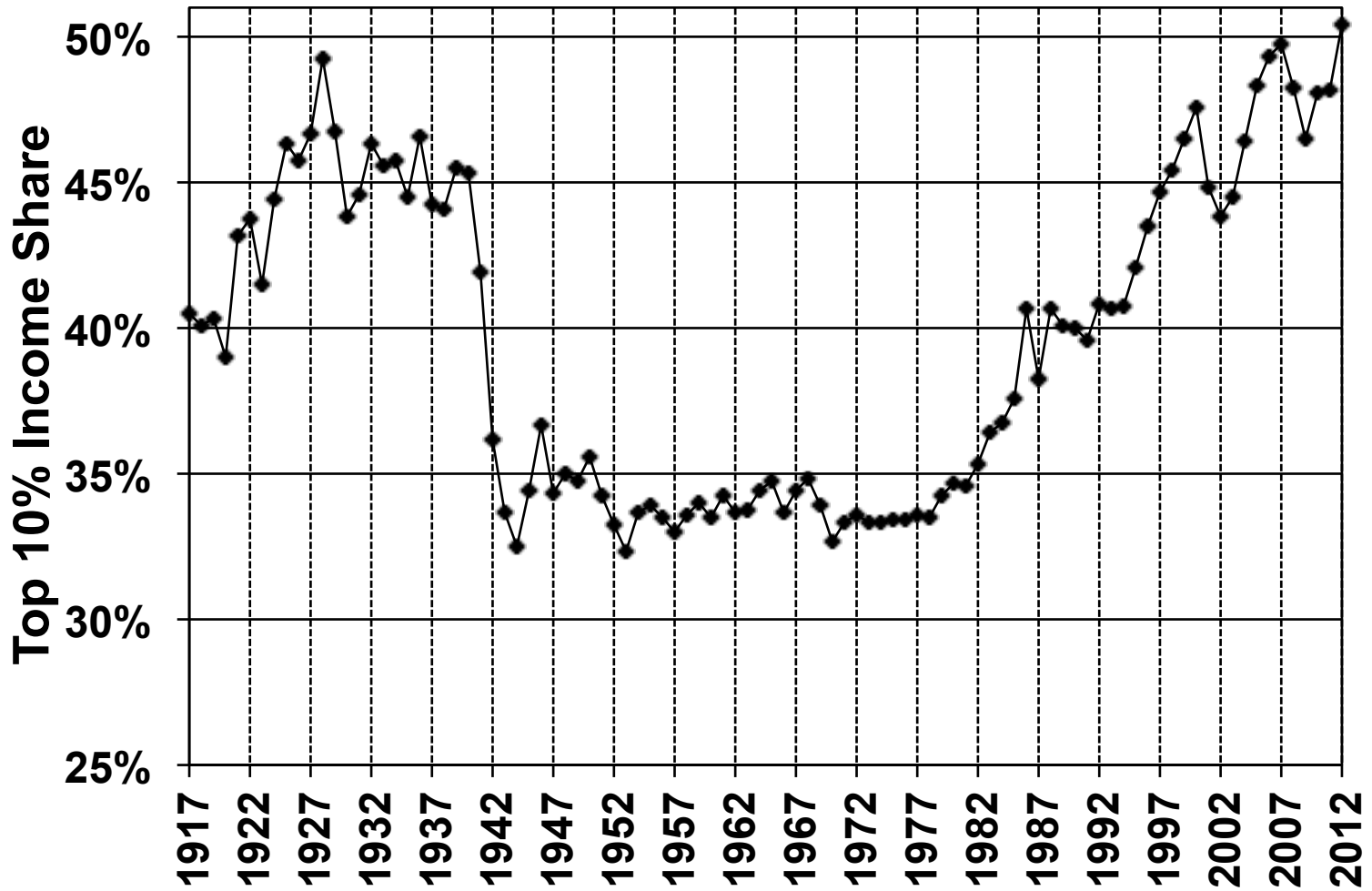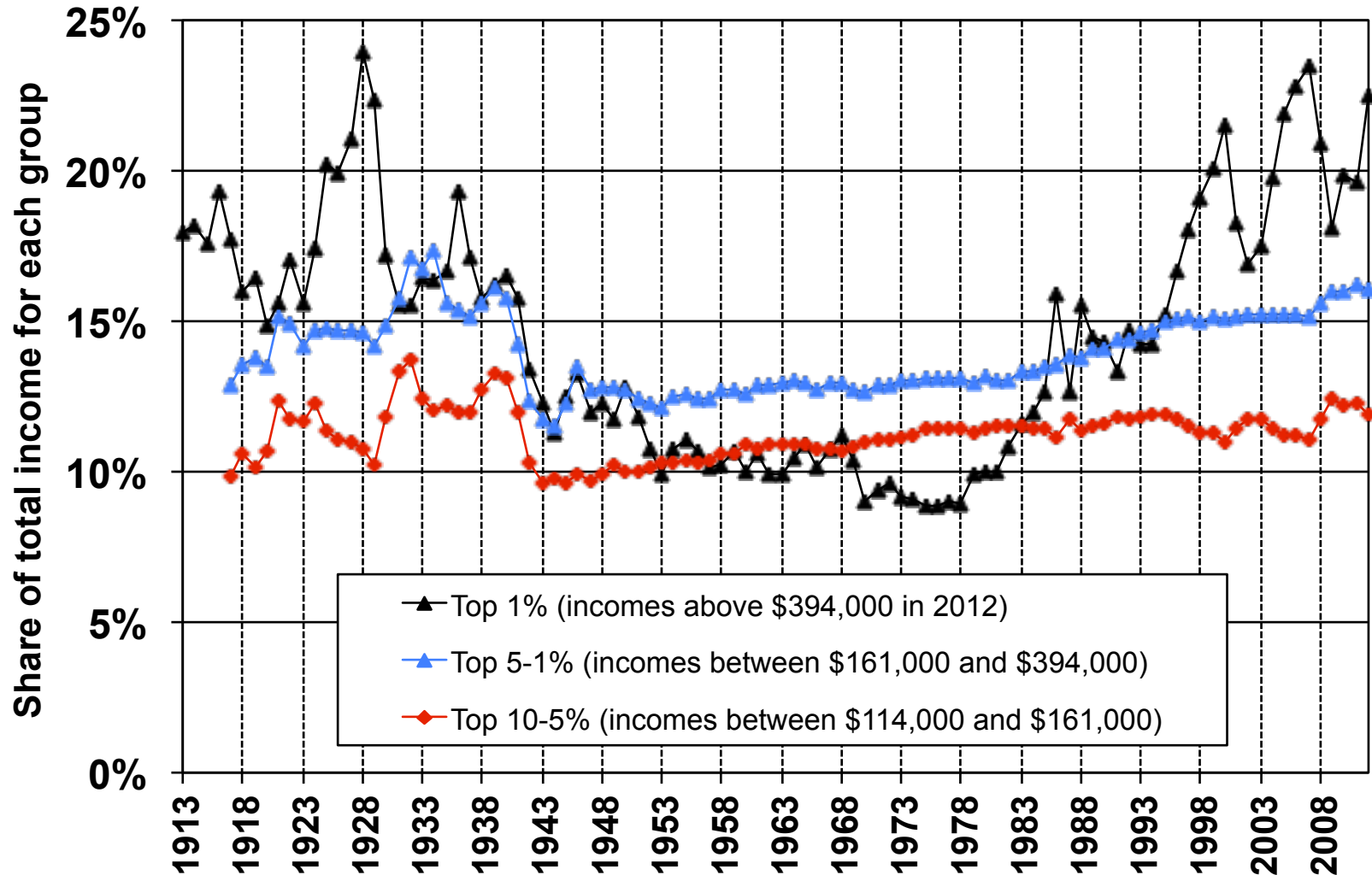# Top 10% Pre-tax Income Share in the US, 1917-2012

Source: Piketty and Saez, 2003 updated to 2012. Series based on pre-tax cash market income including realized capital gains and excluding government transfers. 2012 data based on preliminary statistics

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)

Source: Piketty and Saez, 2003 updated to 2012. Series based on pre-tax cash market income including realized capital gains and excluding government transfers. 2012 data based on preliminary statistics.

1.1

The Four Questions of Public Finance

► **APPLICATION**

The Congressional Budget Office: Government Scorekeepers

"We don't use the Congressional Budget Office. We have our own figures."

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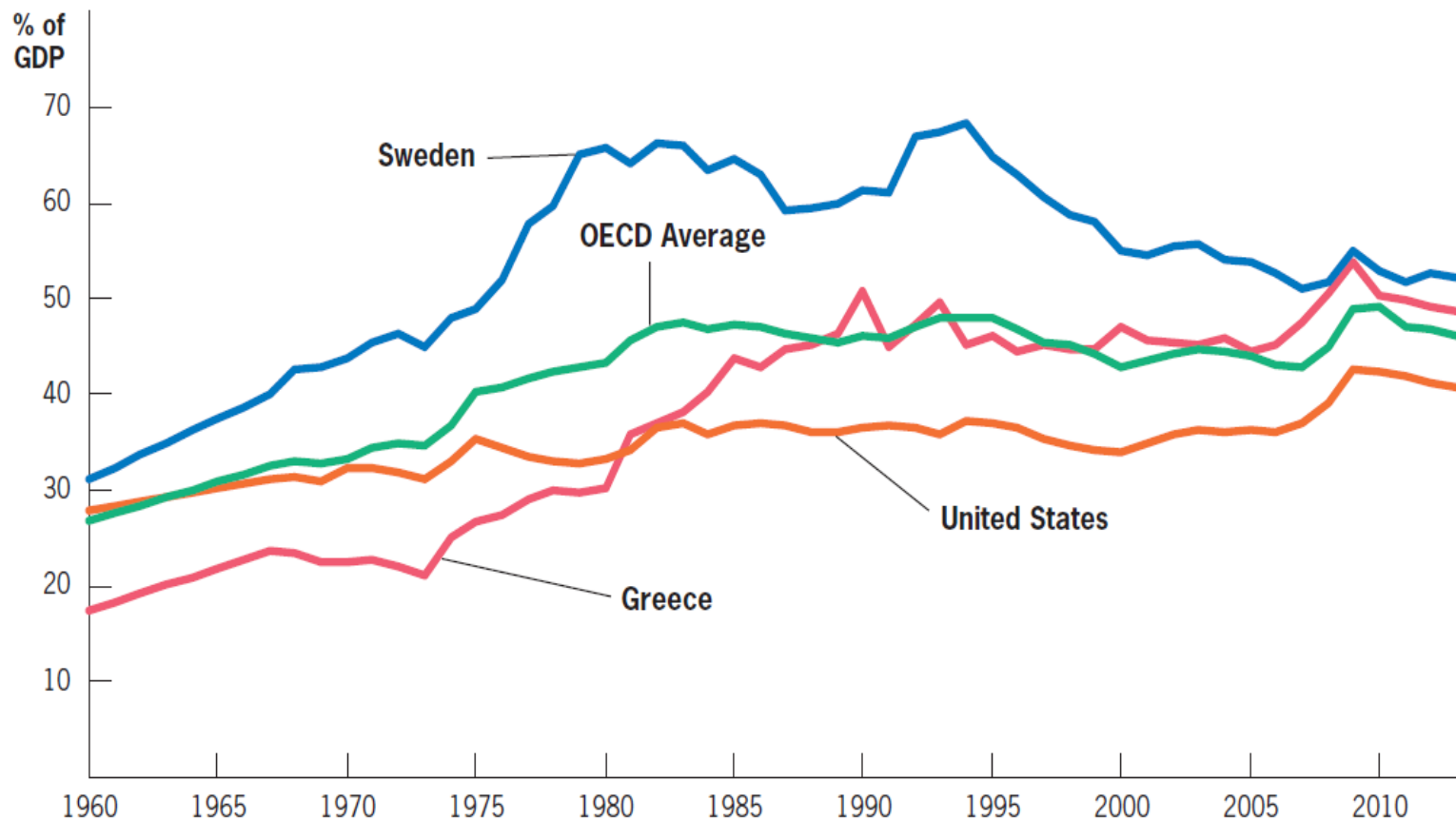
It is not an overstatement to say that the economists who work at the CBO frequently hold the fate of a legislative proposal in their hands. The large price tag that the CBO assigned to the Clinton administration's plan to reform health care in the United States in 1994 is often cited as a key factor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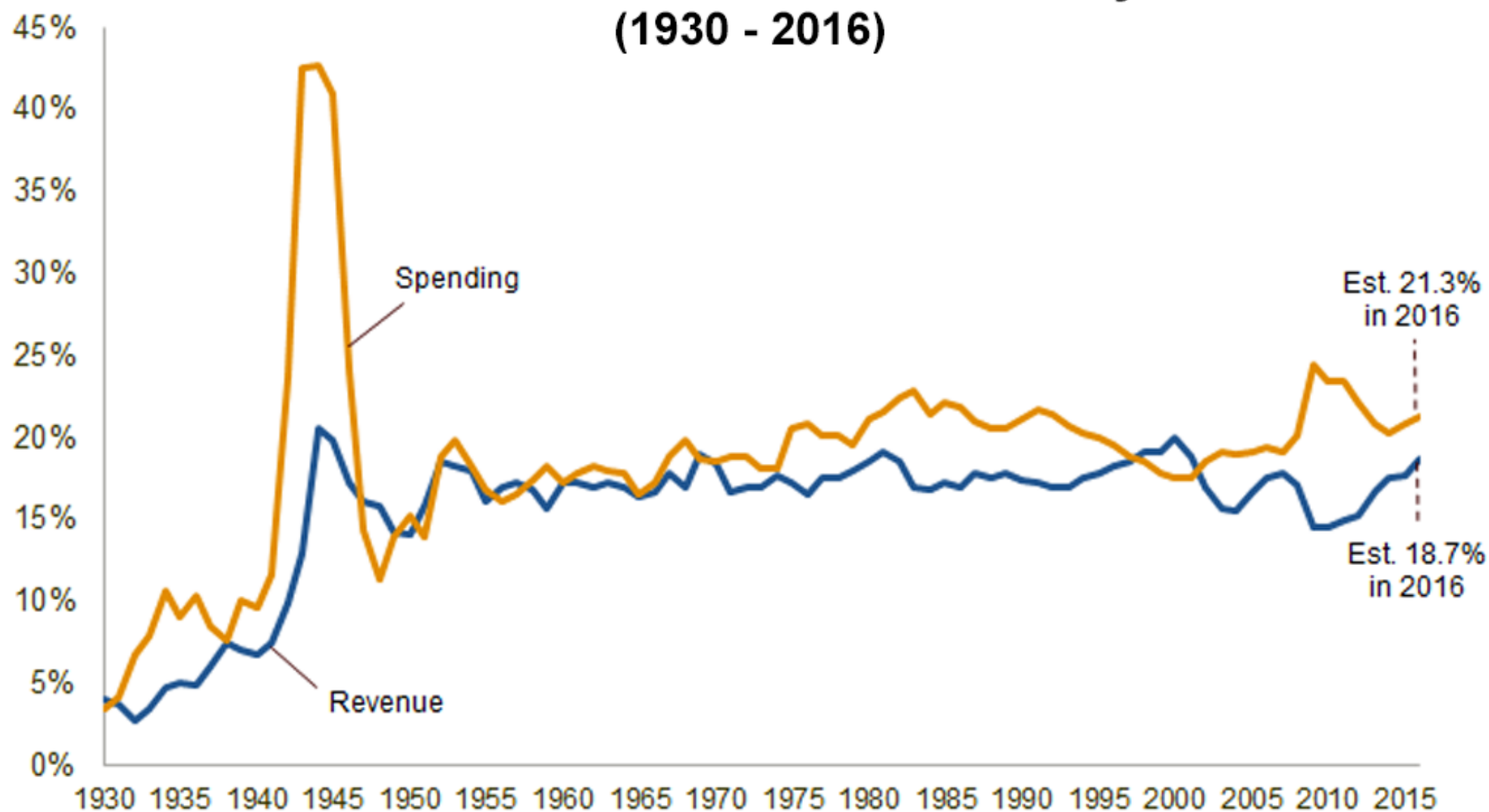
2A. Tax revenue/GDP in the US, UK, and Sweden

