Introduction

131 Undergraduate Public Economics

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PUBLIC ECONOMICS DEFINITION

Public Economics (or public finance) = Study of the Role of the Government in the Economy

Government is instrumental in most aspects of economic life:

1) Government in charge of huge **regulatory** structure

2) **Taxes:** governments in advanced economies collect 30-45% of GDP in taxes

3) **Expenditures:** tax revenue funds **traditional public goods** (infrastructure, public order and safety, defense) and **welfare state** (Education, Retirement benefits, Health care, Income Support)

4) Macro-economic **stabilization** through central bank (interest rate, inflation control), fiscal stimulus, bailout policies

Four questions of public finance

1) When should the government intervene in the economy?

2) How might the government intervene?

3) What is the effect of those interventions on economic outcomes?

4) Why do governments choose to intervene in the way that they do?

When should the government intervene in the economy?

1) Market Failures: Market economy sometimes fails to deliver an outcome that is efficient $\Rightarrow$ Government intervention may improve the situation

2) Redistribution: Market economy generates substantial inequality in economic resources across individuals $\Rightarrow$ Government intervention may help reduce inequality by redistributing resources through taxes and transfers

First part of the class focuses on Market Failures

Second part of the class focuses on Redistribution

Main Market Failures

1) Externalities: (example greenhouse emissions) $\Rightarrow$ require govt interventions (Pigouvian taxes/subsidies, public good provision)

2) Imperfect competition: (example monopoly) $\Rightarrow$ requires regulation (typically studied in Industrial Organization)

3) Imperfect or Asymmetric Information: (example, adverse selection in health insurance may require mandatory insurance)

4) Individual failures: People are not always rational (analyzed in behavioral economics, field in huge expansion): example myopic or hyperbolic people may not save enough for retirement

Inequality and Redistribution

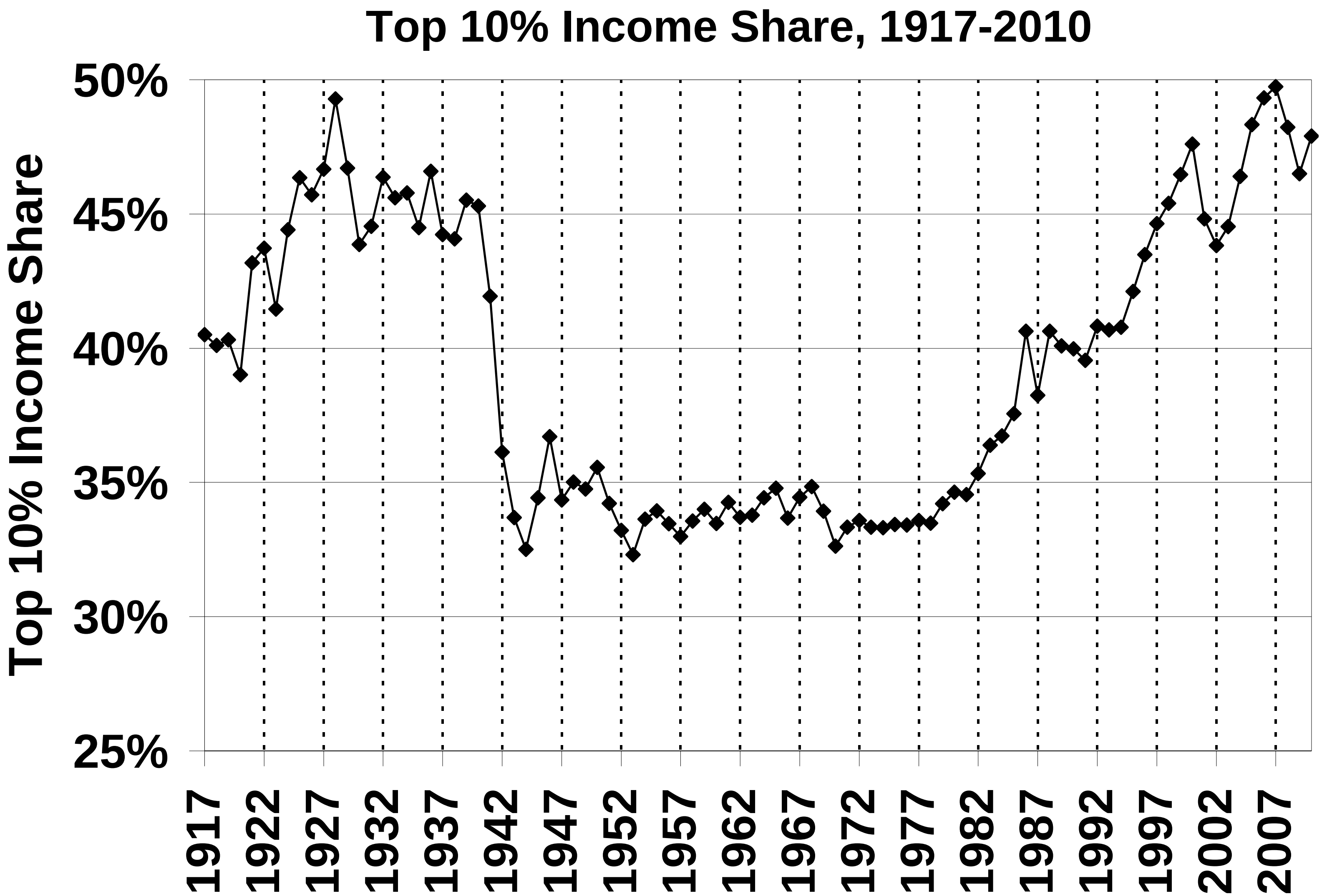
Even if market outcome is Pareto efficient, society might not be happy with the market outcome because market equilibrium might generate very high economic disparity across individuals

