CATO
POLICY
ANALYSIS

November 17, 2026 Number 1024

Immigrants' Historical Effects on Government Budgets: 1900–2023

By David J. Bier and Julián Salazar

EXECUTIVE SUMMARY

Critics of immigration often claim that it was once fiscally positive for the United States but that the welfare state ended the fiscal upside. Contrary to this perception, this paper details how immigrants have reduced federal, state, and local government deficits every year for the last 124 years by a cumulative $14.6 trillion—not counting savings on interest payments on a smaller debt. As a share of gross domestic product (GDP), the immigrant surplus was more than twice as fiscally beneficial in 2023 as in 1913—before the modern welfare state and individual federal income tax. In inflation-adjusted terms, immigrants were 53 times more beneficial to public budgets in 2023 than in 1913.

Although government spending has increased over the course of the 20th century, tax revenues have also increased. Before World War I, state and local governments drove the government deficit, as opposed to the federal government today, and all levels of government spent less of their budgets on pure public goods, so the share of spending that needed to scale with population was higher back then. But the most important difference is that immigrants today are vastly more productive—and thus pay more in taxes per capita in inflation-adjusted terms—than those in 1913, creating a much larger net fiscal surplus. Congress should build on this success by further limiting the scope of the welfare state and expanding legal immigration.




DAVID J. BIER is the director of immigration studies and The Selz Foundation Chair in Immigration Policy at the Cato Institute. **JULIÁN SALAZAR** is a public policy data analyst.

INTRODUCTION

About 130 million immigrants have come to the United States since 1776, contributing to the country's fiscal and economic well-being.[1] Nonetheless, many people believe that although immigration was helpful to the country in the past, the welfare state has now eliminated, or at least reduced, that benefit because of the cost of government services and payments to immigrants.[2] Although studies have recently demonstrated that immigrants are still fiscally positive today, no study has attempted to calculate allocations of government spending to immigrants and natives every year of the 20th century to show how this fiscal benefit has changed over time.[3]

This study calculates the fiscal benefits of immigration over more than a century by building on the extremely detailed findings of a Cato Institute 2026 report on the fiscal effects of immigrants. That report used a fiscal accounting model based on one used by a study published by the National Academies of Sciences, Engineering, and Medicine in 2017 and applied it to a 30-year period from 1994 to 2023.[4] The Cato Institute–National Academies model is based primarily on granular survey data from the Census Bureau's Current Population Survey (CPS) Annual Social and Economic Supplement (ASEC) on the use of government benefits by immigrants and the US-born population. The CPS ASEC also imputes tax payments to specific individuals, using tax data from the Internal Revenue Service and state sources.

This analysis shows that the immigrant population's share of tax payments corresponded closely to its share of income in each of these 30 years. General tax data from the IRS indicate that this relationship likely also existed before 1994. By apportioning taxes based on the share of income, this study identifies the taxes paid by immigrants throughout the 20th century. It uses similar proxies for government benefits streams (e.g., immigrant share of the population in schools for education spending).

Immigration would be even more fiscally positive if immigrants, who currently are ineligible for many welfare benefits, were entirely ineligible, but it is incorrect to conclude that immigrants are, therefore, fiscally negative. In fact:

- Immigrants accounted for a disproportionate share of earned income almost every year from 1900 to 2023.
- Immigrants paid more in taxes to every level of government than they received in benefits from government every year since 1900.
- Immigrant revenues exceeded benefits by $14.6 trillion in inflation-adjusted terms since 1900, excluding savings on interest payments on less debt.
- The total immigrant surplus in 2023 was more than twice the surplus in 1913 as a percentage of US GDP.
- In real inflation-adjusted terms, the immigrant surplus in 2023 was more than 53 times larger than in 1913: $585 billion versus $11 billion (Figure 1).

Including immigrants' US-born dependents does not substantively change these major conclusions. This accounting also does not include any indirect effects of immigration on the productivity or tax payments of the US-born population, which would increase the positive effect.[5] Nor does it calculate the enormous savings on interest payments on the debt that would have accrued over the last century if not for immigrant workers, which we cannot calculate because they would exceed the size of total US debt.

Despite receiving more benefits, today's immigrants are more valuable to governments because they pay even more in taxes than their predecessors. Tax payments are higher both because tax rates are higher and because immigrants are much more economically productive than immigrants were a century or more ago. When immigrants come to America and work, they help make the country a wealthier and more prosperous place. Congress should reform outdated laws that restrict immigration based on the false premise that immigrants are economically harmful.

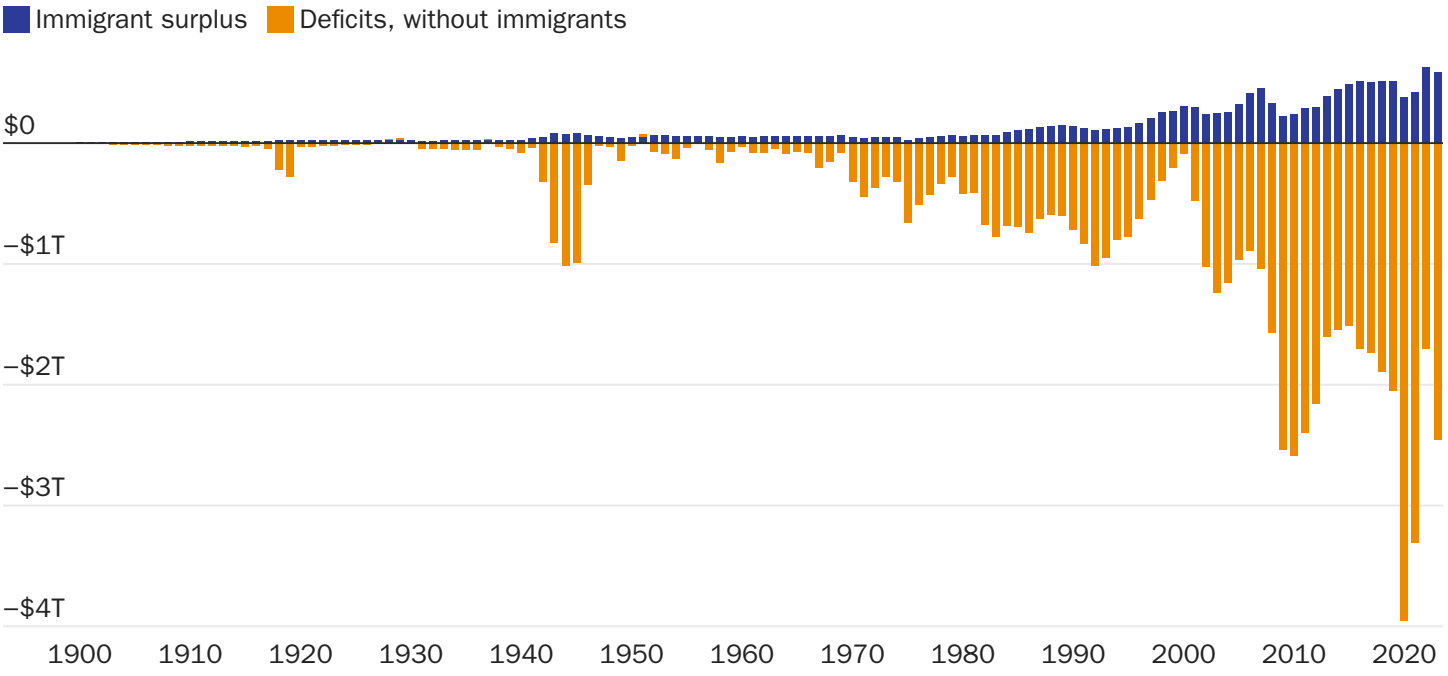
AN ADDITIONAL PERSON'S EFFECT ON BUDGETS

The view that immigration has become less fiscally positive in the United States starts from three accurate premises, but it draws an unjustified conclusion. First, government spending has increased dramatically since the 1910s. Figure 2 displays all US government spending—federal, state, and local—broken down into major component parts from 1900 through 2023 as a percentage of gross domestic product, documenting a rise from less

Figure 1

Immigrants' fiscal impact has always been positive since the early 20th century

Net fiscal impact, immigrants and US population without immigrants, 2024 dollars, 1900–2023

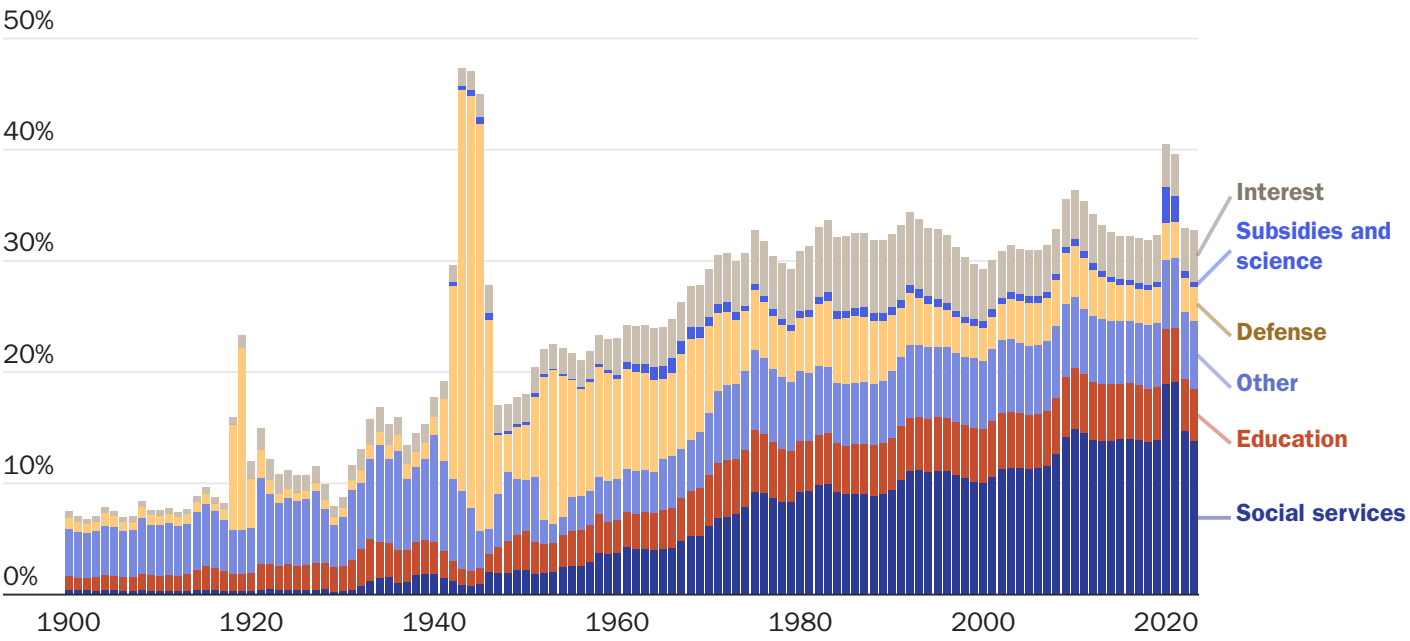


Sources: See Appendix Tables A1–A7.

Figure 2

The welfare state drives the growth in government spending

Federal, state, and local government spending as a percent of GDP, 1900–2023



Sources: See Appendix Tables A1 and A3.
Note: GDP = gross domestic product.

than 10 percent to more than 30 percent of GDP. Second, it is correct that, as Figure 2 illustrates, the category of social services, or "the welfare state," was the primary driver of spending growth in the 20th century.

Third, it is accurate that the welfare state has made immigration less economically beneficial today than it would be if the welfare state had stayed as small as it was in 1910.[6] But this does not mean that immigration is harmful and that the United States would be better off without it. For one thing, people's fiscal effects are not equivalent to their economic effects. The fiscal effect is only a subset of their overall economic effect. People with zero effect on US government budgets likely have very positive economic effects in their roles as workers, consumers, entrepreneurs, and investors. Even someone with a negative fiscal effect can have a positive economic effect by expanding consumer or producer surplus or by increasing wages through consumption, investment, entrepreneurship, or labor complementarities.[7]

Regardless, higher government spending today does not automatically reduce immigrants' fiscal benefit because tax revenues have also increased. As Figure 3 shows, the government imposed new taxes—income taxes and social insurance taxes (such as for Medicare, Social Security, and unemployment)—that have compensated for the rise in welfare spending over the last century. Thus, while it is correct that the government has grown dramatically, that does not mean that the net fiscal benefit of immigrants after taxes has declined proportionally to the increase in spending.

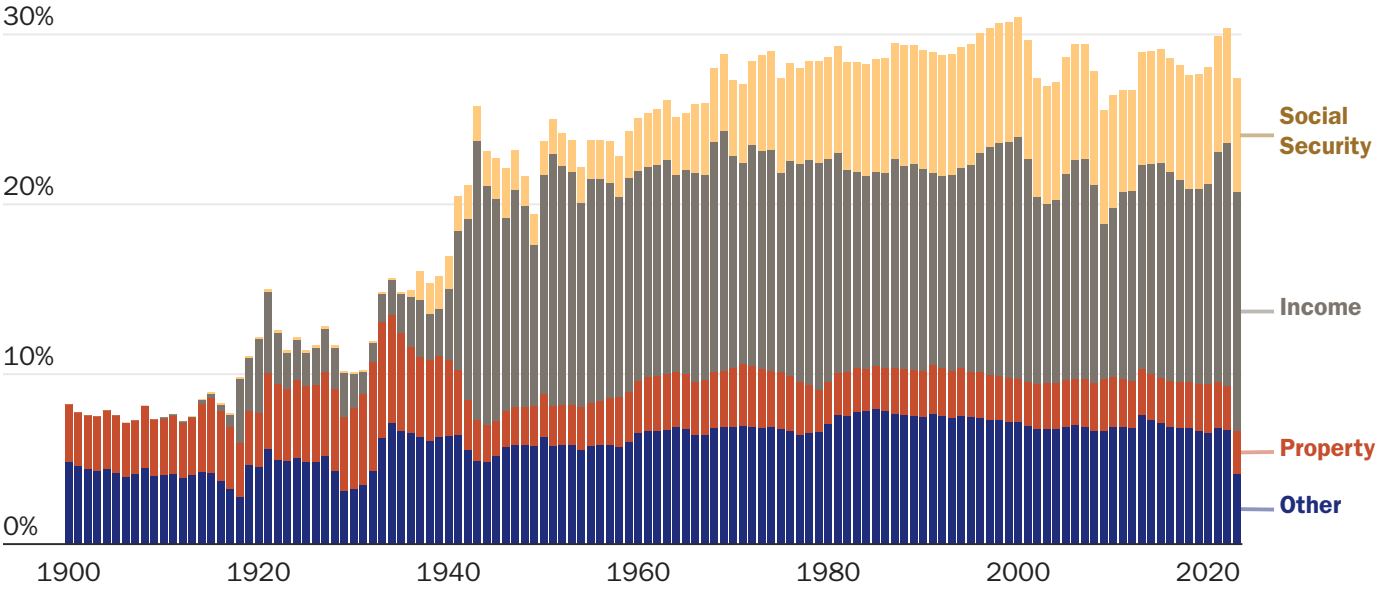
Admittedly, taxes have not covered all spending, which led to deficits during most years in the last century (Figure 4). For the purpose of analyzing immigration, however, what matters is the cost of the marginal, or next additional, person added to the society. The marginal cost is much lower than the average cost because a significant share of government spending is on pure public goods (Figure 4), meaning items for which additional people do not reduce the benefit to anyone else or trigger additional spending. If we exclude spending on pure public goods and focus only on government benefits, the net fiscal impact of the average person—and hence the true fiscal impact of the marginal person—has been positive every year since 1900, except for four years in the 21st century (2009–2010 and 2020–2021) during global economic crises.

The pure public goods categories are shown as the top three categories in Figure 2 and are combined in Figure 4. They are defined here to include the following:

Figure 3

Higher taxes have fueled the growth in government

Federal, state, and local government taxes as a percent of GDP, 1900–2023



Sources: See Appendix Tables A2 and A3.
Note: GDP = gross domestic product.

- national defense, including benefits for former military personnel and foreign affairs (12.9 percent of total 2023 spending);[8]
- spending on general science, space, technological research, and subsidies (1.5 percent of spending);[9] and
- interest on past debt (13.5 percent of spending).[10]

Immigrants certainly do benefit from pure public goods spending, so sometimes analysts will include that spending as benefits to immigrants in certain scenarios, depending on the point of the analysis.[11] However, since such a reallocation lowers the fiscal cost of natives, the net effect of immigration overall is the same. As the National Academies report observes, the natural-born citizen's fiscal cost "would have been larger without the addition of the first generation group because federal expenditures on public goods . . . would have to be divided among a smaller population. Some argue that this is an important benefit of immigration."[12]

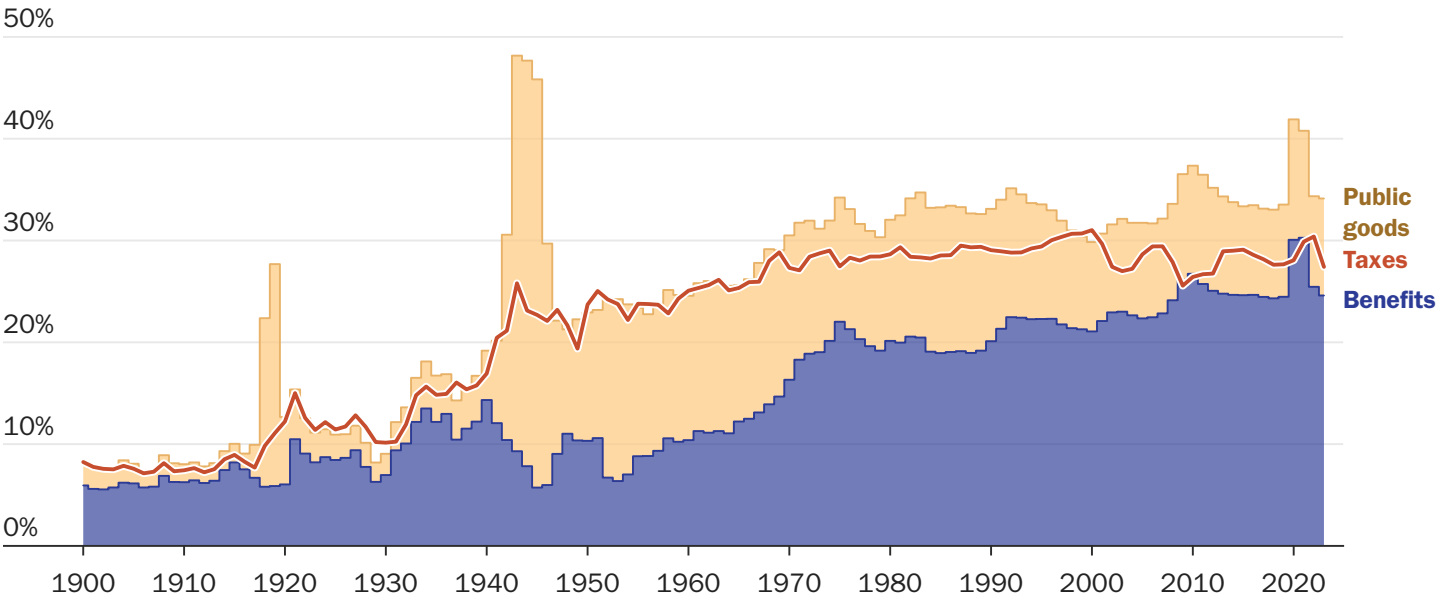
There is no doubt that a country with a larger population can spend more on the military, but whether any of that increase is the result of a larger immigrant population remains unproven. Indeed, there is no empirical connection between these two, and the available academic literature on defense spending does not connect population growth—immigrant or otherwise—to increased defense spending.[13] In fact, defense-related spending per capita has generally fallen since the mid-1940s and mid-1950s, indicating that the additional population has, in practice, not led to any measurable increase in this category of spending in the last generation.[14] Thus, if the early 20th-century immigrants supposedly caused a portion of the increase in per capita defense spending from 1900 to 1945, but recent immigrants did not have the same effect—as indicated by declining per capita spending—the fiscal effects of early 20th-century immigrants would seem relatively worse. In any case, if a portion of the immigrant surplus is used to fund more defense spending, the fiscal surplus still exists and is providing a fiscal benefit to the United States.

Overall, this treatment of pure public goods spending is conservative. Economists often consider other items to be pure public goods spending, such as spending on the legislative branch, the White House, general government administration, and other expenditures where the costs are unrelated to population size.[15] Likewise, the assumption that there is always a direct increase in spending in other areas that theoretically should increase with more

Figure 4

Tax revenue exceeds spending on benefits almost every year

Federal, state, and local spending and taxes, percent of GDP, 1900–2023



Sources: See Appendix Tables A1–A3.
Note: GDP = gross domestic product.

population is likely too strong. For instance, a larger labor force should logically lead to more spending on minimum wage enforcement by the Department of Labor, but in fact the Wage and Hour Division budget has remained flat for a decade and a half in real terms.[16] Regardless, this paper is primarily comparing immigrants to immigrants between periods, so it is more important to use consistent methods of analysis across time.

AN IMMIGRANT'S EFFECT ON BUDGETS

Figure 4 shows that the government almost always received more in tax revenue than it spent on benefits—that is, spending on everything except pure public goods. This provides a starting point for concluding that the effect of immigration on government budgets has been positive throughout American history and that the effect today is at least not worse than before the welfare state. But is the effect of an immigrant generally higher or lower than the effect of an average additional person? Building on a model used by the National Academies report, the Cato Institute has answered this question for the period 1994–2023.[17] During that time, the Census Bureau's Current Population Survey Annual Social and Economic Supplement published detailed estimates of taxes paid and benefits used by immigrants.

