Federal debt is on an unsustainable path

DEBT HELD BY THE PUBLIC (% OF GDP)

147% in 2049

NOTE: This chart was updated with revised CBO data published on March 6, 2019.

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

Federal Revenues and Spending (% of GDP)


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Net interest costs are projected to rise sharply

10-Year Interest Costs: $7.0 trillion


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Interest costs are the fastest growing category of the budget.

**Budget Categories (% of GDP)**

- **2018**
  - Interest: ~10%
  - Social Security: ~20%
  - Medicare: ~15%
  - Medicaid, CHIP & Exchanges: ~10%
  - Nondefense Discretionary: ~5%
  - Defense Discretionary: ~5%
  - Other Mandatory: ~5%

- **2026**
  - Interest: ~15%
  - Social Security: ~20%
  - Medicare: ~15%
  - Medicaid, CHIP & Exchanges: ~10%
  - Nondefense Discretionary: ~5%
  - Defense Discretionary: ~5%
  - Other Mandatory: ~5%

- **2046**
  - Interest: ~30%
  - Social Security: ~20%
  - Medicare: ~15%
  - Medicaid, CHIP & Exchanges: ~10%
  - Nondefense Discretionary: ~5%
  - Defense Discretionary: ~5%
  - Other Mandatory: ~5%

- **2048**
  - Interest: ~35%
  - Social Security: ~20%
  - Medicare: ~15%
  - Medicaid, CHIP & Exchanges: ~10%
  - Nondefense Discretionary: ~5%
  - Defense Discretionary: ~5%
  - Other Mandatory: ~5%

**Source:** Congressional Budget Office, *The 2018 Long-Term Budget Outlook*, June 2018; and PGPF calculations based on CBO data. Compiled by PGPF.

**Note:** Medicare spending is net of premiums and payments from the states. In 2048, net interest costs would about equal Social Security.
By 2048, interest costs are projected to be more than twice what the federal government has historically spent on R&D, infrastructure, and education combined.

**Federal Spending (% of GDP)**

- Average Spending (1968–2017)
  - R&D: 2.5%
  - Infrastructure: 1.6%
  - Education: 2.0%

- Interest Costs
  - 2038: 4.2%
  - 2048: 6.3%


NOTE: Infrastructure excludes defense.
Healthcare is the major driver of the projected growth in non-interest spending over the long term.

Federal Spending (% of GDP)

SOURCE: Congressional Budget Office, The 2018 Long-Term Budget Outlook, June 2018, and The Budget and Economic Outlook: 2018 to 2028, April 2018; and PGPF calculations based on CBO data. Compiled by PGPF.
NOTE: Major health programs include Medicare (net), Medicaid, Children’s Health Insurance Program (CHIP), and the health exchanges.

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The elderly population is growing rapidly and living longer

U.S. POPULATION AGE 65+ (MILLIONS)


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Medical spending increases rapidly with age

**ANNUAL HEALTHCARE SPENDING PER CAPITA (Dollars)**

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Spending per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–18</td>
<td>$3,552</td>
</tr>
<tr>
<td>19–44</td>
<td>$4,458</td>
</tr>
<tr>
<td>45–64</td>
<td>$9,513</td>
</tr>
<tr>
<td>65–84</td>
<td>$16,872</td>
</tr>
<tr>
<td>85+</td>
<td>$32,411</td>
</tr>
</tbody>
</table>

**SOURCE:** Centers for Medicare and Medicaid Services, *National Health Expenditures by Age and Gender*, August 2016. Data are for 2012. Compiled by PGPF.

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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>18%</td>
<td>19%</td>
</tr>
<tr>
<td>2025</td>
<td>19%</td>
<td></td>
</tr>
</tbody>
</table>

United States per capita healthcare spending is more than twice the average of other developed countries.

### Healthcare Costs per Capita (Dollars)

<table>
<thead>
<tr>
<th>Country</th>
<th>Cost (Dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>$3,542</td>
</tr>
<tr>
<td>U.K.</td>
<td>$4,264</td>
</tr>
<tr>
<td>Australia</td>
<td>$4,543</td>
</tr>
<tr>
<td>Japan</td>
<td>$4,717</td>
</tr>
<tr>
<td>Canada</td>
<td>$4,826</td>
</tr>
<tr>
<td>France</td>
<td>$4,902</td>
</tr>
<tr>
<td>Sweden</td>
<td>$5,511</td>
</tr>
<tr>
<td>Germany</td>
<td>$5,728</td>
</tr>
<tr>
<td>Switzerland</td>
<td>$8,009</td>
</tr>
<tr>
<td>United States</td>
<td>$10,209</td>
</tr>
<tr>
<td>OECD Average</td>
<td>$4,069</td>
</tr>
</tbody>
</table>


**NOTE:** Data are for 2017 or latest available. Chart uses purchasing power parities to convert data into U.S. dollars.
Although the United States spends more on healthcare than other developed countries, its health outcomes are generally no better.

