Selected Charts on the Long-Term Fiscal Challenges of the United States

July 2022
The national debt will exceed its historic peak in the upcoming decade.

**Debt Held by the Public (% of GDP)**

- **World War II**
- Actual vs. Projected


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The growing debt is caused by a structural mismatch between spending and revenues.

**Federal Spending and Revenues (% of GDP)**

- **Spending**
- **Revenues**

**Average Spending (1987–2021)**

**Average Revenues (1987–2021)**


NOTE: Projected data have been adjusted to remove the effects of timing shifts. Certain payments that would ordinarily have been made on the first day of this fiscal year (October 1), but are instead made at the end of September and thus shifted into the previous fiscal year are treated as belonging to the subsequent fiscal year.
Net interest costs are projected to rise sharply

Net Interest (% of GDP)


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By 2052, interest costs are projected to be nearly three times the amount the federal government has historically spent on R&D, infrastructure, and education combined.

**Federal Spending (% of GDP)**

<table>
<thead>
<tr>
<th></th>
<th>Average Spending (1971–2021)</th>
<th>Projected Interest Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D</td>
<td>2.5%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Education</td>
<td>1.6%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Infrastructure</td>
<td></td>
<td>7.2%</td>
</tr>
</tbody>
</table>


NOTE: Infrastructure excludes defense.
Over the past decade, the U.S. spent more on interest on the national debt than it did on other national priorities.

**Federal Spending from FY2012 to FY2021 (Billions of Dollars)**

- **Net Interest Costs**: $2.8 Trillion
- **Veterans Benefits and Services**: $1.8 Trillion
- **Education**: $1.4 Trillion
- **Transportation**: $1.0 Trillion
- **Administration of Justice**: $0.6 Trillion
- **Natural Resources & Environment**: $0.4 Trillion


**Note**: Education includes education, training, employment, and social services.
Spending for mandatory programs and interest is projected to outpace all other non-interest spending

**Federal Spending (% of GDP)**

- **Social Security and Major Healthcare Programs**
- **All Other Non-interest Spending**
- **Net Interest**


**NOTE:** The major healthcare programs include Medicare (net), Medicaid, the Children’s Health Insurance Program, and spending to subsidize health insurance purchased through the marketplaces established under the Affordable Care Act and related spending. Data for 2022 to 2052 are adjusted to remove the effects of shifts in the timing of payments that arise when the first day of the fiscal year falls on a weekend.

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The elderly population is growing rapidly and living longer

U.S. Population Age 65+ (Millions)

Medical spending increases rapidly with age

**HEALTHCARE SPENDING PER CAPITA BY AGE GROUP (DOLLARS)**

- **0–18**: $3,749
- **19–44**: $4,856
- **45–64**: $10,212
- **65–84**: $16,977
- **85+**: $32,903


**NOTE**: Data are for 2014.

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Total U.S. health spending (public and private) is projected to rise to nearly one-fifth of the economy by 2025

National Health Expenditures (% of GDP)

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
<th>Projected</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td>19%</td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: Centers for Medicare and Medicaid Services, National Health Expenditures, April 2022; and Office of Management and Budget, Historical Tables, Budget of the United States Government, Fiscal Year 2023, March 2022.

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United States per capita healthcare spending is nearly three times the average of other developed countries.
Although the United States spends more on healthcare than other developed countries, its health outcomes are generally not any better.