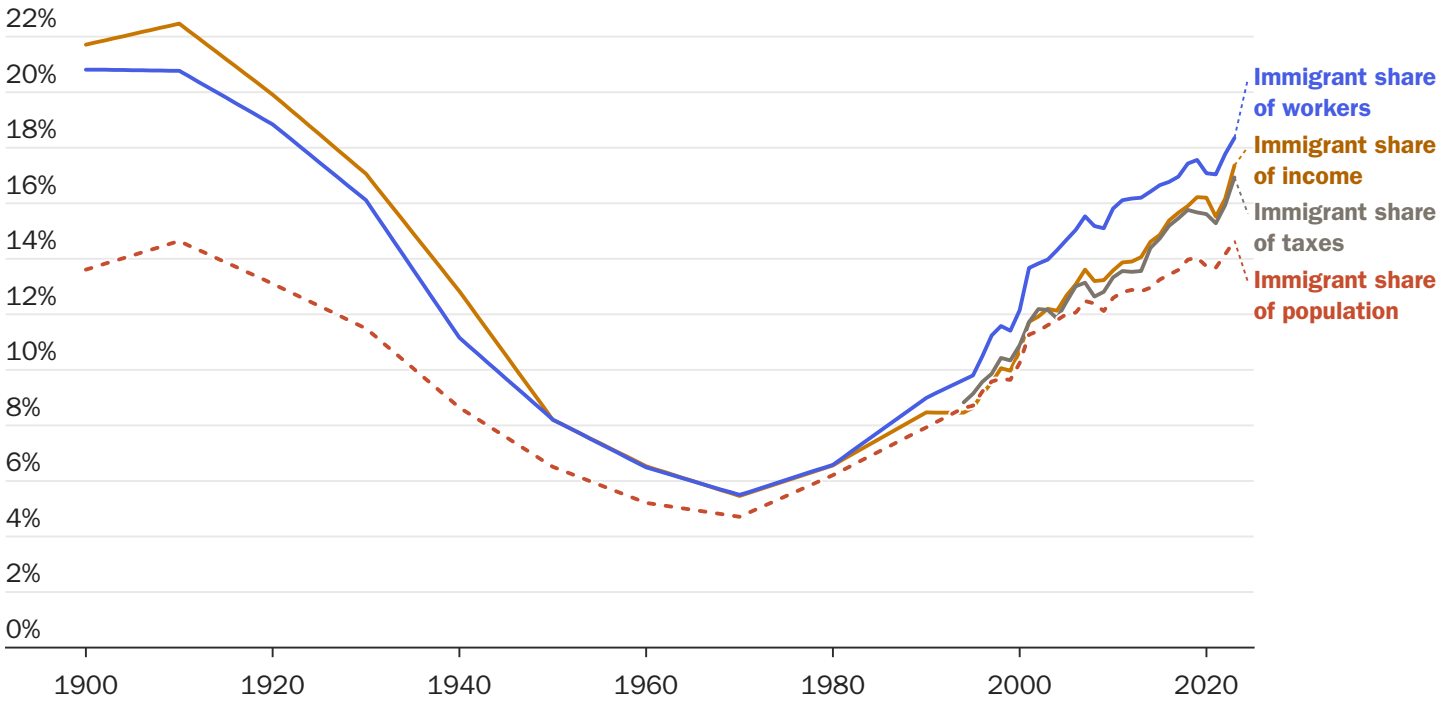
Before 1994, the Census Bureau did not publish regular estimates of immigrant tax payments (which rely on estimates for individuals using actual tax receipts, not self-reporting).[18] The 1994–2023 estimates confirm a tight correlation between the immigrant share of income and the distribution of taxes, implying that the distribution of total income can be used as a close approximation of total taxes paid.

Figure 5 shows this recent relationship between taxes and income alongside the immigrant share of the population.[19] The 1900–1930 censuses did not record income or wages directly, so we used the proxy OCCSCORE, which assigns a value using the median wage of each occupation in 1950.[20] This was used to estimate the immigrant share of total earned income, rather than its absolute value. The

Figure 5

Immigrants' share of taxes is proportional to their share of income

Immigrant share of workers, income, taxes, and population, 1900–2023



Sources: See Appendix Tables A6 and A7.
Note: Employed population includes individuals aged 10+ before 1940, and 16+ from 1940 onward, reflecting the child labor provisions of the Fair Labor Standards Act of 1938, the first federal law setting minimum working-age standards.

assumption is that we can substitute occupation-based earnings for individual income because even if the absolute level changes, the relative value of the work will remain similar. The OCCSCORE is necessary because, before 1940, the census did not collect income data at all, and OCCSCORE—developed specifically to fill this gap—has become the standard tool in economic history for measuring immigrant earnings in this period.[21]

As Figure 5 shows, early 20th-century immigrants' estimated share of income exceeded their share of workers, implying that they worked in higher-income occupations during that period. The primary reason, however, that they had such a disproportionate share of income was their high rates of employment because they were more likely to be of working age during that time.[22] In real inflation-adjusted terms, immigrants' estimated contribution to GDP—based on their share of income—increased from $280 billion in 1913 to $4.8 trillion in 2023.

Figure 5 implies that immigrants were responsible for a higher-than-average share of taxes almost every year for more than 120 years, as their share of income predicts their share of taxes. That outcome might be surprising since immigrants have had lower hourly earnings in recent years, but it becomes less mysterious after accounting for immigrants' high employment rate. Immigrants can earn lower hourly wages, but they account for more total income per capita than natives because they have been more likely to work every year for over a century. In 2023, immigrants had an employment-to-population ratio (the share of the total population that is employed) 14.6 percentage points higher than that of US-born Americans. In 1910, that same gap neared 20 percentage points.[23] This is primarily because the share of the immigrant population in their prime working years has usually been higher than that of the US-born population.

Just accounting for higher tax revenues shows that since 1900, immigrants likely had tax payments about 27 percent higher than those of the average person in the country. Although the tax system has become more progressive since the 1950s, the best evidence indicates that effective tax rates across the income distribution in earlier periods were not sufficiently different from those in the 1990s to undermine the relationship between income and taxes.[24] Regardless, this uncertainty is not a serious limitation of this analysis because immigrant tax payments exceeded their benefit spending by a wide margin during the midcentury (Figure 16), so the positive effect of immigration would not be in question even if immigrant taxes were somewhat lower during that period. In any case, there were few immigrants in the United States at the time (Figure 5), and our main comparison is with the early 20th century.

In 1913, the largest single source of government revenues by far was state and local property taxes, which accounted for nearly half of all receipts (Figure 3). "Other" revenue combines various minor sources, primarily excise taxes, tariffs, and sales taxes. In the Cato Institute–National Academies analyses, which leverage the CPS ASEC tax model, immigrants' share of property taxes also closely tracks their income. As seen in Figure 6, the immigrant share of property taxes more closely tracks the immigrant income share than income taxes do.[25] This was also true in the 1970s.[26] There is no reason to suspect that using income as a proxy for taxes significantly biases this analysis one way or another.

Using the immigrant share of income as a proxy for taxes paid shows that, for almost every year of the 20th and early 21st centuries, the average immigrant paid more in taxes than the average US-born resident (Figure 7).

Of course, taxes are only half the ledger when determining the fiscal effects of immigration. Did immigrants receive a larger-than-predicted share of government benefits? From 1994 to 2023, the Cato Institute–National Academies model finds that the average immigrant used fewer benefits than the average person every year. Recall that benefits are broadly defined to include all government spending that is not pure public goods.

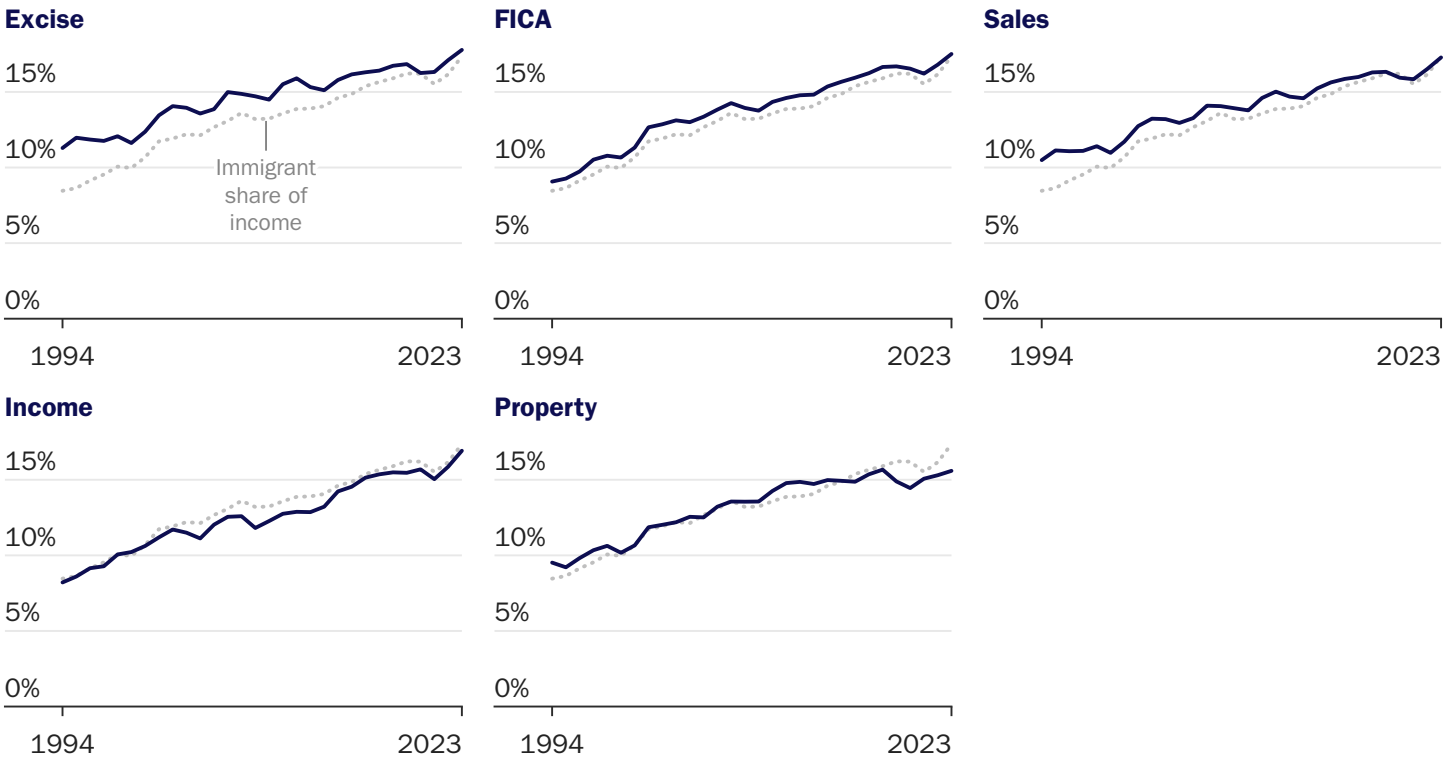
Immigrants in this calculation are deemed to add to spending on everything from welfare (based on value received), to schools (based on enrollment), to highways and parks (at their share of the population). Overall, immigrants used fewer benefits than their population share would predict in every year: 18 percent fewer in 1994 and 25 percent fewer in 2023.

Figure 8 shows the immigrant share of government benefits by type, according to the Cato Institute–National Academies model.[27] The three main causes of lower immigrant benefit use from 1994 to 2023 were lower-than-average use of old-age benefits (39 percent of benefits in 2023), educational services (12 percent of benefits), and lastly, prisons, felony police, and felony courts (2 percent).

Figure 6

Immigrant tax payments closely relate to immigrant income

Immigrant share of various taxes and income, 1994–2023



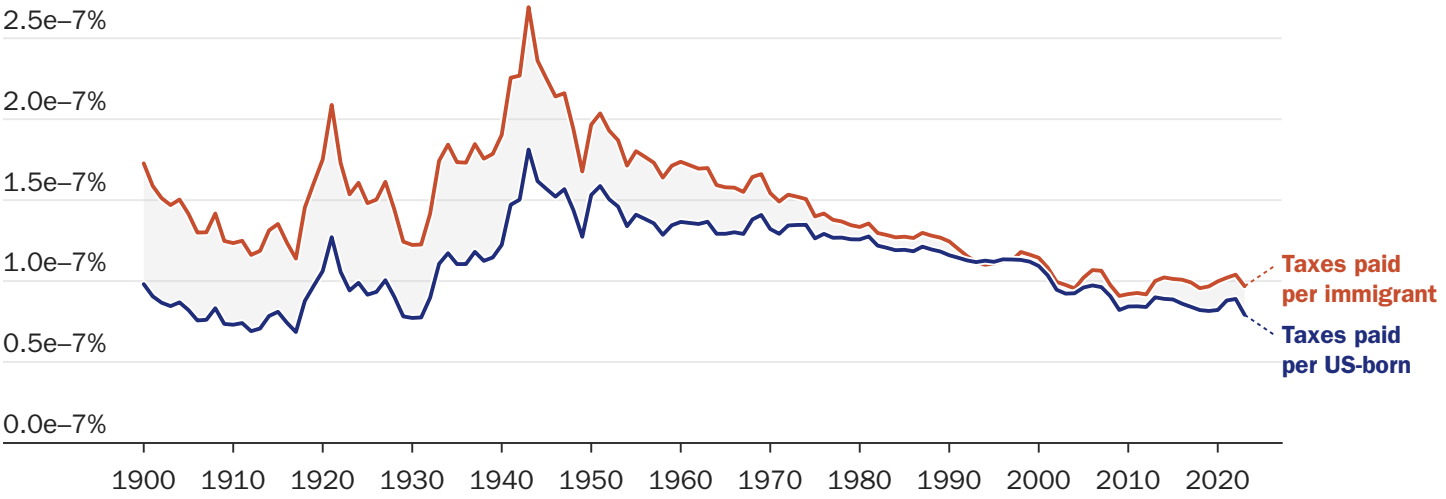
Sources: David J. Bier et al.; Census Bureau.

Note: FICA = Federal Insurance Contributions Act; this payroll tax funds Social Security and Medicare and is collected from both employees and employers.

Figure 7

For more than a century, the average immigrant has paid more in taxes almost every year than the average US-born person

Taxes paid per US-born and per immigrant, share of total US GDP; 1900–2023



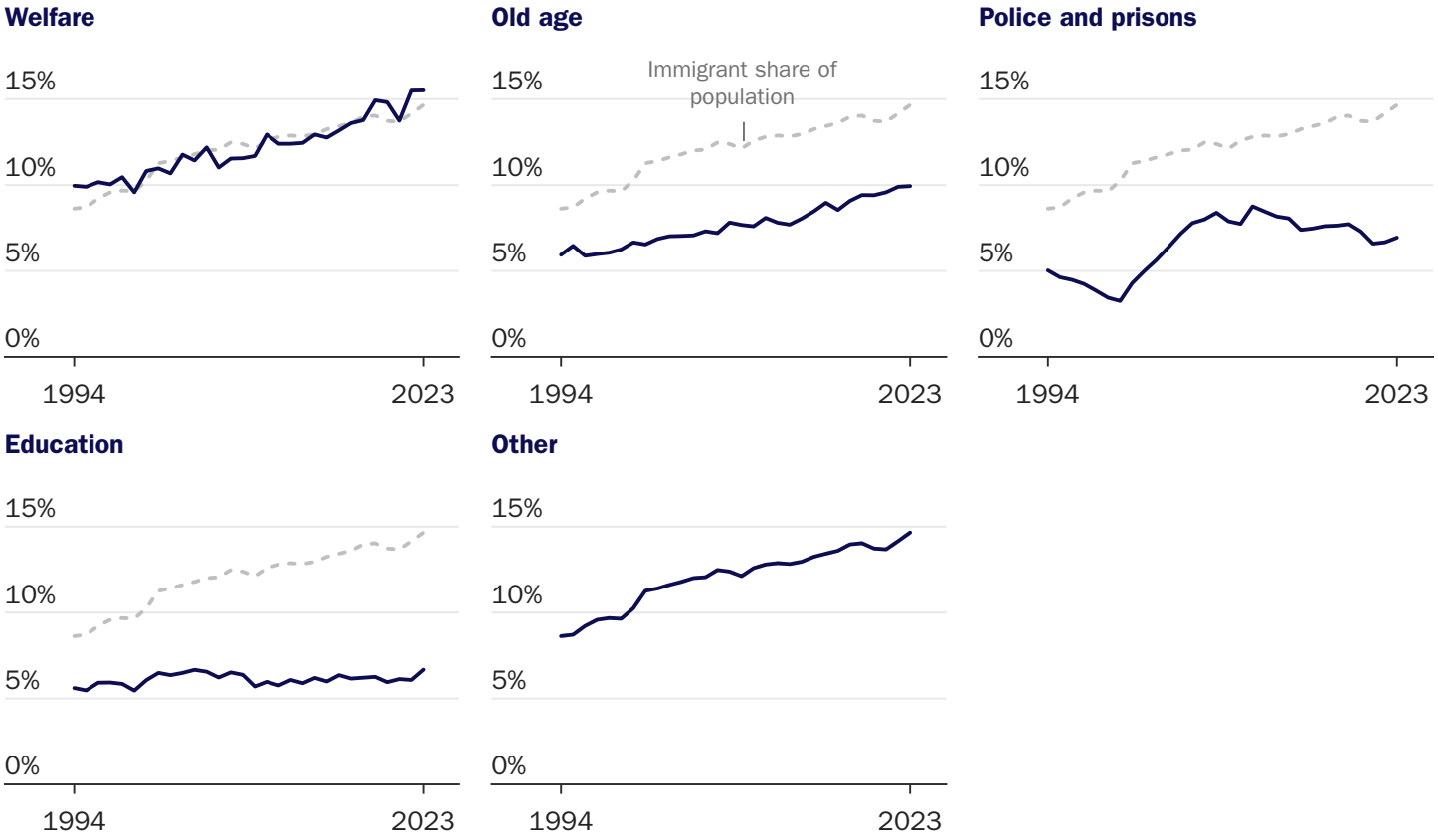
Sources: See Appendix Tables A2–A7.

Note: e = exponent; GDP = gross domestic product.

Figure 8

Immigrants use fewer government services of virtually all types

Immigrant share of various government benefits by type, 1994–2023



Sources: David J. Bier et al.; Census Bureau.
Note: "Other" category share is equal to immigrant share.

Despite being poorer than average, immigrants have used close to their population share of welfare benefits (31 percent of benefits) and other spending (mainly things such as roads, parks, fire protection, and misdemeanor or civil law enforcement, which are attributed on a per-person basis).

Immigrants have recently used fewer police, court, and prison resources because they have been less likely to commit crimes and end up incarcerated in US prisons (Figure 9).[28] Why do immigrants use fewer old-age benefits and educational services? Part of the reason is that more immigrants arrive during their prime working years than when they are school-age children or elderly. Age fully explains the drop-off for educational services (Figure 10).[29] But age does not fully explain it for old-age benefits. Although the difference has grown recently, immigrants were significantly less likely to use old-age benefits than their share of the elderly population would predict back in 1994 (Figure 11).[30]

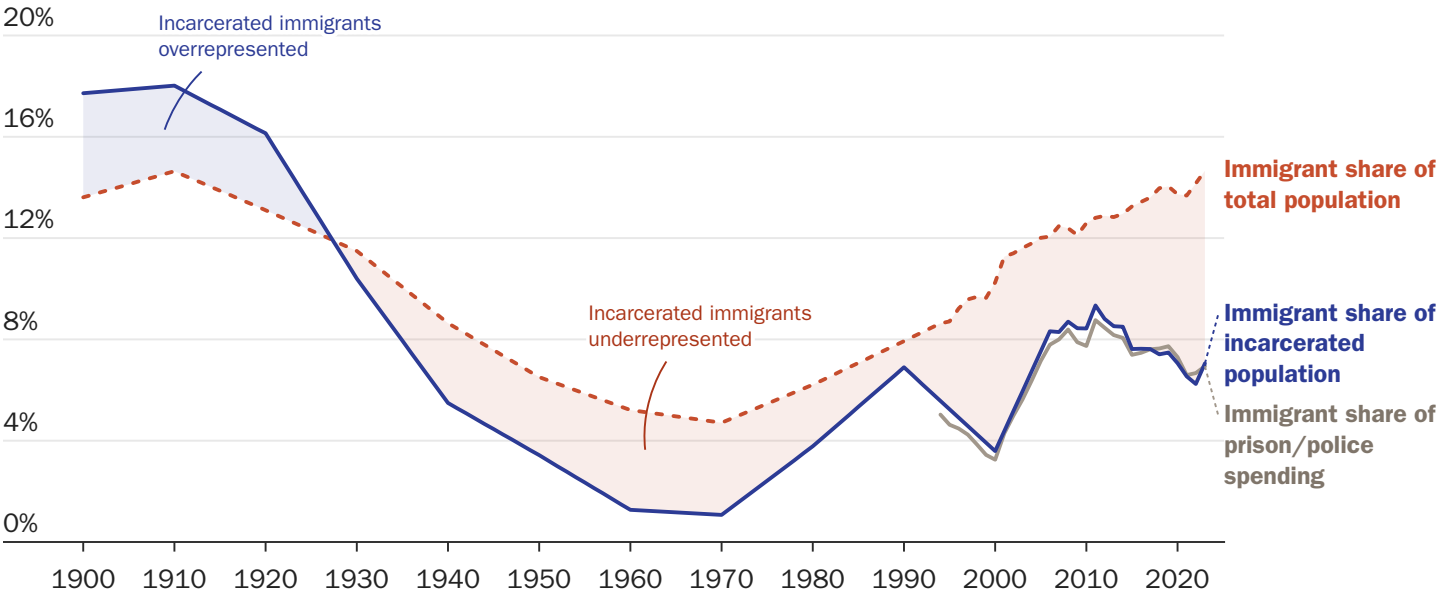
Did these conditions hold in the early 20th century? Generally yes, with some exceptions. Figure 9 shows that immigrant share of the incarcerated population has recently been below the immigrant share of the total US population, meaning that they are underrepresented in prisons, jails, and detention facilities. Data limitations for recent surveys require us to use only prisoners between the ages of 18 and 54, but this accounts for nearly all prisoners.[31] From 1960 to 2022, immigrants were between 13 percent and 77 percent less likely to be incarcerated than their population share. But in the early 20th century, they were proportionally more likely to be incarcerated than their share of the population. After controlling for age and sex, early 20th-century immigrants were also less likely to be incarcerated, but the interest here is only in apportioning costs in a specific year, not measuring criminality.[32]