Governments use taxes and transfers to redistribute from from rich to poor and reduce inequality

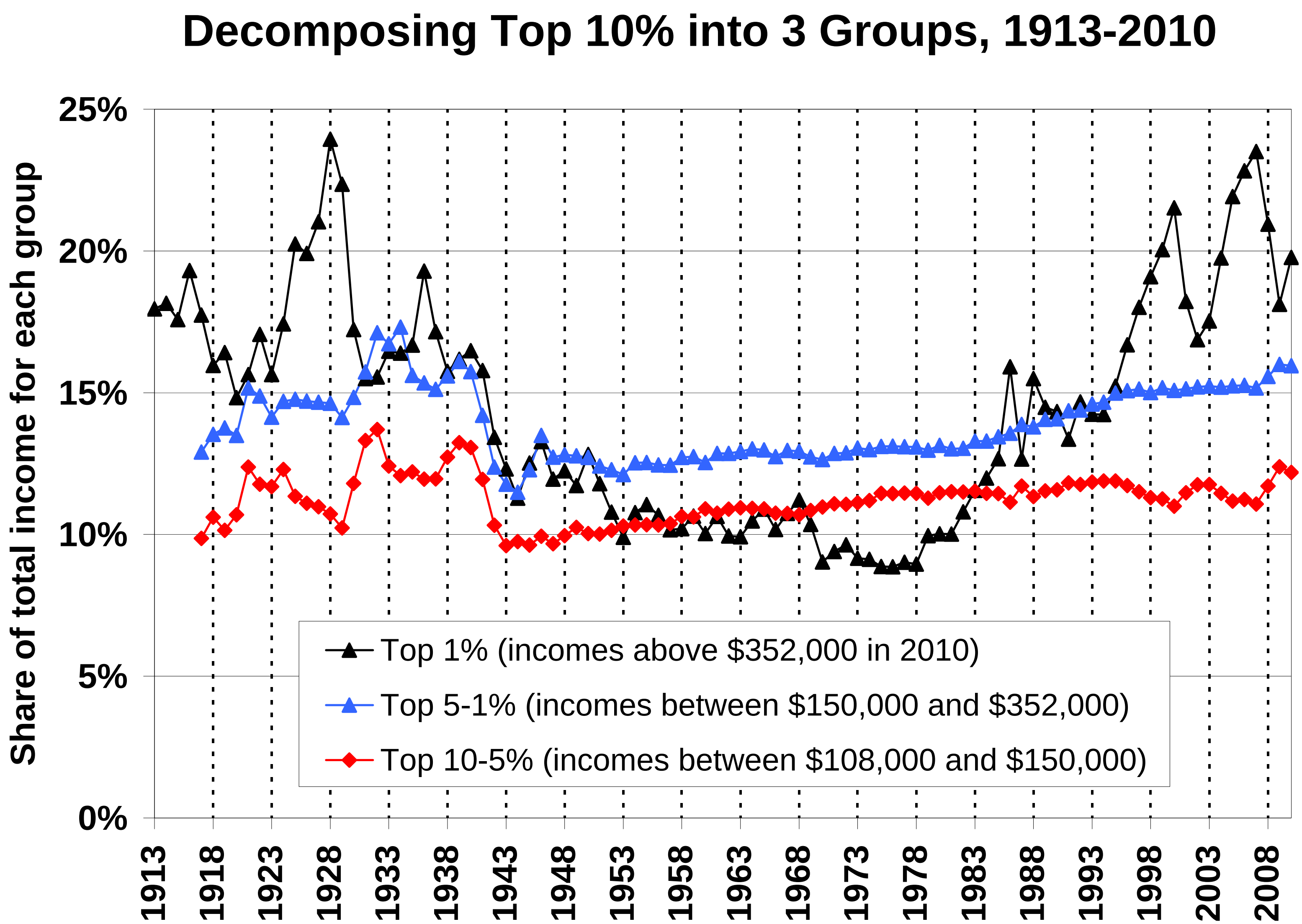
Redistribution through taxes and transfers might reduce incentives to work

$\Rightarrow$ create inefficiencies Redistribution creates an equity-efficiency trade-off

Pre-tax, pre-transfer income inequality has soared in the United States in recent decades, and has moved to the forefront in the public debate on taxes (e.g., Fiscal Cliff deal for '13)



Source: Piketty and Saez, 2003 updated to 2010. Series based on pre-tax cash market income including realized capital gains and excluding government transfers.



Source: Piketty and Saez, 2003 updated to 2010. Series based on pre-tax cash market income including realized capital gains and excluding government transfers.

How Might the Government Intervene?

1) Tax or Subsidize Private Sale or Purchase:

One way that the government can try to address failures in the private market is to use the price mechanism, whereby government policy is used to change the price of a good in one of two ways:

a) Through taxes, which raise the price for private sales or purchases of goods that are overproduced (example is carbon tax), or

b) Through subsidies, which lower the price for private sales or purchases of goods that are underproduced (example is subsidized flu shots).

How Might the Government Intervene?

2) Restrict or Mandate Private Sale or Purchase: The government can directly restrict the private sale or purchase of goods that are overproduced, or mandate the private purchase of goods that are underproduced and force individuals to buy that good (example is auto insurance)

3) Public Provision: The government can provide the good directly, in order to potentially attain the level of consumption that maximizes social welfare (example is defense)

4) Public Financing of Private Provision: Governments may want to influence the level of consumption but may not want to directly involve themselves in the provision of a good (example is privately provided health insurance paid for by government in Medicare-Medicaid)

What Are the Effects of Alternative Interventions?

