

UN3902: Economics of Public Policy Seminar
Week 1: Introduction

Michael Carlos Best

January 21, 2026

Outline

Introduction

Four Questions in Public Finance

The Size and Role of Government

Distribution of Revenue Sources

Regulatory Role

Welcome to UN3902: Economics of Public Policy Seminar

- ▶ Instructor: Michael Carlos Best

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- ▶ Email: michael.best@columbia.edu
- ▶ Office Hours: Tuesdays 5:00–5:30 PM, & Thursdays 1:15–2 PM; 1112 IAB

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 - ▶ Formulate research questions.

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 - ▶ The textbook and the lectures are resources to inspire you to do your own research.

Course Overview: Schedule

1. 1/21: Introduction to Public Economics
2. 1/28: Empirical Tools
3. 2/4: Externalities & Public Goods II: Externalities
4. 2/11: Externalities & Public Goods II: Fiscal Federalism
5. 2/18: Social Insurance & Redistribution I: Health
6. 2/25: Social Insurance & Redistribution II: Inequality
7. 3/3: Taxation I: Theory & Taxes in High-income Countries
8. 3/10: Midterm Exam

Course Overview: Schedule (cont.)

- * 3/17: Spring Break (No Class)
- 9 3/24: Taxation II: Tax Evasion and Taxes in Low- and Middle-income Countries
- 10 3/31: Student preliminary presentations and Discussants I
- 11 4/7: Student preliminary presentations and Discussants II
- 12 4/14: Student preliminary presentations and Discussants III
- 13 4/21: Student final presentations I
- 14 4/28: Student final presentations II

Course Overview: Grading

- ▶ Your grades will have 3 elements:
 1. Problem sets: Average grade on your 3 problem sets.
 2. Midterm Exam grade.
 3. Research Paper grade.

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- ▶ Textbook: Gruber, Jonathan. 2022. *Public Finance and Public Policy*, 7th edition. It is also available as an [e-book through Columbia University Libraries](#).

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- ▶ I'll post slides/problem sets on Courseworks.
- ▶ I'll post source code for syllabus/lecture slides at <https://github.com/michaelcbest/un3902-economics-of-public-policy-seminar>

Outline

Four Questions in Public Finance

1. When should the government intervene?
2. How the Government Might Intervene
3. Effects of Interventions
4. Why Do Governments Intervene the Way They Do?

The Four Questions of Public Finance

Public Finance is the study of the role of the *government* in the *economy*. It focuses on four key questions:

1. When should the government intervene in the economy?
2. How might the government intervene in the economy?
3. What are the effects of government interventions on economic outcomes?
4. Why do governments choose to intervene in the way that they do?

When the Government Should Intervene in the Economy? 1

- ▶ The fundamental lesson of basic microeconomics is that, in most cases, the competitive market equilibrium is the most efficient outcome for society.
- ▶ Economics generally presumes that markets deliver efficient outcomes, so why should government do anything?
- ▶ There are two reasons governments may want to intervene in market economies:
 1. Market failures
 2. Redistribution

When the Government Should Intervene in the Economy? 2

- ▶ **Market failure:** A problem that causes the market economy to deliver an outcome that does not maximize efficiency.
- ▶ An example of a market failure occurs in the health insurance market.
 - ▶ An uninsured man may choose not to get a flu shot, which increases the risk of both himself and others getting the flu.
 - ▶ When deciding whether to get a flu shot, the man considers the cost only to himself, not to others.
- ▶ This is an example of a **negative externality**, whereby the man's decision imposes on others costs that he does not bear.

APPLICATION 1: Modern Measles Epidemic

- ▶ Measles vaccine was introduced in 1963, and measles cases had become relatively rare in the United States by the 1980s.
- ▶ **1989–1991:** Huge resurgence in measles.
- ▶ One-third of all of the new cases were in Los Angeles, Chicago, and Houston, and one-half of those children who contracted measles had not been immunized, even though many had regular contact with a physician.
- ▶ This is a negative externality because the unimmunized children raised the risk that these other children would become sick, without bearing any of the costs of raising this risk.

APPLICATION 2: Modern Measles Epidemic

- ▶ The federal government responded to this health crisis in the early 1990s:
 1. Encouraged parents to immunize their children.
 2. Paid for the vaccines for low-income families.
- ▶ Impressive results:
 1. Immunization rates never higher than 70% prior to outbreak.
 2. Rose to 90% by 1995.
- ▶ Government intervention clearly reduced this negative externality.

APPLICATION 3: Modern Measles Epidemic

- ▶ In 2014, there were 644 cases in 27 states.
- ▶ Largest outbreak in Disneyland.
- ▶ The reason was the refusal of a large number of parents to immunize their children due to the now discredited “link” between vaccinations and autism.
- ▶ The “anti-vaccine” movement has taken root, resulting in large pockets of nonimmunized children in some areas.

APPLICATION 4: Modern Measles Epidemic

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HEALTH • 10 MIN READ

South Carolina measles cases jump 68% in one week amid holiday activities and lagging vaccination

UPDATED JAN 9, 2026



≡ Live News First Alert Weather Traffic Palmetto Sports United for Veterans Submit a News Tip Community Calendar



Nearly 1,000 visited SC State Museum on day of possible measles exposure

- Does government policy need to go further and require children to be vaccinated?

Most Read

Coroner IDs man killed after being hit by vehicle in Lexington County



When Should the Government Intervene in the Economy?

- ▶ Even if the market is well functioning, an efficient outcome is not necessarily socially desirable.
- ▶ **Redistribution** is a second reason for government intervention.
- ▶ **Redistribution:** The shifting of resources from some groups in society to others.
- ▶ Redistribution usually entails efficiency loss.
- ▶ This leads to the **equity-efficiency trade-off**.
 - ▶ Societies typically have to choose between pies that are larger and pies that are more equally distributed.

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How the Government Might Intervene 1

- ▶ **Tax or Subsidize Private Sale or Purchase**
 - ▶ Use the price mechanism, changing the price of a good to encourage or discourage use.
 - ▶ Taxes raise the price for private sales or purchases of goods that are overproduced.
 - ▶ Subsidies lower the price for private sales or purchases of goods that are underproduced.

How the Government Might Intervene 2

- ▶ **Restrict or Mandate Private Sale or Purchase**

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 - ▶ The government can provide the good directly.
- ▶ **Public Financing of Private Provision**
 - ▶ Governments pay; private companies produce.

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What Are the Effects of Interventions on Economic Outcomes?

Interventions have **direct** and **indirect** effects.

- ▶ **Direct effects:** The effects of government interventions that would be predicted if individuals did not change their behavior in response to their interventions.
 - ▶ With 49 million uninsured, providing universal health insurance covers 49 million people.

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 - ▶ With 49 million uninsured, providing universal health insurance covers 49 million people.
- ▶ **Indirect effects:** The effects of government intervention that arise only because individuals change their behavior in response to the interventions.
 - ▶ Providing free insurance creates an incentive to drop private plans and enroll in the government plan, adding significant numbers of people.