Immigrants have also been less likely to be in school throughout the century (Figure 10), primarily because they

Figure 9

Immigrants were less likely to be incarcerated than their population share in the latter half of the 20th century

Immigrant share of total and incarcerated population, 1900–2023

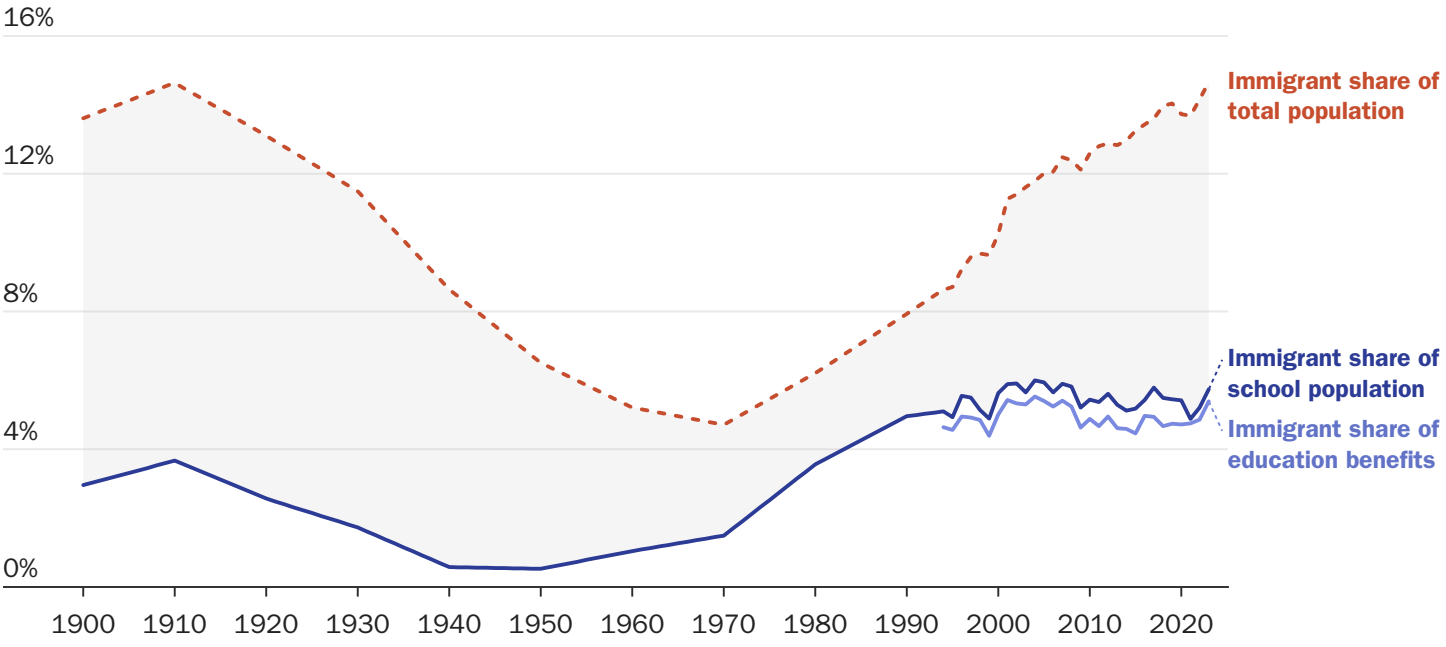


Sources: David J. Bier et al.; Census Bureau; Appendix Table A6.
Note: Incarcerated population includes only individuals ages 18–54.

Figure 10

Immigrants were less likely to be in school throughout the 20th century

Immigrant share of total and school population, 1900–2023

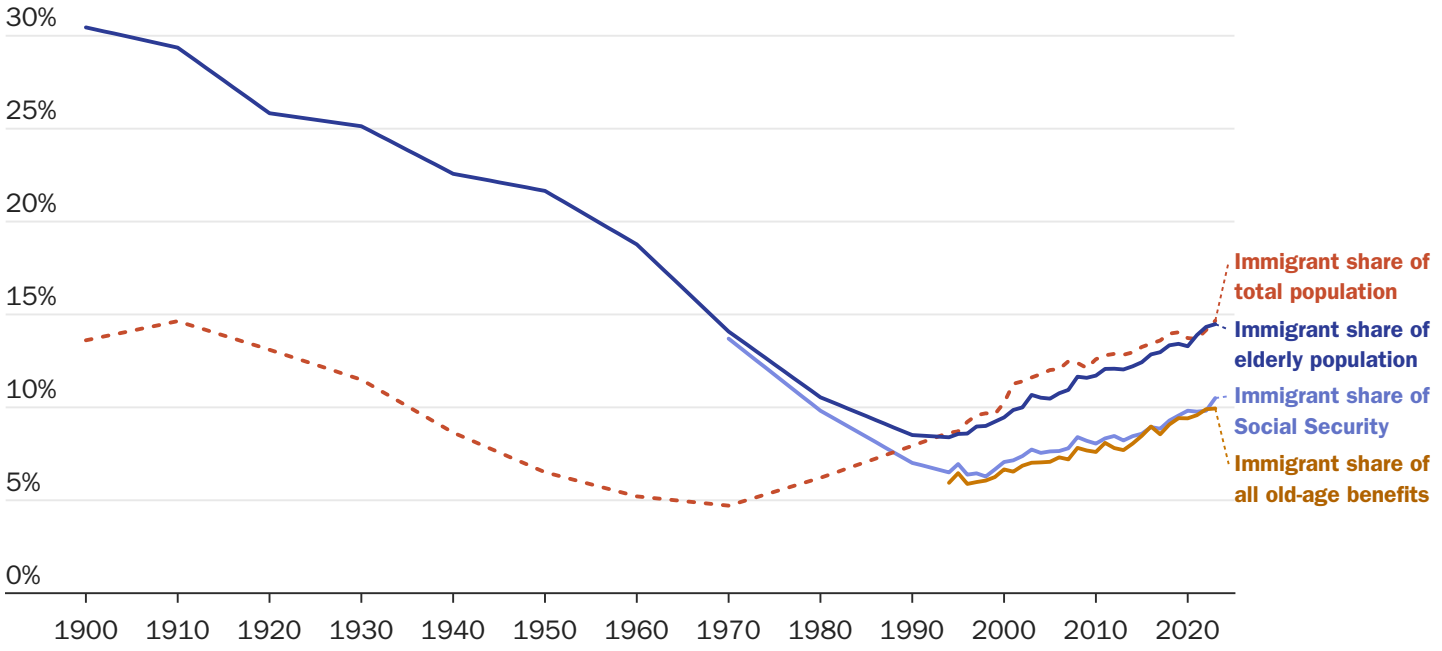


Sources: David J. Bier et al.; Census Bureau; Appendix Tables A4–A5.
Note: School population and benefits are restricted to individuals ages 5–24.

Figure 11

Immigrants use less Social Security than their share of the elderly population predicts

Immigrant share of Social Security income, elderly population (ages 62 and older), and total population, 1900–2023



Sources: David J. Bier et al.; Census Bureau; Appendix Table A6.

mostly arrived as adults. Although immigrants were more likely to attend private schools in the early 20th century, private enrollment was too small a share of students for this fact to meaningfully affect our analysis.[33]

In the early 20th century, there were no old-age-specific programs (except for veterans' pensions, which are included in pure public goods). We have data on Social Security income back to 1970, and as Figure 11 shows, immigrants used benefits in amounts about equivalent to their share of the elderly population in 1970. The share of Social Security income closely approximates the share of old-age benefits more broadly (Medicare and public pensions). Figure 11 also shows that our results are not based on a static illusion, which would reverse if we looked at an individual's lifecycle, because immigrants were never significantly underrepresented in the elderly population. Moreover, if we reweight the 2023 population using the 1910 census age distribution, it actually increases the net fiscal effect for 2023.

What about welfare for the poor? The evidence from the censuses from 1970 to 1990 shows that immigrants went from being slightly more likely to receive cash welfare in 1970 to being slightly less likely to receive it than their share of the poor population from the 1980s to 1990s (Figure 12).[34] Immigration by welfare-ineligible illegal immigrants increased, and welfare rules were restricted for new legal immigrants during their first five years in the country.

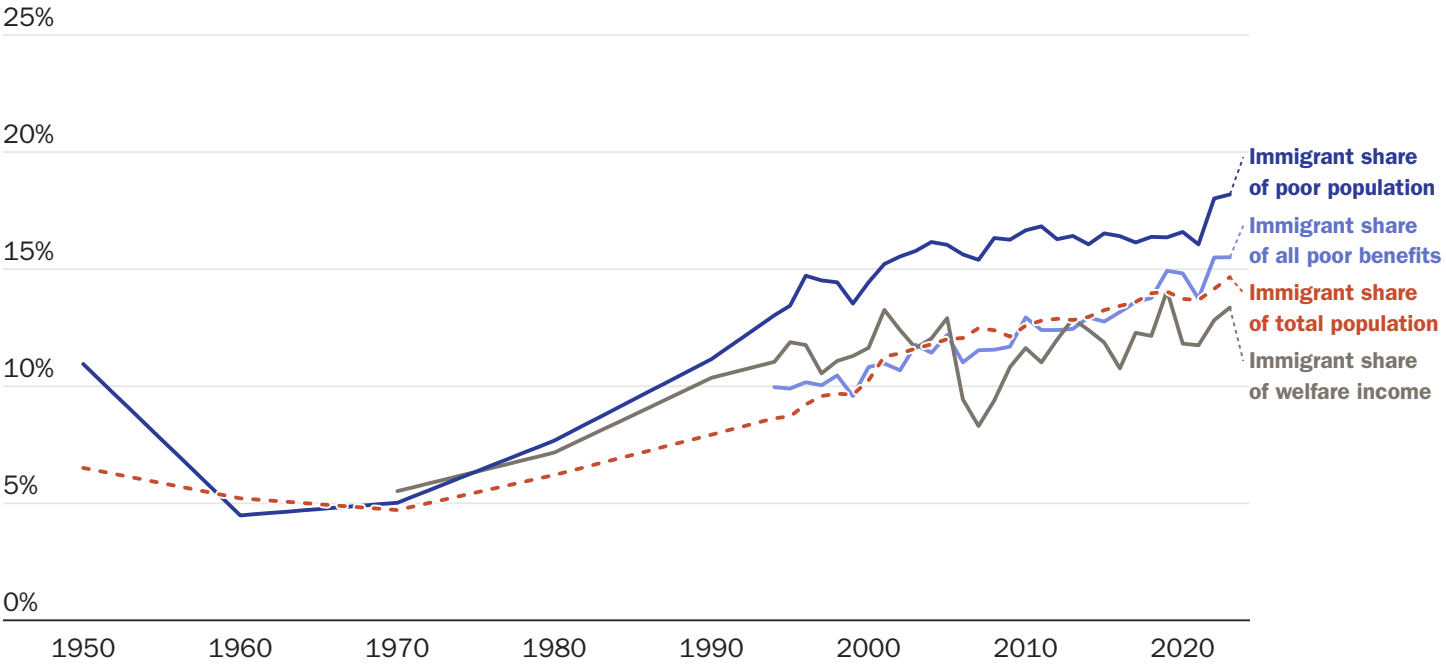
In the years before 1940, most welfare was provided at the state and local level through almshouses, asylums, orphanages, homes for the handicapped, and other "benevolent institutions," and not in the form of cash or noncash transfers. From 1900 to 1940, the censuses show that immigrants were substantially overrepresented at these institutions (Figure 13). This is consistent with a more general investigation of all types of aid in 43 cities in 1908–1909.[35]

These facts make allocating all US government benefits spending for earlier periods possible. Appendix Tables A5 and A6 give details on how spending was allocated, and Table A4 reports the resulting allocation factors themselves. Educational services can be allocated based on immigrant share of the population in schools—which, as we have seen, is a very good proxy. It is possible to distribute old-age benefits based on Social Security income recorded in the census back to 1970 and the immigrant share of the elderly population before then, but this particular spending stream did not exist in the early 20th century, so it plays little role in the comparison. For prisons, police, and courts,

Figure 12

Immigrants are no longer more likely to receive cash welfare than their share of the poor population

Immigrant share of welfare income, poor population, and total population, 1950–2023

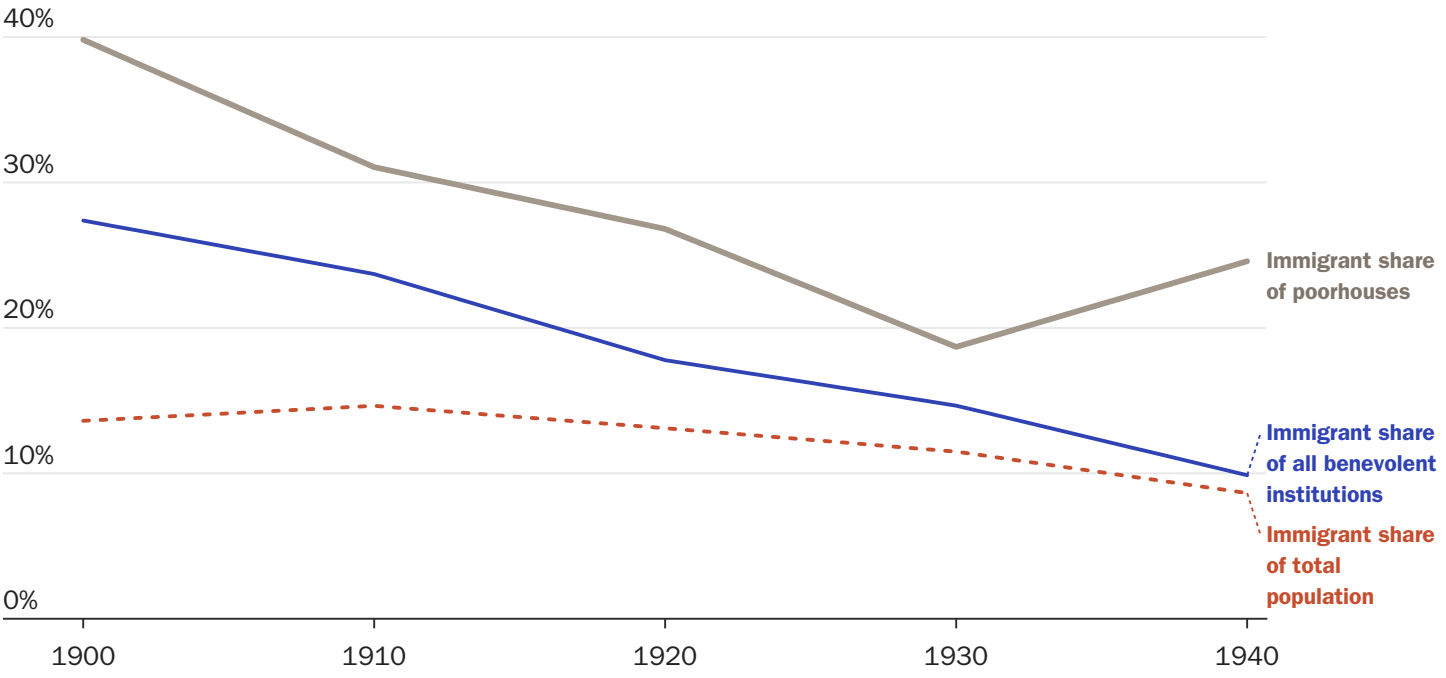


Sources: David J. Bier et al.; Census Bureau; Appendix Table A6.

Figure 13

Immigrants were overrepresented at welfare institutions in the early 20th century

Immigrant share of poorhouses, benevolent institutions, and total population, 1900–1940



Source: See Appendix Table A6.

the incarceration rate—which is available in the decennial censuses—provides a proxy for cost. It is an imperfect proxy, but it is the best available, and the expenditure is a relatively small share of spending, so any potential bias either way would have a minimal effect on our results.

For benefits for the poor, welfare income is available back to 1970, and the share of the poor population is available back to 1950. From 1900 to 1940, the share of the population in publicly funded benevolent institutions can be used.[36] All other benefits—from roads to parks to libraries (sometimes called congestible public goods)—are assumed to be used proportionally to the immigrant share of the population.

Figure 14 shows how close this result is to the results using the much more specific methodology in the Cato 2026 fiscal model, which used direct survey data on benefit use from the Census Bureau's Current Population Survey Annual Social and Economic Supplement.[37] The indirect estimates are within 1 percent of the more detailed model's value for the full 30-year period, so the model appears to be an accurate approximation of total spending on immigrants.

Figure 15 compares marginal and average spending per immigrant to spending per US-born person (including benefits and public goods spending). The upshot is that, except for a period from the 1950s to the 1980s when the immigrant population was smaller and less likely to be of working age than in the other periods, the average immigrant has been less costly on the margin than the average US-born person.

IMMIGRANTS' NET EFFECT ON BUDGETS

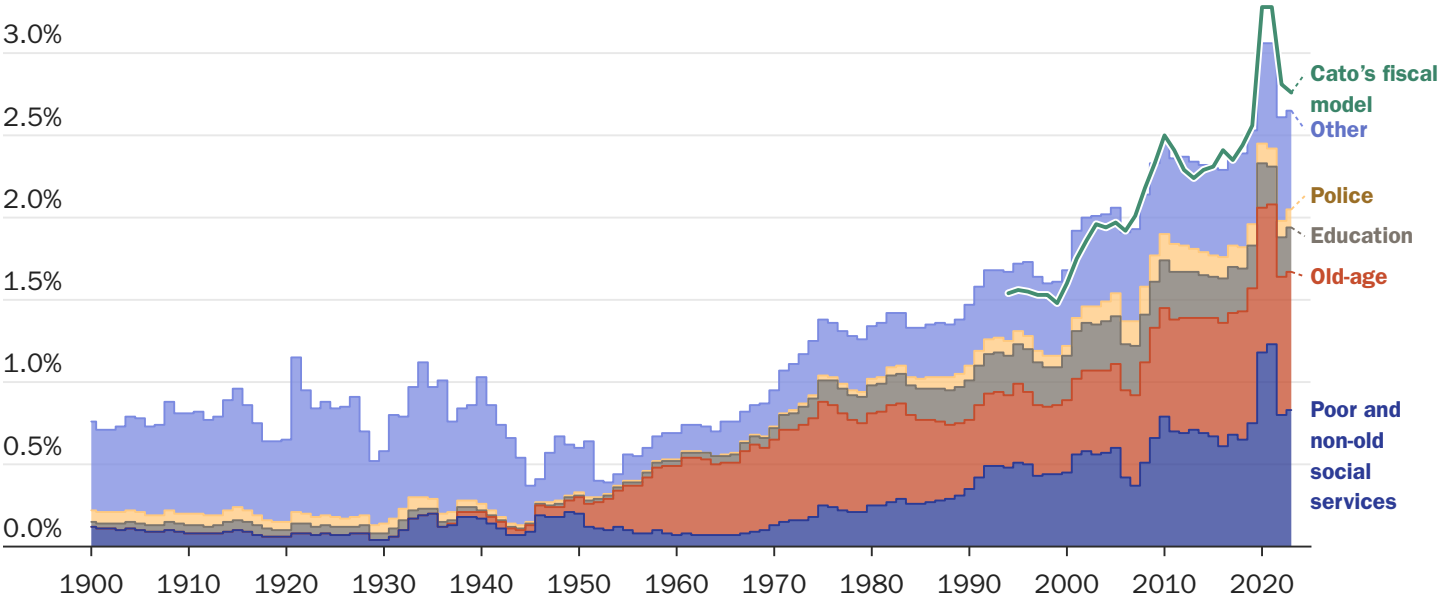
Figure 16 compares immigrant tax and benefits flows across the 20th and early 21st centuries, showing that immigrants have been fiscally positive every single year for more than 120 years. In 2022, immigrants were collectively the most fiscally positive in American history, as a percentage of GDP, with 2023 close behind. The net fiscal gain in 2023 was about 2.1 percent of GDP. In 1913, the net fiscal gain was just 0.8 percent of GDP. In other words, immigrants today are more than twice as much of a fiscal benefit to governments as they were in the early 20th century.

Economist Milton Friedman famously claimed, "You cannot simultaneously have a welfare state and free immigration."[38] On another occasion, he said, "Free immigration was a good thing before 1914, and free immigration is a bad thing

Figure 14

Spending on immigrants has risen similarly, regardless of the model used

Spending on immigrant benefits as a percent of GDP, 1900–2023

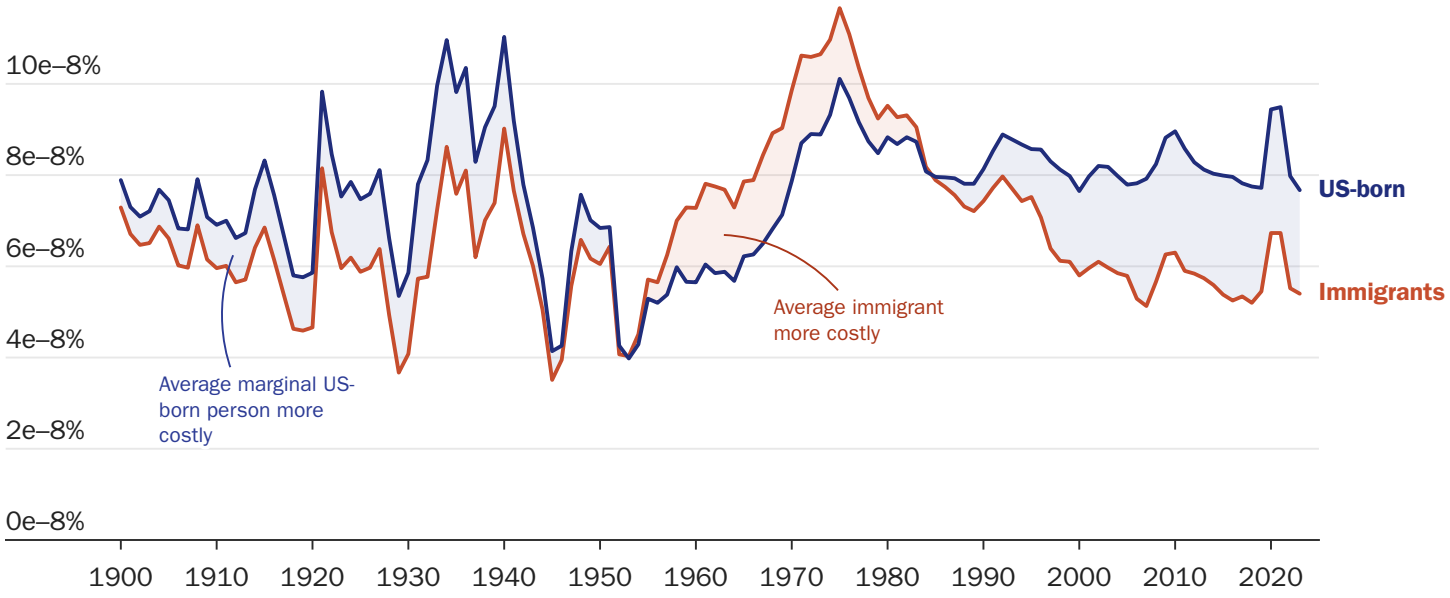


Sources: David J. Bier et al.; Census Bureau; Appendix Tables A3–A7.
Note: GDP = gross domestic product.