1) Direct Effects: The effects of government interventions that would be predicted if individuals did not change their behavior in response to the interventions.

Direct effects are relatively easy to compute

2) Indirect Effects: The effects of government interventions that arise only because individuals change their behavior in response to the interventions (sometimes called **unintended effects**)

Empirical public finance analysis tries to estimate indirect effects to inform the policy debate

Example: increasing top income tax rates mechanically raises tax revenue but top earners might work less and earn less, reducing tax revenue relative to mechanical calculation

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.

Why Do Governments Do What They Do?

Political economy: The theory of how the political process produces decisions that affect individuals and the economy

Example: Understanding how the level of taxes and spending is set through voting and voters' preferences

Public choice is a sub-field of political economy from a Libertarian perspective that focuses on government failures (=situations where the government does not act in the benefit of society).

Normative vs. Positive Public Economics

Normative Public Economics: Analysis of How Things Should be (e.g., should the government intervene in health insurance market? how high should taxes be?, etc.)

Positive Public Economics: Analysis of How Things Really Are (e.g., Does govt provided health care crowd out private health care insurance? Do higher taxes reduce labor supply?)

Positive Public Economics is a required 1st step before we can complete Normative Public Economics

Positive analysis is primarily empirical and Normative analysis is primarily theoretical

Paternalism vs. Individual Failures

In many situations, individuals may not or do not seem to act in their best interests [e.g., many individuals are not able to save for retirement]

Two Polar Views on such situations:

1) **Paternalism [Libertarian Chicago View]** Individual failures do not exist and govt wants to impose its own preferences against individuals' will

2) **Individual Failures [Behavioral Economics View]** Individual Failures exist: Self-control problems, Cognitive Limitations

Key way to distinguish those 2 views: Under Paternalism, individuals should be opposed to govt interventions. If individuals understand they have failures, they will tend to support govt interventions.

Key Facts on Taxes and Spending

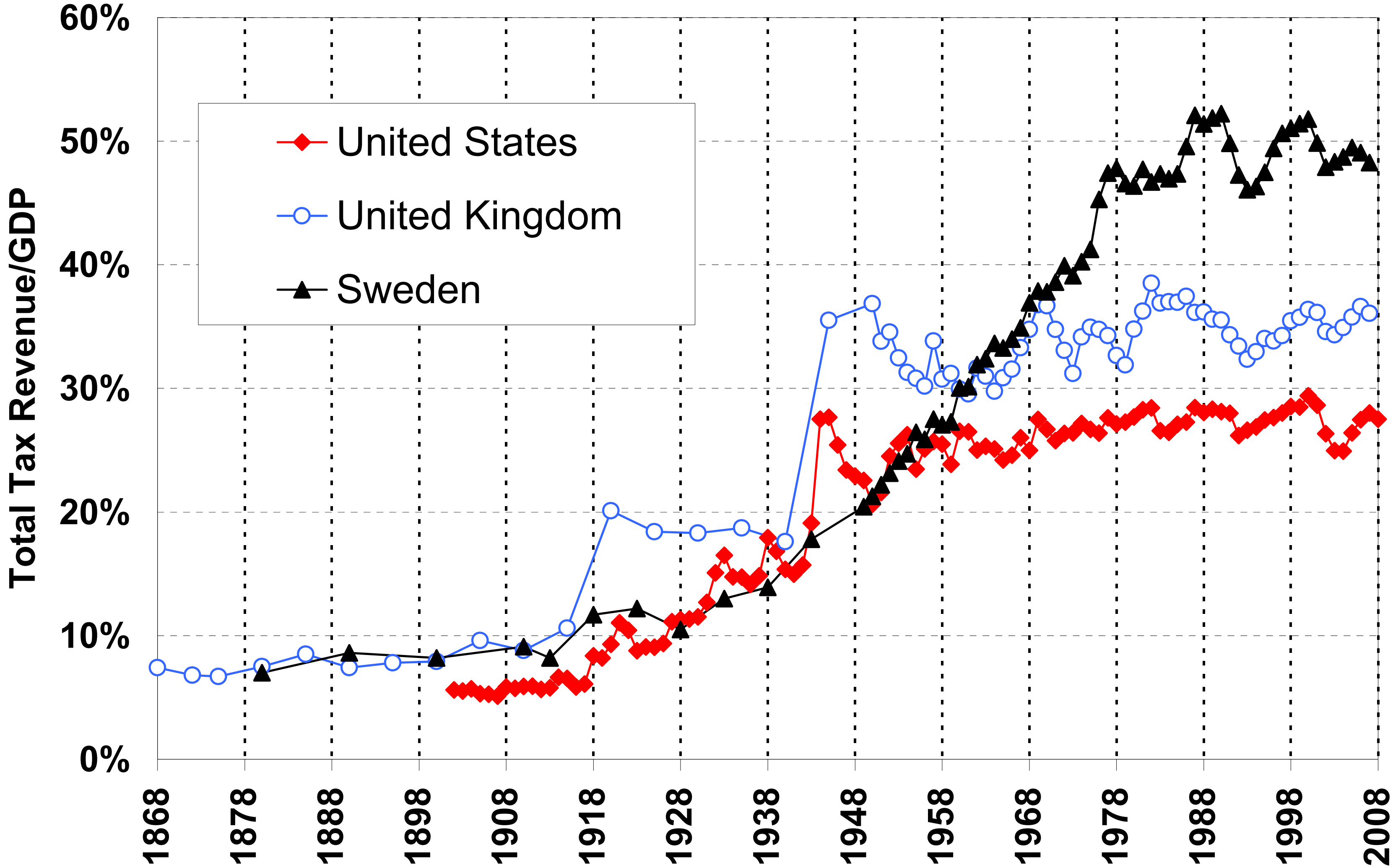
1) Government Growth: Size of government relative to GDP grows dramatically over the process of development from less than 10% in less developed economies to 30-50% in most advanced economies