Source: Kleven-Kreiner-Saez NBER WP 2009
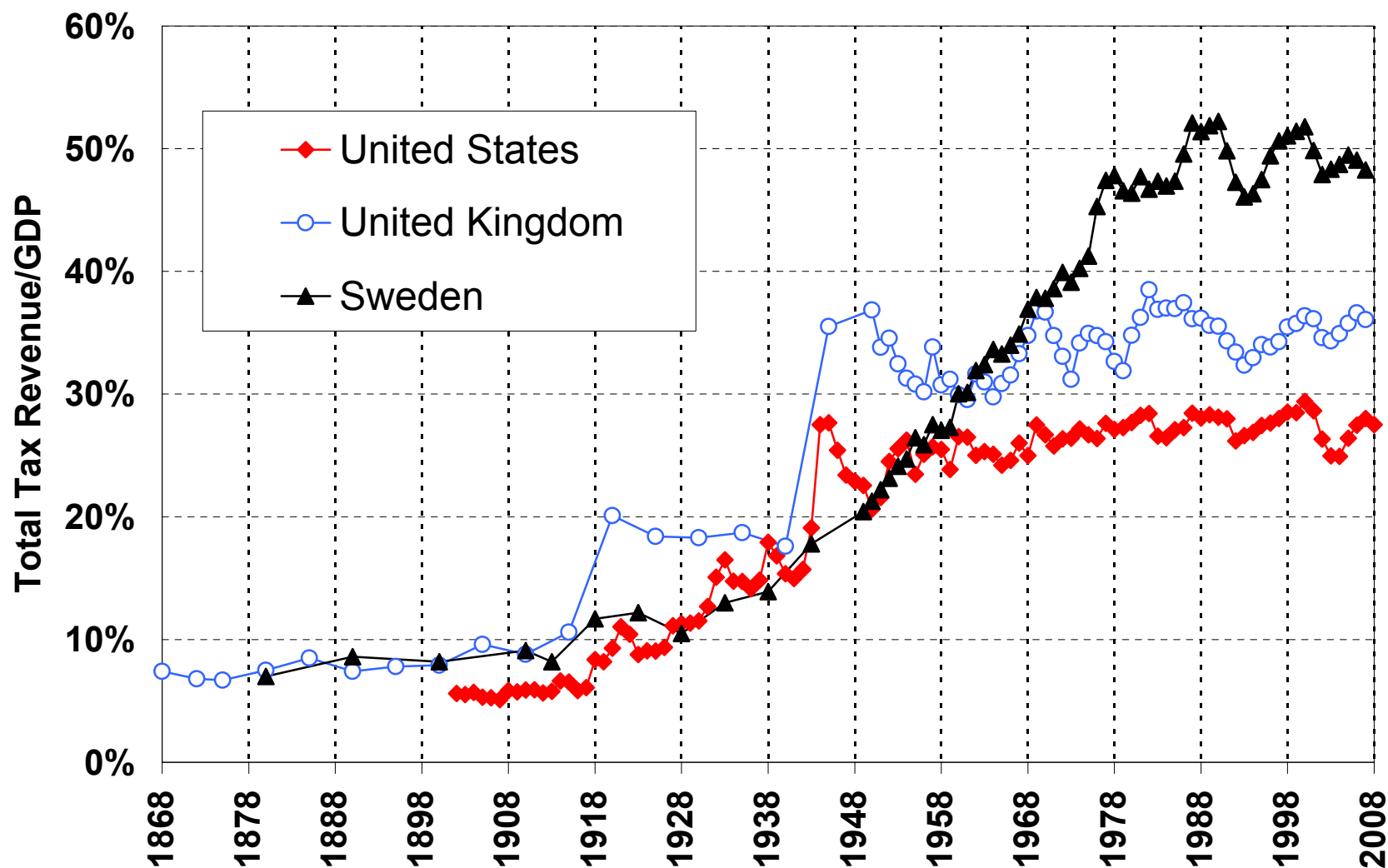
Total Government Spending Across Developed Nations, 1960−2013

Federal Spending and Revenue as a Share of the U.S. Ecoomy
(1930 - 2016)

Est. 21.3% in 2016

Est. 18.7% in 2016

Spending
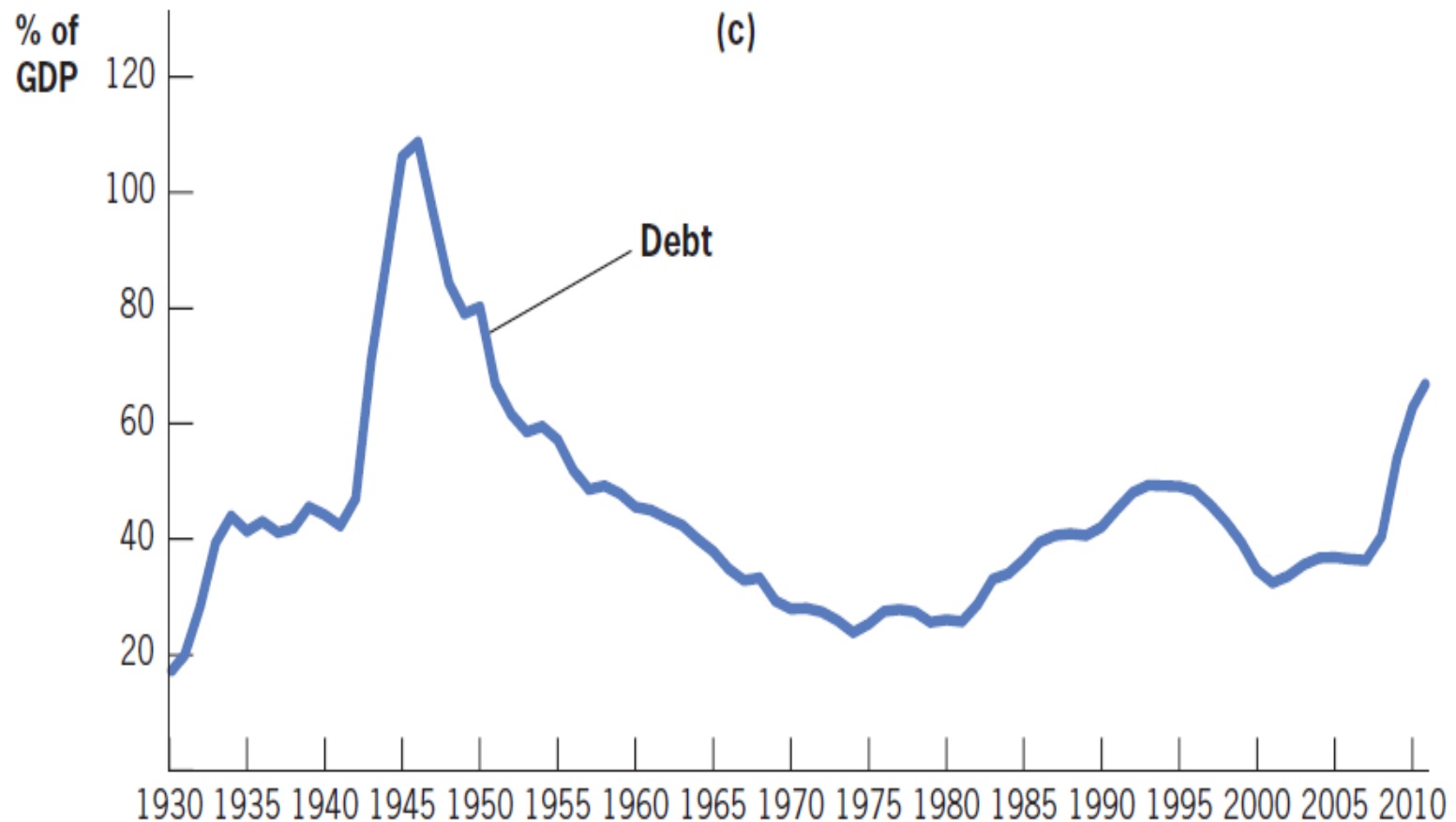
Revenue

Source: OMB, National Priorities Project
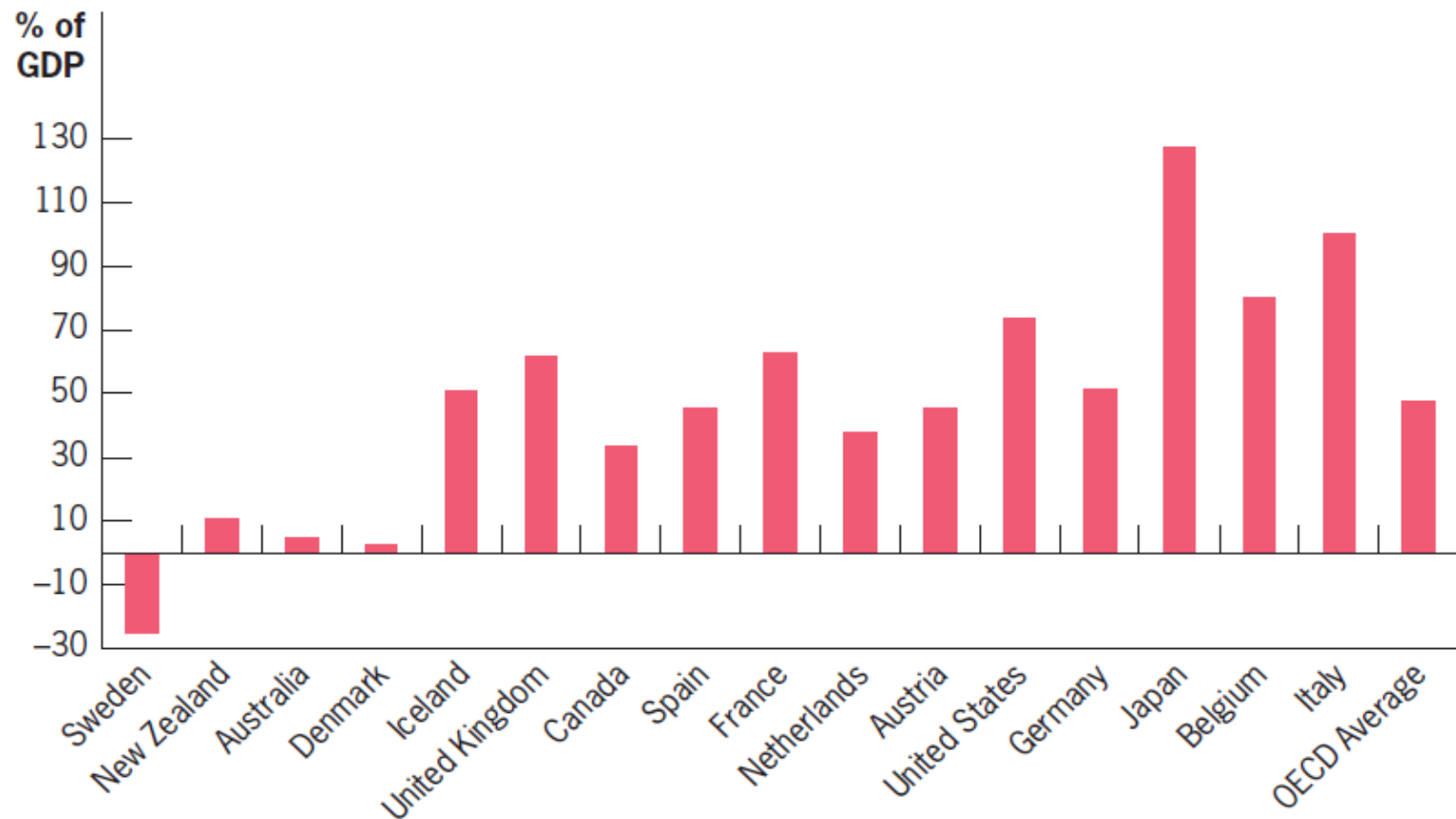
1.2