Figure 15

The average immigrant has been less costly than the average marginal US-born person for the majority of the 20th and 21st centuries

Spending per immigrant and per additional US-born (without pure public goods), percent of GDP; 1900–2023

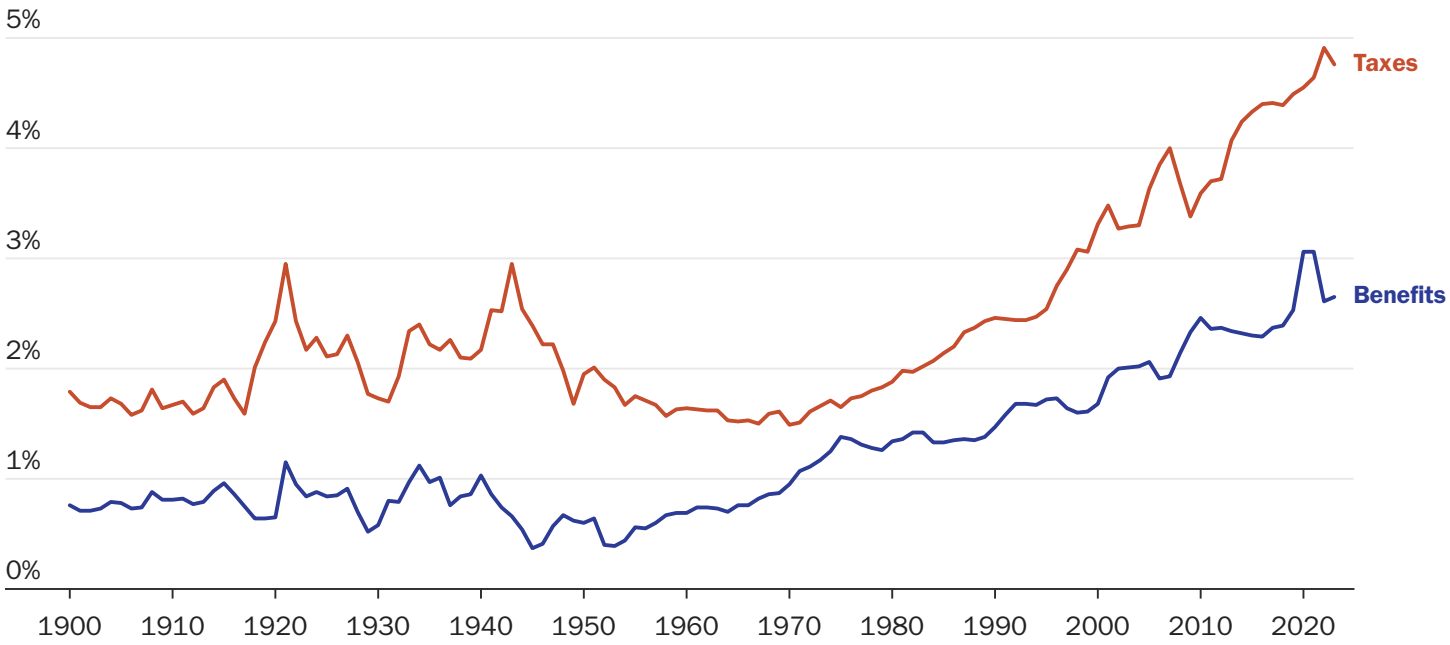


Sources: See Appendix Tables A1–A6.
Note: e = exponent; GDP = gross domestic product.

Figure 16

Immigrants have been fiscally positive every year for more than 120 years

Immigrant spending and taxes as a percent of GDP, 1900–2023



Sources: See Appendix Tables A1–A7.
Note: GDP = gross domestic product.

today" because people now are "entitled to a prorated share of the pot . . . or even to a low level of the pot."[39] Friedman clarified that he was speaking about legal immigration specifically, stating that illegal "immigration over the border is a good thing" because illegal immigrants "do not qualify for welfare."[40] Unfortunately, the Census Bureau data do not distinguish by legal status, and about 27 percent of the immigrant population was here illegally in 2023.[41] But we have previously estimated that 84 percent of the positive fiscal effect from 1994 to 2023 came from legal immigrants.[42]

Nonetheless, Friedman was correct to identify 1913—the year the current individual federal income tax was passed—as a critical juncture in US fiscal policy. Therefore, to respond directly to Friedman's assessment that there was a fundamental change in the fiscal situation for immigrants since 1914, Table 1 and Figure 17 break down the budget numbers for 2023 and 1913, just before the radical change in governmental taxes and spending that followed institution of the current income tax.

In 1913, all levels of government cumulatively ran a deficit in the nominal amount of $235 million, but pure public goods spending exceeded the deficit, so the marginal person was fiscally positive. Immigrants accounted for 9.7 percent of total spending and 21.7 percent of total taxes. Their net effect was a nominal $336 million—0.8 percent of GDP—or $11 billion in 2024 dollars. In 2023, all levels of government ran a cumulative deficit of $1.8 trillion, but again, public goods spending exceeded the deficit, meaning the average additional person had a positive effect. Immigrants were responsible for 7.8 percent of spending and 17.4 percent of revenue, for a cumulative fiscal boost of nearly $585 billion, compared to $11 billion in 1913.[43]

But Figure 17 dramatically understates the positive fiscal effect of immigrants. The more important perspective is the effect of immigrants compared to the population without immigrants. While some groups of immigrants do receive more in benefits than they generate in taxes, this fiscal flow is less fiscally negative relative to their contributions to GDP than that of the US-born population. Immigrants also reduce the deficit-to-GDP ratio, which improves the US fiscal situation because the economic burdensomeness of debt depends directly on the size of the economy.

Figure 18 shows the immigrant surplus relative to US GDP, compared to America's fiscal deficit relative to GDP. From 1913 to 2023, the immigrant surplus more than doubled as a share of GDP, but at the same time, the US federal, state, and local combined deficit without immigrants widened from negative 1.4 percent to negative 8.8 percent, a sixfold increase. This means the fiscal gap between immigrants and the US-born population has grown fivefold, from 2 percent to 11 percent of GDP, or $3.04 trillion. Milton Friedman failed to consider that the worse the fiscal situation of the United States, the more beneficial new immigrants become.

However, controlling for GDP biases the analysis in favor of early 20th-century immigrants. America is continuously becoming more productive, which means that each immigrant is—in real terms—having a much more positive effect today than in the early 20th century. They produce more for Americans today than they did then, and that production results in more tax revenue. Two percent of GDP represents far more new goods and services produced today than 2 percent of GDP in 1910. Comparing the immigrant surplus in real terms—controlling for inflation rather than GDP—is more revealing about how much more fiscally beneficial immigrants are today.

Figure 19 depicts this. In real inflation-adjusted terms, immigrants in 2023 were about 53 times more valuable to the government than immigrants in 1913 (using a consistent methodology throughout). In 1913, immigrants contributed about $11 billion more in taxes than they received in benefits, compared to roughly $585 billion in 2023 (again, using consistent methods). Their cumulative effect is enormous. In real terms, immigrants have contributed $14.6 trillion more in taxes than they have received in benefits since 1900. On a per-person basis, the average immigrant provided a fiscal benefit of $796 in 1913, compared to $11,899 in 2023.

THE EFFECT OF US-BORN CHILDREN

Our main interest in this paper is whether immigrants have increased the debt or whether the debt has risen exclusively through spending on the US-born population. Obviously, immigrants also have children in the United States, and those children impose costs and ultimately grow up and pay taxes. However, including all the descendants of immigrants in our analysis would effectively include nearly all Americans. Even limiting the analysis to the second generation obfuscates the comparison of immigrants between periods, because costs

from the elderly children of immigrants who arrived in the early 20th century would be attributed to the immigrants of the 21st century.

For these reasons, we will incorporate only the US-born dependent children of immigrants into this analysis. If estimating the total effect of immigration or comparing immigrants with the US-born were our goal, this choice would be inappropriate since it would automatically exclude all children of immigrants the moment that they become independent economic contributors—artificially increasing

Table 1

The net fiscal effect of immigrants has stayed positive in the face of consistent government deficits

Federal, state, and local expenditures and revenue, in millions of US dollars, 1913 and 2023

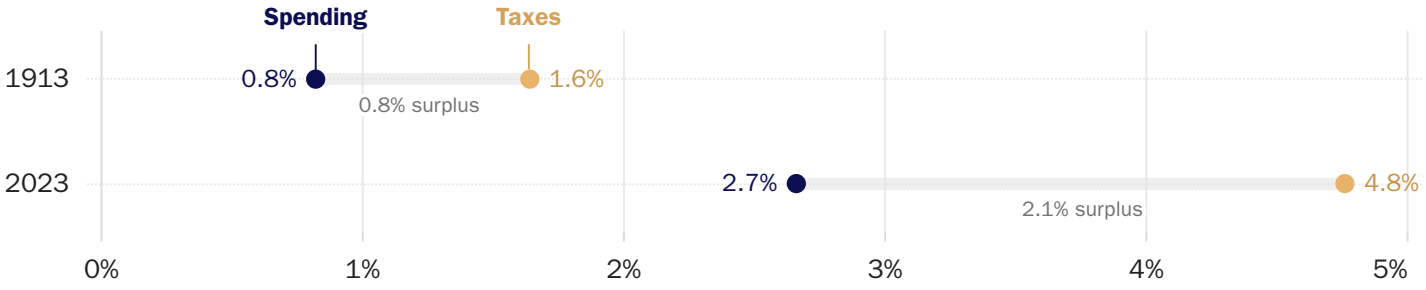
	1913				
	All US	**ImmShare**	**ImmTotal**	**% of GDP**	**2024$**
Old-age specific	$0	28.30%	$0	0.00%	$0
Other social benefits	$137	21.92%	$30	0.08%	$981
Education	$582	3.34%	$19	0.05%	$634
Police	$148	17.45%	$26	0.07%	$842
Other	$1,663	14.18%	$236	0.60%	$7,704
Public goods	$685	0.00%	$0	0.00%	$0
Total spending	$3,215	9.67%	$311	0.79%	$10,163
Taxes	$2,980	21.70%	$647	1.64%	$21,134
Net taxes	**–$235**		**$336**	**0.85%**	**$10,971**
	2023				
	All US	**ImmShare**	**ImmTotal**	**% of GDP**	**2024$**
Old-age specific	$2,151,189	10.50%	$225,811	0.84%	$232,474
Other social benefits	$1,677,972	13.36%	$224,115	0.83%	$230,727
Education	$1,261,972	5.74%	$72,396	0.27%	$74,532
Police	$432,429	7.05%	$30,466	0.11%	$31,365
Other	$1,113,049	14.66%	$163,172	0.60%	$167,987
Public goods	$2,572,681	0.00%	$0	0.00%	$0
Total spending	$9,209,292	7.77%	$715,961	2.65%	$737,085
Taxes	$7,394,987	17.36%	$1,283,935	4.76%	$1,321,817
Net taxes	**–$1,814,305**		**$567,975**	**2.10%**	**$584,732**

Sources: See Appendix Tables A1–A7.
Note: Totals may not sum due to rounding. GDP = gross domestic product; ImmShare = immigrant share of tax or spending category.

Figure 17

Immigrant tax revenue has increased more than spending on immigrants

Tax revenue and government spending attributed to immigrants, as a share of GDP, 1913 and 2023

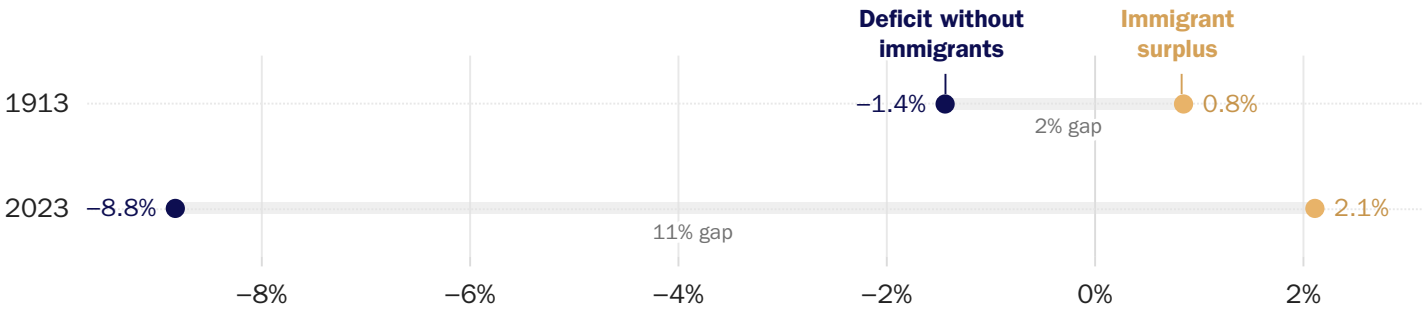


Sources: See Appendix Tables A1–A7.
Note: GDP = gross domestic product.

Figure 18

Immigrants have a larger relative effect on deficit to GDP in 2023

Immigrant surplus and deficit without immigrant surplus, as a share of GDP, 1913 and 2023

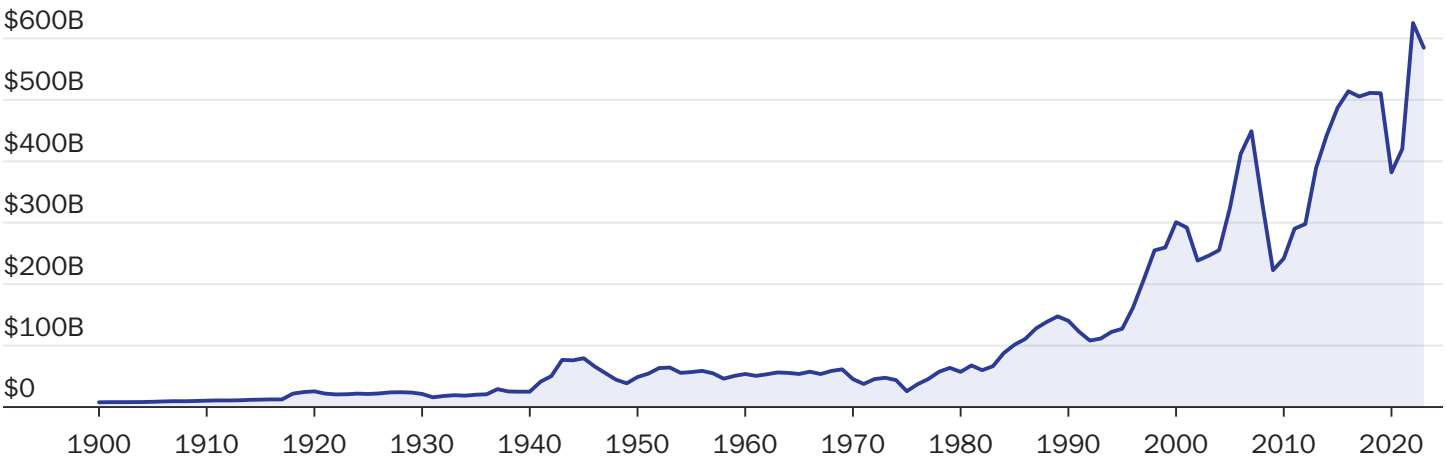


Sources: See Appendix Tables A1–A7.
Note: GDP = gross domestic product.

Figure 19

21st-century immigrants have the most fiscal upside in US history

Immigrant surplus in 2024 dollars, 1900–2023



Sources: See Appendix Tables A1–A7.

costs without accounting for their economic and fiscal contributions. However, the primary purpose of this paper is to compare the effects between immigrants of different periods, so using only dependents creates an internally valid comparison. We also use only the children of two immigrant parents because mixed-nativity households raise an unresolved allocation problem: If a child has one native and one immigrant parent, there is no principled way to assign that child's schooling costs or tax contribution to one parent over the other. Limiting the sample to two-immigrant-parent families avoids this ambiguity.[44]

As Figure 20 shows, immigrants accounted for about 15 percent of the population in 1910, and their dependents accounted for 6.3 percent of the population—a 2.3-to-1 ratio of immigrants to dependents. By 2023, immigrants were again about 15 percent of the population, but their dependents were just 3.8 percent of the population—a 3.8-to-1 ratio of immigrants to dependents. In other words, dependents were a much larger portion of the population in 1910 because immigrants in those days had larger families than today.

Adding dependents into the calculation increases substantial costs for education and some costs for welfare, but it has minimal effect on criminal justice and no effect on the largest government expenditures on programs for the elderly. Because old-age benefits are the largest benefits category and the one where immigrants' underuse is unaffected by adding dependents, they now account for a larger share of the immigrant fiscal advantage, which is reinforced by immigrants' continued tax advantage from working at higher rates, which dependents also leave untouched. Regardless, the effect of adding dependents into the calculation changes the picture more for the early 20th-century immigrants than the early 21st-century immigrants.

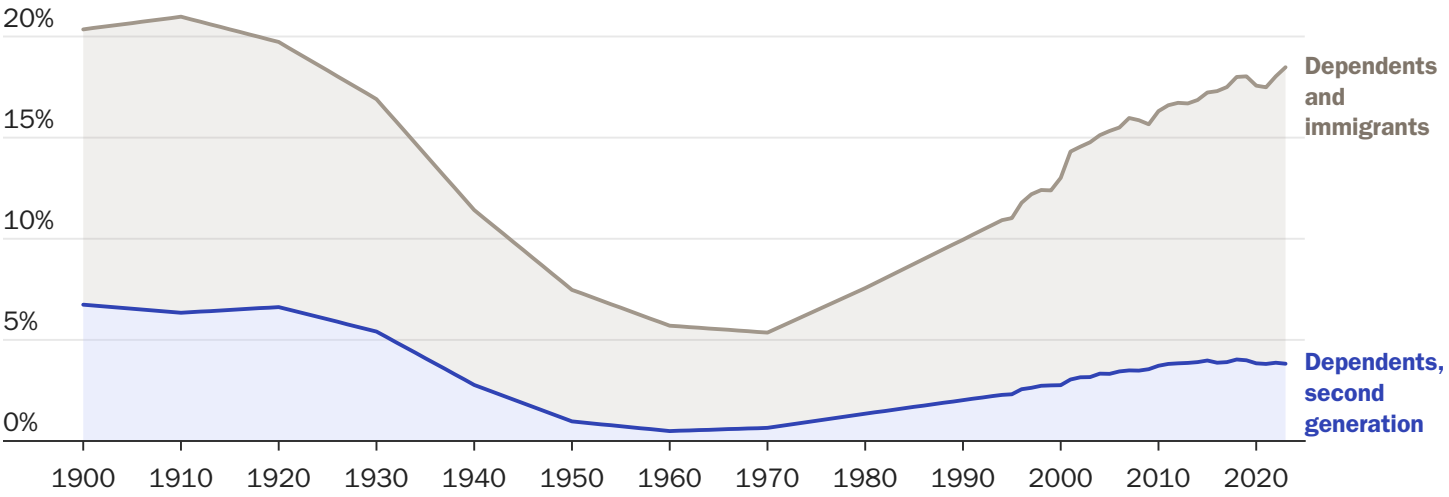
The total net fiscal effect of immigrants and their dependents was positive $6.3 trillion from 1900 to 2023, lower than the $14.6 trillion for immigrants alone. This lower amount makes sense because dependents almost exclusively add fiscal costs, not benefits, unlike when they are adults. The net effect of immigrants alone was a positive 0.8 percent of GDP in 1913, compared with 2.1 percent in 2023. It was 0.4 percent with dependents in 1913, compared with 1 percent with them in 2023 (Figure 21). In other words, even with dependents, immigrants were more than twice as fiscally positive in 2023 as they were in 1913.

When we compare immigrants and their dependents today against the US population without them, the difference is even more dramatic: The US population without immigrants and their dependents was fiscally negative 1 percent of GDP in 1913 and negative 8 percent in 2023. That means the fiscal gap between immigrants and their dependents versus the US population overall grew from 1.4 percent in 1913 to about 8.7 percent in 2023

Figure 20

Immigrants have half the number of dependents today as they did in 1910

Immigrants and dependents of immigrants, share of the population, 1900–2023



Sources: See Appendix Tables A4–A6.
Note: Dependents include only dependents of two immigrant parents.

(Figure 22). By this metric, immigrants and their children were relatively six times more fiscally beneficial in 2023 than in 1913 as a share of GDP. The net fiscal effect of immigrants and dependents in inflation-adjusted terms grew 49-fold, rather than 53-fold without dependents.