**Health Status**
- **Life Expectancy at Birth**
  - Worst: Japan, Latvia
  - Best: Mexico, Iceland
- **Infant Mortality**
  - Worst: U.S.
  - Best: Mexico, Iceland

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

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


**NOTE:** Data are not available for all countries for all metrics. Data are for 2017 or latest available.
As the population ages, fewer workers will be paying taxes to support each Social Security beneficiary.

**Workers per Beneficiary**

<table>
<thead>
<tr>
<th>Year</th>
<th>Workers per Beneficiary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>3.7</td>
</tr>
<tr>
<td>1990</td>
<td>3.4</td>
</tr>
<tr>
<td>2010</td>
<td>2.9</td>
</tr>
<tr>
<td>2030</td>
<td>2.3</td>
</tr>
</tbody>
</table>

**Source:** Social Security Administration, *The 2018 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds*, June 2018. Compiled by PGPF.
Social Security will run a cumulative cash deficit of $2.9 trillion between now and 2034.

**SOCIAL SECURITY SURPLUSES/DEFICITS (% OF GDP)**

- **Actual**
- **Projected**

**2018-2034**
- **Deficit:** $2.9 Trillion

**Trust Fund Depleted in 2034**

**Sources:**
- **Note:** Surplus/deficit numbers exclude interest income. The total deficit of $2.8 trillion is the present value of the cash deficits between 2018 and 2034.

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Low-income seniors rely on Social Security benefits for a major share of their retirement income

**Social Security Benefits (% of Total Income)**

- **Lowest Quintile** (Under $13,499): 81%
- **Second Quintile** ($13,499–$23,592): 81%
- **Middle Quintile** ($23,592–$39,298): 61%
- **Fourth Quintile** ($39,298–$72,129): 39%
- **Highest Quintile** (Over $72,129): 15%

**Source:** Social Security Administration, *Income of the Population 55 or Older, 2014*, April 2016. Data are for 2014. Compiled by PGPF.

**Note:** A quintile is one-fifth of the population.
Discretionary spending funds a wide range of programs

2018 Budgetary Resources
$1,404 Billion

- Defense
- Education
- Transportation
- Veterans Benefits and Services
- Income Security
- Health (Discretionary Only)
- International Affairs
- Administration of Justice
- Natural Resources and Environment
- General Science, Space and Technology
- Community and Regional Development
- General Government
- Other

NOTE: Health (discretionary only) includes National Institutes of Health, the Centers for Disease Control and Prevention, veterans healthcare, and administrative costs for Medicaid.
The United States spends more on defense than the next seven countries combined.

**Defense Spending (Billions of Dollars)**

- **China**: $578 Billion
- **Russia**: $300 Billion
- **Saudi Arabia**: $200 Billion
- **India**: $150 Billion
- **France**: $100 Billion
- **United Kingdom**: $100 Billion
- **Japan**: $0 Billion
- **United States**: $610 Billion

**SOURCE:** Stockholm International Peace Research Institute, *SIPRI Military Expenditure Database*, May 2018. Data are for 2017. Compiled by PGPF.

**NOTE:** Figures are in U.S. dollars, converted from local currencies using market exchange rates.
Discretionary spending is projected to fall to well below its historical average.

**% of Federal Spending**
- 2009: 35%
- 2019: 30%
- 2029: 22%

**% of GDP**
- 2009: 65%
- 2019: 70%
- 2029: 78%

**Mandatory Spending and Net Interest Costs**

**20-Year Average (1999–2018)**

**Discretionary Spending**


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The federal government collects revenues from a variety of sources

2018 Total Revenues
$3,329 Billion

- Individual Income Taxes 51%
- Payroll Taxes 35%
- Corporate Income Taxes 9%
- Excise Taxes 3%
- Other 6%
- Estate and Gift Taxes 1%

Note: Other includes customs duties and miscellaneous sources. Numbers may not sum to 100% due to rounding.
The U.S. tax system is progressive, with higher-income taxpayers facing higher tax rates.

**Effective Federal Tax Rate by Type (% of Cash Income in 2018)**

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

<table>
<thead>
<tr>
<th>Quintile</th>
<th>Lowest Quintile</th>
<th>Second Quintile</th>
<th>Middle Quintile</th>
<th>Fourth Quintile</th>
<th>80–90th Percentile</th>
<th>90–95th Percentile</th>
<th>95–99th Percentile</th>
<th>Top 1 Percent</th>
<th>Top 0.1 Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>3%</td>
<td>8%</td>
<td>12%</td>
<td>16%</td>
<td>18%</td>
<td>20%</td>
<td>22%</td>
<td>30%</td>
<td>31%</td>
</tr>
</tbody>
</table>

**Source:** Tax Policy Center, *Effective Federal Tax Rates by Expanded Cash Income Percentile, 2018*, August 2018. Compiled by PGPF.