Federal Surplus/Deficit, 1930−2011
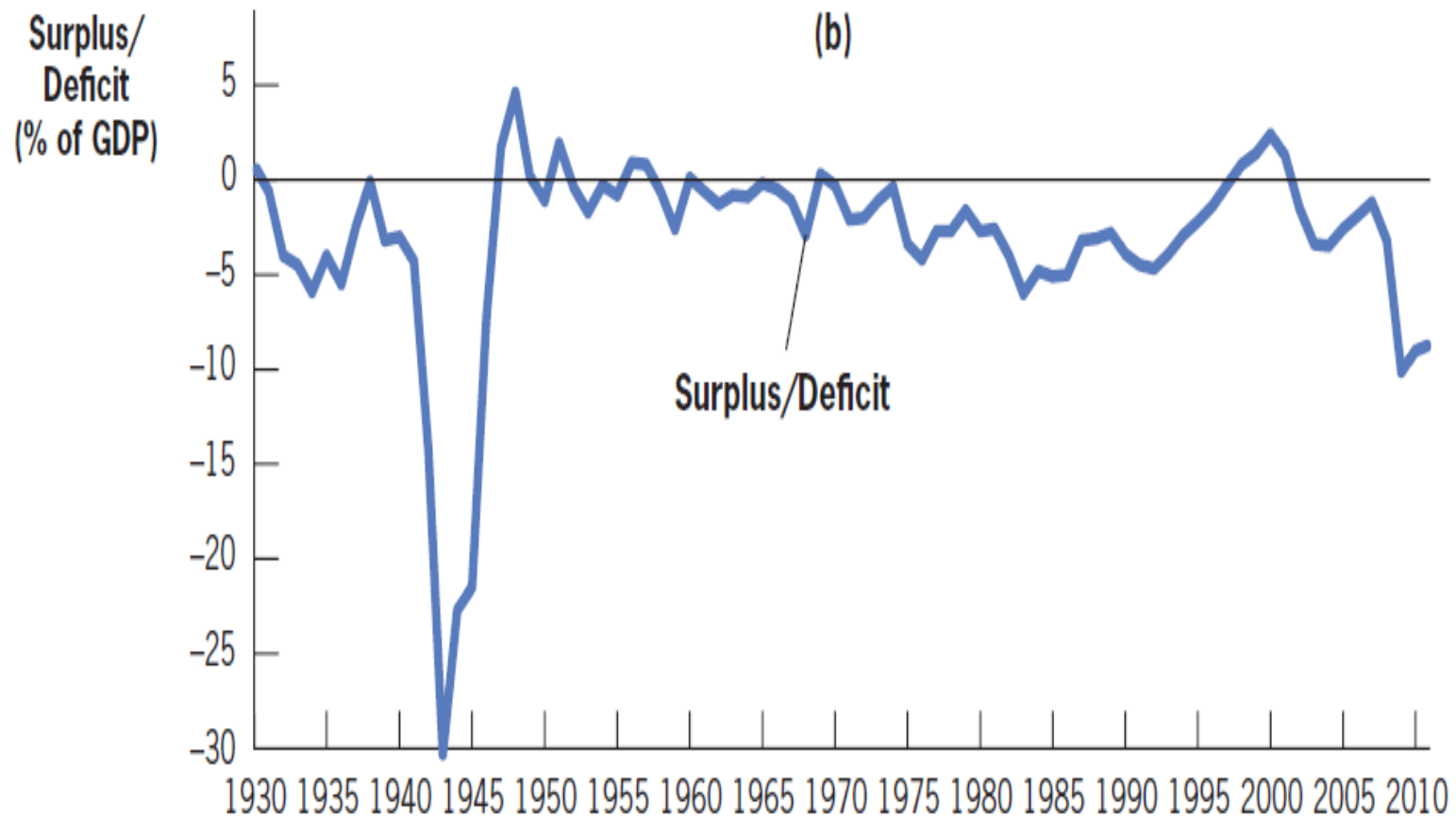
1.2

Federal Debt, 1930−2011

1.2

Debt Level of OECD Nations in 2011

1.2

Why Study Public Finance? Facts on Government in the United States and around the World

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.

■ FIGURE 1-3

State/local: 36.5% of total government spending (12.1% of GDP)

Federal: 63.5% of total government spending (21% of GDP)
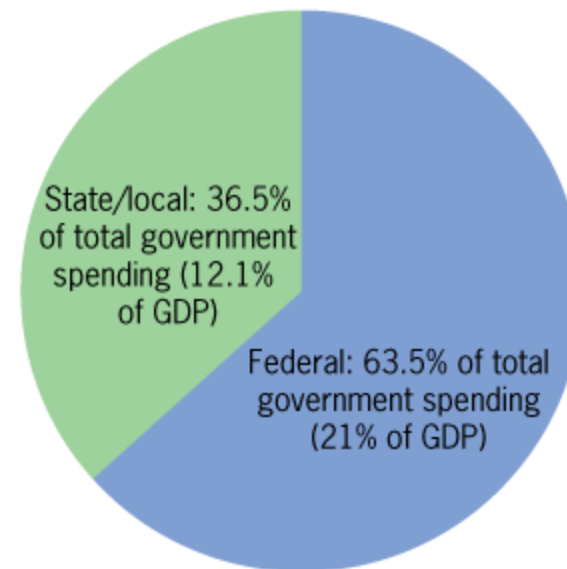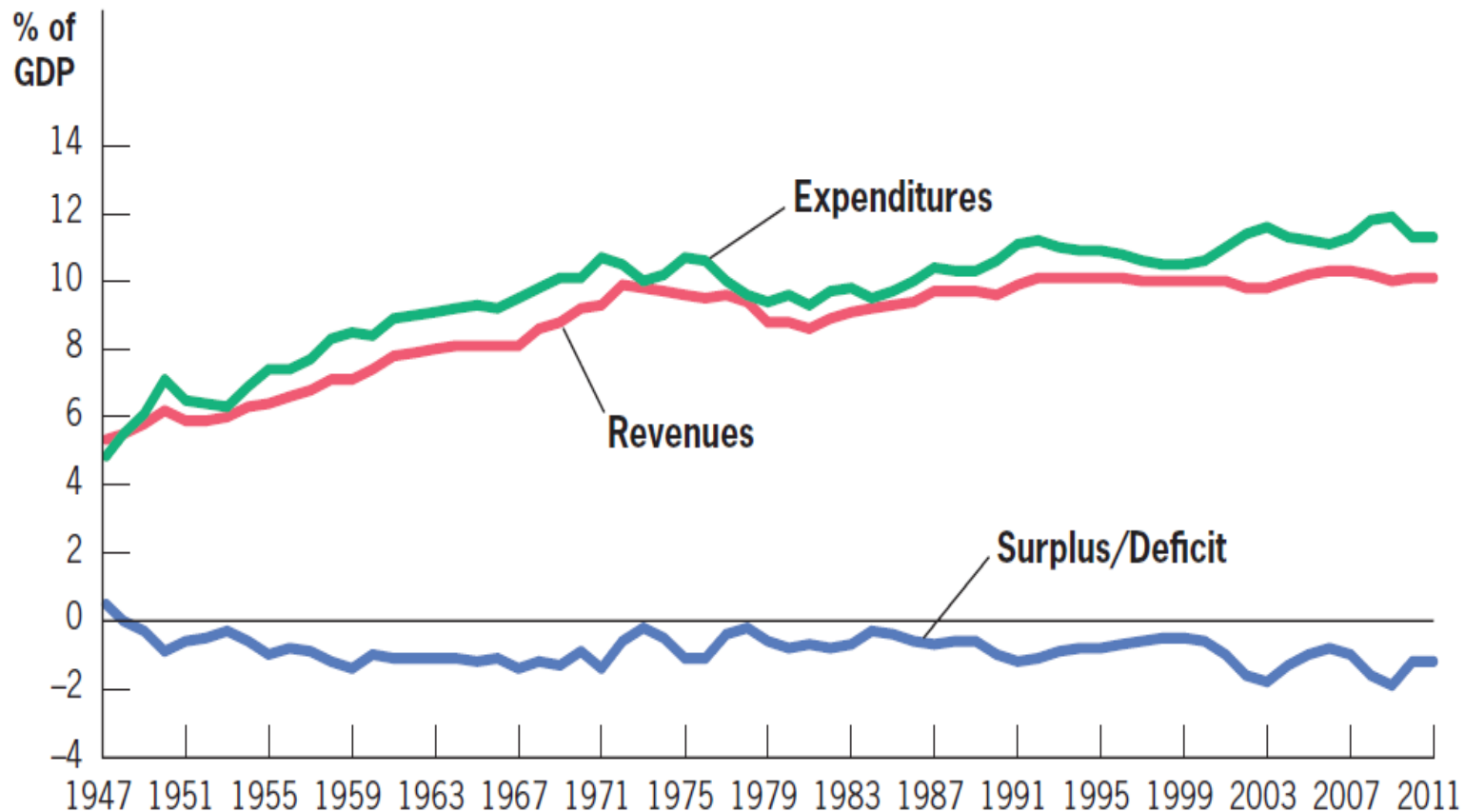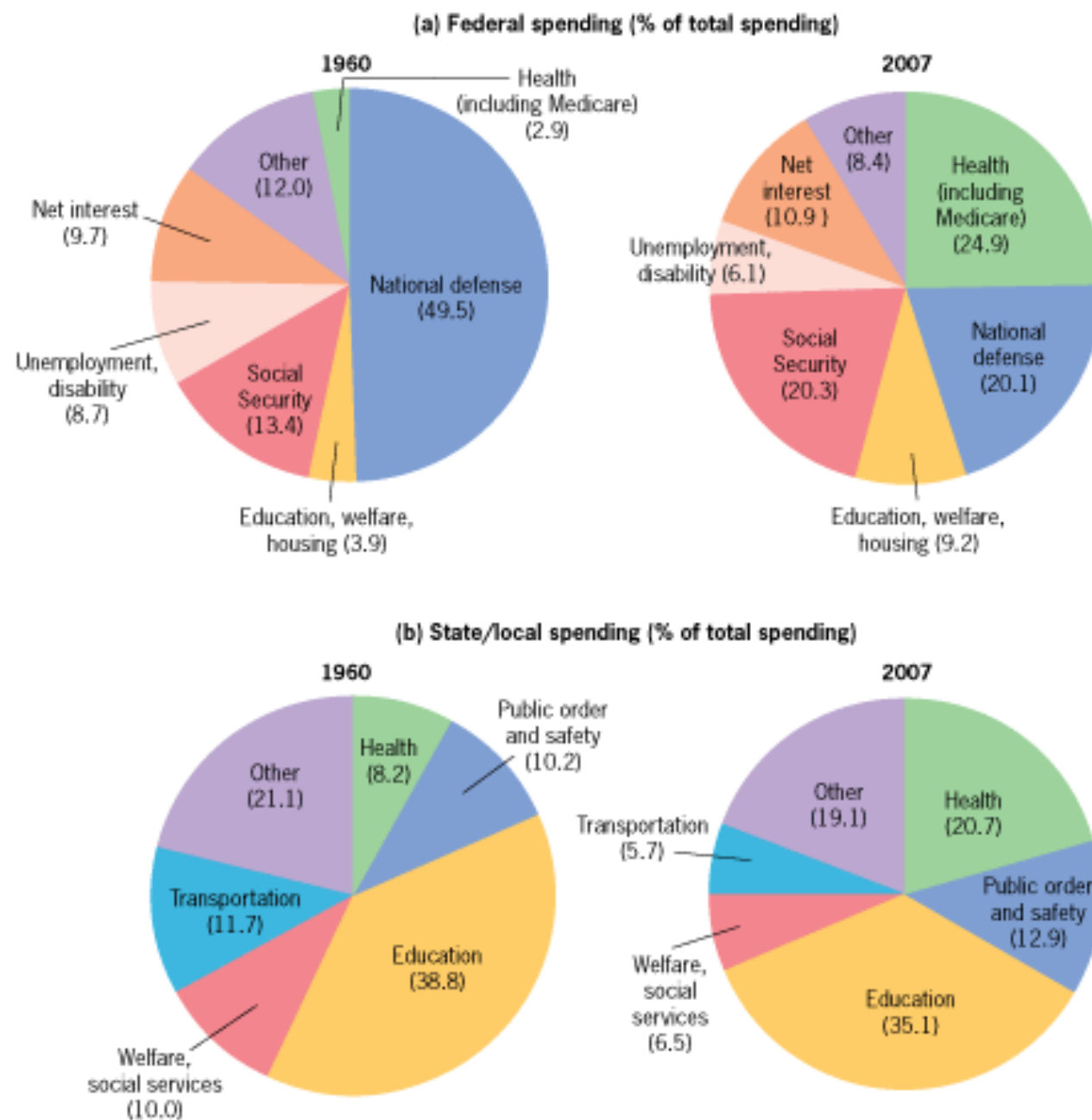
Federal vs. State/Local Government Spending, 2008 • State and local spending today amounts to roughly one-third of total government spending in the United States, at over 12% of GDP.