APPLICATION: The CBO: 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) has the mission to provide Congress with objective, timely, nonpartisan analyses needed for economic and budget decisions.
- ▶ CBO “scores” policy proposals by estimating their budget implications.
- ▶ CBO scores can determine the fate of legislation.

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Why Do Governments Intervene in the Way That They Do?

- ▶ Governments do not always choose efficient or socially desirable outcomes.
- ▶ Governments face enormous challenges in figuring out what the public wants and how to choose policies that match those wants.
- ▶ **Political economy:** The theory of how the political process produces decisions that affect individuals and the economy.

Lean by Doing: Practice Question 1

Which of the following is **not** one of the four key questions of public finance?

1. How might the government intervene in the economy?
2. When should the government intervene in the economy?
3. Who should the government intervene for?
4. What are the effects of government interventions on economic outcomes?

Outline

Introduction

Four Questions in Public Finance

The Size and Role of Government

Distribution of Revenue Sources

Regulatory Role

Government as Part of the Economy

- The government is a huge part of the economy.

Government as Part of the Economy

- ▶ The government is a huge part of the economy.
- ▶ Government spending represents a large sector of the economy in the United States and around the world.

Government as Part of the Economy

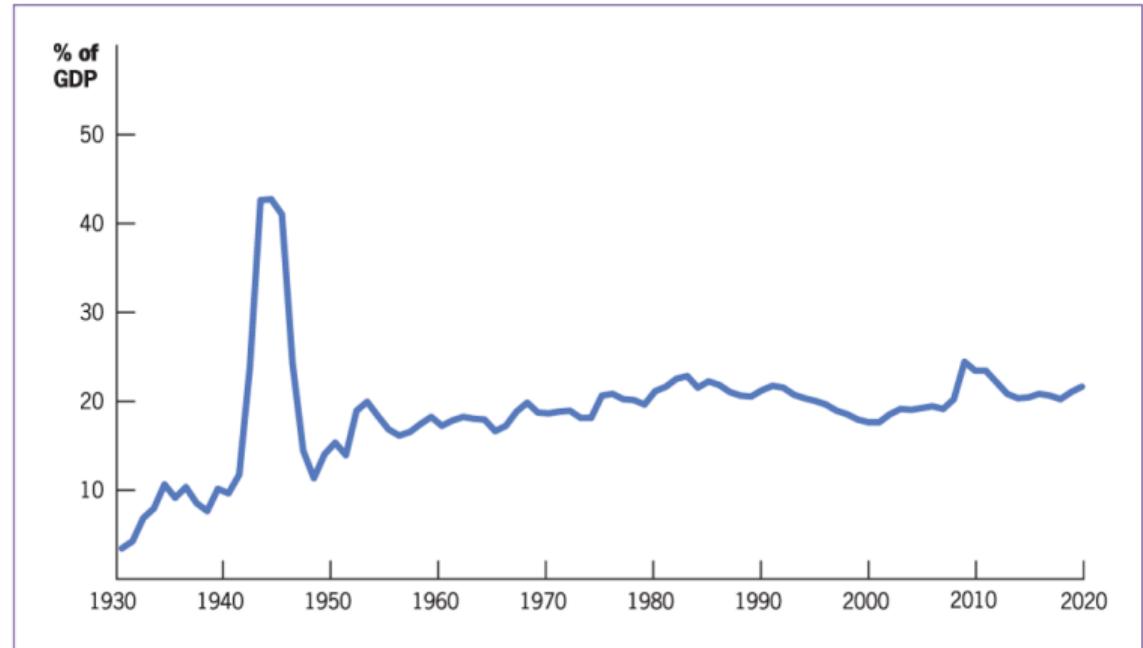
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- ▶ This spending is financed with taxes or with debt, and these affect every facet of the economy.

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- ▶ This spending is financed with taxes or with debt, and these affect every facet of the economy.
- ▶ Many sectors of the economy are also directly affected by regulation.

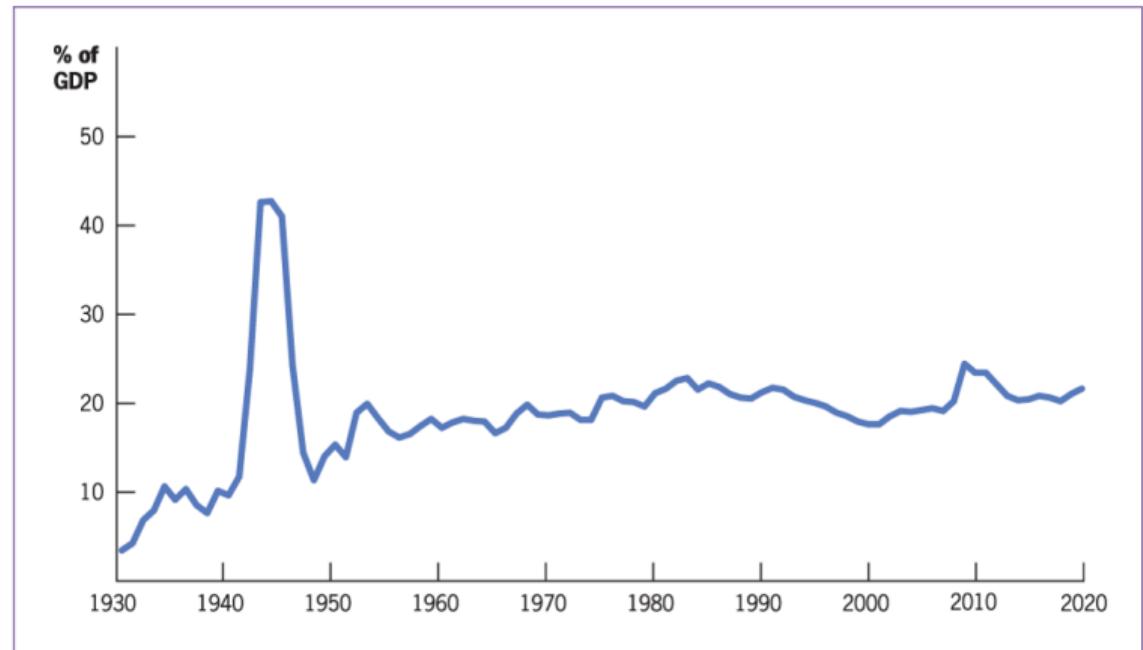
The Size and Growth of Government: Federal Spending as a Percent of GDP, 1930–2019

- In 1930, the federal government's activity accounted for only about 3.4% of GDP.