**Note:** Individual income tax rates for the lowest and second lowest quintiles are negative and are netted against the payroll tax rate. A quintile is one-fifth of the population. In 2018 dollars, the income breaks are: 20% $25,100; 40% $49,300; 60% $85,900; 80% $153,300; 90% $222,900; 95% $319,100; 99% $754,800; 99.9% $3,318,600. Includes both filing and non-filing units but excludes those that are dependents of other tax units.
The top 1 percent of taxpayers generate 26 percent of total federal tax revenues

Share of Federal Tax Revenues

Top 1 Percent
26%

All Other Taxpayers
74%

SOURCE: Tax Policy Center, Baseline Distribution of Income and Federal Taxes, All Tax Units, by Expanded Cash Income Percentile, August 2018. Data are for 2018. Compiled by PGPF.
NOTE: In 2018, a tax unit was in the top 1 percent if its income was $754,800 or higher.
The incomes of the wealthy have grown much faster than the incomes of other groups

### Average Annual After-Tax Income (2015 Dollars)

- **Top 1%:** Increase of $876,200 (+242%)
- **Top 20%:** Increase of $109,100 (+103%)
- **Middle 20%:** Increase of $18,700 (+41%)
- **Lowest 20%:** Increase of $14,800 (+80%)


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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 2018 (Dollars)**

- **All Tax Expenditures**: $1.5 Trillion
- **Individual & Corporate Income Tax Revenues**: $1.9 Trillion
- **Social Security**: $982 Billion
- **Defense**: $622 Billion
- **Medicare**: $582 Billion


**Note:** Tax expenditures are deductions, credits, exclusions, and preferential rates. The estimates for tax expenditures 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.
### Six popular tax provisions accounted for a large majority of annual tax expenditures for individuals

<table>
<thead>
<tr>
<th>Major Individual Tax Expenditures</th>
<th>Budgetary Costs (2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exclusion of pension contributions and earnings**</td>
<td>$251 billion</td>
</tr>
<tr>
<td>Exclusion of employer contributions for medical insurance and care*</td>
<td>$146 billion</td>
</tr>
<tr>
<td>Preferential treatment of dividends and capital gains</td>
<td>$129 billion</td>
</tr>
<tr>
<td>Child Tax Credit</td>
<td>$104 billion</td>
</tr>
<tr>
<td>Earned Income Tax Credit (EITC)</td>
<td>$70 billion</td>
</tr>
<tr>
<td>Subsidies for insurance purchased through health benefit exchanges</td>
<td>$49 billion</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$749 billion</strong></td>
</tr>
</tbody>
</table>

**SOURCE:** The Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2018–2022*, October 2018. Compiled by PGPF NOTE: *Estimate includes employer-provided health insurance purchased through cafeteria plans and TRICARE medical insurance. **Includes defined benefit plans, defined contribution plans, plans covering partners and sole proprietors, and IRA’s.*
The top 1 percent of taxpayers receive 28 percent of the benefit from individual income tax expenditures.

Distribution of Individual Income Tax Expenditures

- Top 1 Percent: 28%
- All Other Taxpayers: 72%


NOTE: Data only includes non-business tax expenditures that are claimed on individual tax returns. TPC’s income groups are based on expanded cash income and account for family size. In 2015, a family was in the top 1 percent if its size-adjusted expanded cash income was $391,500 or higher.
The growing federal debt would reduce family incomes substantially

**Income Loss for a 4-Person Family, on Average (2019 Dollars)**

- 2028: -$4,000
- 2038: -$8,000
- 2048: -$16,000


NOTE: The income measures are based on CBO’s projections of real gross national product (GNP) 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 GDP.
Waiting 5 years raises the cost of stabilizing the debt by 21 percent.

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

- 2019: 1.9%
- 2024: 2.3%
- 2029: 2.9%

SOURCE: Congressional Budget Office, The 2018 Long-Term Budget Outlook, June 2018. Compiled by PGPF.
Solutions exist: PGPF Solutions Initiative plans from five think tanks showed stable or declining federal debt through 2040

Debt Held by the Public (% of GDP)

Current Policy

- Bipartisan Policy Center
- American Enterprise Institute
- Economic Policy Institute
- Center for American Progress
- American Action Forum

NOTE: Current policy is defined as the alternative fiscal scenario without economic feedback from CBO’s 2014 Long-Term Budget Outlook.