2) Government Size Stable in richest countries after 1980

3) Government Growth is due to the expansion of the welfare state: public education, public retirement benefits, public health insurance, income support programs

4) Spending > Taxes: Most rich countries have significant public debt (relative to GDP), particularly after Great Recession of 2008

2A. Tax revenue/GDP in the US, UK, and Sweden



Source: Kleven-Kreiner-Saez NBER WP 2009

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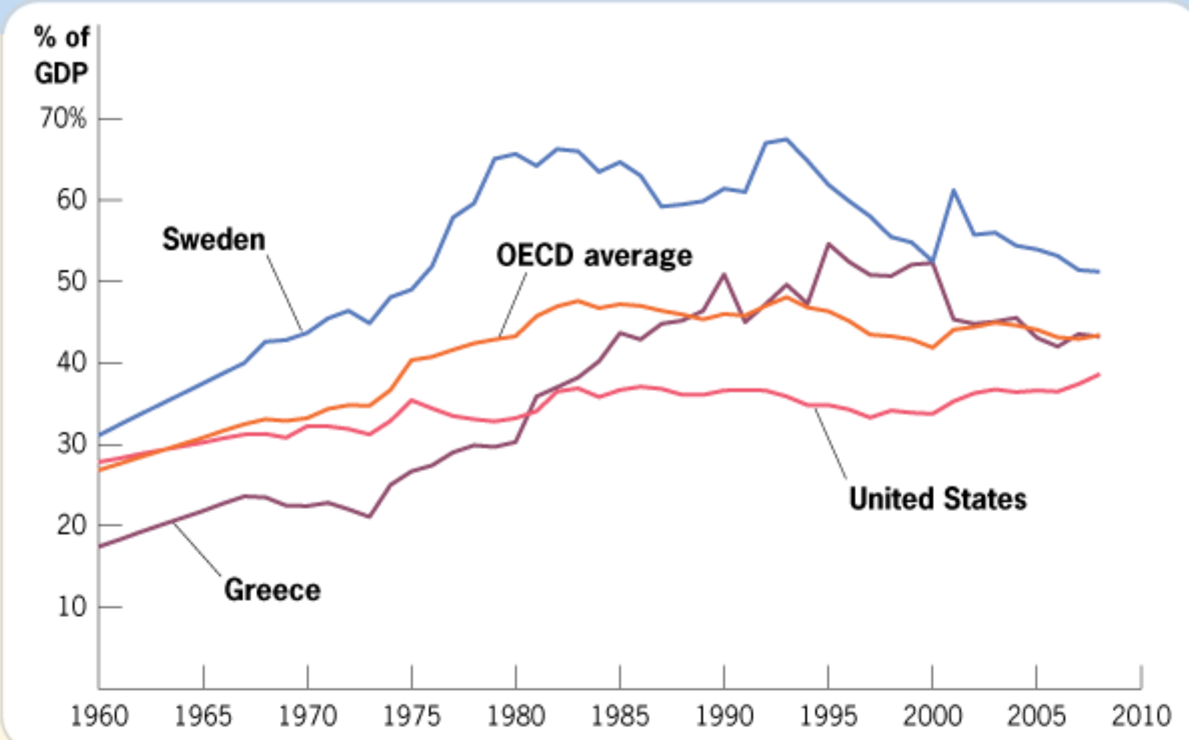
Why Study Public Finance? Facts on Government in the United States and around the World

The Size and Growth of Government

■ FIGURE 1-2



Total Government Spending Across Developed Nations, 1960–2008 • Government spending as a share of GDP has grown throughout the developed world, but the pace of growth has varied. The United States has seen a modest growth in its government share over this period, while government spending in Greece has more than tripled as a share of the economy.