**Health Status**
- **Life Expectancy at Birth**
  - Worst: Mexico
  - U.S.
  - Best: Japan
- **Infant Mortality**
  - Worst: Colombia
  - Best: Estonia

**Quality of Primary Care**
- **Unmanaged Asthma**
  - Worst: Latvia
  - U.S.
  - Best: Mexico
- **Unmanaged Diabetes**
  - Worst: Korea
  - U.S.
  - Best: Iceland

**Quality of Acute Care**
- **Safety During Childbirth**
  - Worst: Canada
  - Best: Poland
- **Heart Attack Mortality**
  - Worst: Latvia
  - U.S.
  - Best: Iceland


**NOTES:** Data are not available for all countries for all metrics. Data are for 2019 or latest available.

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As the population ages, fewer workers will be paying taxes to support each Social Security beneficiary

**Workers per Beneficiary Ratio**

<table>
<thead>
<tr>
<th>Year</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982</td>
<td>3.1</td>
</tr>
<tr>
<td>2002</td>
<td>3.3</td>
</tr>
<tr>
<td>2022</td>
<td>2.8</td>
</tr>
<tr>
<td>2042</td>
<td>2.2</td>
</tr>
</tbody>
</table>

Social Security will run a cumulative cash deficit of $2.9 trillion between 2022 and 2035.

**Social Security Surpluses/Deficits (% of GDP)**

- **2022–2035 Deficit:** $2.9 Trillion
- **Combined Trust Funds Depleted in 2035**

**Source:** Social Security Administration, *The 2022 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds*, June 2022.

**Notes:** Surplus/deficit numbers exclude interest income. The total deficit of $2.9 trillion is the present value of the cash deficits between 2022 and 2035. The Old-Age & Survivors Insurance trust fund is projected to be depleted in 2034 and lead to a 23 percent cut in benefits that year; the Disability Insurance trust fund is not projected to become depleted during the 75-year period ending in 2096.
Low-income seniors rely on Social Security benefits for a major share of their retirement income

Social Security Benefits (% of Total Income)

<table>
<thead>
<tr>
<th>Quintile</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Quintile (Under $13,499)</td>
<td>81%</td>
</tr>
<tr>
<td>Second Quintile ($13,499–$23,592)</td>
<td>81%</td>
</tr>
<tr>
<td>Middle Quintile ($23,592–$39,298)</td>
<td>61%</td>
</tr>
<tr>
<td>Fourth Quintile ($39,298–$72,129)</td>
<td>39%</td>
</tr>
<tr>
<td>Highest Quintile (Over $72,129)</td>
<td>15%</td>
</tr>
</tbody>
</table>

NOTE: A quintile is one-fifth of the population. Data are for 2014.
Discretionary spending is projected to remain below its historical average

% of Federal Spending

<table>
<thead>
<tr>
<th>Year</th>
<th>Discretionary Spending</th>
<th>Mandatory Spending and Net Interest Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>36%</td>
<td>64%</td>
</tr>
<tr>
<td>2022</td>
<td>29%</td>
<td>71%</td>
</tr>
<tr>
<td>2032</td>
<td>25%</td>
<td>75%</td>
</tr>
</tbody>
</table>

% of GDP


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Defense spending accounts for nearly half of total discretionary spending

2021 Discretionary Outlays: $1,636 Billion

- Defense
- Health
- Transportation
- Education
- Veterans' Benefits and Services
- Administration of Justice
- General Government
- International Affairs
- Community and Regional Development
- Housing Assistance
- Natural Resources and Environment
- General Science, Space and Technology
- Training and Employment

NOTES: Health includes funding for agencies that provide healthcare services or engage in health research, such as the National Institutes of Health, Centers for Disease Control and Prevention, and Indian Health Service. General government includes central executive and legislative functions as well as the administrative costs of Social Security, Medicare, and income security programs. Energy is included in Transportation and Agriculture is included in Natural Resources and Environment. Veterans’ benefits primarily consists of medical and hospital care. In 2020 and 2021, spending on health programs was boosted by programs to address the COVID-19 pandemic; in 2019, the largest category other than defense was transportation.
The United States spends more on defense than the next 9 countries combined.