1.2

State and Local Government Receipts, Expenditures, and Surplus, 1947−2008

■ FIGURE 1-7

(a) Federal spending (% of total spending)

1960
- Health (including Medicare) (2.9)
- Other (12.0)
- Net interest (9.7)
- National defense (49.5)
- Unemployment, disability (8.7)
- Social Security (13.4)
- Education, welfare, housing (3.9)

2007
- Other (8.4)
- Net interest (10.9)
- Health (including Medicare) (24.9)
- Unemployment, disability (6.1)
- Social Security (20.3)
- National defense (20.1)
- Education, welfare, housing (9.2)

(b) State/local spending (% of total spending)

1960
- Health (8.2)
- Public order and safety (10.2)
- Other (21.1)
- Transportation (11.7)
- Education (38.8)
- Welfare, social services (10.0)

2007
- Other (19.1)
- Health (20.7)
- Transportation (5.7)
- Public order and safety (12.9)
- Welfare, social services (6.5)
- Education (35.1)
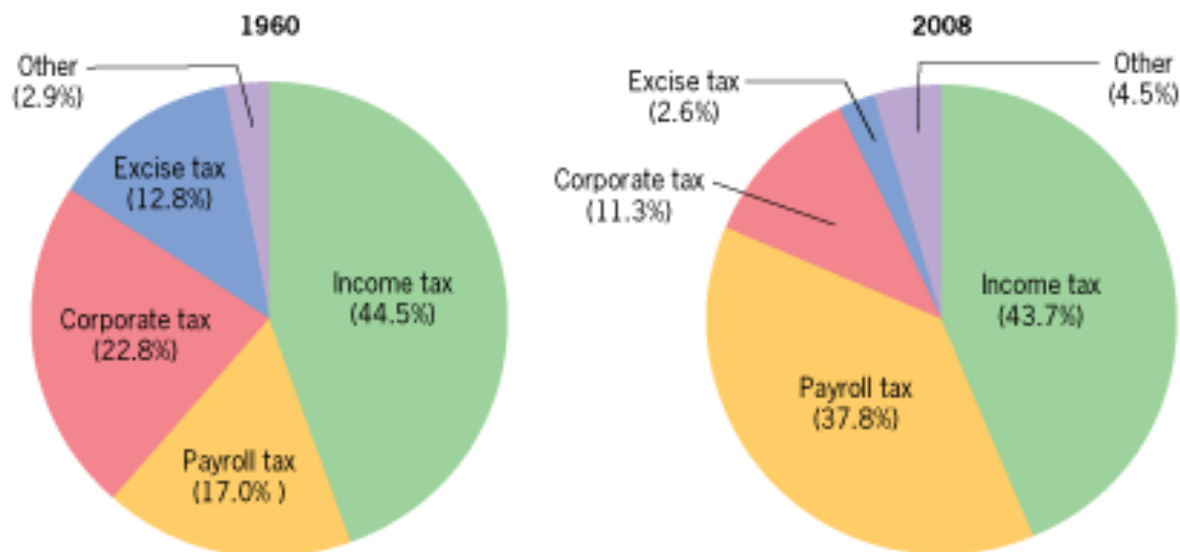
Distribution of Spending

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.

■ **FIGURE 1-8**

(a) Federal revenues (% of total revenue)

1960

Other (2.9%)
Excise tax (12.8%)
Corporate tax (22.8%)
Payroll tax (17.0%)
Income tax (44.5%)

2008

Excise tax (2.6%)
Corporate tax (11.3%)
Other (4.5%)
Income tax (43.7%)
Payroll tax (37.8%)

(b) State/local revenues (% of total revenue)

1960

Income tax (5.9%)
Other (17.7%)
Sales tax (28.8%)
Property tax (38.2%)
Federal grants (9.4%)

2008

Other (20.7%)
Income tax (15.8%)
Sales tax (22.5%)
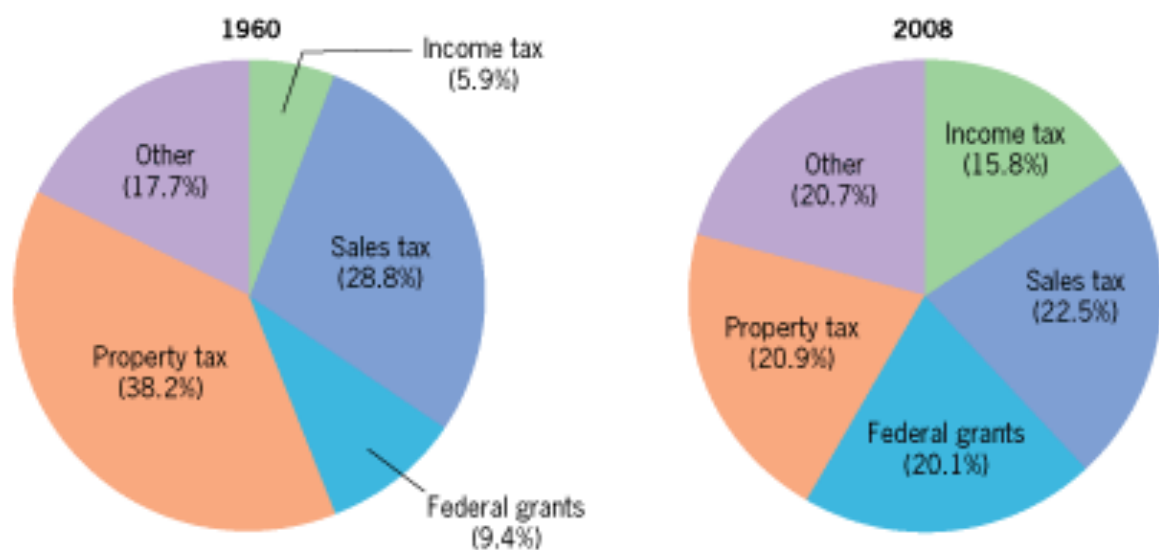Property tax (20.9%)
Federal grants (20.1%)