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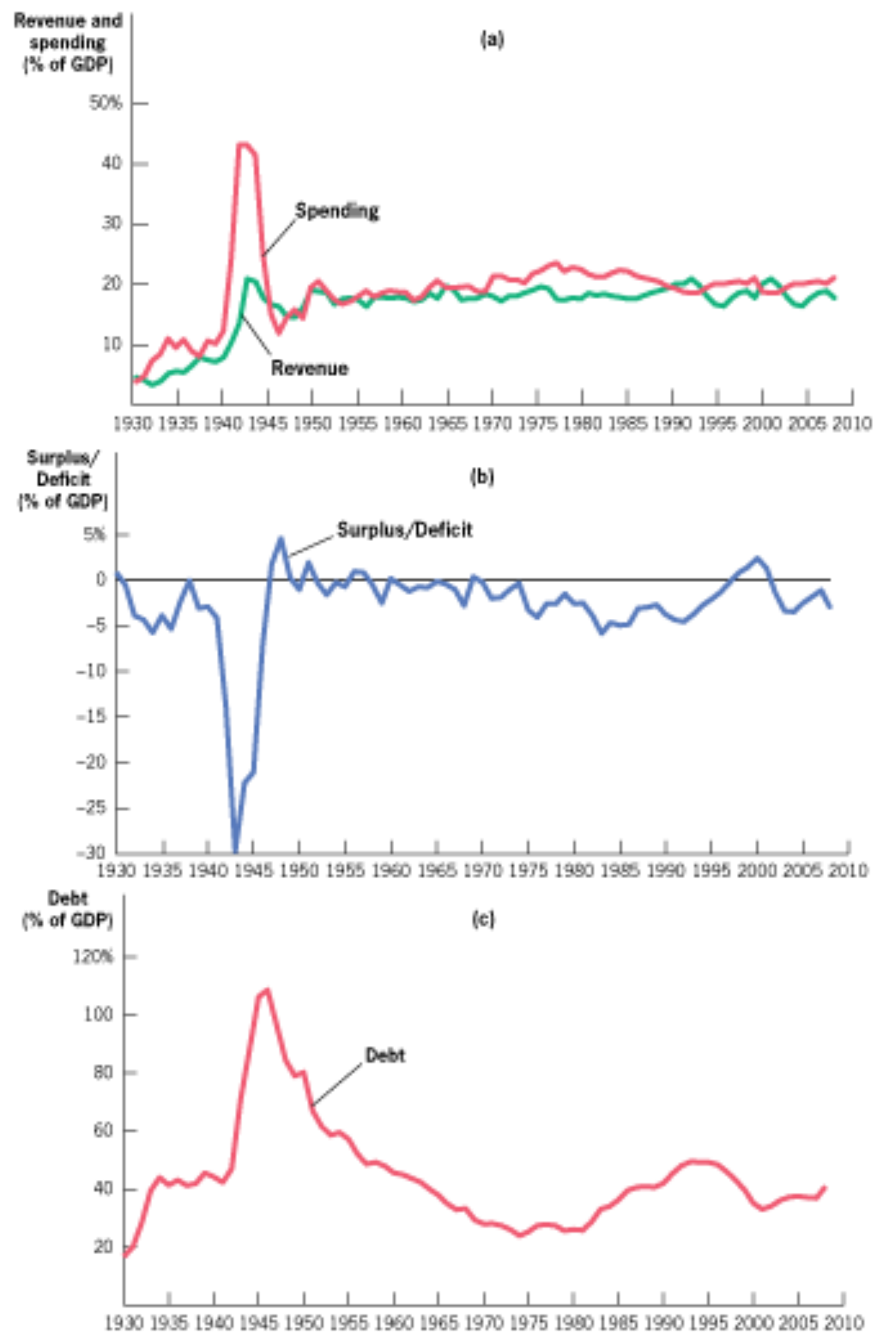
Spending, Taxes, Deficits, and Debts

Federal Revenues and Expenditures, Surplus or Deficit, and Debt, 1930–2008 • For most of the twentieth century, except for the World War II period, federal government tax receipts have kept pace with expenditures. But expenditures have exceeded receipts by several percentage points of GDP on average since the 1970s. The resulting federal government debt is now at about 40% of GDP.

■ FIGURE 1-4



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Spending, Taxes, Deficits, and Debts

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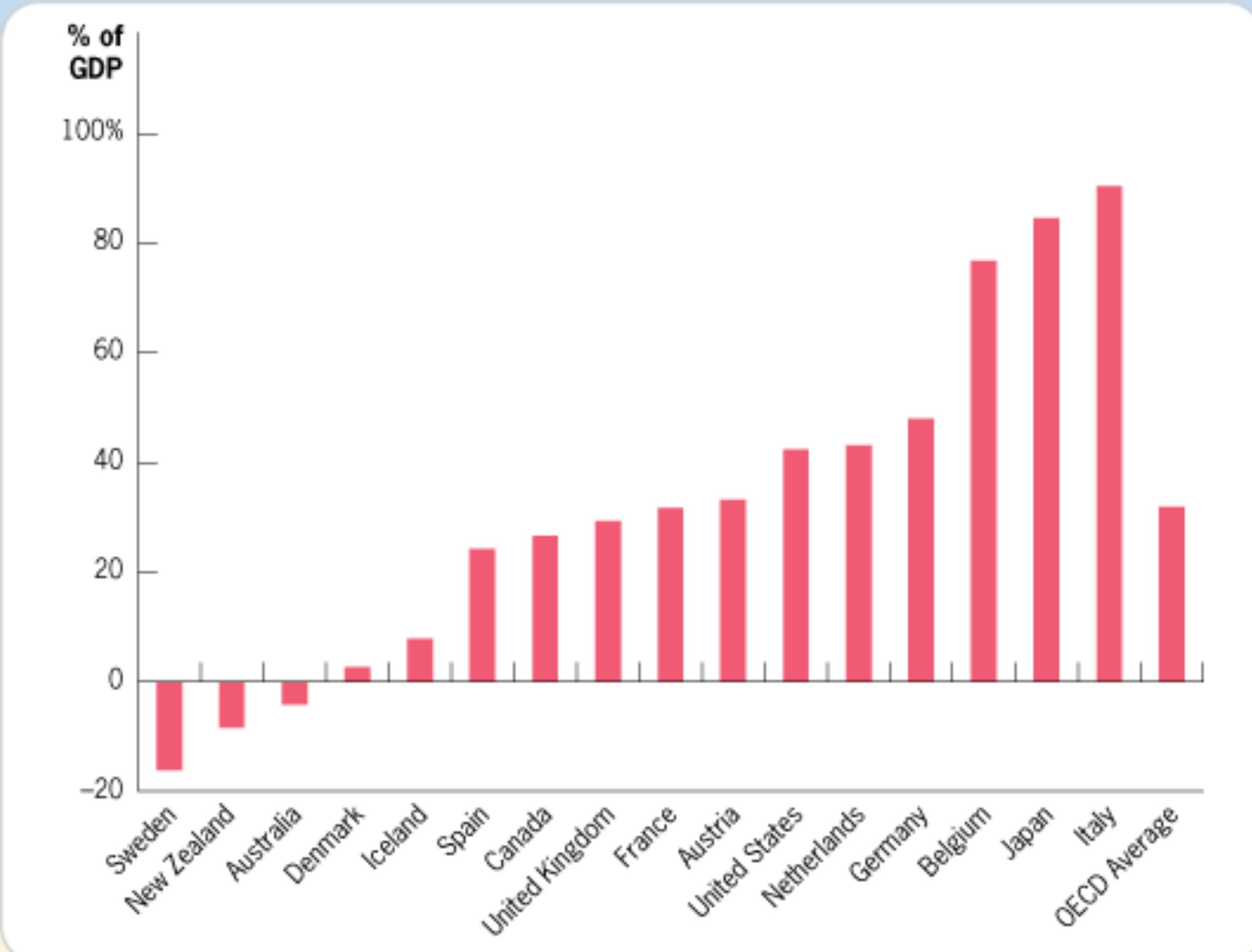