**Defense Spending (Billions of Dollars)**

- **China**: $777 Billion
- **United States**: $801 Billion
- **India**:
- **United Kingdom**:
- **Russia**:
- **France**:
- **Germany**:
- **Saudi Arabia**:
- **Japan**:
- **South Korea**:

**Source:** Stockholm International Peace Research Institute, SIPRI Military Expenditure Database, April 2022.

**Notes:** Figures are in U.S. dollars converted from local currencies using market exchange rates. Data for the United States are for fiscal year 2021, which ran from October 1, 2020 through September 30, 2021. Data for the other countries are for calendar year 2021. The source for this chart uses a definition of defense spending that is broader than budget function 050 and defense discretionary spending.
Non-defense discretionary spending funds a wide range of programs

Non-defense Discretionary Outlays in 2021 (Billions of Dollars): $895 Billion

<table>
<thead>
<tr>
<th>Category</th>
<th>Outlay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>$140</td>
</tr>
<tr>
<td>Transportation and Services</td>
<td>$124</td>
</tr>
<tr>
<td>Education</td>
<td>$110</td>
</tr>
<tr>
<td>Veterans’ Benefits and Services</td>
<td>$109</td>
</tr>
<tr>
<td>Administration of Justice</td>
<td>$66</td>
</tr>
<tr>
<td>General Government</td>
<td>$62</td>
</tr>
<tr>
<td>International Affairs</td>
<td>$59</td>
</tr>
<tr>
<td>Community and Regional Developm</td>
<td>$55</td>
</tr>
<tr>
<td>Housing Assistance</td>
<td>$55</td>
</tr>
<tr>
<td>Natural Resources and Environment</td>
<td>$53</td>
</tr>
<tr>
<td>General Science, Space, and Technology</td>
<td>$35</td>
</tr>
<tr>
<td>Training and Employment</td>
<td>$26</td>
</tr>
</tbody>
</table>

NOTES: Health includes funding for agencies that provide healthcare services or engage in health research, such as the National Institutes of Health, Centers for Disease Control and Prevention, and Indian Health Service. General government includes central executive and legislative functions as well as the administrative costs of Social Security, Medicare, and income security programs. Energy ($6 billion) is included in Transportation. Agriculture ($11 billion) is included in Natural Resources and Environment. Veterans’ benefits primarily consists of medical and hospital care. In 2020 and 2021, spending on health programs was boosted by programs to address the pandemic; in 2019, the largest category was transportation.
The federal government collects revenues from a variety of sources.

2021 Revenues $4,047 Billion

- Individual Income: 51%
- Payroll: 32%
- Corporate Income: 9%
- Other: 4%
- Excise: 2%
- Customs Duties: 2%

NOTE: Other includes estate and gift taxes, income from the Federal Reserve, and miscellaneous fees and fines.
The U.S. tax system is progressive, with higher-income taxpayers facing higher tax rates

Effective Federal Tax Rates by Type (% of Expanded Cash Income in 2021)

- Excise Tax
- Estate Tax
- Corporate Income Tax
- Payroll Tax
- Individual Income Tax

NOTES: Individual income tax rates for the lowest and second quintiles are negative and are netted against the payroll tax rate. A quintile is one-fifth of the population. In 2020 dollars, the income breaks are: 20% $27,900; 40% $50,700; 60% $91,200; 80% $163,600; 90% $239,600; 95% $339,200; 99% $818,700; 99.9% $3,803,800.
The top 1 percent of taxpayers generate 30 percent of total federal tax revenues

Share of Federal Tax Revenues

- Top 1 Percent: 30%
- All Other Taxpayers: 70%

NOTES: Federal tax revenues include revenues from the excise tax, estate tax, corporate income tax, payroll tax, and individual income tax. Data are for 2021. Income percentile classes are based on 2020 dollars; a tax unit was in the top 1 percent if its income was $882,500 or higher, as measured by expanded cash income.
Income growth since 1979 has been larger for high-income earners, even when including transfers and taxes.