Distribution of Revenue Sources

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.
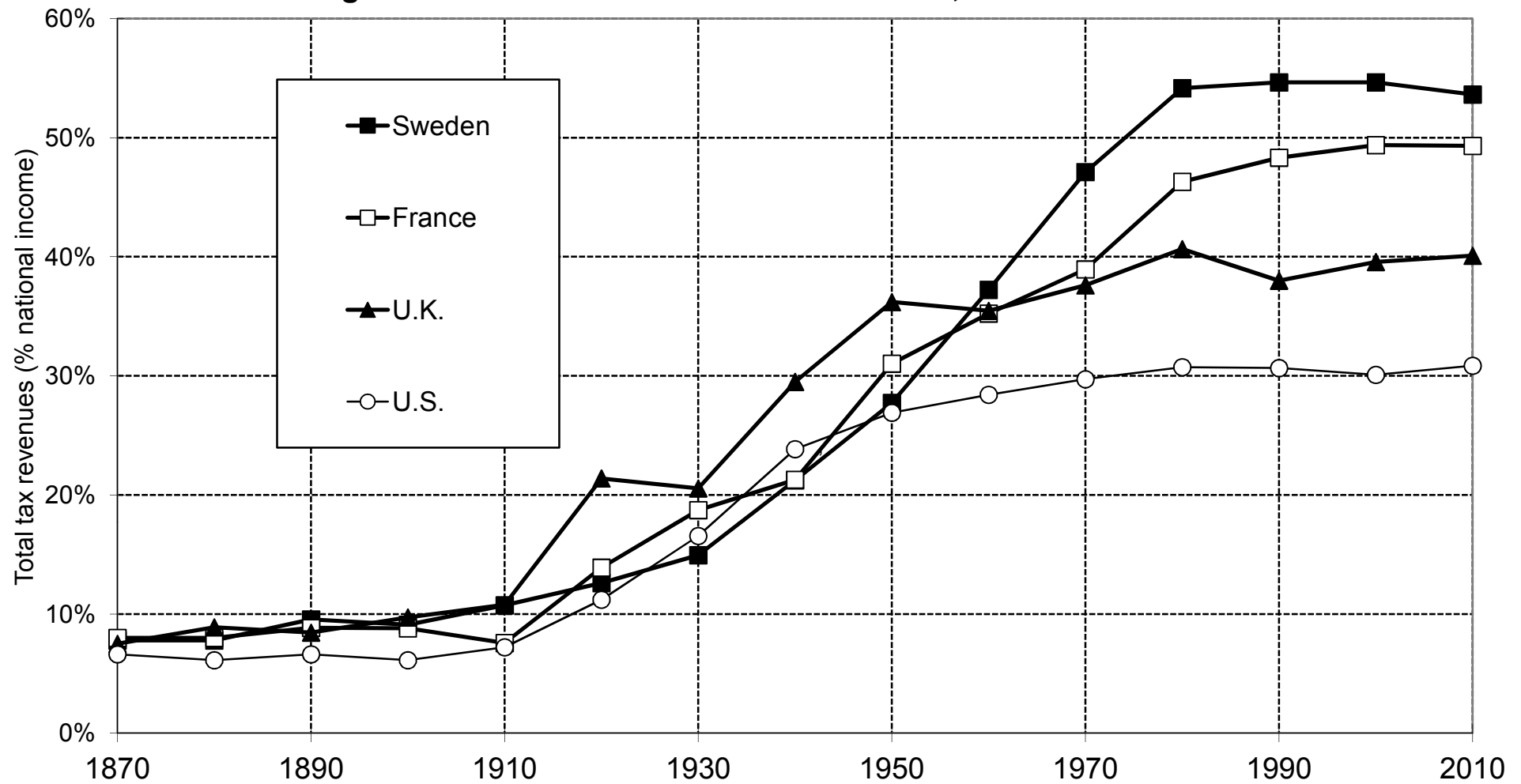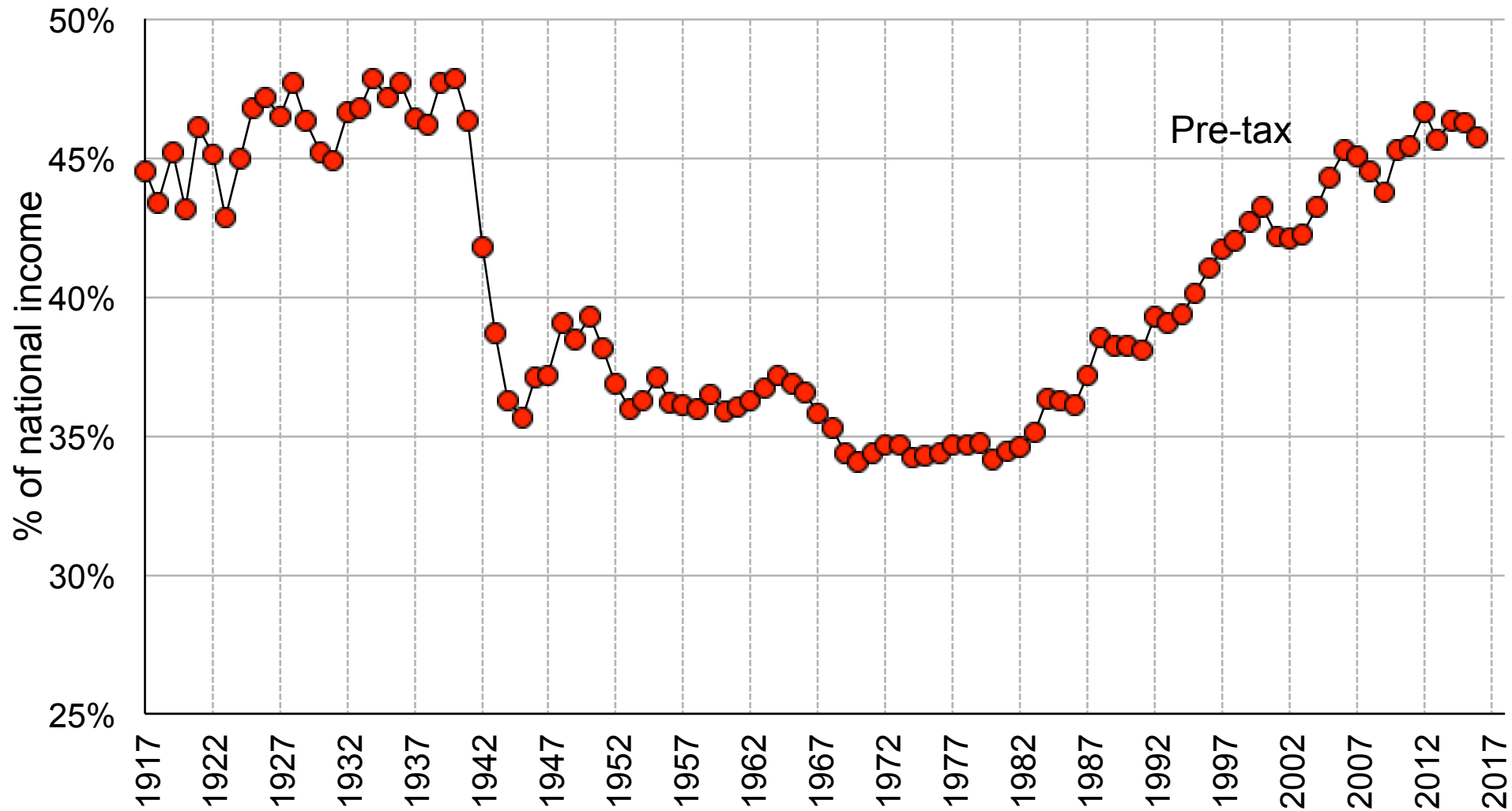
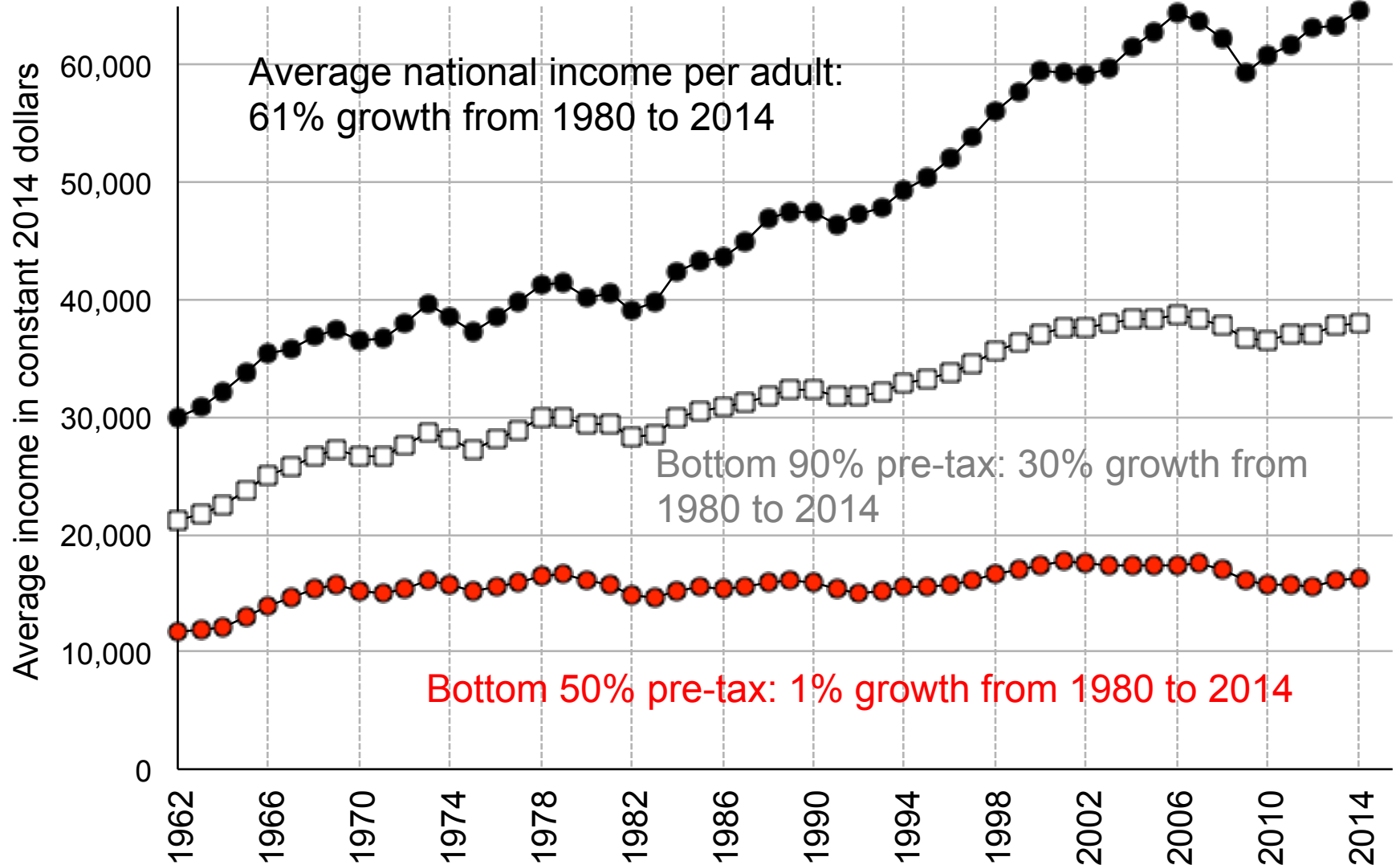# Figure 13.1. Tax revenues in rich countries, 1870-2010

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

Pre-tax

% of national income

Source: Piketty, Saez, and Zucman (2018)

Average, bottom 90%, bottom 50% real incomes per adult

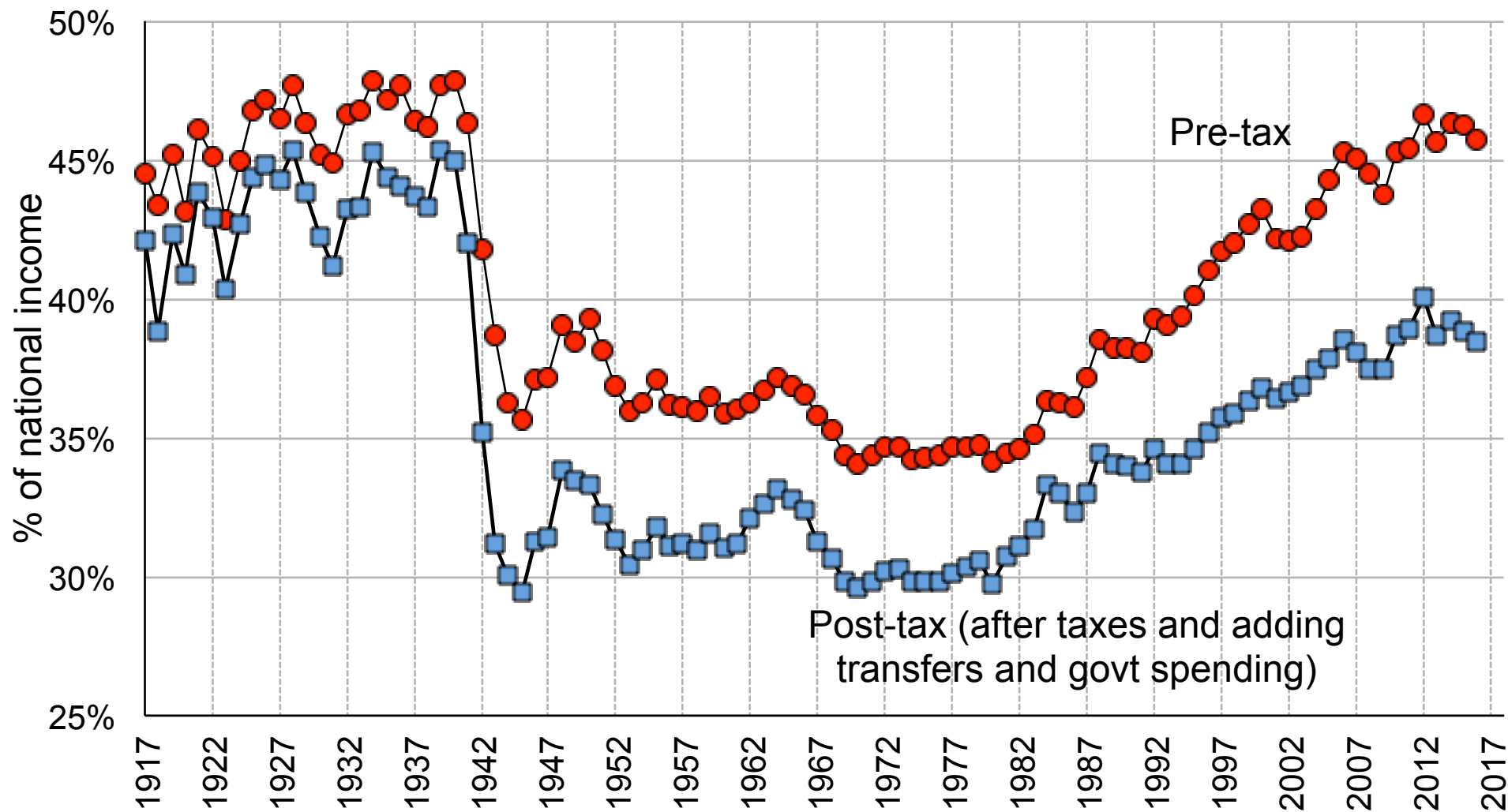Average national income per adult:
61% growth from 1980 to 2014

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

Bottom 50% pre-tax: 1% growth from 1980 to 2014

Average income in constant 2014 dollars

Top 1% and Bottom 50% Adults pre-tax national income shares

Top 1%

Bottom 50%

% of national income

22%
20%
18%
16%
14%
12%
10%

1962 1966 1970 1974 1978 1982 1986 1990 1994 1998 2002 2006 2010 2014
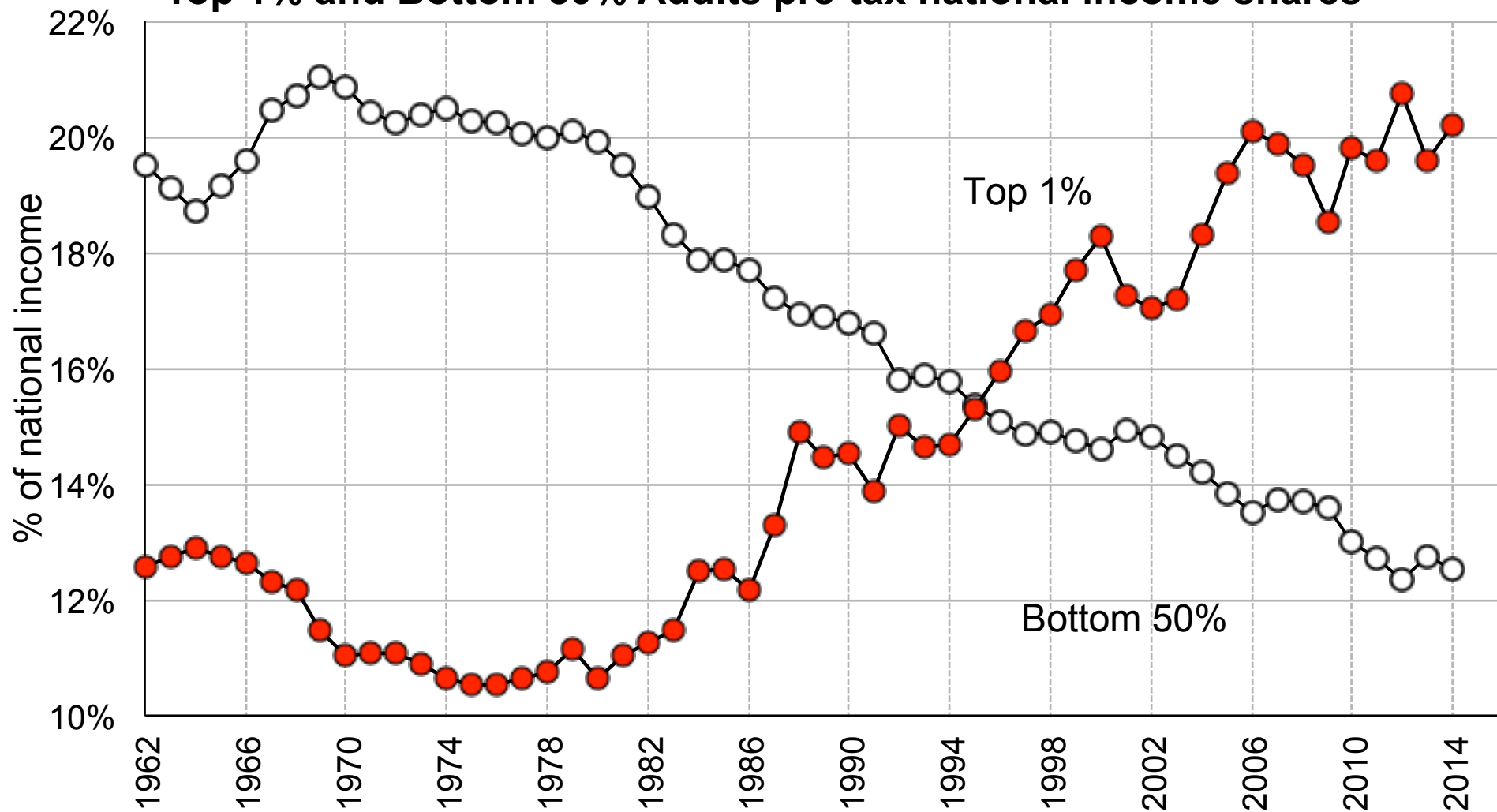
Top 10% national income share: pre-tax vs. post-tax