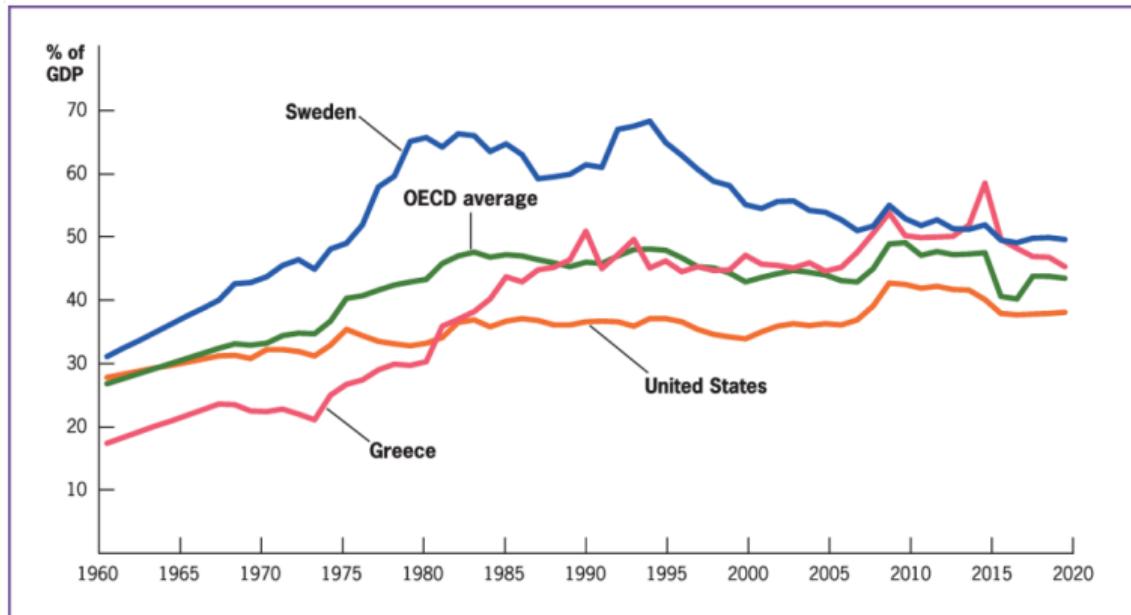
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- ▶ In 1930, the federal government's activity accounted for only about 3.4% of GDP.
- ▶ From the 1950s through the present, the size of government has averaged around 20% of GDP, although it grows during recessions.



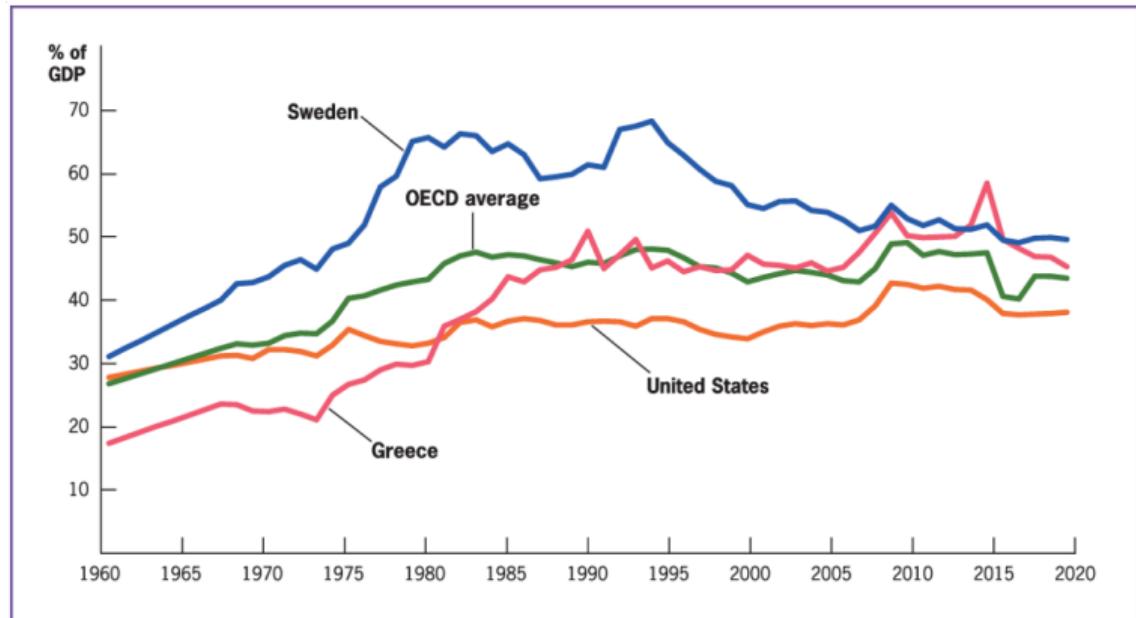
The Size and Growth of Government: Total Government Spending Across Developed Nations, 1960–2019

- In 1960, the US was in line with the average of the OECD in terms of government spending / GDP.



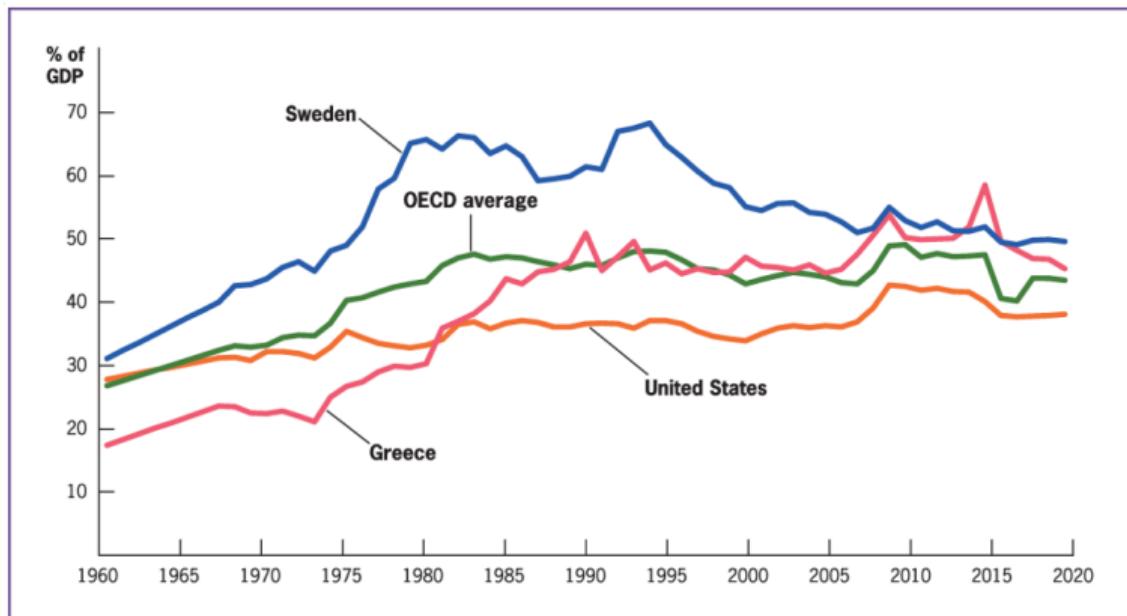
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- ▶ Government growth was much faster in other OECD nations in the 60s and 70s.
- ▶ All have now surpassed the United States.



