfall usually leads to slower economic growth or stagnation. The inability to satisfy the demand for labor tends to increase its aggregate cost, with a shortfall tending to place upward pressure on price and wage levels. Conversely, an increase in the size of certain segments of the labor force could result in downward pressure on wages while at the same time increasing consumer demand for goods and services. And because immigration can in some circumstances make it easier to fill job vacancies, this may limit pressure on wages and prices.

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17 An H-1B visa is a designation of non-immigrant aliens as workers in specialty occupations, requiring the application of a body of specialized knowledge and attainment of a bachelor's degree or equivalent. It is designed to help employers who cannot otherwise obtain individuals from the U.S. workforce with needed business skills and abilities by authorizing temporary employment of qualified individuals not otherwise authorized to work in the United States. There were about 780,000 registrations for an H-1B visa for 2024 compared with a maximum annual limit of 85,000.

While recent immigrants have relieved labor shortages in some areas, it is unclear the extent to which they may have contributed to price increases. In addition, although they have contributed to economic growth, it is uncertain whether they have contributed to per-capita GDP growth. However, if native-born workers have taken higher-wage, more productive jobs, this may result in an increase in relatively low-level paid opportunities for unskilled immigrants. Goldman Sachs Research[xxxiii] indicated that an increase in foreign-born workers could also help contain the rise in wages and prices.

For a temporary period after entry into the United States, some other-than-LPR immigrant workers and their families may require public assistance of some kind. For example, if their country of origin is non-English-speaking, they may require publicly provided education before they enter the labor force. However, the amount of this assistance should wear off over time, just as it has had for previous waves of immigrants.

As is the case for much of this issue paper, the total costs and benefits from immigration may depend on the trajectory of their development as workers, as well as that of their children.

The financial effect on immigrants from poorer countries moving to the United States often increases their earnings, although this may be partly offset by higher expenses. In general, their work has a limited effect on the earnings of the native-born.

Impact on Social Security

Social Security is expected to experience a serious long-term actuarial deficit unless reformed. As discussed in this issue paper, increased immigration can help increase the labor force contributing to Social Security, improve the current 2.7 workers per beneficiary ratio, slightly delay the depletion of the trust funds, and eliminate about 11% of the 75-year actuarial deficit, if increased to the number of immigrants in the low-cost assumption (see Table 7). However, it is not a silver bullet to "solve" 100% of Social Security's financial problems. Nevertheless, the quantity, type, and demographics of immigration could significantly enhance the future financial condition of Social Security, especially in the long term.

Because payroll taxes from new immigrants exceed the benefits they will receive over the next 75 years, a higher rate of immigration would reduce the actuarial deficit. In addition, immigrants who contribute taxes to Social Security for less than 40 quarters are not eligible for benefits; neither are other-than-LPRs eligible for benefits.

Table 7 shows the impact of two alternate immigration assumptions included in the 2024 Trustees Report. Under the intermediate assumptions, with an average total net immigration of 1,244,000 people between 2023 and 2098, the 75-year actuarial deficit of costs over income is 3.50% of taxable payroll. Under a sensitivity test where immigration is decreased to the high-cost assumption of 829,000 people per year, the 75-year deficit of costs over income increases to 3.90% of taxable payroll. If immigration is increased to the low-cost assumption of 1,683,000 per year, the 75-year deficit of costs over income decreases to 3.12% of taxable payroll. However, over the next decade, these alternatives are not projected to change the date of trust fund depletion materially.

Table 7. Sensitivity of Immigration Assumptions on the 75-Year Deficit

Assumption	Net Average Annual Immigration (2034-2098)	Difference From Intermediate	75-Year Deficit As a Percent of Taxable Wages	Difference From Intermediate
Intermediate	1,244,000	—	3.50%	—
High-Cost	829,000	-415,000	3.90%	+0.40%
Low-Cost	1,683,000	+438,000	3.12%	-0.38%

Source: Table VI.D3. from the 2024 Trustees Report.

Uncertainties

Projections regarding the level of future immigration and emigration and their impacts are difficult because of the uncertainties involved, which can arise from numerous causes, especially:

- Changes in future immigration policy, law, and their enforcement;
- Relative differences in economic conditions between the United States and countries that are sources of immigration;
- The relative number of open actual or perceived job opportunities in the United States;
- Relative effects of conflicts and climate change in countries other than the United States; and
- The economic effects of immigration.

In addition, estimating the current number of immigrants, especially those who are other-than-LPR immigrants, represents a significant challenge. These uncertainties have been reflected in both the low- and high-cost assumptions by the trustees.

