Top 10% Pre-tax Income Share in the US, 1917-2012

Decomposing Top 10% into 3 Groups, 1913-2012

Share of total income for each group

- Top 1% (incomes above $394,000 in 2012)
- Top 5-1% (incomes between $161,000 and $394,000)
- Top 10-5% (incomes between $114,000 and $161,000)

The Congressional Budget Office: Government Scorekeepers

- The methods and results derived from empirical economics are central to the development of public policy at all levels of government.
- The Congressional Budget Office (CBO) provides Congress with the objective, timely, nonpartisan analyses needed for economic and budget decisions.
- The CBO increasingly plays a critical role as a “scorekeeper” for government policy debates.
- Legislative spending proposals that are to become law must first have their costs estimated by the analysts at the CBO.

It is not an overstatement to say that the economists who work at the CBO frequently hold the fate of a legislative proposal in their hands. The large price tag that the CBO assigned to the Clinton administration’s plan to reform health care in the United States in 1994 is often cited as a key factor in the defeat of that proposal.
2A. Tax revenue/GDP in the US, UK, and Sweden

Source: Kleven-Kreiner-Saez NBER WP 2009
Federal Spending and Revenue as a Share of the U.S. Economy (1930 - 2016)
Federal Surplus/Deficit, 1930–2011
Federal Debt, 1930–2011

% of GDP

120
100
80
60
40
20

Debt Level of OECD Nations in 2011

% of GDP

Sweden
New Zealand
Australia
Denmark
Iceland
United Kingdom
Canada
Spain
France
Netherlands
Austria
United States
Germany
Japan
Belgium
Italy
OECD Average
Decentralization

A key feature of governments is the degree of centralization across local and national government units—that is, the extent to which spending is concentrated at higher (federal) levels or lower (state and local) levels.

- **% of GDP**
  - Expenditures
  - Revenues
  - Surplus/Deficit

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
<th>Expenditure</th>
<th>Surplus/Deficit</th>
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<tbody>
<tr>
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<td>2011</td>
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The Distribution of Federal and State Expenditures, 1960 and 2007 • This figure shows the changing composition of federal and state spending over time, as a share of total spending. (a) For the federal government, defense spending has fallen and Social Security and health spending have risen. (b) For the states, the distribution has been more constant, with a small decline in education and welfare spending and a rise in health spending.
The Distribution of Federal and State Revenues, 1960 and 2008 • This figure shows the changing composition of federal and state revenue sources over time, as a share of total revenues. (a) At the federal level, there has been a large reduction in corporate and excise tax revenues and a rise in payroll tax revenues. (b) For the states, there has been a decline in property taxes and a rise in income taxes and federal grants.
Total tax revenues were less than 10% of national income in rich countries until 1900-1910; they represent between 30% and 55% of national income in 2000-2010. Sources and series: see piketty.pse.ens.fr/capital21c.

Source: Piketty (2014)
Share of pre-tax national income going to top 10% adults

- Source: Piketty, Saez, and Zucman (2018)
Average national income per adult: 61% growth from 1980 to 2014

Bottom 90% pre-tax: 30% growth from 1980 to 2014

Bottom 50% pre-tax: 1% growth from 1980 to 2014
Top 10% national income share: pre-tax vs. post-tax

Pre-tax

Post-tax (after taxes and adding transfers and govt spending)

Source: Piketty, Saez, Zucman (2018)
Average national income per adult: 61% growth from 1980 to 2014

Bottom 50% post-tax: 21% growth from 1980 to 2014

Bottom 50% pre-tax: 1% growth from 1980 to 2014
Federal outlays, adjusted to exclude shifts in the timing of certain payments, are projected to climb from 21.0 percent of GDP in 2020 to 23.0 percent in 2029 (see Figure 1-2).

Deficits are projected to average 4.7 percent of GDP over the 2020–2029 period. Over the past 50 years, deficits have averaged 2.9 percent of GDP; and in years when the unemployment rate has been below 6 percent, deficits averaged just 1.5 percent of GDP.