Decentralization

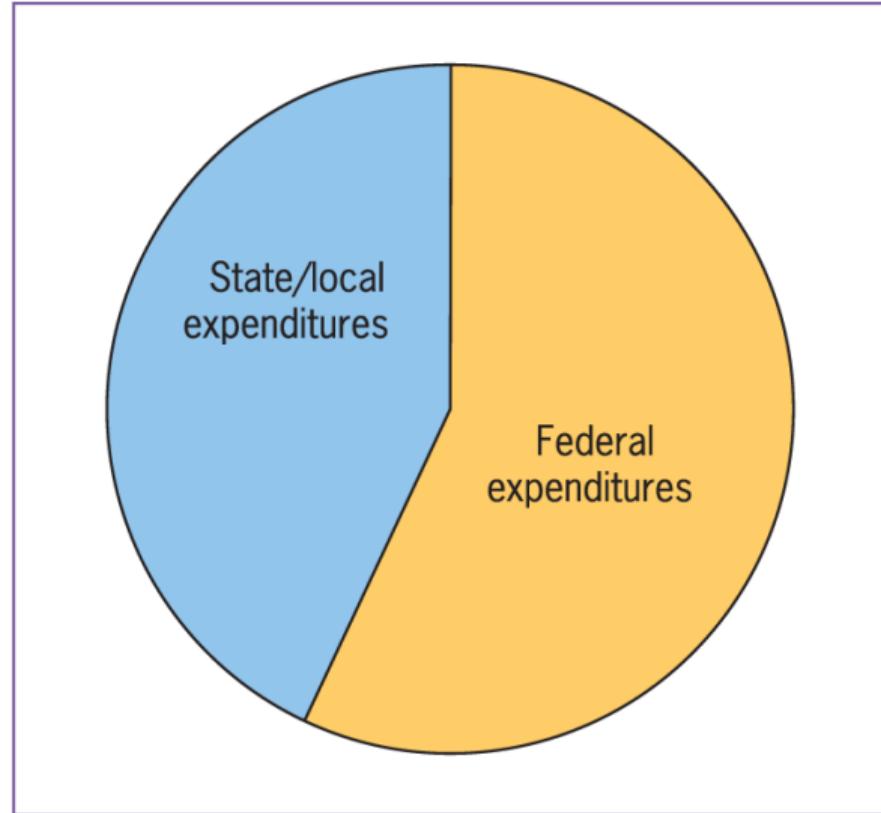
- ▶ A key feature of governments is the degree of centralization across local and national government units.
- ▶ **Centralization:** The extent to which spending is concentrated at higher (federal) levels or lower (state and local) levels.

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- ▶ A key feature of governments is the degree of centralization across local and national government units.
- ▶ **Centralization:** The extent to which spending is concentrated at higher (federal) levels or lower (state and local) levels.
- ▶ In the United States, state and local spending is about one-third of total government spending.

Federal Versus State/Local Government Spending, 2019

- ▶ The federal government provides the majority of government spending in the United States, but state and local spending amounts to roughly 40% of total government spending and more than 17% of GDP.



Spending, Taxes, Deficits, and Debts

Governments have a budget just like households do.

- ▶ If revenues exceed spending, there is a budget surplus.
- ▶ If revenues fall short of spending, there is a budget deficit.
 - ▶ Each dollar of government deficit adds to the stock of government debt. That is, the deficit measures the year-to-year shortfall of revenues relative to spending.

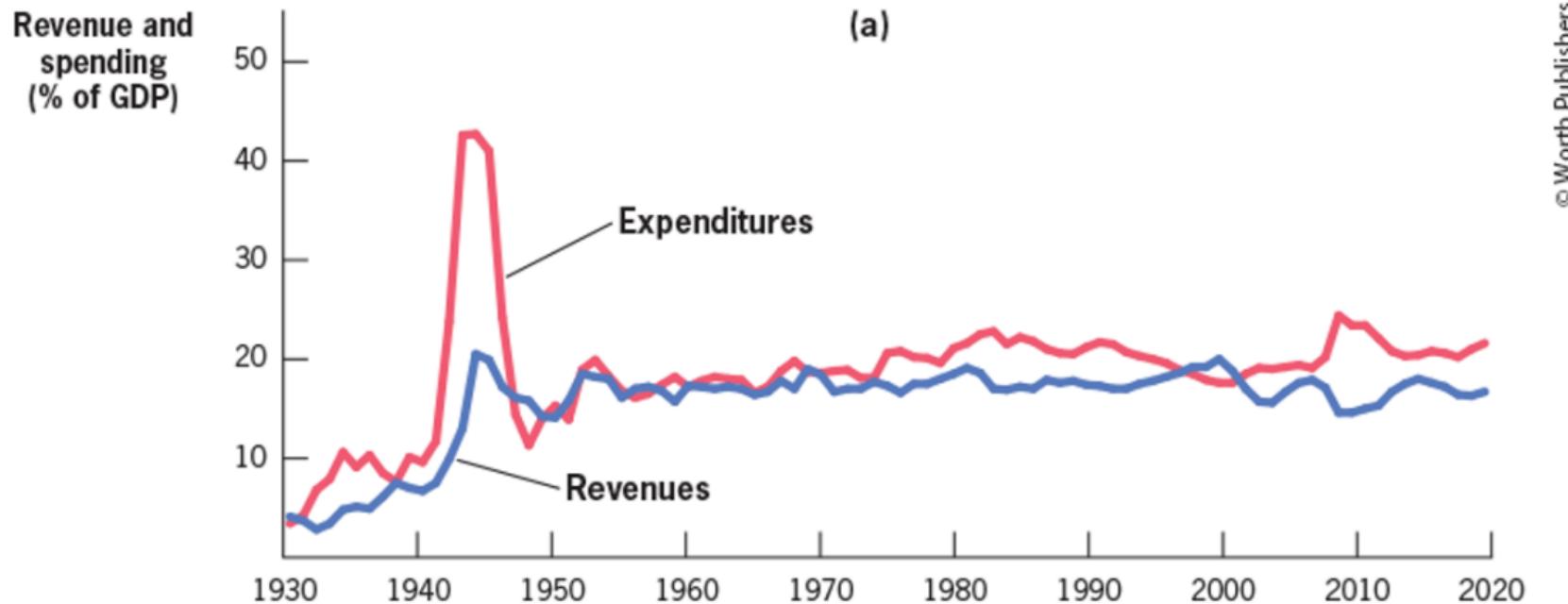
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- ▶ The debt measures the accumulation of past deficits over time.
 - ▶ This government debt must be financed by borrowing.
 - ▶ Governments can borrow from their own citizens, from citizens of other municipalities, or from other nations.