Debt Levels of OECD Nations in 2008 • The United States has a debt level that is typical of developed nations, although there is wide variation.

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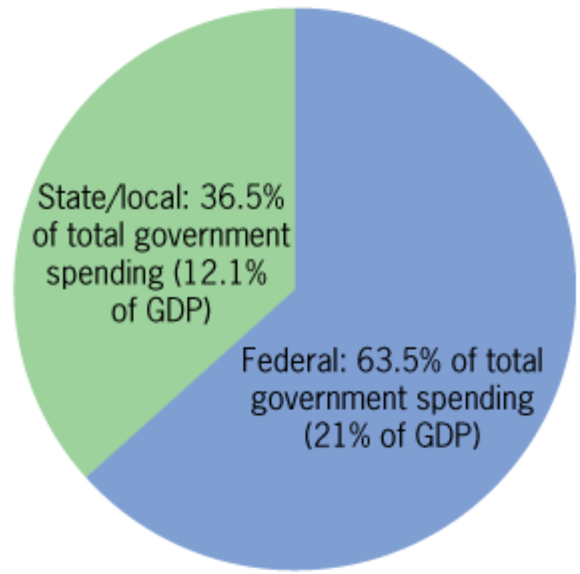
Why Study Public Finance? Facts on Government in the United States and around the World

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



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.

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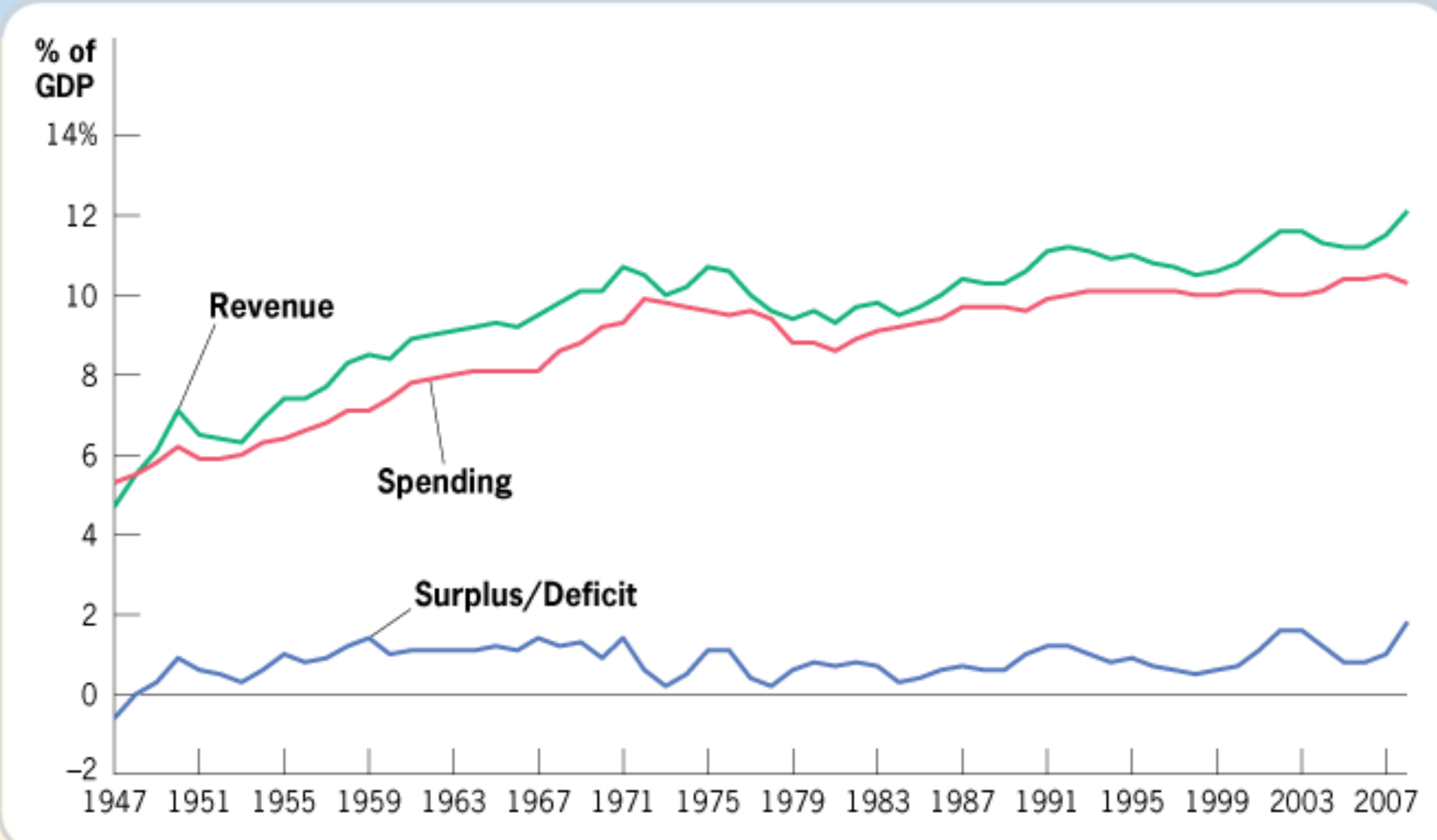
Spending, Taxes, Deficits, and Debts

■ FIGURE 1-6



State and Local Government Receipts, Expenditures, and Surplus, 1947–2008 • State and local revenues almost always exceed expenditures, although surpluses have been close to zero in recent years.