Primary deficits—that is, deficits excluding net outlays for interest—are projected to decrease over time, averaging 2.7 percent of GDP from 2020 through 2024 and 2.2 percent from 2025 through 2029. At the same time, because of projected increases in interest rates and federal borrowing, net interest outlays grow steadily, from 1.8 percent of GDP in 2020 to 2.6 percent in 2029 (see Figure 1-3 on page 14).

Those deficits are projected to boost federal debt held by the public, which consists mostly of the securities that the Treasury issues to raise cash to fund federal activities and pay off the government’s maturing liabilities. The net amount that the Treasury borrows by issuing those securities (calculated as the amounts that are sold minus the amounts that have matured) is influenced primarily by the annual budget deficit.

Consequently, under current law, debt held by the public would increase in upcoming years. In CBO’s baseline, after accounting for all of the government’s borrowing needs, debt held by the public rises from $17.8 trillion at the end of 2020 to $29.3 trillion at the end of 2029 (see Table 1-3 on page 15). As a percentage of GDP, that debt would increase from 79 percent in 2019 to 95 percent by the end of the projection period (see Figure 1-4 on page 16). At that point, such debt would be the largest since 1946 and more than twice the 50-year average.

Outlays
Over the coming decade, CBO projects, federal outlays would grow at an average annual rate of 5 percent, reaching $7.1 trillion in 2029 (adjusted to exclude the effects of timing shifts). Outlays for Social Security, Medicare, and net interest account for about two-thirds of that $2.7 trillion increase.
Average tax rates by income group in 2018 (% of pre-tax income)

- Corporate & property taxes
- Consumption taxes
- Payroll taxes
- Individual income taxes
- Estate tax

Source: Saez and Zucman (2019)
Figure 10.15. The rise of the social State in Europe, 1870-2015

Interpretation. In 2015, fiscal revenues represented 47% of national income on average in Western Europe and were used as follows: 10% of national income for regalian expenditure (army, police, justice, general administration, basic infrastructure: roads, etc.); 6% for education; 11% for pensions; 9% for health; 5% for social transfers (other than pensions); 6% for other social spending (housing, etc.). Before 1914, regalian expenditure absorbed almost all fiscal revenues. Note. The evolution depicted here is the average of Germany, France, Britain and Sweden (see figure 10.14). Sources and series: see piketty.pse.ens.fr/ideology.
Figure 10.14. The rise of the fiscal State in rich countries 1870-2015

Interpretation. Total fiscal revenues (all taxes and social contributions included) made less than 10% of national income in rich countries during the 19th century and until World War 1, before rising strongly from the 1910s-1920s until the 1970s-1980s and then stabilizing at different levels across countries: around 30% in the U.S., 40% in Britain and 45%-55% in Germany, France and Sweden.

Sources and series: see piketty.pse.ens.fr/ideology.
Proposed tax plans (as of January 20, 2020)
(including private health insurance as tax)

<table>
<thead>
<tr>
<th>Income group</th>
<th>Proposed tax plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>Sanders</td>
</tr>
<tr>
<td>10%</td>
<td>Warren</td>
</tr>
<tr>
<td>20%</td>
<td>Buttigieg</td>
</tr>
<tr>
<td>30%</td>
<td>Biden</td>
</tr>
<tr>
<td>40%</td>
<td>Trump</td>
</tr>
<tr>
<td>Top 1%</td>
<td>Obama</td>
</tr>
<tr>
<td>Top 0.1%</td>
<td></td>
</tr>
<tr>
<td>Top 0.01%</td>
<td></td>
</tr>
<tr>
<td>Top 400</td>
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</tbody>
</table>
Figure 1

Number of Uninsured and Uninsured Rate among the Nonelderly Population, 2008-2018

NOTE: Includes nonelderly individuals ages 0 to 64.
GLOBAL TEMPERATURE & CARBON DIOXIDE

1880  2017

°C
+1.1°  +1.0°  +0.9°  +0.7°  +0.5°  +0.3°  +0.1°  -0.1°  -0.3°

PPM
410  390  370  350  330  310  290  270

TEMPERATURE
CARBON DIOXIDE

Global temperature data points averaged and adjusted to early industrial baseline (1880-1910)
Source: NASA GISS, NOAA ARL, ENSO

CLIMATE CENTRAL