Pre-tax

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

Source: Piketty, Saez, Zucman (2018)

Average vs. bottom 50% income growth per adult

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

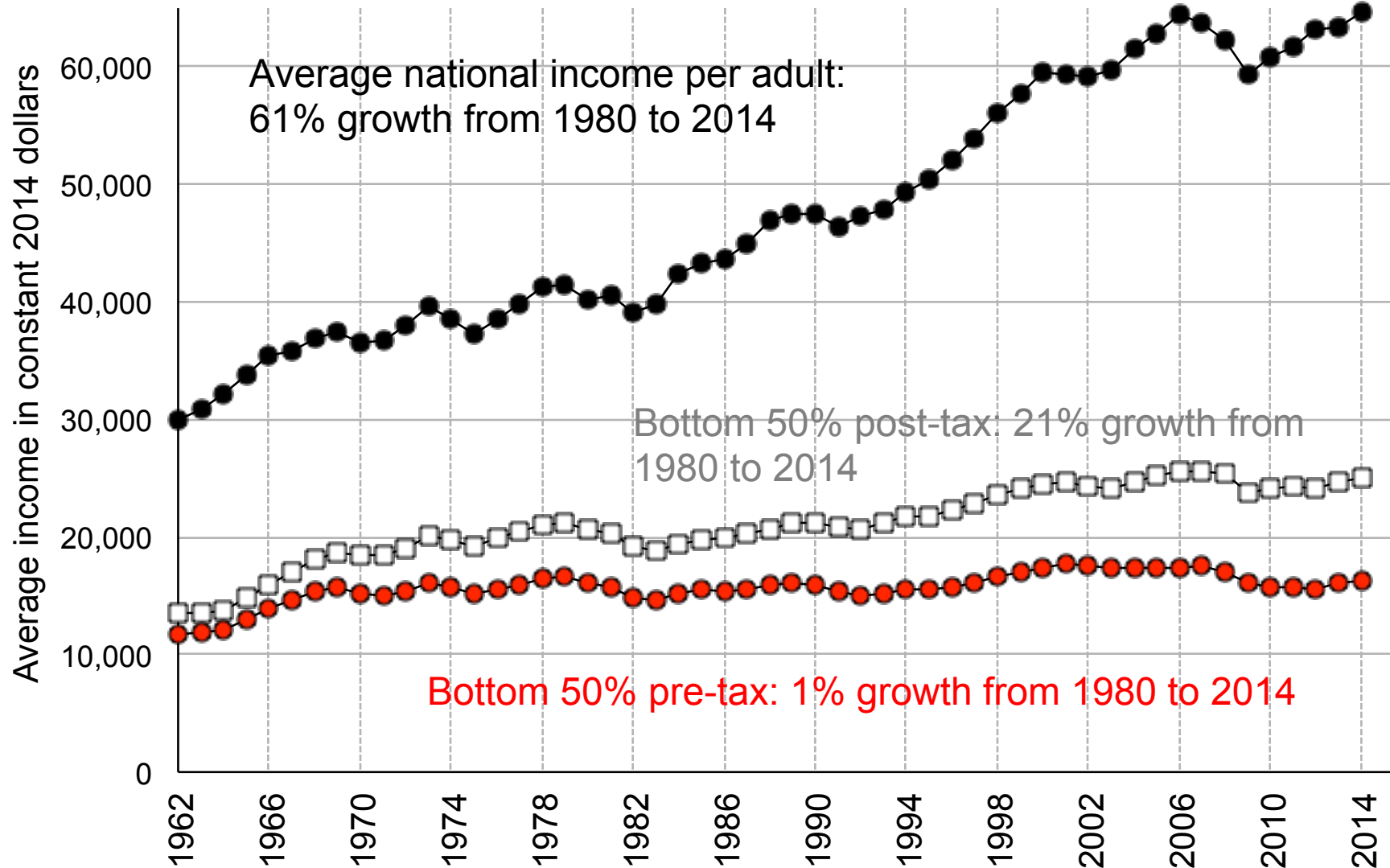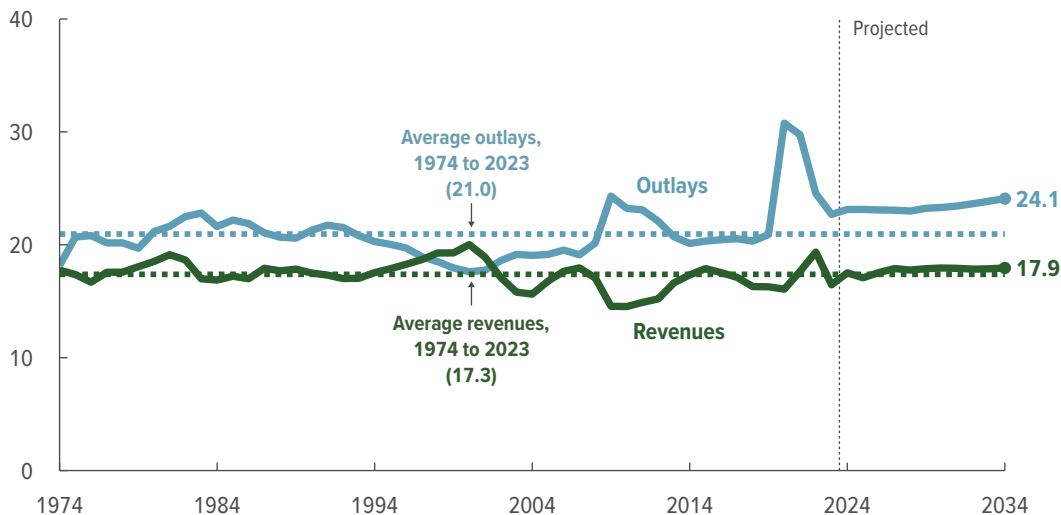Average income in constant 2014 dollars

Figure 1-3.

Total Federal Outlays and Revenues   Federal goverment only (state+local excluded)
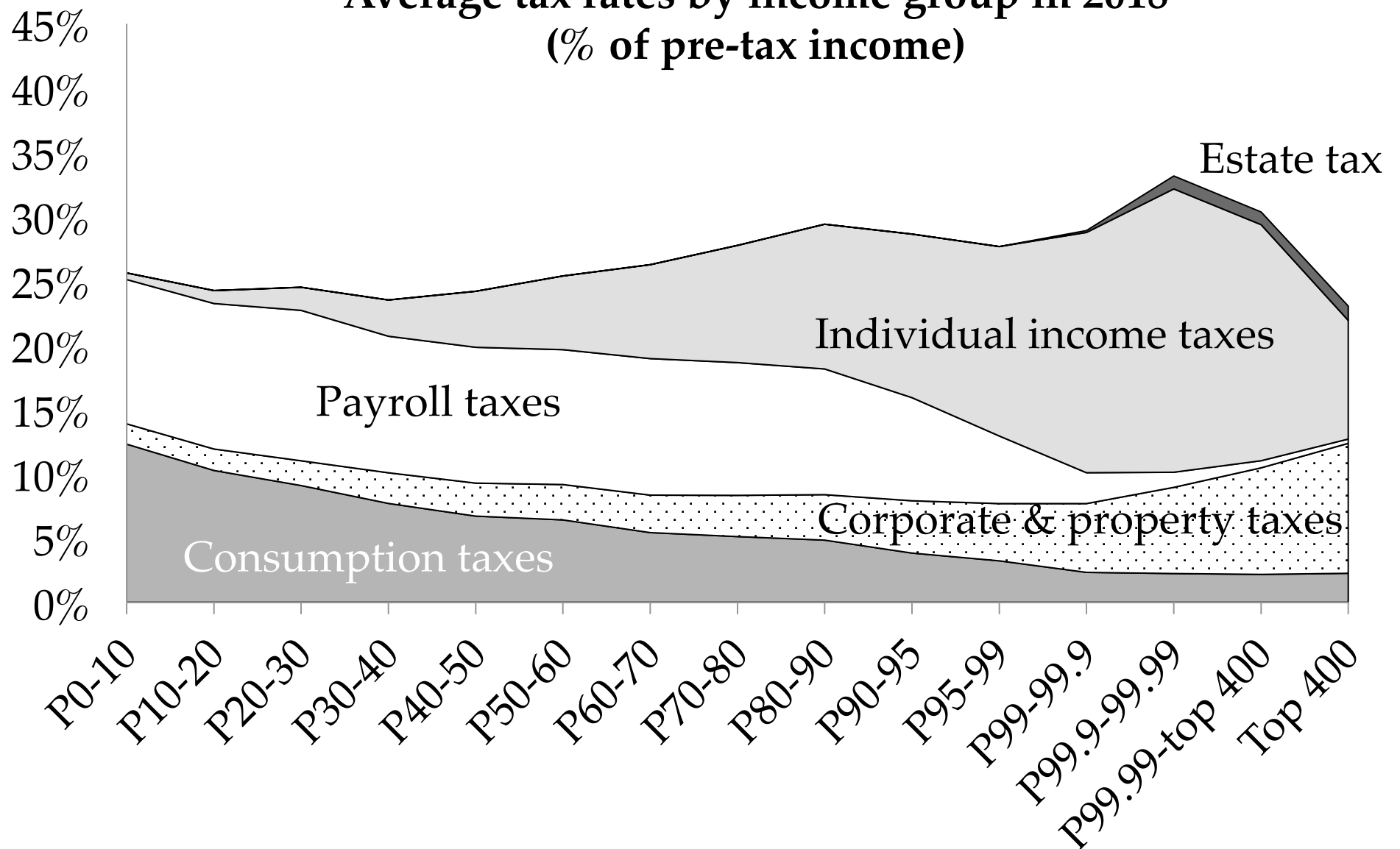
Percentage of GDP

Measured as a percentage of GDP, projected outlays remain about the same for the next several years as growth in outlays for interest payments is offset by decreases in discretionary spending. Over the 2024–2034 period, outlays exceed their 50-year average by more than revenues exceed their historical average.

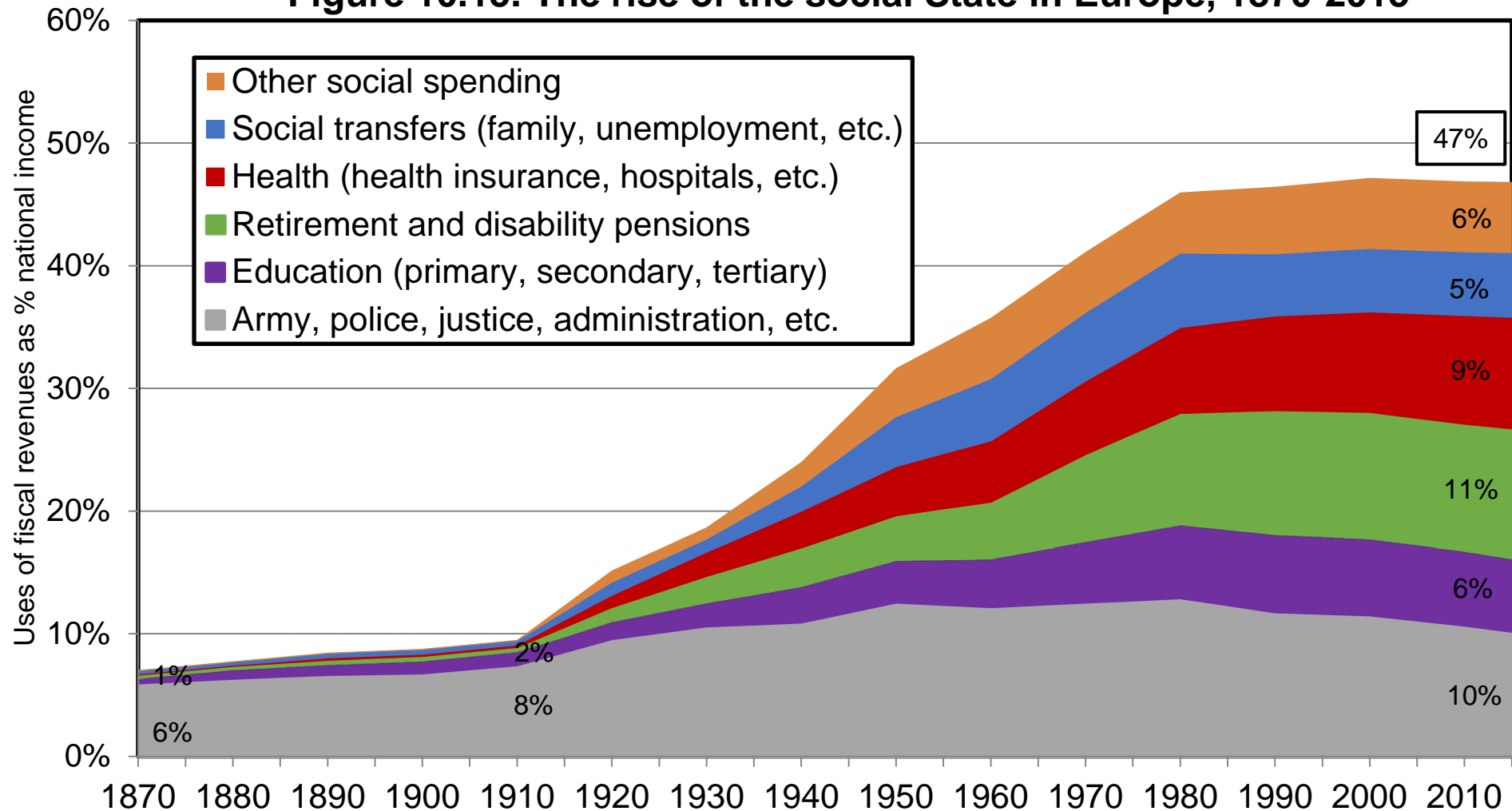Data source: Congressional Budget Office. See www.cbo.gov/publication/59710#data.