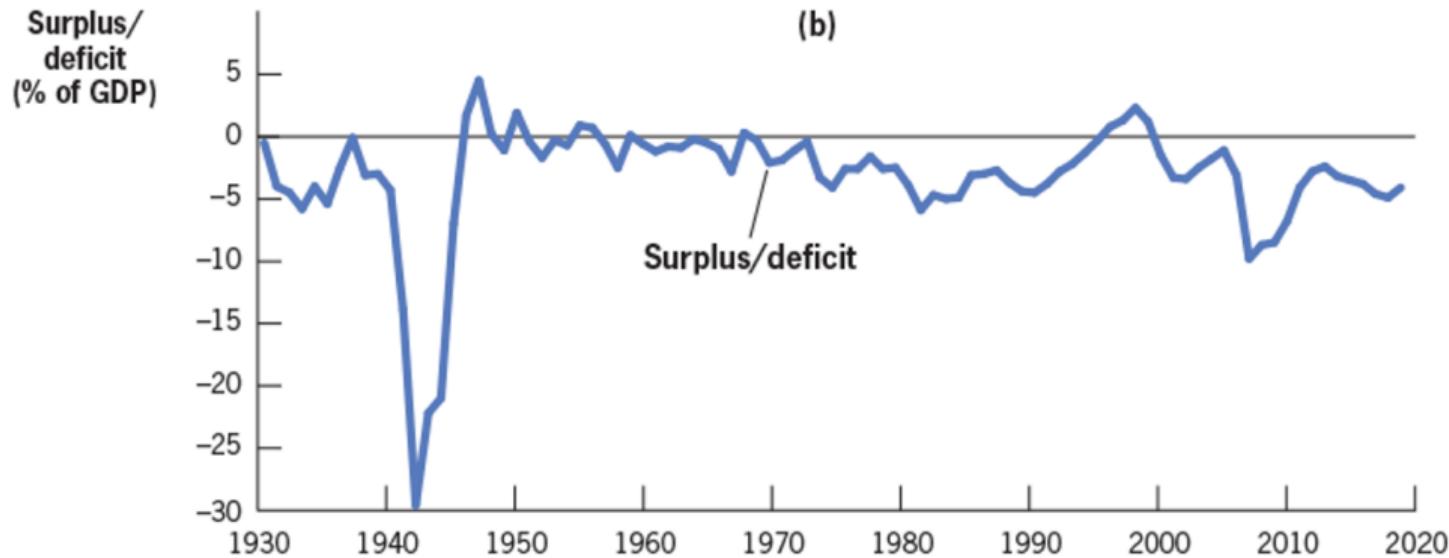
Spending, Taxes, Deficits, and Debts: Federal Revenues and Expenditures, 1930–2019

- Except for an enormous increase in spending without increased taxation in World War II (1941–45), the federal budget was close to balanced until the late 1960s.



Spending, Taxes, Deficits, and Debts: Federal Surplus/Deficit, 1930–2019

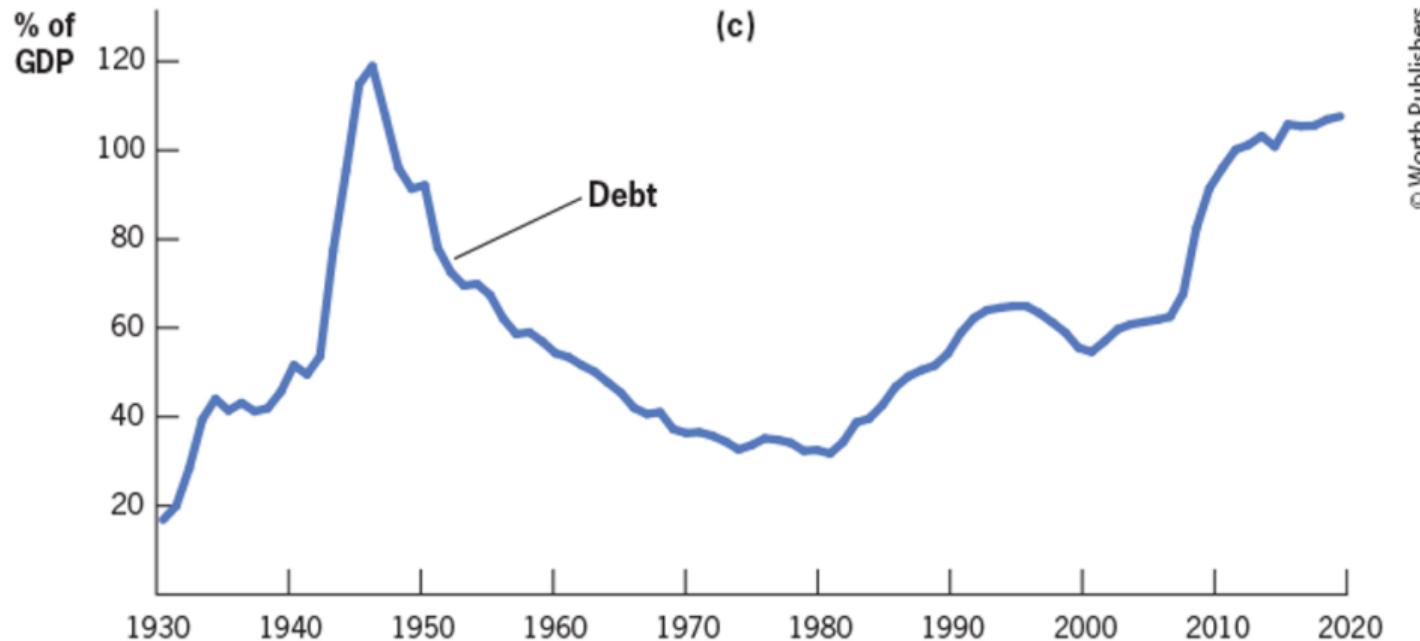
- ▶ From the mid-1970s through the mid-1990s, there was a relatively large deficit, which shrank dramatically in the 1990s.
- ▶ The United States was back in deficit by the early twenty-first century, with the deficit becoming very large in the late 2000s.



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Spending, Taxes, Deficits, and Debts: Federal Debt, 1930-2019