CONCLUSION

Milton Friedman was right that immigrants at the turn of the 21st century were legally entitled to more benefits than they had been at the turn of the 20th century. But immigrants today are more productive and pay higher taxes than in the past. This study demonstrates that immigration has remained fiscally positive, collectively, at all levels of the US government for more than a century. Indeed, immigration has never been as fiscally and economically positive as it is today.

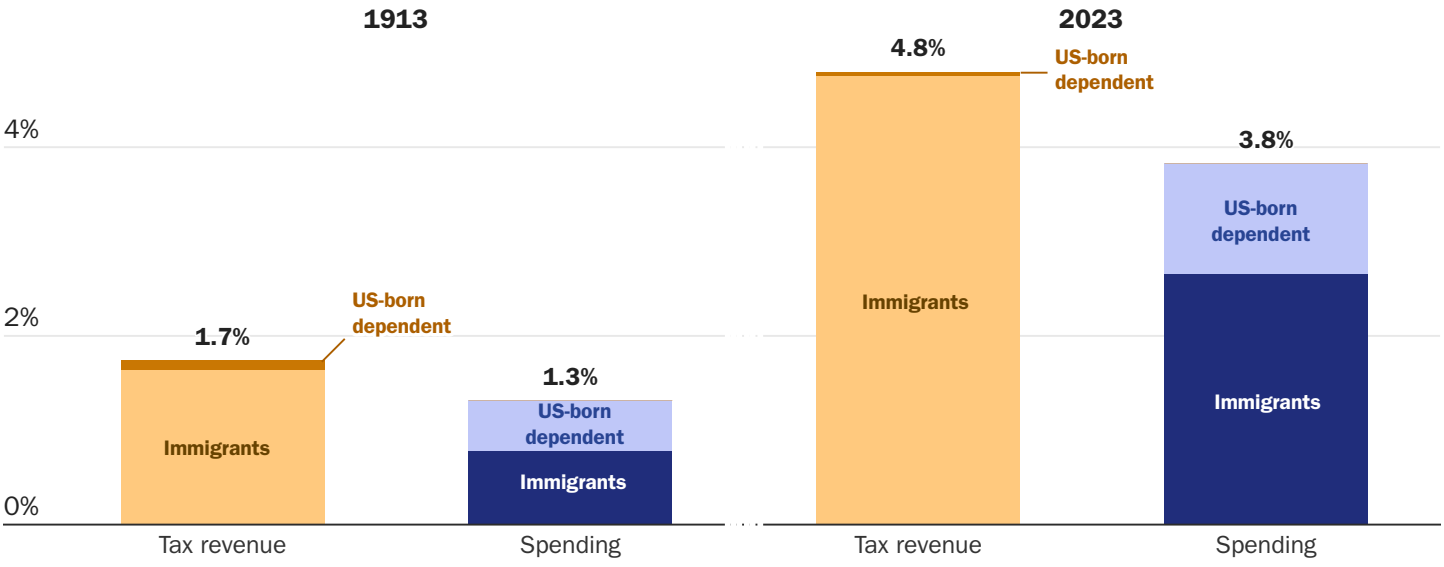
Of the $14.6 trillion in immigrant fiscal surplus, 86 percent has accrued since 1965 and the creation of the modern Great Society welfare state. The effect of immigrants on early 20th-century budgets must be estimated indirectly, but the facts are so clear that minor methodological changes would not reverse any of this paper's substantive conclusions. Of course, the effect could change in the future if taxes are significantly reduced, benefits are increased, or the composition of the immigrant population becomes radically different. However, the fiscal effect is not anywhere close to negative, and the positive effect is rising quickly. It would take a dramatic reversal for the immigrant population to harm government budgets. One of the few methods to turn the immigrant fiscal effect negative would be to prohibit new immigration until most current immigrants were elderly retirees.

Immigrants were much more fiscally positive in 2023 than they were in the early 20th century. This conclusion is robust against alternative methodologies, such as including the children of immigrants. Congress has built immigration policy largely on the premise that legal immigration economically harms Americans, so it should be strictly limited. Less than 4 percent of the applicants for green cards—or lawful permanent residence—were approved in 2023.[45] A better policy would be built on the assumption that immigrants will benefit the country fiscally and economically. Prior to 1921, more than 98 percent of immigrant applicants were approved to receive permanent residence. That system better reflected American traditions and economic reality. Congress should return to the presumption of openness and reauthorize peaceful immigrants to come to the United States legally.

Figure 21

Immigrant tax revenue exceeds spending on immigrants and their dependents

Tax revenue, spending allocations, immigrants, share of GDP, 1913 and 2023

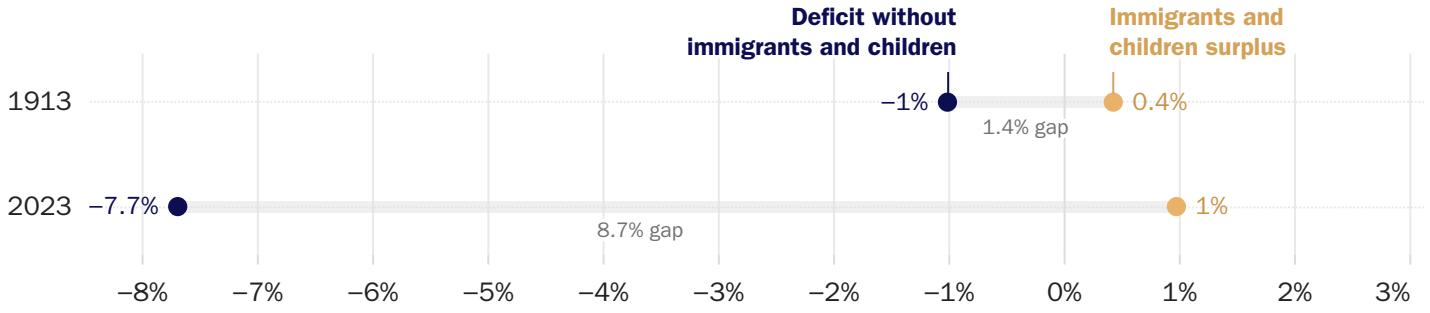


Sources: See Appendix Tables A1–A7.
Note: GDP = gross domestic product.

Figure 22

Immigrants with their children have a larger relative effect on deficit to GDP in 2023

Immigrant surplus and deficit without immigrant surplus, share of GDP, 1913 and 2023



Sources: See Appendix Tables A1–A7.
Note: GDP = gross domestic product.

APPENDIX

The primary sources for distributing spending and taxes between immigrants and the US-born are the Census Bureau's decennial censuses and, since 1994, the Census Bureau's Current Population Survey Annual Social and Economic Supplement, both available via IPUMS (originally Integrated Public Use Microdata Series), a collection of social science data housed at the University of Minnesota's Institute for Social Research and Data Innovation.[46] The main series for spending and revenues for this paper comes from the Bureau of Economic Analysis's (BEA) National Income and Product Accounts (NIPA) for 1929 to 2024 and from the Census Bureau's *Historical Statistics of the United States* for 1900 to 1928.[47] The BEA does not provide details on defense expenditures prior to 1959, so data from the Office of Management and Budget (OMB) on defense outlays were used. Generally, the difference between "outlays" and "current expenditures" is small, but from 1941 to 1945 the difference is so large (given World War II military expenditures) that total outlays must be used instead of the BEA's total current expenditures. Otherwise, the spending components will become larger than the total amount. Pre-1929 spending is more compatible with the OMB approach, but the differences are not important for the 1913 to 2023 comparison. Appendix Tables A1 and A2 provide the nominal values underlying the figures in this paper. Table A4 reports the resulting allocation factors themselves: the annual share of each spending or tax category attributable to first-generation immigrants and to their second-generation dependents, separately, for every year from 1900 to 2023.[48]

Table A5 explains how each factor in Table A4 is constructed—that is, which proxy variable stands in for that factor and over what period—since several factors switch proxies across the century as better data become available. The factors in Table A4 are shares, so multiplying one by the corresponding total in Table A1 or A2 converts it into a dollar figure, a share of GDP, or a per capita amount.

Take the education factor as an example. In every year, it is built from the immigrant (or dependent) share of the school population: If first-generation immigrant children are listed as 3 percent of all students enrolled in 1913, Table A4 reports 3 percent as that year's education factor for first-generation immigrants, and Table A5 records "share of school population" as the proxy used to build it, for all years. To find immigrants' dollar share of education spending in 1913, multiply that 3 percent factor by total nominal education spending in 1913 from Table A1. Dividing the result by 1913 GDP, from Table A2, expresses it as a share of GDP instead of a dollar figure. And dividing it by the immigrant population in 1913 gives the marginal, or per capita, cost, where immigrant population itself is obtained by multiplying the "other spending factor" in Table A4 (the immigrant share of total population) by total US population in Table A2.

(Text continues on page 33)

Table A1 (page 1 of 8)

Government spending, all levels of government, by type

Millions of US$, 1900–2023

Aggregated								
Year	Interest	Subsidies	Defense	Veterans	Foreign affairs	Science/ Space/ Tech	Education	Other
1900	105	0	191	141	3	0	234	834
1901	99	0	205	139	3	0	246	869
1902	97	0	180	138	3	0	258	895
1903	104	0	201	138	3	0	287	985
1904	107	0	268	143	4	0	317	1,062
1905	114	0	244	142	3	0	346	1,153
1906	121	0	248	141	3	0	376	1,232
1907	128	0	247	139	4	0	405	1,322
1908	133	0	294	154	4	0	435	1,432
1909	140	0	308	162	4	0	464	1,514
1910	147	0	313	161	5	0	494	1,589
1911	154	0	317	158	5	0	523	1,665
1912	162	0	320	154	5	0	553	1,744
1913	170	0	335	175	5	0	582	1,811
1914	196	0	348	173	5	0	708	2,024
1915	222	0	344	164	5	0	834	2,273
1916	248	0	337	159	6	0	961	2,464
1917	276	0	633	160	891	0	1,087	2,735
1918	467	0	7,278	181	4,751	0	1,213	2,982
1919	923	0	13,727	222	3,500	0	1,339	3,342
1920	1,350	0	4,057	213	435	0	1,466	3,765
1921	1,355	0	1,768	261	11	0	1,592	5,369
1922	1,373	0	935	253	11	0	1,718	4,659
1923	1,474	0	730	264	18	0	1,823	4,818
1924	1,394	0	689	228	16	0	1,928	5,075
1925	1,372	0	717	218	15	0	2,033	5,425
1926	1,358	0	677	207	18	0	2,138	5,823
1927	1,349	0	688	231	18	0	2,243	6,225
1928	1,329	0	732	229	12	0	2,259	4,747
1929	881	46	791	230	16	0	2,276	3,974
1930	906	73	839	221	16	0	2,292	4,260

Table A1 (page 2 of 8)

Government spending, all levels of government, by type

Millions of US$, 1900–2023

Aggregated								
Year	Interest	Subsidies	Defense	Veterans	Foreign affairs	Science/ Space/ Tech	Education	Other
1931	1,123	145	832	234	16	0	2,309	5,278
1932	1,229	117	834	233	19	0	2,325	4,043
1933	1,322	166	784	235	15	0	2,165	4,186
1934	1,362	467	706	319	11	0	2,005	5,435
1935	1,290	598	924	374	16	0	2,185	5,266
1936	1,256	289	1,147	399	17	0	2,365	7,126
1937	1,478	347	1,185	396	18	0	2,509	5,730
1938	1,452	479	1,240	403	19	0	2,653	6,090
1939	1,475	796	1,368	417	19	0	2,740	6,574
1940	1,737	748	1,660	570	51	0	2,827	9,376
1941	1,819	456	6,435	560	145	0	2,762	9,440
1942	2,139	520	25,658	501	968	4	2,696	10,840
1943	2,899	583	66,699	276	1,286	1	2,751	12,817
1944	3,612	1,041	79,143	–126	1,449	48	2,805	12,213
1945	4,544	1,144	82,965	110	1,913	111	3,258	7,411
1946	5,621	1,359	42,681	2,465	1,935	34	3,711	5,163
1947	5,936	398	12,808	6,344	5,791	5	5,716	11,263
1948	6,169	540	9,105	6,457	4,566	1	7,721	16,033
1949	6,582	498	13,150	6,599	6,052	48	8,684	13,738
1950	6,993	843	13,724	8,834	4,673	55	9,647	12,804
1951	7,354	1,048	23,566	5,526	3,647	51	9,623	18,957
1952	7,785	774	46,089	5,341	2,691	49	9,598	7,491
1953	8,275	514	52,802	4,519	2,119	49	10,117	6,497
1954	8,866	327	49,266	4,613	1,596	46	11,196	6,260
1955	9,328	201	42,729	4,675	2,223	74	12,710	12,612
1956	10,386	742	42,523	4,891	2,414	79	14,160	13,256
1957	11,633	1,132	45,430	5,005	3,147	122	15,098	14,462
1958	11,970	1,368	46,815	5,350	3,364	141	16,836	15,462
1959	13,795	1,058	49,015	5,443	3,144	294	14,484	18,645
1960	17,453	1,146	48,130	5,441	2,988	599	15,902	19,570
1961	17,850	2,014	49,601	5,705	3,184	1,042	17,329	20,984

Table A1 (page 3 of 8)

Government spending, all levels of government, by type

Millions of US$, 1900–2023

Aggregated								
Year	Interest	Subsidies	Defense	Veterans	Foreign affairs	Science/ Space/ Tech	Education	Other
1962	19,660	2,273	52,345	5,628	5,639	1,723	18,567	22,236
1963	21,255	2,234	53,400	5,521	5,308	3,051	20,260	23,873
1964	22,922	2,729	54,757	5,682	4,945	4,897	22,264	24,181
1965	24,460	3,007	50,620	5,723	5,273	5,823	24,848	32,771
1966	26,696	3,949	58,111	5,923	5,580	6,717	28,506	36,288
1967	29,090	3,811	71,417	6,743	5,566	6,233	32,260	37,196
1968	32,788	4,174	81,926	7,042	5,301	5,524	36,376	41,018
1969	36,634	4,534	82,497	7,642	4,600	5,020	41,569	49,778
1970	44,383	4,777	81,692	8,679	4,330	4,511	48,531	57,956
1971	48,621	4,675	78,872	9,778	4,159	4,182	55,491	71,638
1972	53,464	6,636	79,174	10,732	4,781	4,175	61,881	82,201
1973	61,980	5,230	76,681	12,015	4,149	4,032	67,410	91,488
1974	69,526	3,307	79,347	13,388	5,710	3,980	75,419	105,994
1975	77,403	4,494	86,509	16,599	7,097	3,991	88,350	116,082
1976	86,724	5,125	89,619	18,433	6,433	4,373	94,997	121,410
1977	95,753	7,100	97,241	18,038	6,353	4,736	101,480	133,460
1978	112,446	8,936	104,495	18,978	7,482	4,926	108,572	147,617
1979	128,460	8,531	116,342	19,931	7,459	5,234	119,007	159,753
1980	148,756	9,800	133,995	21,185	12,714	5,831	129,834	175,599
1981	180,093	11,473	157,513	22,991	13,104	6,468	141,789	191,886
1982	206,165	15,017	185,309	23,958	12,300	7,199	151,203	203,074
1983	227,965	21,304	209,903	24,846	11,848	7,934	160,455	209,387
1984	260,064	21,065	227,411	25,601	15,869	8,311	172,719	215,971
1985	285,779	21,360	252,743	26,281	16,169	8,622	186,855	234,304
1986	302,683	24,895	273,373	26,343	14,146	8,962	201,108	249,229
1987	314,659	30,282	281,996	26,761	11,645	9,200	215,429	265,308
1988	333,727	29,501	290,360	29,409	10,466	10,820	231,023	282,874
1989	362,097	27,428	303,555	30,038	9,583	12,821	253,079	308,233
1990	383,323	26,994	299,321	29,088	13,758	14,426	274,888	354,071
1991	408,691	27,488	273,285	31,319	15,846	16,092	291,248	375,831
1992	417,216	30,088	298,346	34,112	16,090	16,389	308,521	420,306

Table A1 (page 4 of 8)

Government spending, all levels of government, by type

Millions of US$, 1900–2023

Aggregated								
Year	Interest	Subsidies	Defense	Veterans	Foreign affairs	Science/ Space/ Tech	Education	Other
1993	422,743	36,681	291,084	35,690	17,218	17,006	325,963	433,263
1994	434,080	32,523	281,640	37,617	17,067	16,189	342,261	459,791
1995	473,006	34,812	272,063	37,910	16,429	16,692	362,405	478,948
1996	479,364	35,234	265,748	37,003	13,487	16,684	378,472	510,861
1997	485,311	33,810	270,502	39,332	15,173	17,136	398,296	527,193
1998	479,288	36,368	268,194	41,793	13,054	18,172	424,270	551,558
1999	465,623	45,209	274,769	43,216	15,239	18,084	452,571	596,669
2000	464,812	45,840	294,363	47,040	17,213	18,594	487,914	624,286
2001	459,818	58,710	304,732	45,024	16,485	19,753	525,802	679,601
2002	452,224	41,396	348,456	50,979	22,315	20,734	545,057	717,115
2003	475,585	49,057	404,733	56,832	21,199	20,831	565,550	741,073
2004	480,658	46,386	455,813	59,729	26,870	23,029	596,950	757,575
2005	521,518	60,911	495,294	70,112	34,565	23,597	627,411	787,303
2006	560,869	51,467	521,820	69,832	29,499	23,584	663,078	845,714
2007	600,017	54,584	551,258	72,828	28,482	24,407	708,127	904,204
2008	592,304	52,557	616,066	84,711	28,857	26,773	749,532	946,809
2009	621,553	58,347	661,012	95,545	37,529	28,417	777,316	948,019
2010	648,459	55,808	693,485	108,478	45,195	30,100	813,238	941,682
2011	691,208	60,008	705,554	127,269	45,685	29,466	821,745	911,565
2012	703,747	58,037	677,852	124,679	36,802	29,060	828,478	955,889
2013	686,541	59,720	633,446	139,038	46,464	28,908	860,402	968,046
2014	701,355	58,090	603,457	149,621	46,879	28,570	882,096	1,001,064
2015	698,020	57,192	589,659	159,781	52,040	29,412	902,971	1,027,781
2016	737,072	61,748	593,372	174,557	45,306	30,174	923,269	1,052,561
2017	767,644	59,875	598,723	176,584	46,308	30,398	947,933	1,094,924
2018	826,647	63,320	631,251	178,895	48,875	31,536	983,893	1,179,161
2019	883,547	72,957	685,707	199,843	53,035	32,414	1,019,283	1,229,782
2020	815,302	656,856	724,588	218,655	67,722	34,022	1,047,561	1,318,673
2021	855,458	482,741	753,897	234,282	46,951	35,534	1,097,866	1,445,958
2022	973,673	127,449	765,649	274,404	71,873	37,404	1,179,919	1,528,743
2023	1,239,150	101,079	820,263	301,600	69,313	41,276	1,261,972	1,647,912

Table A1 (page 5 of 8)

Government spending, all levels of government, by type

Millions of US$, 1900–2023

	Disaggregated			
Year	Poor/Needs-based	Old age	Police	Other
1900	84		74	760
1901	87		77	792
1902	89		80	814
1903	93		86	898
1904	98		93	970
1905	102		99	1,054
1906	106		105	1,127
1907	111		111	1,211
1908	115		117	1,316
1909	120		123	1,391
1910	124		129	1,460
1911	128		135	1,529
1912	133		142	1,602
1913	137		148	1,663
1914	160		168	1,856
1915	184		188	2,085
1916	207		208	2,255
1917	231		228	2,507
1918	254		248	2,734
1919	278		268	3,074
1920	301		288	3,477
1921	325		308	5,061
1922	348		328	4,331
1923	372		355	4,462
1924	395		383	4,691
1925	419		410	5,015
1926	442		438	5,386
1927	466		466	5,760
1928	536		485	4,262
1929	257	0	504	3,471
1930	296	0	522	3,738
1931	375	0	541	4,736

Table A1 (page 6 of 8)

Government spending, all levels of government, by type

Millions of US$, 1900–2023

	Disaggregated			
Year	Poor/Needs-based	Old age	Police	Other
1932	525	0	560	3,484
1933	751	0	526	3,660
1934	930	0	491	4,944
1935	1,139	0	511	4,755
1936	831	1	531	6,595
1937	999	41	569	5,161
1938	1,536	108	607	5,483
1939	1,596	124	613	5,961
1940	1,715	153	620	8,756
1941	1,594	212	666	8,773
1942	1,571	258	713	10,127
1943	1,295	297	755	12,061
1944	1,385	346	798	11,415
1945	1,886	419	840	6,571
1946	4,211	539	881	4,282
1947	3,947	661	1,022	10,241
1948	4,315	805	1,162	14,871
1949	5,258	952	1,275	12,463
1950	5,063	1,259	1,387	11,417
1951	3,857	2,190	1,561	17,396
1952	4,249	2,618	1,734	5,757
1953	4,288	3,449	1,863	4,634
1954	5,558	4,161	2,013	4,247
1955	5,012	5,479	2,180	10,432
1956	5,028	6,275	2,386	10,870
1957	5,737	8,004	2,606	11,856
1958	8,524	9,216	2,840	12,622
1959	7,480	11,008	3,314	15,331
1960	7,944	12,079	3,599	15,971
1961	9,749	13,608	3,857	17,127
1962	8,977	15,338	4,046	18,190
1963	9,294	16,315	4,310	19,563

Table A1 (page 7 of 8)