When October 1 (the first day of the fiscal year) falls on a weekend, certain payments that would have ordinarily been made on that day are instead made at the end of September and thus are shifted into the previous fiscal year. All projections presented here have been adjusted to exclude the effects of those timing shifts. Historical amounts have been adjusted as far back as the available data will allow.

GDP = gross domestic product.

**Average tax rates by income group in 2018 (% of pre-tax income)**

Estate tax

Individual income taxes

Payroll taxes

Corporate & property taxes

Consumption taxes

y-axis: 0%, 5%, 10%, 15%, 20%, 25%, 30%, 35%, 40%, 45%

x-axis: P0-10, P10-20, P20-30, P30-40, P40-50, P50-60, P60-70, P70-80, P80-90, P90-95, P95-99, P99-99.9, P99.9-99.99, P99.99-top 400, Top 400

Source: Saez and Zucman (2019)

Figure 10.15. The rise of the social State in Europe, 1870-2015

Legend:
- Other social spending
- Social transfers (family, unemployment, etc.)
- Health (health insurance, hospitals, etc.)
- Retirement and disability pensions
- Education (primary, secondary, tertiary)
- Army, police, justice, administration, etc.

Y-axis: Uses of fiscal revenues as % national income

Data labels (2015): 47%, 6%, 5%, 9%, 11%, 6%, 10%

Early labels: 1%, 2%, 8%, 6%

Interpretation. In 2015, fiscal revenues represented 47% of national income on average in Western Europe et 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 séries: see piketty.pse.ens.fr/ideology.

Figure 10.14. The rise of the fiscal State in rich countries 1870-2015

Total tax revenues as % national income

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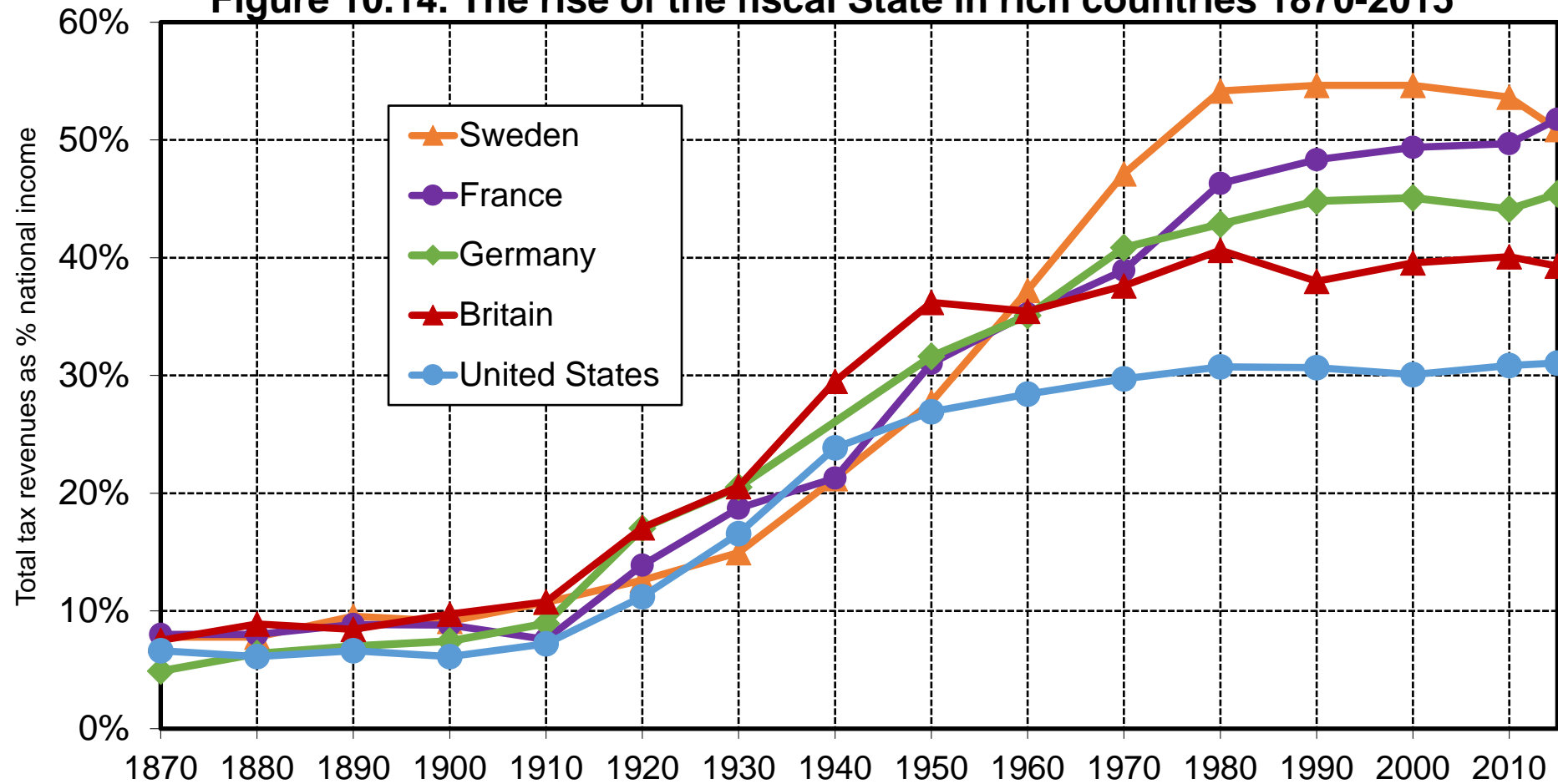
Interpretation. Total fiscal revenues (all taxes and social contributions included) made less than 10% of national income in rich countries during the 19th century and until World War 1, before rising strongly from the 1910s-1920s until the 1970s-1980s and then stabilizing at different levels across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

Total tax rate (% of income) vs Income group
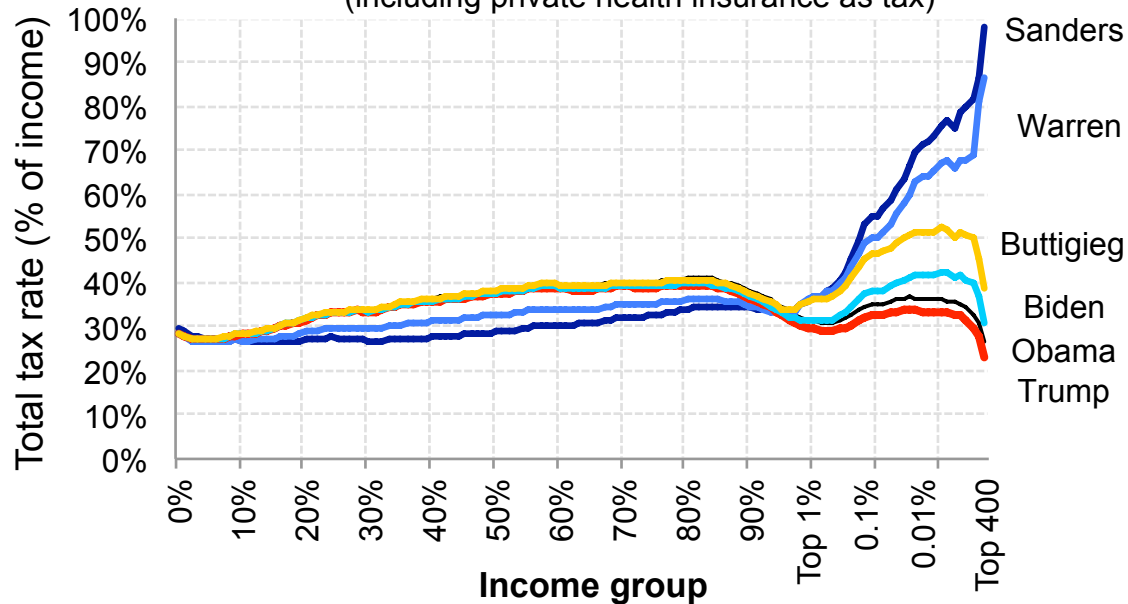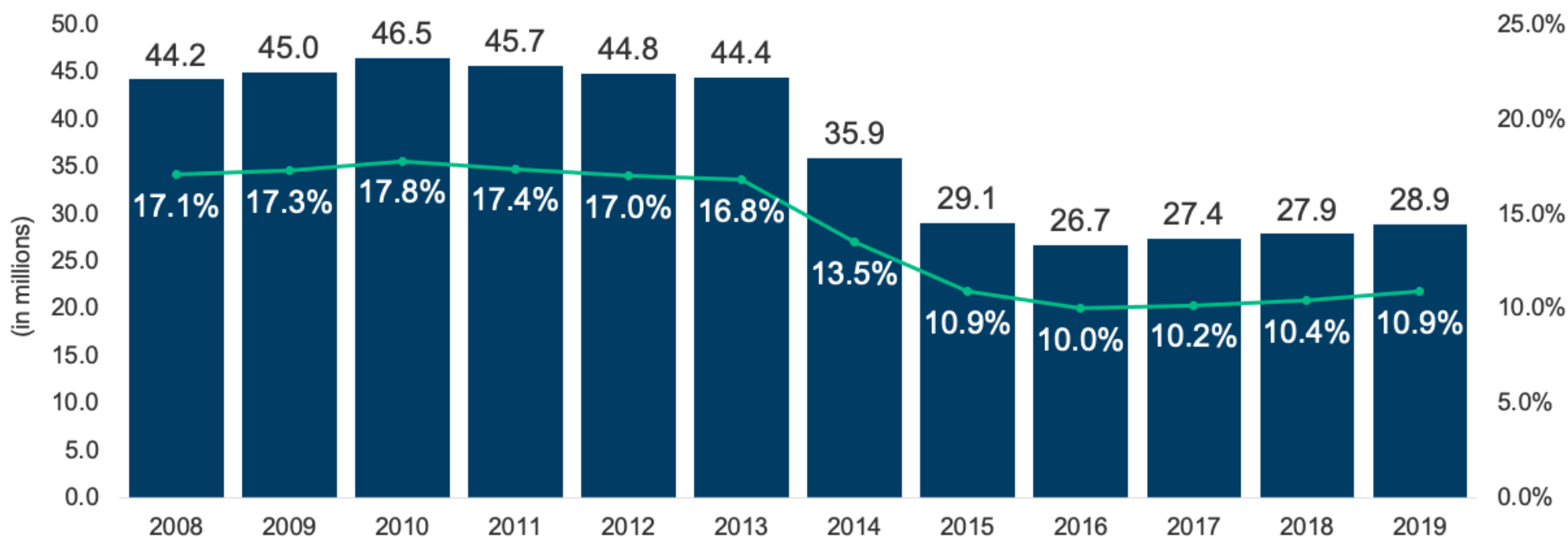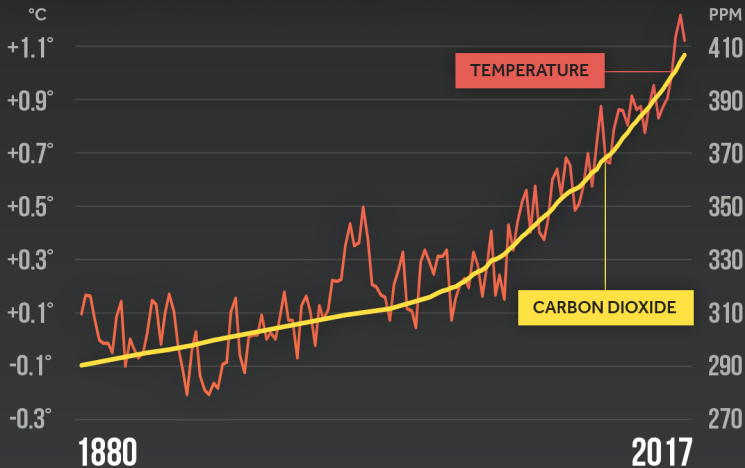
Sanders
Warren
Buttigieg
Biden
Obama
Trump

Figure 1

Number of Uninsured and Uninsured Rate among the Nonelderly Population, 2008-2019


NOTE: Includes nonelderly individuals ages 0 to 64.
SOURCE: KFF analysis of 2008-2019 American Community Survey, 1-Year Estimates.