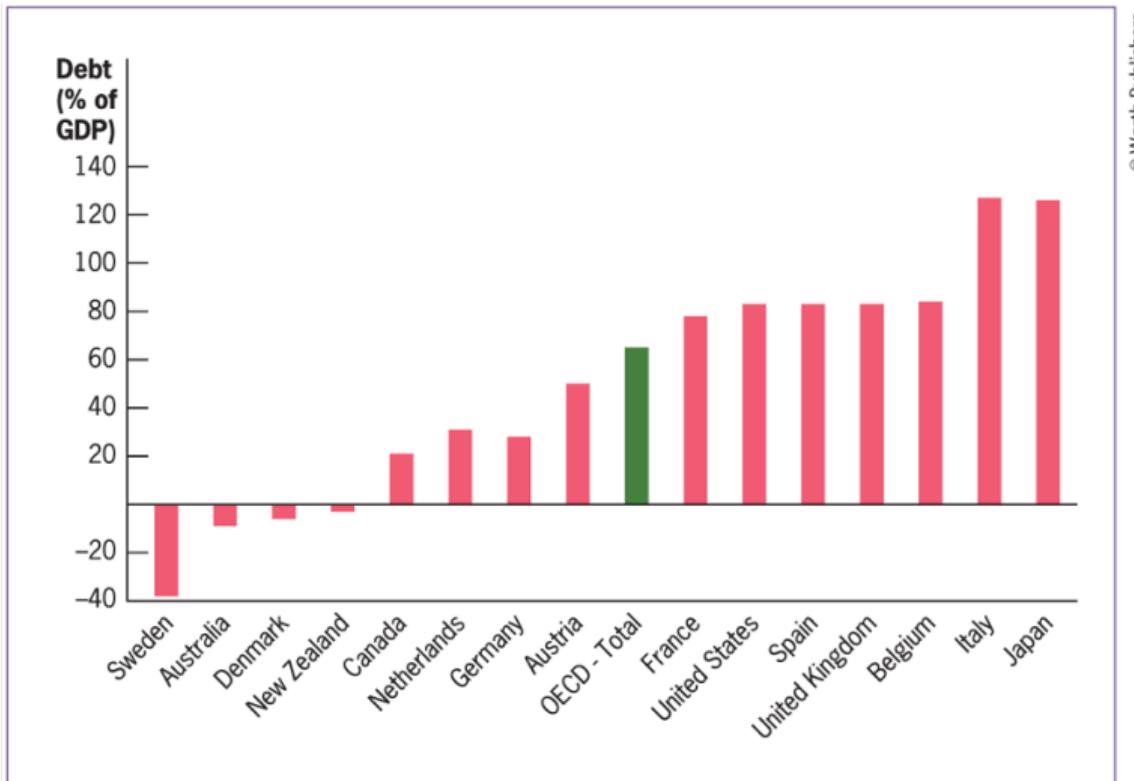
- The stock of debt rose sharply during World War II, then fell steadily until large deficits caused it to rise in the 1980s.
- The debt has risen considerably since, with a brief pause in the mid- to late 1990s, and now is over 103% of GDP.



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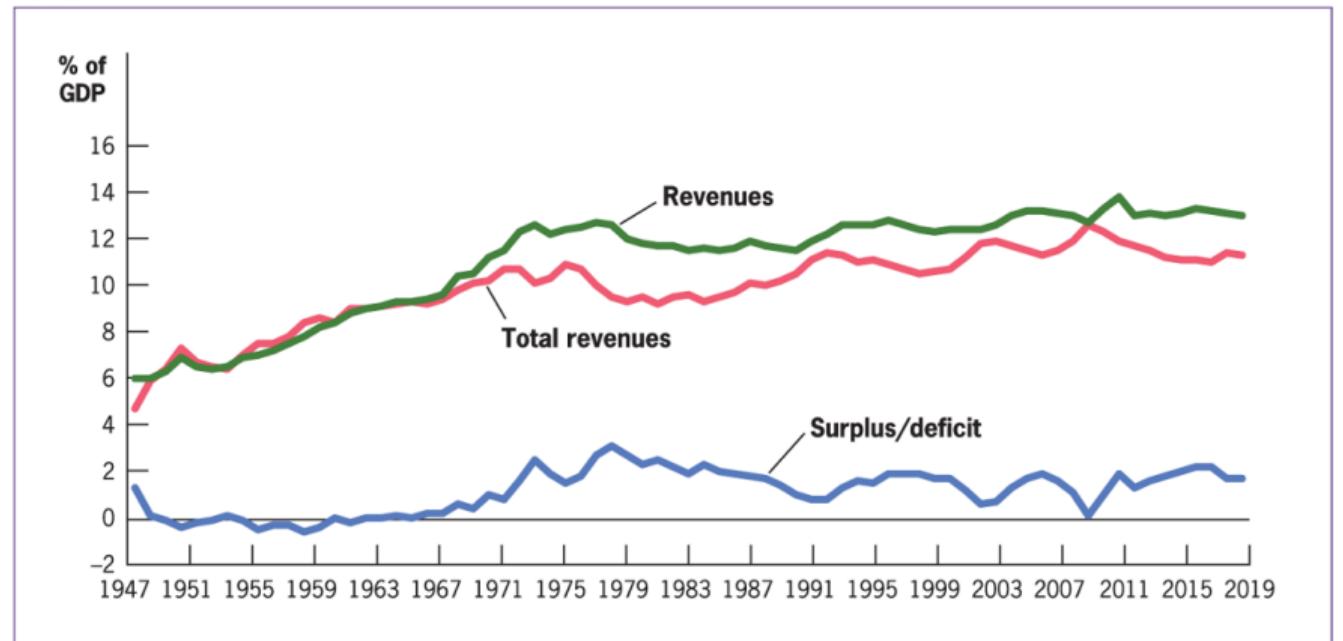
Spending, Taxes, Deficits, & Debts: Debt in OECD in 2019

- The United States has higher debt levels than most other comparable nations, but its load remains well below that of others.



Spending, Taxes, Deficits, and Debts: State and Local Government Receipts, Expenditures, and Surplus, 1947–2019

- Unlike the federal government, state and local governments' budgets are typically in surplus: there is very little deficit overall across the state and local governments in any year.



Distribution of Spending

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 - ▶ Example: Defense spending

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- ▶ **Social insurance programs:** Government provision of insurance against adverse events to address failures in the private insurance market.
 - ▶ Example: Health insurance

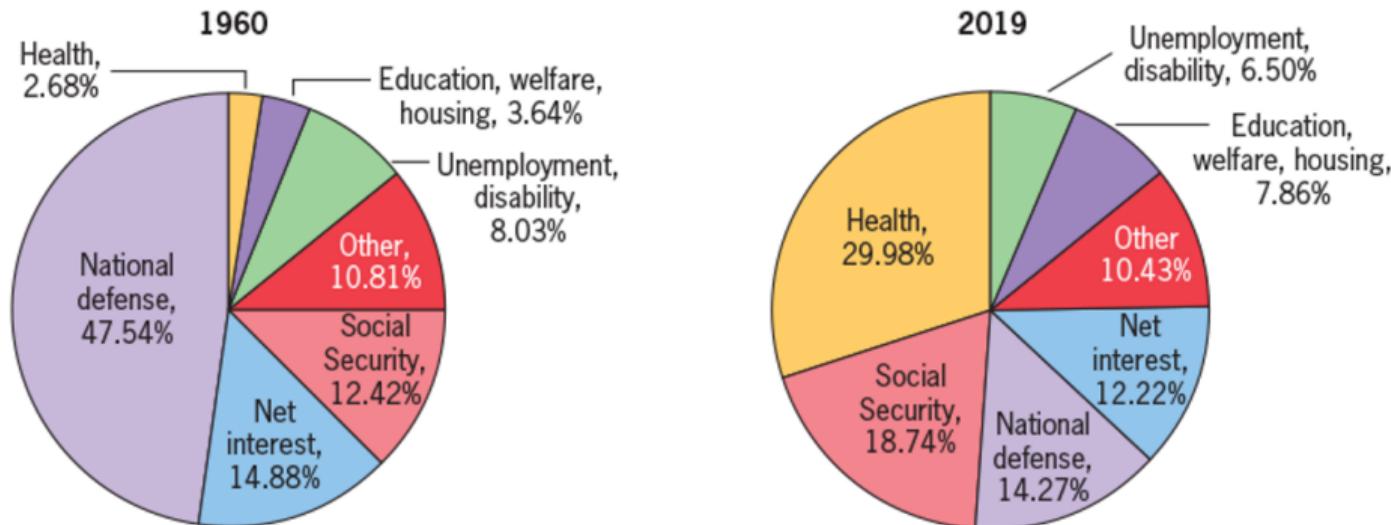
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- ▶ **Social insurance programs:** Government provision of insurance against adverse events to address failures in the private insurance market.
 - ▶ Example: Health insurance
- ▶ Over time, spending has shifted dramatically toward social insurance, especially health insurance.