Government spending, all levels of government, by type

Millions of US$, 1900–2023

	Disaggregated			
Year	Poor/Needs-based	Old age	Police	Other
1964	9,594	17,115	4,637	19,544
1965	9,881	19,207	5,019	27,752
1966	10,710	21,996	5,474	30,814
1967	13,111	27,129	6,125	31,071
1968	15,543	31,959	7,212	33,806
1969	17,818	34,618	7,994	41,784
1970	23,983	40,379	9,156	48,800
1971	30,414	46,661	10,625	61,013
1972	33,566	51,938	12,067	70,134
1973	35,052	63,475	13,530	77,958
1974	44,110	73,130	15,457	90,537
1975	64,560	84,793	17,577	98,505
1976	67,064	96,846	19,072	102,338
1977	67,045	109,123	20,987	112,473
1978	68,952	120,908	23,281	124,336
1979	76,377	136,830	25,875	133,878
1980	97,263	159,599	28,858	146,741
1981	104,592	187,457	32,542	159,344
1982	116,403	210,406	36,497	166,577
1983	125,840	228,234	39,876	169,511
1984	120,804	243,840	43,451	172,520
1985	127,367	259,206	48,305	185,999
1986	136,779	275,251	52,388	196,841
1987	142,404	289,058	56,933	208,375
1988	153,228	306,913	63,401	219,473
1989	171,355	332,513	71,106	237,127
1990	198,005	358,994	79,430	274,641
1991	243,185	389,204	87,427	288,404
1992	291,028	422,116	95,608	324,698
1993	307,096	452,545	103,785	329,478
1994	311,472	484,545	111,573	348,218
1995	327,275	516,920	119,854	359,094

Table A1 (page 8 of 8)

Government spending, all levels of government, by type

Millions of US$, 1900–2023

	Disaggregated			
Year	Poor/Needs-based	Old age	Police	Other
1996	339,950	544,960	127,923	382,938
1997	341,414	571,707	135,066	392,127
1998	351,688	582,969	146,332	405,226
1999	371,266	596,806	159,482	437,187
2000	391,105	628,777	173,350	450,936
2001	443,167	676,076	188,082	491,519
2002	506,146	715,345	199,666	517,449
2003	540,082	749,093	205,857	535,216
2004	571,552	798,880	217,683	539,892
2005	600,505	854,049	228,826	558,477
2006	601,477	952,722	241,442	604,272
2007	642,043	1,013,667	258,370	645,834
2008	797,140	1,077,223	276,773	670,036
2009	888,204	1,168,051	282,185	665,834
2010	1,009,195	1,214,343	285,713	655,969
2011	987,144	1,259,831	285,925	625,640
2012	924,272	1,328,295	285,846	670,043
2013	923,384	1,383,563	288,681	679,365
2014	967,956	1,446,602	298,373	702,691
2015	1,023,710	1,518,960	308,996	718,785
2016	1,049,666	1,570,932	316,569	735,992
2017	1,065,737	1,630,376	325,320	769,604
2018	1,087,649	1,718,712	342,915	836,246
2019	1,126,714	1,831,004	357,685	872,097
2020	2,129,558	1,907,836	364,721	953,952
2021	2,397,935	2,002,229	383,387	1,062,571
2022	1,581,371	2,151,189	407,908	1,120,835
2023	1,677,972	2,151,189	432,429	1,113,049

Table A2 (page 1 of 4)

Government receipts, all levels of government, GDP, and US population, 1900–2023

Millions of US$

Year	Current receipts	Other	Property tax	Income tax	Social Security	US GDP	US population
1900	1,598	947	651			19,395	76,094,000
1901	1,665	987	678			21,468	77,584,000
1902	1,694	988	706			22,390	79,163,000
1903	1,789	1,026	763			23,798	80,632,000
1904	1,871	1,051	820			23,775	82,166,000
1905	1,977	1,100	877			26,065	83,822,000
1906	2,130	1,196	934			29,880	85,450,000
1907	2,304	1,313	991			31,588	87,008,000
1908	2,342	1,295	1,047			28,800	88,710,000
1909	2,447	1,343	1,104			33,390	90,490,000
1910	2,621	1,439	1,161	21		35,263	92,407,000
1911	2,750	1,498	1,218	34		35,978	93,863,000
1912	2,844	1,540	1,275	29		39,343	95,335,000
1913	2,980	1,611	1,332	35	2	39,538	97,225,000
1914	3,305	1,654	1,553	83	15	38,833	99,111,000
1915	3,589	1,684	1,774	103	29	40,143	101,000,000
1916	3,993	1,798	1,995	159	42	48,303	102,000,000
1917	4,658	1,982	2,216	405	55	60,540	103,000,000
1918	7,529	2,128	2,437	2,895	69	76,560	103,000,000
1919	9,340	3,932	2,658	2,668	82	84,278	105,000,000
1920	11,185	4,175	2,879	4,035	95	91,543	106,000,000
1921	10,433	3,906	3,100	3,318	109	69,515	109,000,000
1922	9,322	3,691	3,321	2,188	122	74,163	110,000,000
1923	9,725	4,188	3,603	1,804	130	85,373	112,000,000
1924	10,320	4,329	3,885	1,967	139	84,878	114,000,000
1925	10,666	4,514	4,166	1,839	147	93,300	116,000,000
1926	11,397	4,669	4,448	2,124	156	97,165	117,000,000
1927	12,191	4,915	4,730	2,382	164	95,008	119,000,000
1928	11,368	4,189	4,681	2,335	163	97,165	121,000,000
1929	10,544	3,244	4,543	2,683	74	103,423	122,000,000
1930	9,975	3,178	4,727	1,997	73	98,400	123,000,000
1931	8,685	2,972	4,539	1,104	70	84,800	124,000,000

Table A2 (page 2 of 4)

Government receipts, all levels of government, GDP, and US population, 1900–2023

Millions of US$

Year	Current receipts	Other	Property tax	Income tax	Social Security	US GDP	US population
1932	8,171	2,944	4,424	732	71	68,500	125,000,000
1933	8,628	3,660	3,962	943	63	58,300	126,000,000
1934	9,700	4,453	3,907	1,271	69	62,000	126,000,000
1935	10,462	4,727	4,023	1,640	72	70,500	127,000,000
1936	11,886	5,208	4,058	2,308	312	79,600	128,000,000
1937	14,266	5,620	4,162	3,011	1,473	88,900	129,000,000
1938	13,873	5,511	4,277	2,468	1,617	90,200	130,000,000
1939	14,249	5,715	4,285	2,497	1,752	90,400	131,000,000
1940	16,622	6,265	4,407	4,080	1,870	98,200	132,000,000
1941	23,764	7,512	4,449	9,469	2,334	116,200	133,000,000
1942	31,224	8,186	4,397	15,749	2,892	147,700	135,000,000
1943	47,619	9,033	4,494	30,314	3,778	184,600	137,000,000
1944	49,432	10,403	4,565	30,117	4,347	213,800	138,000,000
1945	51,366	11,761	4,642	29,623	5,340	226,400	140,000,000
1946	50,387	13,070	4,836	25,863	6,618	228,000	141,000,000
1947	55,395	14,011	5,346	30,474	5,564	238,900	144,000,000
1948	56,757	15,314	5,938	30,889	4,616	261,900	147,000,000
1949	53,588	15,952	6,642	26,104	4,890	276,500	149,000,000
1950	66,091	17,530	7,143	35,936	5,482	278,700	152,000,000
1951	81,919	18,987	7,696	48,584	6,652	327,100	155,000,000
1952	86,443	20,837	8,385	50,276	6,945	357,100	158,000,000
1953	90,800	22,283	9,096	52,292	7,129	382,100	160,000,000
1954	85,933	21,609	9,673	46,551	8,100	387,200	163,000,000
1955	96,656	23,487	10,448	53,604	9,117	406,300	166,000,000
1956	104,147	25,599	11,453	57,078	10,017	438,300	169,000,000
1957	109,797	27,147	12,609	58,597	11,444	463,400	172,000,000
1958	108,166	27,227	13,764	55,754	11,421	473,500	175,000,000
1959	122,549	30,433	14,812	63,430	13,874	504,600	178,000,000
1960	133,926	35,037	16,238	66,173	16,478	534,300	181,000,000
1961	138,531	36,306	17,580	67,588	17,057	546,600	184,000,000
1962	150,068	39,054	18,958	72,882	19,174	585,700	187,000,000

Table A2 (page 3 of 4)

Government receipts, all levels of government, GDP, and US population, 1900–2023

Millions of US$

Year	Current receipts	Other	Property tax	Income tax	Social Security	US GDP	US population
1963	161,628	41,727	20,245	77,921	21,735	618,200	189,000,000
1964	166,113	45,556	21,687	76,406	22,464	661,700	192,000,000
1965	179,762	48,011	23,187	85,064	23,500	709,300	194,000,000
1966	202,215	50,206	24,535	96,033	31,441	780,500	197,000,000
1967	217,039	53,854	26,964	101,242	34,979	836,500	199,000,000
1968	251,352	61,440	29,896	121,177	38,839	897,600	201,000,000
1969	282,685	67,458	32,763	138,124	44,340	980,300	203,000,000
1970	285,847	71,962	36,674	130,618	46,593	1,046,700	205,000,000
1971	302,310	77,735	40,445	132,626	51,504	1,116,600	208,000,000
1972	345,609	84,222	43,227	158,582	59,578	1,216,300	210,000,000
1973	388,789	93,004	46,355	173,392	76,038	1,352,700	212,000,000
1974	430,239	102,389	48,980	193,120	85,750	1,482,900	214,000,000
1975	441,228	109,240	53,384	188,707	89,897	1,606,900	216,000,000
1976	505,685	119,266	58,247	226,199	101,973	1,786,100	218,000,000
1977	567,397	130,339	63,200	260,005	113,853	2,024,300	220,000,000
1978	646,125	149,572	63,748	300,680	132,125	2,273,500	223,000,000
1979	729,342	169,449	64,403	341,812	153,678	2,565,600	225,000,000
1980	799,894	197,571	68,826	366,294	167,203	2,791,900	227,000,000
1981	919,127	238,982	77,080	406,196	196,869	3,133,200	229,000,000
1982	940,921	250,176	85,300	395,359	210,086	3,313,400	232,000,000
1983	1,002,103	274,947	91,877	408,071	227,208	3,536,000	234,000,000
1984	1,114,958	309,105	99,700	447,347	258,806	3,949,200	236,000,000
1985	1,217,036	339,459	107,491	487,291	282,795	4,265,100	238,000,000
1986	1,292,856	355,075	116,158	516,733	304,890	4,526,300	240,000,000
1987	1,406,641	367,285	126,422	588,296	324,638	4,767,700	242,000,000
1988	1,507,065	393,175	136,496	614,238	363,156	5,138,600	244,000,000
1989	1,631,997	420,025	149,863	675,172	386,937	5,554,700	247,000,000
1990	1,713,321	441,012	161,533	698,701	412,075	5,898,800	249,000,000
1991	1,763,643	467,230	176,071	688,110	432,232	6,093,200	252,000,000
1992	1,848,639	482,625	184,678	724,248	457,088	6,416,300	255,000,000
1993	1,953,139	502,934	187,258	783,301	479,646	6,775,300	258,000,000

Table A2 (page 4 of 4)

Government receipts, all levels of government, GDP, and US population, 1900–2023

Millions of US$

Year	Current receipts	Other	Property tax	Income tax	Social Security	US GDP	US population
1994	2,097,324	543,742	199,369	843,546	510,667	7,176,900	260,000,000
1995	2,223,514	565,811	202,579	919,621	535,503	7,560,400	263,000,000
1996	2,388,150	593,635	212,351	1,024,298	557,866	7,951,300	265,000,000
1997	2,565,474	620,720	223,529	1,130,970	590,255	8,451,000	268,000,000
1998	2,738,032	652,438	231,007	1,226,834	627,753	8,930,800	270,000,000
1999	2,908,920	685,229	242,801	1,316,312	664,578	9,479,600	273,000,000
2000	3,138,155	727,791	254,669	1,446,302	709,393	10,117,100	282,398,400
2001	3,124,420	733,650	268,018	1,385,799	736,953	10,525,700	285,225,200
2002	2,968,342	735,434	289,213	1,188,444	755,251	10,828,900	287,954,600
2003	3,044,626	763,309	306,924	1,191,185	783,208	11,278,800	290,626,300
2004	3,274,148	816,070	326,128	1,298,317	833,633	12,028,400	293,262,300
2005	3,677,824	887,864	351,241	1,560,707	878,012	12,840,000	295,992,900
2006	4,012,163	954,621	375,162	1,755,245	927,135	13,636,800	298,817,700
2007	4,209,591	988,463	403,688	1,851,314	966,126	14,305,400	301,696,200
2008	4,124,974	986,018	415,674	1,730,095	993,187	14,796,600	304,543,100
2009	3,698,523	966,744	439,601	1,322,947	969,231	14,467,300	307,240,100
2010	3,932,669	1,030,574	438,588	1,474,837	988,670	14,884,400	309,838,800
2011	4,128,292	1,070,800	439,242	1,697,189	921,061	15,466,500	312,295,300
2012	4,309,630	1,105,342	444,298	1,804,830	955,160	16,109,400	314,725,400
2013	4,829,565	1,266,000	455,191	1,998,934	1,109,440	16,687,800	317,099,000
2014	5,054,116	1,271,923	473,412	2,149,980	1,158,801	17,428,100	319,600,400
2015	5,285,526	1,293,130	489,332	2,293,049	1,210,015	18,164,300	322,112,700
2016	5,329,196	1,284,738	510,358	2,289,734	1,244,366	18,641,300	324,609,300
2017	5,456,863	1,318,874	535,227	2,298,607	1,304,155	19,375,200	326,859,700
2018	5,643,690	1,400,245	554,572	2,321,835	1,367,038	20,436,300	328,794,500
2019	5,884,000	1,420,786	588,382	2,444,883	1,429,949	21,275,300	330,512,600
2020	5,974,472	1,400,150	607,621	2,512,121	1,454,580	21,292,400	331,799,800
2021	6,856,295	1,580,304	621,672	3,090,983	1,563,336	22,936,500	332,367,300
2022	7,689,822	1,701,240	660,026	3,621,117	1,707,439	25,305,700	333,568,300
2023	7,394,987	1,110,904	686,834	3,788,493	1,808,756	26,982,400	335,208,400

Note: GDP = gross domestic product.

Years falling between two proxies are filled by linear interpolation, splicing the series together. Table A6 reports the underlying variables and samples used to construct each of the spending proxies listed in Table A5, and Table A7 reports the same for the earned-income proxy that underlies the tax revenue factor, following the approach economist Michael Clemens uses for estimating earned income from the available historical variables.[49]

Table A3 reports the sources and construction notes underlying the nominal series in Tables A1 and A2.

Table A6 reports, for each variable used to allocate spending and tax categories between immigrants and the US-born population, the census and survey samples that were drawn upon, the underlying variables, the construction logic, and the population weight applied in each period.

Samples and population weights for this proxy are identical to the school and total population proxies from Table A6: Decennial Censuses 1900–1950, 1960 5 percent; 1970 Form 2 State, 1980 5 percent; 1990 5 percent; CPS ASEC 1994–2023; slwt—sample-line weight (1940–1950); perwt—person weight (other census years); and Cato fiscal model population weight (1994–2023).

Nativity is assigned using five categories, following the structure of IPUMS's standard nativity variable, but it is reconstructed here using own birthplace, mother's and father's birthplace, and citizenship status where available, since these underlying variables offer a more consistent basis for classification across census years than the prebuilt nativity variable itself. The five categories are: foreign-born; native-born with both parents foreign-born; native-born with foreign-born father and native-born mother; native-born with foreign-born mother and native-born father; and native-born with both parents native-born (Table A8).

Dependents are defined as anyone under age 18, or anyone age 18–21 who is enrolled in school. A household's reference person (the householder) is reclassified as an independent rather than a dependent in the case where every member of their household would otherwise be counted as a dependent, since a household cannot consist entirely of dependents with no independent adult.

For 1971–1993, a two-stage approach is used to reconstruct population and income levels by nativity subcategory. First, each native subcategory's share of the combined native total (third-generation and second-generation split by which parent was foreign-born) is computed for the surrounding anchor years and linearly interpolated across the gap. Second, those interpolated shares are multiplied by the actual native population or income total for each year—itself separately reconstructed by interpolating a binary foreign-versus-native split between real anchor points in 1970, 1980, 1990, and 1994. Dependents are computed and netted out of totals at each stage to avoid double-counting, then added back in afterward.

Table A3 (page 1 of 3)

Sources—government spending and receipts

Data sources and construction notes underlying the nominal spending and revenue series in Tables A1 and A2

Series	Sources and period	Construction notes
Total	NIPA Table 3.1 (1929–1939, 1947–2023); NIPA Table 3.3 and OMB Table 3.1 (1940–1946); *Historical Statistics*, 1970, p. 1120 (1902, 1913, 1922, 1927); *Historical Statistics*, 1970, p. 1114 (other 1903–1928); *Historical Statistics*, 1945, p. 314 and *Historical Statistics*, 1970, p. 1106 (1890)	1940–1946 sums state and local NIPA expenditures with federal OMB outlays. Other 1903–1928 values are federal outlays plus the linearly interpolated state and local share of totals (p. 1120). State and local values for 1891–1901 linearly interpolated.
Revenue	NIPA Table 3.1 (1929–2023); *Historical Statistics*, 1970, p. 1119 (1902, 1913, 1922, 1927); *Historical Statistics*, 1970, p. 1106 (other 1903–1928)	Other 1903–1928 values are federal revenue plus the linearly interpolated state and local share of totals from *Historical Statistics*, 1970, p. 1119.

Sources—government spending and receipts

Data sources and construction notes underlying the nominal spending and revenue series in Tables A1 and A2

Series	Sources and period	Construction notes
Interest	NIPA Table 3.1 (1929–2023); *Historical Statistics*, 1970, p. 1121 (1902, 1913, 1922, 1927); *Historical Statistics*, 1970, p. 1114 (other 1903–1928); *Historical Statistics*, 1945, p. 314 (1890)	Other 1903–1928 values are federal interest payments plus the linearly interpolated state and local share of totals from *Historical Statistics*, 1970, p. 1120. 1890 total adds federal outlays from *Historical Statistics*, 1970, p. 1106. State and local values for 1891–1901 linearly interpolated.
Subsidies	NIPA Table 3.1 (1929–2023)	No reported value existed before 1929.
Defense	OMB Table 3.1 (1940–2023); *Historical Statistics*, 1945, p. 299 (1890–1939)	1890–1939 is the sum of War and Navy Department expenditures. For 1917–1920, includes the net increase in independent bureaus and offices (War Board spending).
Veterans	OMB Table 3.1 (1940–2023); *Historical Statistics*, 1945, p. 299 ("Veterans' pensions")	—
Foreign affairs	OMB Table 3.1 (1940–2023); Statistical Abstracts of the United States (1890–1939: 1901, 1911, 1920, 1935, 1941 editions)	1890–1939 is the State Department budget. For 1917–2020, includes "purchases of obligations of foreign governments" (war debt).
Science, space, and tech	OMB Table 3.1	Series begins in 1942.
Education	NIPA Table 3.16 (1959–2023); *Historical Statistics*, 1970, p. 1120 (1902–1958)	Unlisted years linearly interpolated.
Social benefits	NIPA Table 3.12 (1929–2023); *Historical Statistics*, 1970, p. 1120 (1902–1919)	NIPA value excludes spending on veterans. Unlisted years linearly interpolated. For 1902–1928, sum of welfare, hospitals, health, and social insurance.
Law enforcement	NIPA Table 3.16 (1959–2023); *Historical Statistics*, 1970, p. 1120 (1890–1958)	Sum of police, courts, and prisons. For 1890–1958, unlisted years linearly interpolated and equal to police multiplied by the ratio of law enforcement to police in 1959.

Table A3 (page 3 of 3)

Sources—government spending and receipts

Data sources and construction notes underlying the nominal spending and revenue series in Tables A1 and A2

Series	Sources and period	Construction notes
GDP	NIPA Table 1.1.5 (1929–2023); Samuel H. Williamson, "What Was the U.S. GDP Then?," MeasuringWorth, 2024 (1890–1928)	—
CPI	Lawrence H. Officer and Samuel H. Williamson, "The Annual Consumer Price Index for the United States, 1774–Present," MeasuringWorth, 2024	—

Note: CPI = Consumer Price Index; NIPA = National Income and Product Accounts; OMB = Office of Management and Budget.