Table 7, illustrating a range of uncertainty, shows that total net annual immigration is projected to average 829,000 persons and 1,683,000 persons for the period 2034 through 2098 under the high-cost and low-cost assumptions, respectively. These contrast to the 1,244,000 persons under the intermediate-cost assumption. The trustees' intermediate assumption is that LPR emigrants will equal 25% of the number of immigrants attaining LPR immigrant status, with 20% for the low-cost and 30% for the high-cost assumption.

Other U.S. government agencies develop long-range demographic forecasts. Their estimates of fertility are the most divergent. While the trustees project a 1.90 long-term total fertility rate, the CBO and the U.S. Census Bureau project long-term total fertility rates of 1.70[xxxiv] and 1.52,[xxxv] respectively, the latter being the current total fertility rate for white native-born women[18] that Census projects that the fertility rate of other women will ultimately converge to, consistent with the theory that the fertility of immigrants will eventually reach the level of the native-born of that country. The Global Burden of Disease (GBD)[xxxvi] projects a lower TFR, of 1.52 and 1.45 for 2050 and 2100, respectively. If the Census or GBD forecasts prove more accurate, the total U.S. population will hit a peak before the end of the century, decreasing thereafter.

CBO's projections average about 1.1 million immigrants between 2023 and 2053, while the Census projections are 853,000 in 2023, peaking at 976,000 in 2079, and moving toward 944,000 in 2100. The Census immigration forecasts are developed separately for the U.S. and foreign-born, generally following a level rate approach.

These differences underscore the extent of uncertainty and the importance of reassessing demographic projections regularly. As the CBO (2024) indicates, "CBO's projections of the rates of fertility, mortality, and net immigration are uncertain. Small differences between CBO's projections of those rates and actual outcomes could compound over many years and significantly alter demographic outcomes by the end of the projection period."[xxxvii]

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18 The Census population projections are generally developed separately for the native- and foreign-born population.

Conclusions

Immigration is a crucial component in the development of the population projections of Social Security. Immigration and its effects are complex, as migration impacts other demographic (e.g., fertility and mortality) and economic factors (e.g., labor force, economic growth, and productivity) that underpin future Social Security taxes and their benefits. In carrying out such an analysis, it is important to assess their effects based on immigrant subgroups, including those who are LPR and other-than-LPR immigrants.

These factors include the more immediate favorable effect of increases in Social Security revenue and fertility. Along with births and deaths, the number and composition of immigrants will determine how the U.S. working-age population evolves, as without immigration our country's low fertility rates and aging population are projected to reduce the ratio of workers per Social Security beneficiary.

Immigrants involved in covered employment favorably affect the financial condition of Social Security because (1) their contributions to the system are received far earlier than their potential benefits and (2) they favorably affect economic growth.

There remains considerable uncertainty regarding the number of immigrants and their composition, especially regarding those who are other-than-LPR immigrants, as well as the number and composition of emigrants. This is due to possible future political and administrative actions and its implementation, and to a lack of accurate and relevant data.

Although immigration benefits Social Security finances, the largest part of the solution to Social Security's actuarial deficit must come from other sources.

Appendix. Actuarial Adequacy Measures

There are two actuarial adequacy measures used to assess the sustainability of Social Security:

- For the *short-range* period (10 years), the trustees measure financial adequacy using *trust fund ratios* (the asset reserves of the trust funds at the beginning of a year divided by the cost for the year). These indicate whether the trust fund can cover most short-term contingencies. The trustees' test of short-range financial adequacy is met if, under the intermediate (best estimate) assumptions, the estimated trust fund ratio is at least 100% at the beginning of the period and remains at least 100% throughout the following 10 years. The combined OASDI trust funds currently fail this test of short-range financial adequacy.

- The *actuarial balance*[19] measures the program's *long-term* financial adequacy. It is a summary measure of the program's financial status throughout the 75-year valuation period—the sum of the asset reserve at the beginning of the period and the present value of the income during the period, minus the present value of the costs during the period including a target ending reserve of one year's cost, divided by the sum of the present values of the taxable payroll for the valuation period. According to the 2024 Trustees Report,[xxxviii] the actuarial deficit for the combined OASDI trust funds, according to the intermediate assumptions, is 3.50% of taxable payroll over the 75-year projection period. This means that to remain solvent through the end of the 75-year projection period, an immediate and permanent increase in payroll taxes of 3.50% or its equivalent would be required to meet this test.

An overall financial goal for Social Security, under a specified set of assumptions, is *sustainable solvency*, where the projected trust fund ratio is positive throughout the 75-year projection period and the trust fund balance is either stable or rising at the end of the period.

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19 A negative actuarial balance is called an actuarial deficit.

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