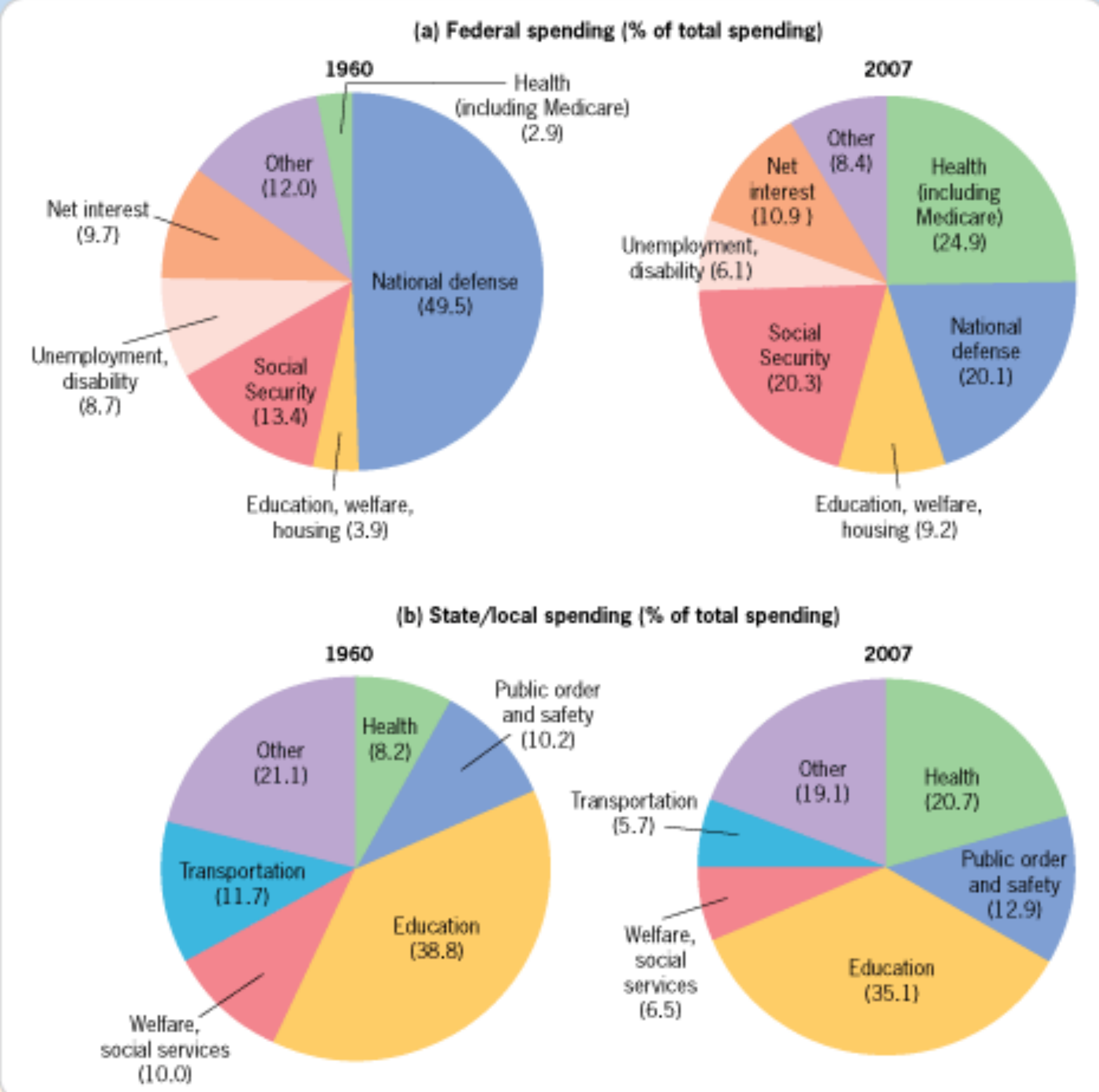
DISTRIBUTION OF SPENDING

Public goods: Goods for which the investment of any one individual benefits everyone in a larger group (examples: defense, police, roads).

Social spending programs: Government provision of insurance against adverse events to correct inequality and address failures in the private insurance market (examples: education, retirement benefits, public health insurance, unemployment insurance, disability insurance)

Growth in government since 1900 mostly due to expansion of social spending: public education, public health benefits, retirement benefits, and income support programs

■ FIGURE 1-7



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.