Table A4 (page 1 of 10)

Immigrant share of government spending and tax revenue, by generation

	First generation					
Year	Education spending factor	Social Security spending factor	Social services spending factor	Law enforcement spending factor	Other spending factor	Tax revenue factor
1900	2.96%	30.45%	27.38%	17.72%	13.61%	21.71%
1901	3.03%	30.34%	27.01%	17.75%	13.71%	21.79%
1902	3.10%	30.23%	26.65%	17.78%	13.82%	21.86%
1903	3.17%	30.13%	26.28%	17.81%	13.92%	21.94%
1904	3.24%	30.02%	25.91%	17.84%	14.02%	22.01%
1905	3.31%	29.91%	25.54%	17.87%	14.12%	22.09%
1906	3.38%	29.80%	25.17%	17.90%	14.23%	22.17%
1907	3.45%	29.69%	24.81%	17.93%	14.33%	22.24%
1908	3.53%	29.58%	24.44%	17.96%	14.43%	22.32%
1909	3.60%	29.47%	24.07%	17.99%	14.54%	22.39%
1910	3.67%	29.36%	23.70%	18.02%	14.64%	22.47%
1911	3.56%	29.01%	23.11%	17.83%	14.48%	22.21%
1912	3.45%	28.66%	22.52%	17.64%	14.33%	21.96%
1913	3.34%	28.30%	21.92%	17.45%	14.18%	21.70%
1914	3.23%	27.95%	21.33%	17.26%	14.02%	21.45%

Table A4 (page 2 of 10)

Immigrant share of government spending and tax revenue, by generation

First generation						
Year	Education spending factor	Social Security spending factor	Social services spending factor	Law enforcement spending factor	Other spending factor	Tax revenue factor
1915	3.12%	27.60%	20.74%	17.08%	13.87%	21.19%
1916	3.01%	27.24%	20.15%	16.89%	13.72%	20.94%
1917	2.90%	26.89%	19.56%	16.70%	13.56%	20.68%
1918	2.79%	26.54%	18.96%	16.51%	13.41%	20.43%
1919	2.68%	26.18%	18.37%	16.32%	13.26%	20.17%
1920	2.57%	25.83%	17.78%	16.14%	13.10%	19.91%
1921	2.48%	25.76%	17.47%	15.56%	12.94%	19.63%
1922	2.40%	25.69%	17.15%	14.99%	12.78%	19.34%
1923	2.31%	25.62%	16.84%	14.42%	12.62%	19.06%
1924	2.23%	25.55%	16.53%	13.84%	12.46%	18.77%
1925	2.15%	25.48%	16.22%	13.27%	12.30%	18.49%
1926	2.06%	25.41%	15.90%	12.70%	12.14%	18.20%
1927	1.98%	25.34%	15.59%	12.12%	11.98%	17.91%
1928	1.90%	25.27%	15.28%	11.55%	11.81%	17.63%
1929	1.81%	25.20%	14.97%	10.98%	11.65%	17.34%
1930	1.73%	25.13%	14.65%	10.40%	11.49%	17.06%
1931	1.61%	24.88%	14.18%	9.91%	11.21%	16.63%
1932	1.50%	24.62%	13.70%	9.42%	10.92%	16.21%
1933	1.38%	24.37%	13.22%	8.93%	10.64%	15.79%
1934	1.27%	24.11%	12.74%	8.44%	10.35%	15.37%
1935	1.15%	23.85%	12.26%	7.95%	10.07%	14.94%
1936	1.04%	23.60%	11.78%	7.45%	9.78%	14.52%
1937	0.92%	23.34%	11.31%	6.96%	9.50%	14.10%
1938	0.81%	23.09%	10.83%	6.47%	9.21%	13.68%
1939	0.69%	22.83%	10.35%	5.98%	8.93%	13.25%
1940	0.58%	22.57%	9.87%	5.49%	8.64%	12.83%
1941	0.57%	22.48%	9.98%	5.28%	8.43%	12.37%
1942	0.57%	22.39%	10.09%	5.08%	8.22%	11.90%

Table A4 (page 3 of 10)

Immigrant share of government spending and tax revenue, by generation

First generation						
Year	Education spending factor	Social Security spending factor	Social services spending factor	Law enforcement spending factor	Other spending factor	Tax revenue factor
1943	0.56%	22.30%	10.19%	4.87%	8.00%	11.44%
1944	0.56%	22.21%	10.30%	4.66%	7.79%	10.98%
1945	0.55%	22.11%	10.41%	4.46%	7.58%	10.52%
1946	0.55%	22.02%	10.52%	4.25%	7.36%	10.05%
1947	0.54%	21.93%	10.62%	4.05%	7.15%	9.59%
1948	0.54%	21.84%	10.73%	3.84%	6.94%	9.13%
1949	0.53%	21.74%	10.84%	3.63%	6.72%	8.67%
1950	0.53%	21.65%	10.95%	3.43%	6.51%	8.20%
1951	0.58%	21.36%	10.30%	3.21%	6.38%	8.04%
1952	0.63%	21.08%	9.65%	2.99%	6.25%	7.87%
1953	0.68%	20.79%	9.01%	2.78%	6.12%	7.70%
1954	0.73%	20.50%	8.36%	2.56%	5.99%	7.53%
1955	0.79%	20.21%	7.71%	2.35%	5.86%	7.37%
1956	0.84%	19.92%	7.07%	2.13%	5.73%	7.20%
1957	0.89%	19.63%	6.42%	1.92%	5.60%	7.03%
1958	0.94%	19.35%	5.77%	1.70%	5.47%	6.87%
1959	0.99%	19.06%	5.13%	1.48%	5.34%	6.70%
1960	1.04%	18.77%	4.48%	1.27%	5.21%	6.53%
1961	1.09%	18.26%	4.58%	1.25%	5.16%	6.42%
1962	1.13%	17.75%	4.69%	1.23%	5.11%	6.32%
1963	1.18%	17.25%	4.79%	1.21%	5.06%	6.21%
1964	1.22%	16.74%	4.90%	1.19%	5.01%	6.10%
1965	1.27%	16.23%	5.00%	1.17%	4.96%	6.00%
1966	1.31%	15.73%	5.10%	1.15%	4.91%	5.89%
1967	1.36%	15.22%	5.21%	1.13%	4.86%	5.78%
1968	1.40%	14.71%	5.31%	1.11%	4.81%	5.67%
1969	1.45%	14.20%	5.41%	1.09%	4.76%	5.57%
1970	1.49%	13.70%	5.52%	1.07%	4.71%	5.46%

Table A4 (page 4 of 10)

Immigrant share of government spending and tax revenue, by generation

First generation						
Year	Education spending factor	Social Security spending factor	Social services spending factor	Law enforcement spending factor	Other spending factor	Tax revenue factor
1971	1.70%	13.31%	5.68%	1.34%	4.86%	5.57%
1972	1.90%	12.92%	5.85%	1.61%	5.01%	5.68%
1973	2.11%	12.53%	6.01%	1.88%	5.16%	5.79%
1974	2.32%	12.15%	6.18%	2.15%	5.31%	5.90%
1975	2.52%	11.76%	6.34%	2.42%	5.46%	6.01%
1976	2.73%	11.37%	6.51%	2.69%	5.61%	6.12%
1977	2.94%	10.98%	6.67%	2.96%	5.76%	6.23%
1978	3.15%	10.59%	6.84%	3.23%	5.91%	6.34%
1979	3.35%	10.21%	7.00%	3.51%	6.06%	6.45%
1980	3.56%	9.82%	7.17%	3.78%	6.21%	6.56%
1981	3.70%	9.54%	7.49%	4.09%	6.38%	6.76%
1982	3.84%	9.26%	7.81%	4.40%	6.55%	6.95%
1983	3.98%	8.98%	8.13%	4.71%	6.73%	7.14%
1984	4.12%	8.70%	8.44%	5.02%	6.90%	7.33%
1985	4.26%	8.42%	8.76%	5.34%	7.07%	7.52%
1986	4.40%	8.14%	9.08%	5.65%	7.24%	7.71%
1987	4.54%	7.85%	9.40%	5.96%	7.42%	7.90%
1988	4.68%	7.57%	9.72%	6.27%	7.59%	8.09%
1989	4.82%	7.29%	10.04%	6.58%	7.76%	8.28%
1990	4.96%	7.01%	10.36%	6.90%	7.93%	8.47%
1991	4.99%	6.89%	10.53%	6.57%	8.11%	8.46%
1992	5.03%	6.76%	10.70%	6.23%	8.28%	8.46%
1993	5.06%	6.63%	10.87%	5.90%	8.46%	8.46%
1994	5.10%	6.50%	11.04%	5.57%	8.63%	8.46%
1995	4.93%	6.95%	11.88%	5.24%	8.71%	8.64%
1996	5.55%	6.38%	11.76%	4.91%	9.22%	9.14%
1997	5.50%	6.45%	10.55%	4.58%	9.58%	9.54%
1998	5.14%	6.28%	11.08%	4.25%	9.68%	10.06%

Table A4 (page 5 of 10)

Immigrant share of government spending and tax revenue, by generation

First generation						
Year	Education spending factor	Social Security spending factor	Social services spending factor	Law enforcement spending factor	Other spending factor	Tax revenue factor
1999	4.89%	6.66%	11.29%	3.92%	9.64%	9.97%
2000	5.63%	7.06%	11.64%	3.59%	10.25%	10.68%
2001	5.89%	7.15%	13.26%	4.38%	11.27%	11.73%
2002	5.91%	7.38%	12.40%	5.17%	11.40%	11.92%
2003	5.65%	7.73%	11.63%	5.95%	11.61%	12.20%
2004	6.00%	7.55%	12.04%	6.74%	11.79%	12.13%
2005	5.94%	7.63%	12.91%	7.53%	12.01%	12.67%
2006	5.65%	7.65%	9.44%	8.32%	12.06%	13.08%
2007	5.90%	7.80%	8.30%	8.29%	12.48%	13.61%
2008	5.82%	8.40%	9.39%	8.70%	12.39%	13.20%
2009	5.21%	8.20%	10.82%	8.44%	12.12%	13.23%
2010	5.44%	8.05%	11.63%	8.43%	12.59%	13.58%
2011	5.37%	8.33%	11.02%	9.34%	12.80%	13.87%
2012	5.61%	8.46%	11.99%	8.81%	12.88%	13.90%
2013	5.29%	8.22%	12.88%	8.52%	12.83%	14.06%
2014	5.12%	8.45%	12.40%	8.50%	12.96%	14.61%
2015	5.18%	8.58%	11.87%	7.62%	13.25%	14.86%
2016	5.43%	8.94%	10.76%	7.63%	13.43%	15.38%
2017	5.79%	8.85%	12.28%	7.62%	13.60%	15.66%
2018	5.49%	9.29%	12.15%	7.41%	13.97%	15.90%
2019	5.45%	9.56%	14.08%	7.48%	14.04%	16.22%
2020	5.42%	9.82%	11.82%	7.06%	13.73%	16.20%
2021	4.88%	9.77%	11.75%	6.54%	13.68%	15.52%
2022	5.21%	9.82%	12.82%	6.24%	14.16%	16.16%
2023	5.74%	10.50%	13.36%	7.05%	14.66%	17.36%

Table A4 (page 6 of 10)

Immigrant share of government spending and tax revenue, by generation

Dependents—second generation						
Year	Education spending factor	Social Security spending factor	Social services spending factor	Law enforcement spending factor	Other spending factor	Tax revenue factor
1900	16.99%	0.00%	5.57%	0.21%	6.74%	1.43%
1901	16.88%	0.00%	5.51%	0.35%	6.70%	1.43%
1902	16.76%	0.00%	5.45%	0.48%	6.66%	1.43%
1903	16.64%	0.00%	5.39%	0.62%	6.62%	1.44%
1904	16.52%	0.00%	5.33%	0.76%	6.58%	1.44%
1905	16.41%	0.00%	5.27%	0.90%	6.54%	1.44%
1906	16.29%	0.00%	5.21%	1.04%	6.50%	1.44%
1907	16.17%	0.00%	5.15%	1.17%	6.46%	1.45%
1908	16.05%	0.00%	5.09%	1.31%	6.42%	1.45%
1909	15.94%	0.00%	5.03%	1.45%	6.38%	1.45%
1910	15.82%	0.00%	4.97%	1.59%	6.34%	1.45%
1911	15.93%	0.00%	4.90%	1.55%	6.37%	1.43%
1912	16.04%	0.00%	4.82%	1.50%	6.40%	1.40%
1913	16.14%	0.00%	4.74%	1.46%	6.42%	1.37%
1914	16.25%	0.00%	4.67%	1.42%	6.45%	1.34%
1915	16.36%	0.00%	4.59%	1.38%	6.48%	1.31%
1916	16.47%	0.00%	4.51%	1.34%	6.51%	1.29%
1917	16.57%	0.00%	4.44%	1.30%	6.54%	1.26%
1918	16.68%	0.00%	4.36%	1.25%	6.57%	1.23%
1919	16.79%	0.00%	4.28%	1.21%	6.59%	1.20%
1920	16.90%	0.00%	4.21%	1.17%	6.62%	1.17%
1921	16.84%	0.00%	4.18%	1.12%	6.50%	1.14%
1922	16.78%	0.00%	4.16%	1.06%	6.38%	1.10%
1923	16.72%	0.00%	4.14%	1.01%	6.26%	1.06%
1924	16.66%	0.00%	4.12%	0.96%	6.14%	1.02%
1925	16.61%	0.00%	4.09%	0.90%	6.02%	0.99%
1926	16.55%	0.00%	4.07%	0.85%	5.90%	0.95%
1927	16.49%	0.00%	4.05%	0.80%	5.77%	0.91%
1928	16.43%	0.00%	4.02%	0.74%	5.65%	0.87%

Table A4 (page 7 of 10)

Immigrant share of government spending and tax revenue, by generation

Dependents—second generation						
Year	Education spending factor	Social Security spending factor	Social services spending factor	Law enforcement spending factor	Other spending factor	Tax revenue factor
1929	16.37%	0.00%	4.00%	0.69%	5.53%	0.83%
1930	16.31%	0.00%	3.98%	0.63%	5.41%	0.80%
1931	15.75%	0.00%	3.80%	0.59%	5.15%	0.72%
1932	15.18%	0.00%	3.63%	0.55%	4.88%	0.65%
1933	14.61%	0.00%	3.45%	0.50%	4.62%	0.58%
1934	14.05%	0.00%	3.27%	0.46%	4.36%	0.51%
1935	13.48%	0.00%	3.10%	0.41%	4.09%	0.44%
1936	12.91%	0.00%	2.92%	0.37%	3.83%	0.37%
1937	12.35%	0.00%	2.74%	0.32%	3.57%	0.30%
1938	11.78%	0.00%	2.57%	0.28%	3.30%	0.22%
1939	11.21%	0.00%	2.39%	0.24%	3.04%	0.15%
1940	10.65%	0.00%	2.21%	0.19%	2.77%	0.08%
1941	9.95%	0.00%	2.00%	0.17%	2.59%	0.11%
1942	9.26%	0.00%	1.78%	0.15%	2.41%	0.13%
1943	8.57%	0.00%	1.57%	0.13%	2.23%	0.16%
1944	7.87%	0.00%	1.35%	0.11%	2.05%	0.18%
1945	7.18%	0.00%	1.14%	0.10%	1.87%	0.21%
1946	6.49%	0.00%	0.92%	0.08%	1.69%	0.23%
1947	5.80%	0.00%	0.71%	0.06%	1.51%	0.26%
1948	5.10%	0.00%	0.49%	0.04%	1.33%	0.28%
1949	4.41%	0.00%	0.27%	0.02%	1.15%	0.31%
1950	3.72%	0.00%	0.06%	0.00%	0.97%	0.34%
1951	3.48%	0.00%	0.10%	0.00%	0.92%	0.31%
1952	3.23%	0.00%	0.14%	0.01%	0.87%	0.28%
1953	2.99%	0.00%	0.18%	0.01%	0.82%	0.25%
1954	2.75%	0.00%	0.22%	0.01%	0.78%	0.21%
1955	2.51%	0.00%	0.26%	0.01%	0.73%	0.18%
1956	2.26%	0.00%	0.30%	0.02%	0.68%	0.15%
1957	2.02%	0.00%	0.34%	0.02%	0.63%	0.12%

Table A4 (page 8 of 10)

Immigrant share of government spending and tax revenue, by generation

Dependents—second generation						
Year	Education spending factor	Social Security spending factor	Social services spending factor	Law enforcement spending factor	Other spending factor	Tax revenue factor
1958	1.78%	0.00%	0.38%	0.02%	0.59%	0.09%
1959	1.54%	0.00%	0.42%	0.02%	0.54%	0.06%
1960	1.29%	0.00%	0.46%	0.03%	0.49%	0.03%
1961	1.31%	0.01%	0.47%	0.02%	0.51%	0.03%
1962	1.32%	0.01%	0.48%	0.02%	0.52%	0.03%
1963	1.33%	0.02%	0.48%	0.02%	0.54%	0.03%
1964	1.35%	0.02%	0.49%	0.02%	0.55%	0.03%
1965	1.36%	0.03%	0.50%	0.01%	0.57%	0.03%
1966	1.38%	0.03%	0.51%	0.01%	0.59%	0.03%
1967	1.39%	0.04%	0.51%	0.01%	0.60%	0.03%
1968	1.40%	0.04%	0.52%	0.01%	0.62%	0.03%
1969	1.42%	0.05%	0.53%	0.00%	0.63%	0.03%
1970	1.43%	0.06%	0.54%	0.00%	0.65%	0.03%
1971	1.65%	0.05%	0.74%	0.03%	0.72%	0.03%
1972	1.86%	0.05%	0.95%	0.04%	0.79%	0.03%
1973	2.07%	0.05%	1.16%	0.04%	0.86%	0.03%
1974	2.28%	0.05%	1.36%	0.04%	0.93%	0.03%
1975	2.49%	0.05%	1.57%	0.05%	1.00%	0.03%
1976	2.70%	0.05%	1.77%	0.05%	1.07%	0.03%
1977	2.91%	0.05%	1.97%	0.06%	1.14%	0.03%
1978	3.12%	0.05%	2.18%	0.06%	1.21%	0.03%
1979	3.32%	0.05%	2.38%	0.06%	1.28%	0.04%
1980	3.53%	0.05%	2.58%	0.07%	1.35%	0.04%
1981	3.74%	0.04%	2.77%	0.07%	1.42%	0.04%
1982	3.94%	0.04%	2.97%	0.07%	1.48%	0.04%
1983	4.15%	0.04%	3.16%	0.07%	1.55%	0.04%
1984	4.36%	0.04%	3.35%	0.07%	1.62%	0.04%
1985	4.56%	0.04%	3.54%	0.07%	1.69%	0.04%
1986	4.77%	0.04%	3.73%	0.08%	1.75%	0.04%

Table A4 (page 9 of 10)

Immigrant share of government spending and tax revenue, by generation

Dependents—second generation						
Year	Education spending factor	Social Security spending factor	Social services spending factor	Law enforcement spending factor	Other spending factor	Tax revenue factor
1987	4.97%	0.04%	3.92%	0.08%	1.82%	0.04%
1988	5.17%	0.04%	4.10%	0.08%	1.89%	0.04%
1989	5.38%	0.04%	4.29%	0.08%	1.95%	0.04%
1990	5.58%	0.03%	4.47%	0.08%	2.02%	0.04%
1991	5.79%	0.03%	4.66%	0.08%	2.09%	0.04%
1992	5.99%	0.03%	4.85%	0.08%	2.15%	0.04%
1993	6.20%	0.03%	5.04%	0.08%	2.22%	0.04%
1994	6.41%	0.03%	5.22%	0.08%	2.28%	0.04%
1995	6.46%	0.05%	5.91%	0.08%	2.31%	0.04%
1996	7.13%	0.03%	7.33%	0.08%	2.56%	0.05%
1997	7.29%	0.02%	7.08%	0.08%	2.63%	0.05%
1998	7.89%	0.03%	8.04%	0.08%	2.73%	0.05%
1999	7.97%	0.02%	7.13%	0.08%	2.75%	0.04%
2000	8.15%	0.04%	8.73%	0.07%	2.76%	0.06%
2001	9.26%	0.05%	9.14%	0.08%	3.04%	0.06%
2002	9.68%	0.05%	7.02%	0.09%	3.15%	0.06%
2003	9.71%	0.03%	6.93%	0.09%	3.16%	0.05%
2004	10.14%	0.03%	8.32%	0.08%	3.33%	0.05%
2005	10.08%	0.03%	6.19%	0.08%	3.32%	0.05%
2006	10.58%	0.04%	6.88%	0.08%	3.44%	0.04%
2007	10.76%	0.03%	4.90%	0.07%	3.49%	0.06%
2008	10.75%	0.04%	7.26%	0.07%	3.48%	0.05%
2009	11.19%	0.05%	8.24%	0.09%	3.55%	0.05%
2010	11.97%	0.06%	7.65%	0.10%	3.72%	0.07%
2011	12.41%	0.03%	7.14%	0.11%	3.81%	0.07%
2012	12.70%	0.04%	7.95%	0.11%	3.84%	0.08%
2013	13.17%	0.03%	7.87%	0.09%	3.86%	0.07%
2014	13.39%	0.05%	6.68%	0.08%	3.90%	0.06%
2015	14.10%	0.05%	5.53%	0.10%	3.98%	0.09%

Table A4 (page 10 of 10)

Immigrant share of government spending and tax revenue, by generation

Dependents—second generation						
Year	Education spending factor	Social Security spending factor	Social services spending factor	Law enforcement spending factor	Other spending factor	Tax revenue factor
2016	13.63%	0.05%	5.41%	0.10%	3.87%	0.06%
2017	13.91%	0.03%	5.20%	0.10%	3.90%	0.06%
2018	14.51%	0.05%	5.77%	0.11%	4.03%	0.08%
2019	14.55%	0.06%	5.50%	0.09%	3.99%	0.09%
2020	13.70%	0.04%	5.34%	0.10%	3.84%	0.08%
2021	14.03%	0.05%	6.04%	0.11%	3.81%	0.08%
2022	14.46%	0.06%	5.73%	0.06%	3.87%	0.09%
2023	14.37%	0.05%	5.41%	0.09%	3.82%	0.14%

Sources: David J. Bier et al.; Census Bureau; IPUMS USA: Version 16.0 [dataset].
Note: Dependents include only dependents of two immigrant parents.