Distribution of Federal Spending, 1960 and 2019

- ▶ In 1960, nearly half of federal government spending was on national defense.
- ▶ Today, however, defense has fallen to less than 1/5 of the federal budget.
- ▶ The Social Security program is the single largest government program in the United States today.

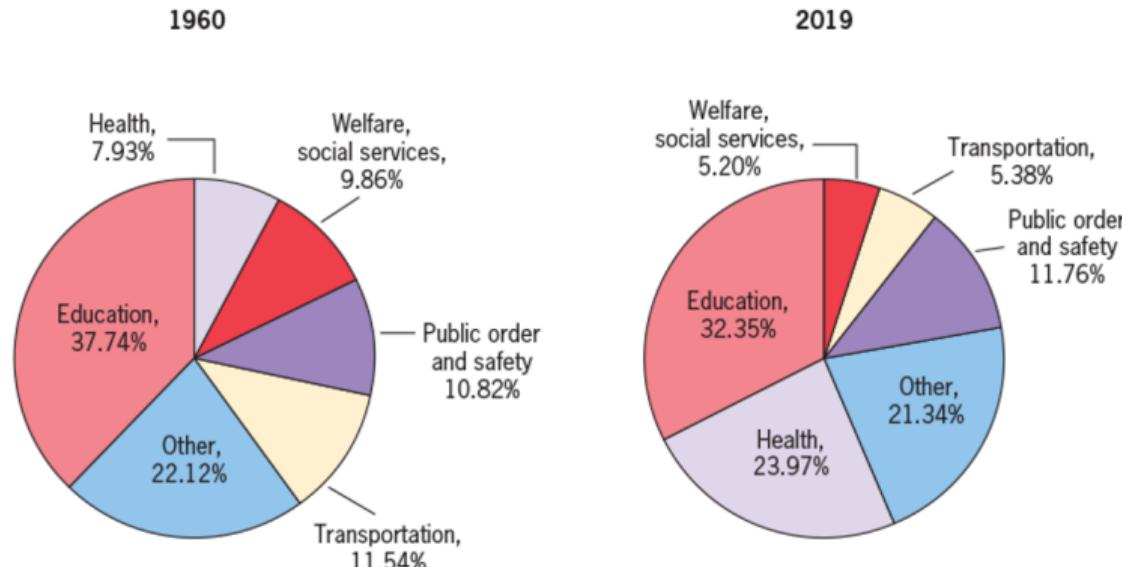
(a) Federal government expenditure by function



Distribution of State/Local Spending, 1960 and 2019

- ▶ Education, welfare, and public safety account for almost 40% of state and local government spending.
- ▶ The major development has been the parallel growth in health care spending and the reduction in education spending.

(b) State/local government expenditure by function



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- ▶ **Payroll taxes:** The taxes on worker earnings that fund social insurance programs.

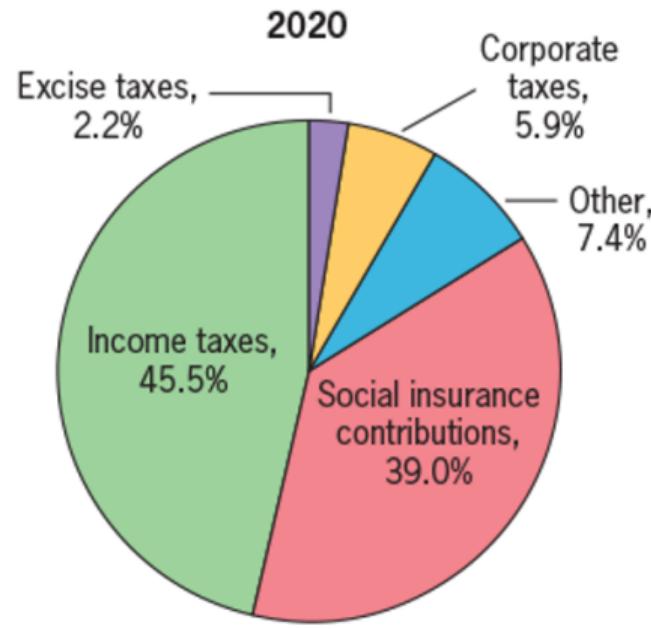
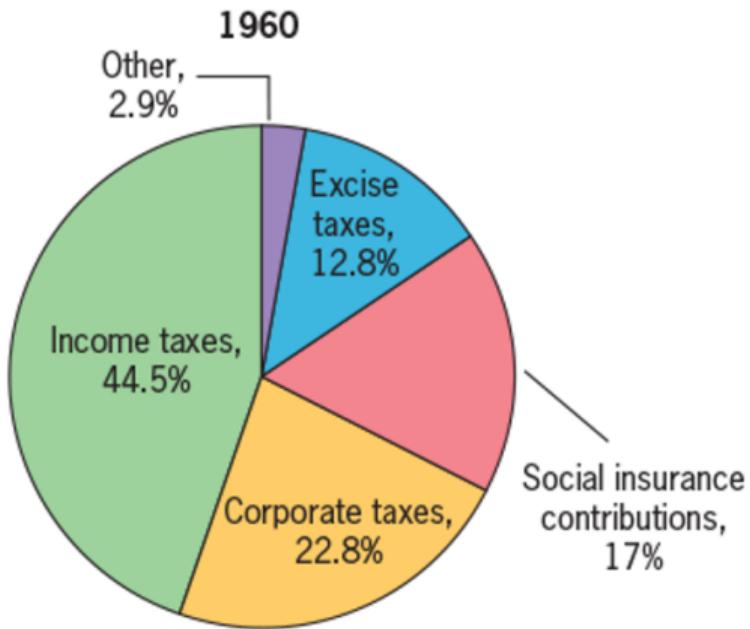
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- ▶ **Payroll taxes:** The taxes on worker earnings that fund social insurance programs.
- ▶ The major shift over time at the federal level has been the rapid shrinking of corporate tax revenues which has been largely replaced by the growth of revenue from payroll taxes.

Distribution of Federal Revenue Sources, 1960 and 2019

- Corporate tax revenues once provided almost 25% of federal government revenue; they now provide only about 12%.