DISTRIBUTION OF TAXES

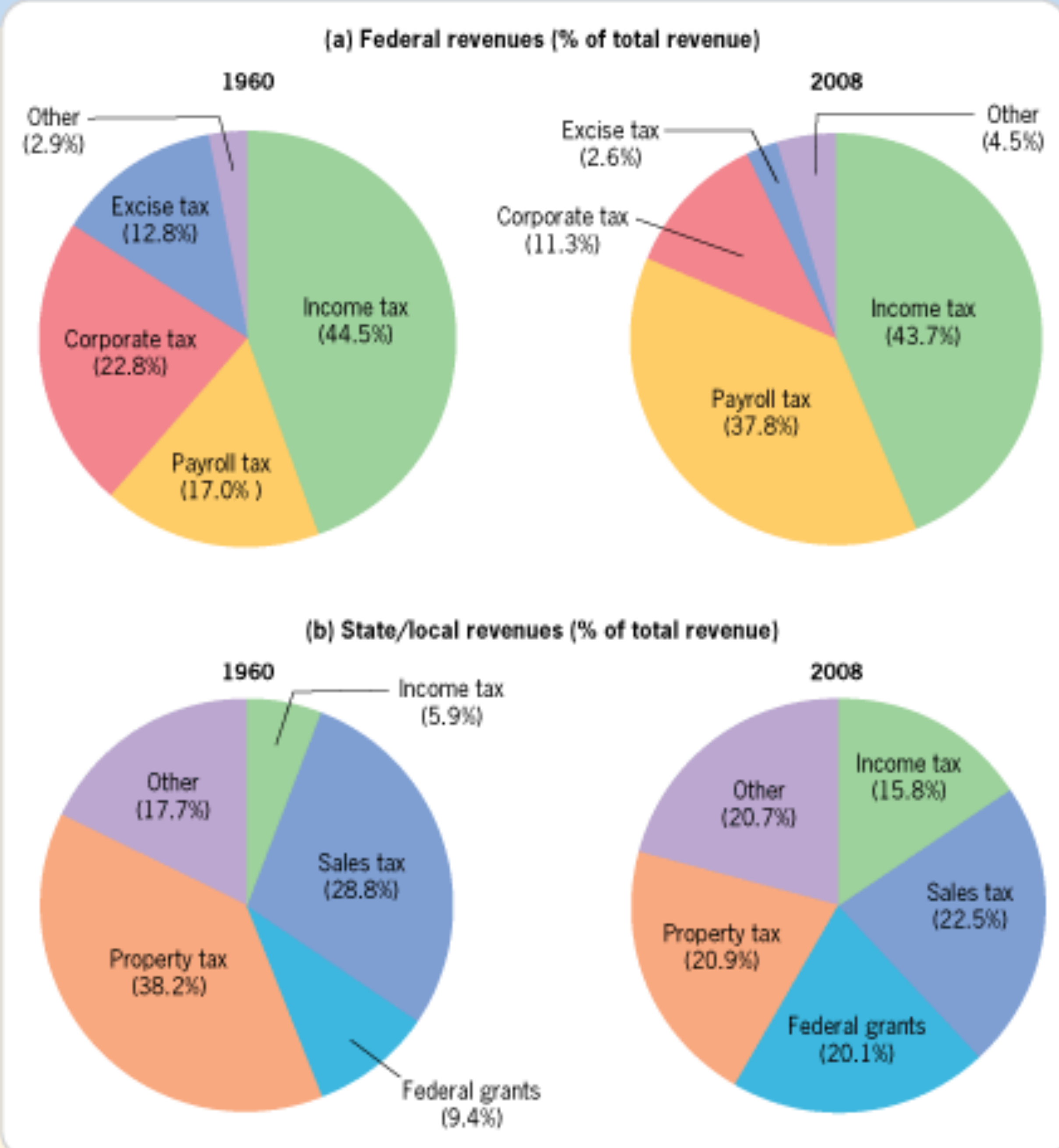
US Federal govt raises about 20% of GDP in taxes, State+Local govt raises about 10% of GDP in taxes.

Main Federal taxes: (1) Individual income tax (40%), (2) payroll taxes on earnings (40%), (3) corporate tax (15%)

Main State taxes: (1) real estate property taxes (30%), (2) sales and excise taxes (30%), (3) individual and corporate state taxes (30%)

Key questions: who bears the burden of those taxes (tax incidence), what impact do they on the economy?

■ FIGURE 1-8



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.

REGULATORY ROLE OF THE GOVERNMENT

Another critical role the government plays in all nations is that of *regulating economic and social activities*. Examples:

1) The **Food and Drug Administration (FDA)** regulates the labeling and safety of nearly all food products and bottled water, tests cosmetics to ensure their safety, and approves drugs and medical devices to be sold to the public.

2) The **Occupational Safety and Health Administration (OSHA)** is charged with regulating the workplace safety of the 115 million Americans employed at 7.2 million job sites.

3) The **Environmental Protection Agency (EPA)** is charged with minimizing dangerous pollutants in the air, water, and food supplies.

PUBLIC DEBATES OVER SOCIAL SECURITY, HEALTH CARE AND EDUCATION

Social Security, health care, and education are each the subject of debate, with both the "liberal" and "conservative" positions holding differing views in their approach to each problem.

Social Security: Social Security is the single largest government expenditure program. The financing structure of this program is basically that today's young workers pay the retirement benefits of today's old.

Health Care: There are currently about 50 million Americans without any health insurance, about 20% of the non-elderly U.S. population. Obamacare will reduce this number substantially but health care costs are increasing very quickly

Education: There is an enormous dissatisfaction with current US educational system, highlighted by the poor performance of US students on international tests.

CONCLUSION

It is clear from the facts presented here that the government plays a central role in the lives of all Americans.

It is also clear that there is ongoing disagreement about whether that role should expand, stay the same, or contract.

The facts and arguments raised in this chapter provide a backdrop for thinking about the set of public finance issues that we explore in the remainder of the lectures.

PROFESSOR SAEZ' RESEARCH

Most of my research (available on my webpage) is in public economics:

1) Design of optimal tax policies and optimal transfer programs (theory, normative)

2) Analysis of the effects of taxes and transfers on individual behavior (empirical, positive)

3) Analysis of inequality overtime and across countries (empirical, descriptive)

I will discuss some of my research in this course when we cover the relevant topics