**Average Annual Income After Transfers and Taxes (2018 Dollars)**

- **Top 1 Percent** (incomes up 268%)
- **Top Quintile** (incomes up 120%)
- **Middle Quintile** (incomes up 47%)
- **Lowest Quintile** (incomes up 91%)


**Notes:** Increases calculated for 1979–2018. Income after transfers and taxes is comprised of market income plus income from social insurance programs (i.e., Social Security), plus means-tested transfers received (i.e., Medicaid), minus federal taxes. The top quintile includes households that are also in the top 1 percent.

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Total tax expenditures are large in comparison to annual income taxes collected and to the government’s major programs.

Budgetary Cost in 2021 (Billions of Dollars)

- Total Tax Expenditures: $1.9 Trillion
- Individual & Corporate Income Tax Revenues: $2.4 Trillion
- Social Security: $1.1 Trillion
- Medicare: $689 Billion
- Defense: $742 Billion


Notes: Tax expenditures are deductions, credits, exclusions, and preferential rates. The estimates for tax expenditures reflect the total in the individual and corporate income tax systems; they do not account for any interactive effects of combining various provisions. Medicare spending is net of premiums and payments from the states. Defense represents discretionary defense spending.
<table>
<thead>
<tr>
<th>Major Tax Expenditures</th>
<th>Budgetary Costs (2021)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exclusion of pension contributions and earnings*</td>
<td>$225 billion</td>
</tr>
<tr>
<td>Exclusion of employer contributions for medical insurance and care</td>
<td>$221 billion</td>
</tr>
<tr>
<td>Reduced rates of tax on dividends and long-term capital gains**</td>
<td>$176 billion</td>
</tr>
<tr>
<td>Child Tax Credit (CTC)</td>
<td>$116 billion</td>
</tr>
<tr>
<td>Earned Income Tax Credit (EITC)</td>
<td>$71 billion</td>
</tr>
<tr>
<td>Tax credits for health insurance purchased through marketplaces</td>
<td>$67 billion</td>
</tr>
<tr>
<td>Step-up basis of capital gains at death</td>
<td>$42 billion</td>
</tr>
<tr>
<td>20-Percent deduction for certain Pass-through income</td>
<td>$34 billion</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$951 billion</strong></td>
</tr>
</tbody>
</table>


NOTES: Table does not include recovery rebate tax credits, which have now expired; such credits totaled $295 billion in 2021. *Estimate includes defined benefit plans, defined contribution plans, self-employed plans, savers’ credit, and IRAs. **Estimate includes qualified dividends, home sales, and exclusion of small corporate stock. Entries do not sum due to rounding.
The top 1 percent of taxpayers receive 19 percent of the benefit from individual income tax expenditures.

Distribution of Individual Income Tax Expenditures

- Top 1 Percent: 19%
- All Other Taxpayers: 81%

NOTES: Data are for 2019. Data only include major non-business and non-payroll tax expenditures that are claimed on individual tax returns.

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The growing federal debt is projected to reduce family incomes substantially over the longer term.

**Income Loss for a Four-Person Family, on Average (2019 Dollars)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Income Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2028</td>
<td>-$4,000</td>
</tr>
<tr>
<td>2038</td>
<td>-$8,000</td>
</tr>
<tr>
<td>2048</td>
<td>-$16,000</td>
</tr>
</tbody>
</table>

**Source:** Congressional Budget Office, *The Deficit Reductions Necessary to Meet Various Targets for Federal Debt*, August 2018.

**Note:** The income measures are based on CBO’s projections of real gross national product per person. The income loss is the difference between the income level if debt rises as it does under current law and the income level if debt remains near its current share of gross domestic product.
Waiting to act raises the cost of stabilizing the debt

**Size of Annual Budget Changes Needed to Stabilize the Debt (% of GDP)**

- **2025**: 2.9%
- **2030**: 3.6%
- **2035**: 4.8% (67% larger)

If Fiscal Reforms Begin in...

**Source:** Congressional Budget Office, *The 2020 Long-Term Budget Outlook*, September 2020.
Solutions Initiative 2019: Projected federal debt

DEBT HELD BY THE PUBLIC (% OF GDP)


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