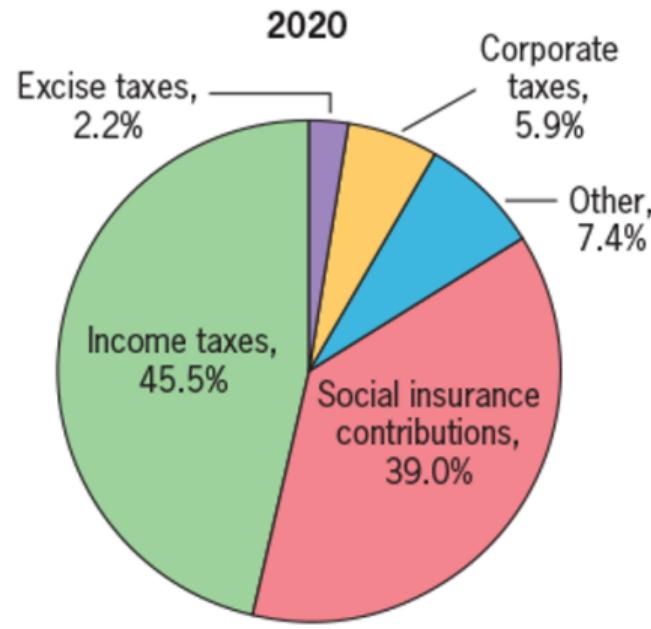
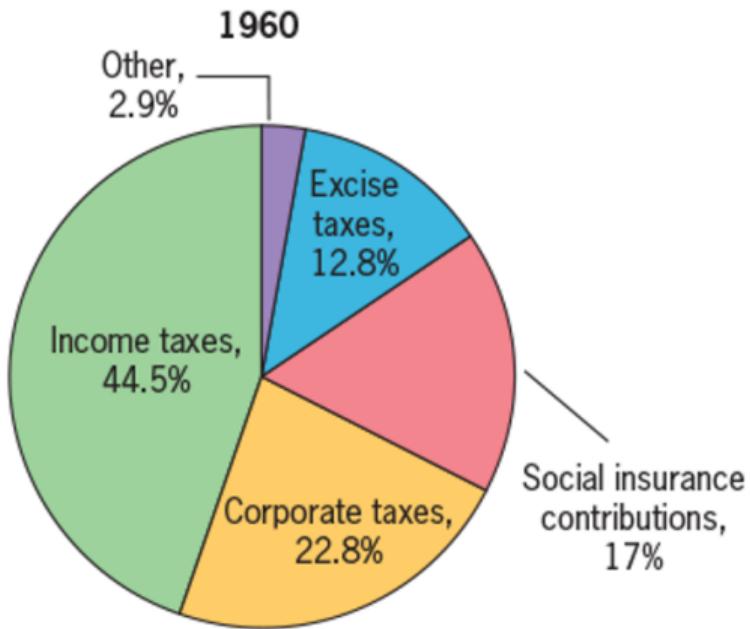
(a) Sources of federal receipts



Distribution of Federal Revenue Sources, 1960 and 2019

- Corporate tax revenues once provided almost 25% of federal government revenue; they now provide only about 12%.
- Payroll taxes have grown from one-sixth of federal revenues to well over one-third.

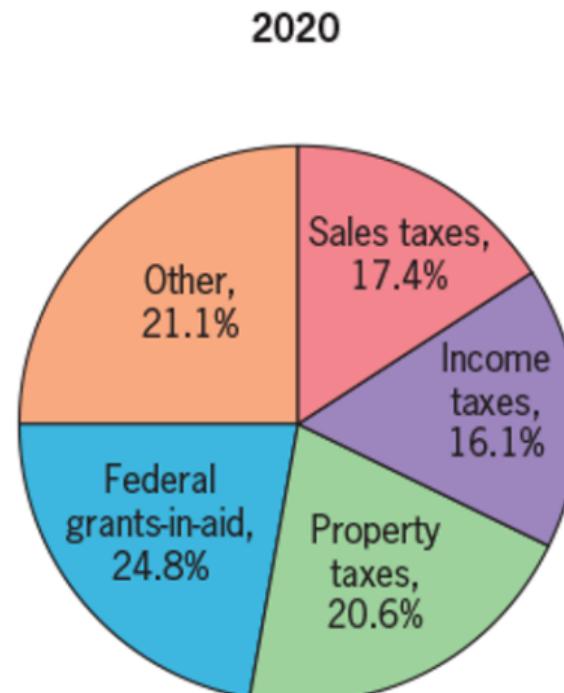
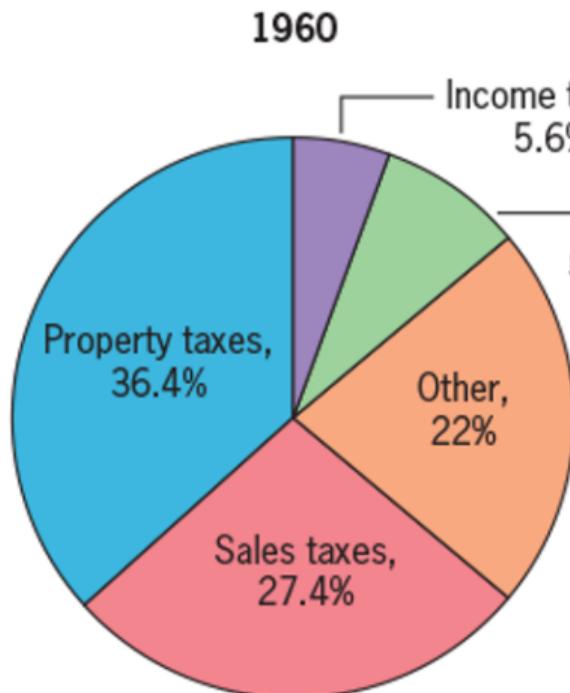
(a) Sources of federal receipts



Distribution of State/Local Revenue Sources, 1960 and 2019

- Over the past 40 years, the substantial drop in revenue from property taxes has been made up for by rising federal grants and income taxes.

(b) Sources of state/local receipts



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Regulatory Role of the Government

- ▶ The government regulates a wide range of economic and social activities.
- ▶ **Food and Drug Administration (FDA)**: food, cosmetics, drugs, and medical devices.
- ▶ **Occupational Safety and Health Administration (OSHA)**: workplace safety.
- ▶ **Federal Communications Commission (FCC)**: radio, television, wire, satellite, and cable.
- ▶ **Environmental Protection Agency (EPA)**: pollution of air, water, and food supplies.

Learn by Doing: Practice Question 2

In 2019, which of these types of taxes was a major component of BOTH federal revenue and state/local revenue?

1. Excise taxes
2. Income taxes
3. Property taxes
4. Sales taxes

Practice Question 2 Answer

In 2019, which of these types of taxes was a major component of BOTH federal revenue and state/local revenue?

Answer: Income taxes

- ▶ Excise taxes are not a major revenue source for either level
- ▶ Income taxes are a major component of both federal and state/local revenue
- ▶ Property taxes are primarily state/local
- ▶ Sales taxes are primarily state/local

Conclusion

- ▶ Government plays a central role in the lives of all Americans.
- ▶ There is ongoing disagreement about whether that role should expand, stay the same, or contract.
- ▶ The facts and arguments we just looked at will provide a backdrop as you begin your research into public finance issues!