**KFF**

GLOBAL TEMPERATURE & CARBON DIOXIDE

°C

+1.1°

+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

1880

2017

Global temperature anomalies averaged and adjusted to early industrial baseline (1881-1910)
Source: NASA GISS, NOAA NCEI, ESRL

CLIMATE CENTRAL

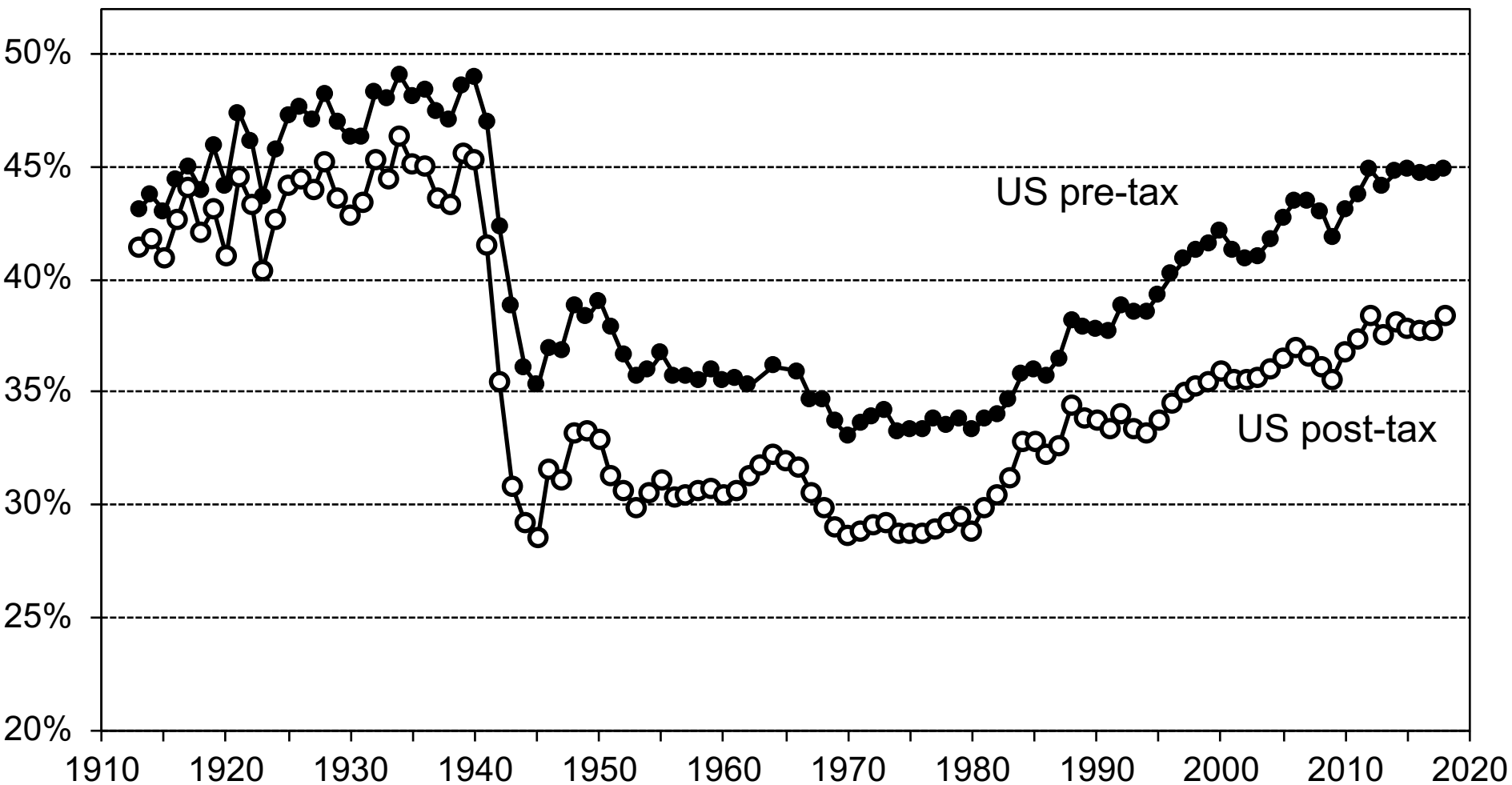# Top 10% Pre-tax Income Share in the US, 1913-2018
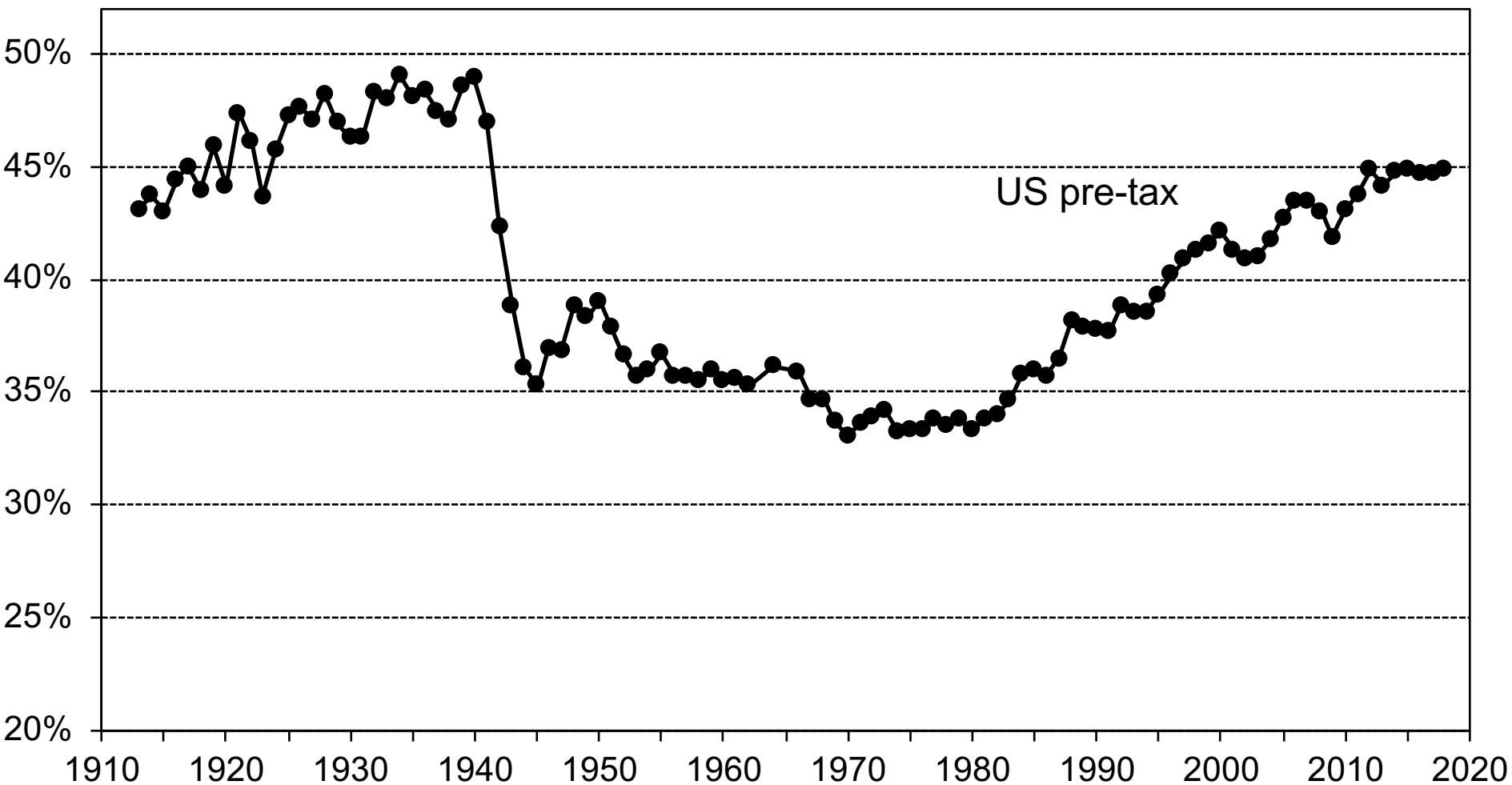
US pre-tax

Top income shares of pretax national income among adults aged 20+ (income within couples equally split).
Source is World Inequality Database wid.world (from Piketty, Saez, Zucman 2018).

US Top 10% Income Shares pre-tax vs. post-tax, 1913-2020
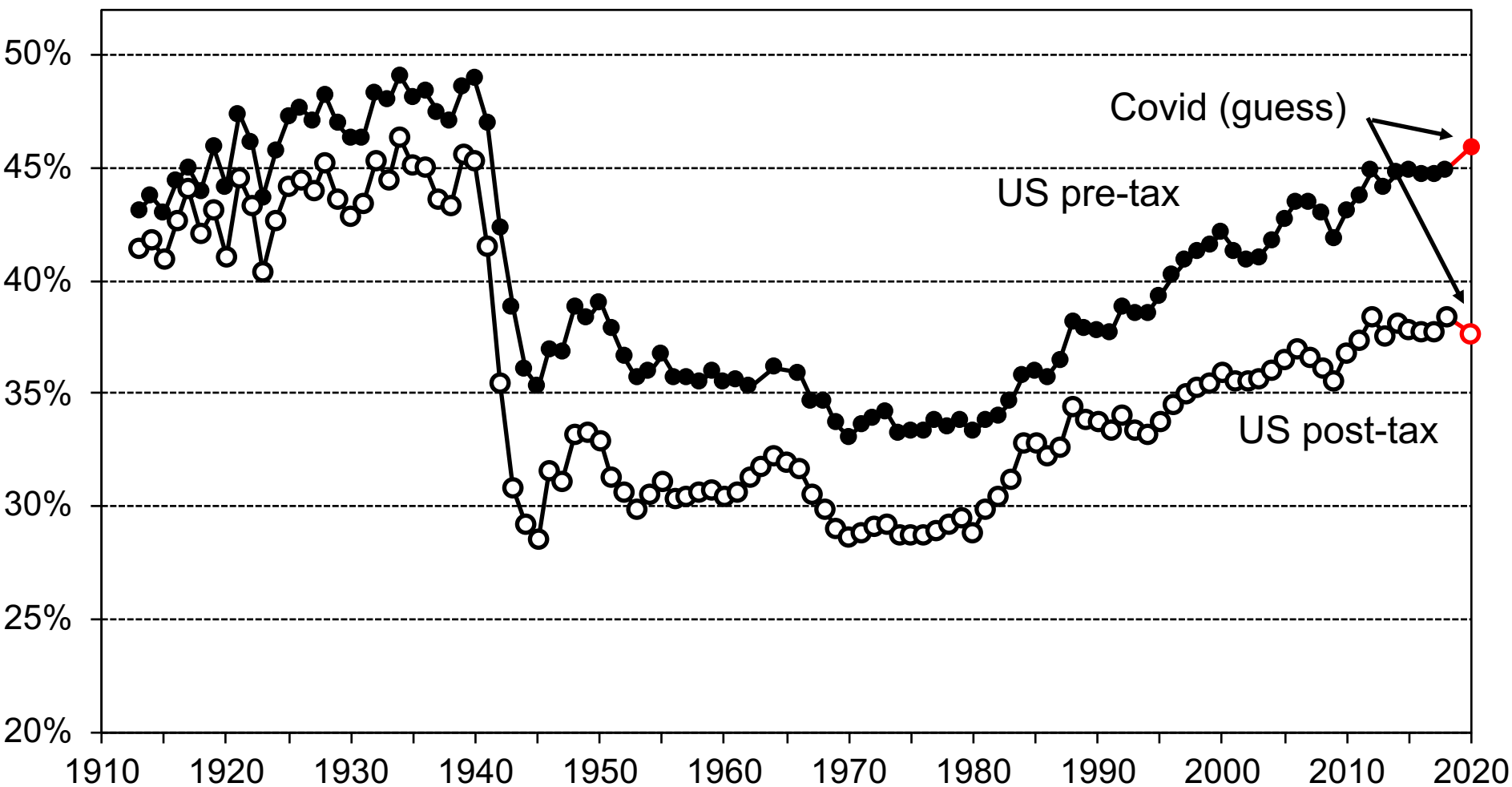
Top income shares of pretax and posttax national income among adults (income within married couples equally split). Source is Piketty, Saez, Zucman (2018) for US and Piketty et al. (2020) for France.

US Top 10% Income Shares pre-tax vs. post-tax, 1913-2018

Top income shares of pretax and posttax national income among adults (income within married couples equally split). Source is Piketty, Saez, Zucman (2018) for US and Piketty et al. (2020) for France.