Table A5

Annual allocation factors

Proxies used to allocate each spending and tax category between immigrants and the US-born population, by period

Factor	Proxy	Period
Education factor	Share of school population	All years
Social Security factor	Share of Social Security income	1970–2023
	Share of elderly (62+) population	Through 1960
	Interpolated	1961–1969
Social services factor (welfare)	Share of welfare income	1970–2023
	Share of poor population	1950–1960
	Share of population in benevolent institutions (almshouses, asylums, orphanages, etc.)	Through 1940
	Interpolated	1941–1949, 1961–1969
Law enforcement factor	Share of incarcerated population	All years
Other spending factor (roads, parks, fire protection, etc.)	Share of total population	All years
Tax revenue factor	Share of earned income	All years

Table A6 (page 1 of 3)

Variable construction for spending factor

Census and survey samples, variables, and construction logic underlying each spending allocation proxy

Variable	Samples	Variables	Construction	Population weight
Share of school population	Decennial Censuses 1900–1950, 1960 5%, 1970 Form 2 State, 1980 5%, 1990 5%; CPS ASEC 1994–2023	school, age, occ1950 (1900–1990); slrec (1940–1950); schlcoll, age (1994–2023)	1900–1990: enrolled in school, excl. armed forces (occ1950 != 595). 1940–1950: restricted to sample-line persons (slrec == 2). 1994–2023: enrolled (college or grades 1–4) or age 5–14, restricted to 5–24	slwt (1940–1950); perwt (other census years); Cato fiscal model population weight (1994–2023)
Share of Social Security income	Decennial Censuses 1970 Form 2 State, 1980 5%, 1990 5%; CPS ASEC 1994–2023	incss	1970–1990: no topcode identified for 1970; 1980 topcoded at 7755, multiplied by 2; 1990 topcoded ≥17000, multiplied by 2. 1994–1995: topcoded at 29999, multiplied by 2. 1996–2023: no topcoding applied	perwt (1970–1990); Cato fiscal model population weight (1994–2023)
Share of elderly (62+) population	Decennial Censuses 1900–1950, 1960 5%, 1970 Form 2 State, 1980 5%, 1990 5%; CPS ASEC 1994–2023	age; slrec (1940–1950)	Age 62 or older. 1940–1950: restricted to sample-line persons (slrec == 2)	slwt (1940–1950); perwt (other census years); Cato fiscal model population weight (1994–2023)
Share of welfare income	Decennial Censuses 1970 Form 2 State, 1980 5%, 1990 5%; CPS ASEC 1994–2023	incwelfr, serial, famunit	Welfare income summed within family unit (serial, famunit) and divided equally across family members. 1970: no topcode identified. 1980: topcoded at 9995, multiplied by 2. 1990: topcoded ≥10000, multiplied by 2. 1994–1995: topcoded at 19999, multiplied by 2. 1996–2023: no topcoding applied	perwt (1970–1990); Cato fiscal model population weight (1994–2023)

Table A6 (page 2 of 3)

Variable construction for spending factor

Census and survey samples, variables, and construction logic underlying each spending allocation proxy

Variable	Samples	Variables	Construction	Population weight
Share of poor population	Decennial Census 1950 1% sample, 1960 5%, 1970 Form 2 State, 1980 5%, 1990 5%; CPS ASEC 1994–2023	poverty, occ1950, slrec (1950); poverty, occ1950 (1960–1990); poverty, empstat (1994–2023)	1950–1990: poverty status 1–99, excl. armed forces (occ1950 != 595). 1950: restricted to sample-line persons (slrec == 2). 1994–2023: poverty code 10, excl. employed persons (empstat != 1)	slwt (1950); perwt (1960–1990); Cato fiscal model population weight (1994–2023)
Share of population in poorhouses	Decennial Censuses 1900, 1920, 1930, 1940 (full count); 1910 1% sample	gqtyped, gqfunds, slrec (1940)	Restricted to group quarters (gqfunds 11–16). Poorhouse defined as gqtyped codes 480–482. 1940: restricted to sample-line persons (slrec == 2)	slwt (1940); perwt (other years)
Share of population in benevolent institutions	Decennial Censuses 1900, 1920, 1930, 1940 (full count); 1910 1% sample	gqtyped, gqfunds, slrec (1940)	Restricted to group quarters (gqfunds 11–16). Benevolent institution defined as gqtyped codes for hospitals (920–924), elder homes (411–413, 420–421), children's homes (430–432, 440–441), handicapped care (450–452, 460–461), and chronic disease facilities (470–472). 1940: restricted to sample-line persons (slrec == 2)	slwt (1940); perwt (other years)

Table A6 (page 3 of 3)

Variable construction for spending factor

Census and survey samples, variables, and construction logic underlying each spending allocation proxy

Variable	Samples	Variables	Construction	Population weight
Share of incarcerated population	Decennial Censuses 1900, 1910 (1% sample), 1920, 1930, 1940, 1950 (1% sample), 1960 5%, 1970 Form 2 State, 1980 5%, 1990 5%, 2000 5%; CPS, 1994–2023; American Community Survey 1-year samples, 2006–2023	gqtype (1900–1980, incl. 1950), gq (1990, 2000, 2006–2023); age; slrec (1940, 1950)	Incarcerated defined as gqtype == 2 for 1900–1980 (incl. 1950) and gq == 3 for 1990, 2000, and 2006 onward, restricted to age 18–54. 1940 and 1950: restricted to sample-line persons (slrec == 2). 1994–2023 (CPS) / 2006–2023 (ACS): Cato's fiscal model native-population prison spending (jail_f, jail_s) split into sub-nativity shares using CPS parental-birthplace data, applied to ACS-based native population totals	slwt (1940, 1950); perwt (other census years); Cato fiscal model population weight (1994–2023)
Share of employed population	Decennial Censuses 1900–1950, 1960 5%, 1970 Form 2 State, 1980 5%, 1990 5%; CPS ASEC 1994–2023	occ1950, occscore, mounemp, age (1900); classwkr, age (1910, 1920, 1930); empstat, classwkr, age (1940–1990); empstat, age (1994–2023)	1900: occ1950 < 980, occscore > 0, mounemp == 0, age ≥ 10. 1910, 1930: empstat == 1 or classwkr in (1,2), age ≥ 10. 1920: classwkr in (1,2), age ≥ 10. 1940–1990: empstat == 1 or classwkr in (1,2), age ≥ 16. 1994–2023: empstat in (1, 10, 12), age ≥ 16	slwt (1940–1950); perwt (other census years); Cato fiscal model population weight (1994–2023)
Share of total population	Decennial Censuses 1900–1950, 1960 5%, 1970 Form 2 State, 1980 5%, 1990 5%; CPS ASEC 1994–2023	none	Every person counted equally; totals obtained from the respective sample weights	slwt (1940–1950); perwt (other census years); Cato fiscal model population weight (1994–2023)

Note: CPS ASEC = Current Population Survey and Annual Social and Economic Supplement; GDP = gross domestic product.

Table A7

Variable construction of share of earned income

Samples, variables, and topcoding rules used to estimate earned income by period, 1900–2023

Period	Samples	Variables	Construction	Topcode
Pre-1940	Decennial Censuses 1900, 1910, 1920, 1930 (full count)	occscore	Occupational income score	Topcoded at score 80, multiplied by 2
1940	Decennial Census 1940 (full count)	incwage	Wage income	Topcoded at 5,001, multiplied by 2
1950	Decennial Census 1950 (full count)	incwage, incbusfm	Wage plus farm/business income	Topcoded at 10,000, multiplied by 2
1960	Decennial Census 1960 5%	incwage, incbusfm	Wage plus farm/business income	Topcoded at 25,000, multiplied by 2
1970	Decennial Census 1970 Form 2 State	incwage, incbus, incfarm	Wage, business, and farm income	Topcoded at 50,000, multiplied by 2
1980	Decennial Census 1980 5%	incwage, incbus, incfarm, incinvst	Adds investment income	Topcoded at 75,000, multiplied by 2
1990	Decennial Census 1990 5%	incwage, incbus, incfarm, incinvst, increti, classwkrd	Adds retirement income (restricted to classwkrd 13, 14, 22, 23)	Wage ≥140,000; business ≥90,000; farm ≥54,000; investment ≥40,000; retirement ≥30,000 — each multiplied by 2
1994–2023 (CPS)	CPS ASEC 1994–2023	incwage, incbus/incnonfarm, incint, incdivid, incrent, increti1/increti2 (1994–2018), incpen1/incpen2 (2019–2023), srcreti1, srcreti2, srcpen1, srcpen2, incretnongov, classwkr	Sum of wage, non-farm business, interest, dividend, rental, and non-government retirement income; wage/business income reassigned to self-employment based on classwkr 13/14. incfarm and inccapg computed but excluded from final total	Wage: 199,998 (≤1995). Business, farm, interest, dividends, rent, retirement: 99,999 (≤1995). All topcodes multiplied by 2.

Note: CPS = Current Population Survey.

Table A8

Variable construction for nativity assignment

Samples and variables used to classify individuals into the five-category nativity scheme by period

Period	Samples	Variables	Construction
1900–1970	Decennial Censuses 1900–1950, 1960 5%, 1970 Form 2 State	bpld, fbpld, mbpld; citizen, slrec (1940–1950 only)	Standard five-category classification by birthplace. 1940–1950: restricted to sample-line persons (slrec == 2); citizenship also required to confirm native or foreign status.
1950 (1% sample)	Decennial Census 1950 1% sample	bpld, fbpld, mbpld, citizen, slrec	Same five-category classification, restricted to sample-line persons. Missing parental birthplace is filled in: one known parent determines the category; where both parents are unknown, each person is assigned a category via a random draw (runiform()) compared against cumulative probability thresholds built from the observed category shares among classifiable cases—drawing across all five categories if own birthplace is unknown, or across just the four native categories if own birthplace is known to be native. A fixed random seed (mt64, seed 12345) ensures the draws are reproducible.
1980, 1990, 2000, 2001–2023	Decennial Censuses 1980 5%, 1990 5%, 2000 5%; American Community Survey one-year samples, 2001–2023	bpld, citizen	Simplified to a binary native/foreign split by own birthplace or citizenship, since parental birthplace isn't available; shifted by 1 to align with the five-category numbering.
1994–2023	CPS ASEC, 1994–2023	fbpl, mbpl, citizen	Same five-category classification, but own nativity comes from citizenship status rather than birthplace.

Note: CPS ASEC = Current Population Survey and Annual Social and Economic Supplement.

NOTES

1. David J. Bier, "The Founders Lived Through—and Loved—High Immigration Rates," *Cato at Liberty* (blog), Cato Institute, July 2, 2026.

2. Bryan Caplan, "Milton Friedman Opposed a Pareto Improvement," *Bet on It* (blog), June 6, 2008.

3. National Academies of Sciences, Engineering, and Medicine, *The Economic and Fiscal Consequences of Immigration* (National Academies Press, 2017).

4. David J. Bier et al., "Immigrants' Recent Effects on Government Budgets: 1994–2023," Cato Institute White Paper, February 3, 2026.

5. Mark Colas and Dominik Sachs, "The Indirect Fiscal Benefits of Low-Skilled Immigration," *American Economic Journal: Economic Policy* 16, no. 2 (May 2024): 515–50.

6. Christina D. Romer and David H. Romer, "The Macroeconomic Effects of Tax Changes: Estimates Based on a New Measure of Fiscal Shocks," *American Economic Review* 100, no. 3 (June 2010): 763–801.

7. Mark Colas and Dominik Sachs, "The Indirect Fiscal Benefits of Low-Skilled Immigration," *American Economic Journal: Economic Policy* 16, no. 2 (May 2024): 515–50.

8. The intuition is that the same-sized military can defend a larger US population, so more immigrants do not cause more spending. Defense and related spending per capita has generally fallen since the mid-1940s and mid-1950s, indicating that the additional population has, in practice, not led to any measurable increase in this category of spending in the last generation. Of course, defense spending per capita rose in the first half of the 20th century, but assuming that early 20th-century immigrants increased defense spending—which is almost certainly not true—would make them seem even worse relative to 21st-century immigrants, which would reinforce this study's conclusion.

9. This includes subsidies for businesses, government scientific research, and public awareness, such as the National Institutes of Health and the Centers for Disease Control and Prevention. Because it is so small, this category is not critical to this analysis, but it is a textbook example of spending that does not increase with population growth. As a share of GDP, it has also declined.

10. As the influential National Academies report explained in 2017, interest payments "represent the cost of servicing debt attributable to past spending and deficits from which new immigrants did not benefit." Moreover, since the average immigrant has not been fiscally negative at any point, immigrants have actually reduced interest payments on the debt from what they would have been otherwise (savings that are not captured in this analysis). National Academies of Sciences, Engineering, and Medicine, *The Economic and Fiscal Consequences of Immigration* (National Academies Press, 2017), p. 364.

11. National Academies of Sciences, Engineering, and Medicine, *The Economic and Fiscal Consequences of Immigration* (National Academies Press, 2017), p. 359.

12. National Academies of Sciences, Engineering, and Medicine, *The Economic and Fiscal Consequences of Immigration* (National Academies Press, 2017), p. 407.

13. The literature on the determinants of defense spending is extensive but does not tie defense spending to population growth or immigrant population growth. Benedict J. Clements et al., "Is Military Spending Converging to a Low Level Across Countries?," *Economic Modelling* 94 (January 2021): 433–41; Matthew Hauenstein et al., "Democracy, External Threat, and Military Spending," *Research & Politics* 8, no. 4 (October 2021): 1–13; William Nordhaus et al., "The Effects of the International Security Environment on National Military Expenditures: A Multicountry Study," *International Organization* 66, no. 3 (July 2012): 491–513; and Benjamin O. Fordham, "Domestic Politics, International Pressure, and the Allocation of American Cold War Military Spending," *Journal of Politics* 64, no. 1 (February 2002): 63–88.

14. For an extended discussion of defense spending, see David J. Bier, "Manhattan Institute's 'Lifetime Fiscal Impact of Immigrants' Report Shows Upside to Immigration," Cato Working Paper no. 82, Cato Institute, November 13, 2024.

15. Christian Dustmann and Tommaso Frattini, "The Fiscal Effects of Immigration to the UK," *Economic Journal* 124, no. 580 (November 2014): F593–F643.

16. Daniel Costa and Philip Martin, "Record-Low Number of Federal Wage and Hour Investigations of Farms in 2022," Economic Policy Institute, August 22, 2023.

17. David J. Bier et al., "Immigrants' Recent Effects on Government Budgets: 1994–2023," Cato Institute White Paper, February 3, 2026.

18. Daniel Lin, "Methods and Assumptions of the CPS ASEC Tax Model," SEHSD Working Paper FY-2022-18, November 30, 2022.

19. For comparability, the taxes paid exclude the indirect tax revenues generated through higher property values, as there is no way to estimate those effects.

20. OCCSCORE doesn't distinguish between immigrants and US-born, which may miss some anti-immigrant wage bias. If there is such a bias, it would make 1913 immigrants look somewhat better than 2023 immigrants, making this the more conservative method. Sarah Flood et al., IPUMS CPS: Version 13.0 [dataset], IPUMS, 2025.

21. Matthew Sobek, "The Comparability of Occupations and the Generation of Income Scores," *Historical Methods* 28, no. 1 (Winter 1995): 47–51; and Ran Abramitzky and Leah Boustan, "Immigration in American Economic History," *Journal of Economic Literature* 55, no. 4 (December 2017): 1311–45.

22. See, for example, Charles Hirschman and Elizabeth Mogford, "Immigration and the American Industrial Revolution from 1880 to 1920," *Social Science Research* 38, no. 4 (2009): 897–920, which outlines how the distinct age selectivity of early 20th-century immigrant flows disproportionately placed them in the active workforce.

23. Employment-to-population ratios for 1910 and 2023 are calculated using total population as the denominator. See Table A6 for variable construction details.

24. Gerald Auten and David Splinter, "Income Inequality in the United States: Using Tax Data to Measure Long-Term Trends," *Journal of Political Economy* 132, no. 7 (July 2024): 2179–227.

25. David J. Bier et al., "Immigrants' Recent Effects on Government Budgets: 1994–2023," Cato Institute White Paper, February 3, 2026; Census Bureau, "Current Population Survey," Annual Social and Economic Supplement, 1994–2023.

26. Charles T. Nelson and Angela M. Feldman, "Estimating After-Tax Money Income Distributions Using Data from the March Current Population Survey," US Department of Commerce, Current Population Reports: Special Studies, Series P-23, no. 126, August 1983.

27. David J. Bier et al., "Immigrants' Recent Effects on Government Budgets: 1994–2023," Cato Institute White Paper, February 3, 2026; Census Bureau, "Current Population Survey," Annual Social and Economic Supplement, 1994–2023.

28. David J. Bier et al., "Immigrants' Recent Effects on Government Budgets: 1994–2023," Cato Institute White Paper, February 3, 2026; Census Bureau, "Current Population Survey," Annual Social and Economic Supplement, 1994–2023. Also, see Appendix Table A6.

29. David J. Bier et al., "Immigrants' Recent Effects on Government Budgets: 1994–2023," Cato Institute White Paper, February 3, 2026; Census Bureau, "Current Population Survey," Annual Social and Economic Supplement, 1994–2023. Also, see Appendix Tables A4–A5.

30. David J. Bier et al., "Immigrants' Recent Effects on Government Budgets: 1994–2023," Cato Institute White Paper, February 3, 2026; Census Bureau, "Current Population Survey," Annual Social and Economic Supplement, 1994–2023. Also, see Appendix Table A6.

31. After 1980, the Census Bureau stopped releasing microdata that differentiated prisons, jails, and detention centers from other places where people are "institutionalized," primarily nursing homes and juvenile facilities. However, if we restrict the age range to 18–54, our estimate of the incarcerated population ages 18–54 (1.74 million) captures 94 percent of all people who were incarcerated (1.85 million) in 2024, while excluding the elderly. "Group Quarters Type (5 Types)," US Census Bureau, American Community Survey, ACS 1-Year Estimates Detailed Tables, Table B26203, 2023. The age restriction has virtually no effect on the immigrant share of the prison population in the years for which the prison population is available. In 1910, the immigrant share moves from 18.28 percent to 18.55 percent, and in 1920, it moves from 16.49 percent to 16.74 percent.

32. In the years after 1980, the institutionalized group quarters variable lacks the "correctional" institution flag, so we have to limit the sample to ages 18–54 population to exclude those people in long-term health care facilities. Applying this methodology to 1980 produces a very similar estimate for the criminally incarcerated population.

33. The early 20th-century censuses do not include a variable for public school versus private school attendance. The earliest census to record this information was 1960, when immigrants were twice as likely to attend private schools, and it also appears that immigrants were more likely to attend private schools, largely because of Catholic parochial schools, in the early 20th century. The Dillingham Commission found that immigrant children and children of immigrants were overrepresented in transfers into public schools from private schools in major cities. US Immigration Commission (1907–1910), *The Children of Immigrants in Schools*, 5 vols. (Washington: Government Printing Office, 1911). However, private schools accounted for only between 7 and 8 percent of students from 1900 to 1920. "Enrollment in Elementary, Secondary, and Degree-Granting Postsecondary Institutions, by Level and Control of Institution: Selected Years, 1869–70

Through Fall 2029," data table, Digest of Education Statistics, US Department of Education, Institute of Education Sciences, 2026. Using the 1960 overrepresentation for 1913, immigrants would be about 80 percent less likely to be in public schools than the about 76 percent less likely for schools overall—an insignificant difference.

34. David J. Bier et al., "Immigrants' Recent Effects on Government Budgets: 1994–2023," Cato Institute White Paper, February 3, 2026; Census Bureau, "Current Population Survey," Annual Social and Economic Supplement, 1994–2023. Also, see Appendix Table A6.

35. William P. Dillingham, *Immigrants as Charity Seekers* (Government Printing Office, 1911).

36. The public funding flag is not available in 1940, so the population is estimated based on the ratio of the publicly funded to total population in 1930 institutions.

37. David J. Bier et al., "Immigrants' Recent Effects on Government Budgets: 1994–2023," Cato Institute White Paper, February 3, 2026; Census Bureau, "Current Population Survey," Annual Social and Economic Supplement, 1994–2023. Also, see Appendix Tables A1, A3–A7.

38. Bryan Caplan, "Milton Friedman Opposed a Pareto Improvement," *Bet on It* (blog), June 6, 2008.

39. "Why is it that free immigration was a good thing before 1914, and free immigration is a bad thing today? . . . If you come under circumstances where each person is entitled to a prorated share of the pot . . . or even to a low level of the pot . . . free immigration would mean a reduction of everybody to the same uniform level. . . . it wouldn't go quite that far but it would go in that direction." See Milton Friedman, "Milton Friedman—Illegal Immigration Only Helps When It's Illegal," September 26, 2012, YouTube video, 01:02 and 02:20.

40. Milton Friedman, "Milton Friedman—Illegal Immigration Only Helps When It's Illegal," September 26, 2012, YouTube video, 03:04 and 03:30.

41. Stephanie Kramer and Jeffrey S. Passel, "What the Data Says About Immigrants in the U.S.," Pew Research Center, August 21, 2025.

42. David J. Bier et al., "Immigrants' Recent Effects on Government Budgets: 1994–2023," Cato Institute White Paper, February 3, 2026.

43. The year 1913 is also one of the few years in the early 20th century for which records on federal, state, and local government spending are fully complete, so there is no need to interpolate any budgetary numbers.

44. National Academies of Sciences, Engineering, and Medicine, *The Economic and Fiscal Consequences of Immigration* (National Academies Press, 2017), ch. 9; and David J. Bier et al., "Immigrants' Recent Effects on Government Budgets: 1994–2023," Cato Institute White Paper, February 3, 2026.

45. David J. Bier, "Green Card Approval Rate Reaches Record Lows," Cato Institute Briefing Paper no. 173, February 15, 2024.

46. Steven Ruggles et al., IPUMS USA: Version 16.0 [dataset], 2025; and Steven Ruggles et al., IPUMS Ancestry Full Count Data: Version 4.0 [dataset], 2024.

47. "Government: Elections and Politics (Series Y 1-271)," *Historical Statistics of the United States, Colonial Times to 1970*, US Census Bureau, 1975; and "Table 3.1. Government Current Receipts and Expenditures," Bureau of Economic Analysis, revised October 30, 2024.

48. David J. Bier et al., "Immigrants' Recent Effects on Government Budgets: 1994–2023," Cato Institute White Paper, February 3, 2026; Census Bureau, "Current Population Survey," Annual Social and Economic Supplement, 1994–2023; Steven Ruggles, Sarah Flood et al., IPUMS USA: Version 16.0 [dataset], Minneapolis: IPUMS, 2023 (Decennial Censuses 1900–1950, 1910 1%, 1950 1%, 1960 5%, 1970 Form 2 State, 1980 5%, and 1990 5%).

49. Michael A. Clemens, "The Fiscal Effect of Immigration: Reducing Bias in Influential Estimates," Center for Global Development, Working Paper 632, February 2023.

CITATION

Bier, David J., and Julián Salazar. "Immigrants' Historical Effects on Government Budgets: 1900–2023," Policy Analysis no. 1024, Cato Institute, Washington, DC, November 17, 2026.

CATO INSTITUTE

The views expressed in this paper are those of the author(s) and should not be attributed to the Cato Institute, its directors, its Partners, or any other person or organization. Nothing in this paper should be construed as an attempt to aid or hinder the passage of any bill before Congress. Copyright © 2026 Cato Institute. This work by the Cato Institute is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.