

Introduction to Public Economics

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Outline

- The three questions of public economics
- Why study public economics? Some facts of the importance of government in different economies

What is Public Economics All About

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 35-50% of National Income in taxes
 3. **Expenditures**: taxes fund **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
- ⇒ We pool a large share of our incomes through government

The four questions of public economics

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

(I) When should the government intervene in the economy?

1. **Market Failures:** Market economy sometimes fails to deliver an outcome that is efficient
⇒ Government intervention may improve the situation
2. **Redistribution:** Market economy generates substantial inequality in economic resources across individuals
⇒ People willing to pool their resources (through government taxes and transfers) to help reduce inequality

First part of the class focuses on Redistribution

Second part of the class focuses on Market Failures

Main Market Failures

- i. **Externalities:** (example: greenhouse carbon emissions) \Rightarrow require govt interventions (Pigouvian taxes/subsidies, public good provision)
- ii. **Imperfect competition:** (example: monopoly) \Rightarrow requires regulation (typically studied in Industrial Organization)
- iii. **Imperfect or Asymmetric Information:** (example: adverse selection in health insurance may require mandatory insurance)
- iv. **Individual failures:** People are not always rational. This is analyzed in behavioral economics, field in huge expansion (example: myopic people may not save enough for retirement)

2. Inequality and Redistribution

Even if market outcome is 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 rich to poor and reduce inequality

Redistribution through taxes and transfers might reduce incentives to work (**efficiency costs**)

⇒ Redistribution creates an **equity-efficiency trade-off**

Income inequality has soared in the United States in recent decades, and has moved to the forefront in the public debate (Piketty's 2014 book success)

II. How Might the Government Intervene?

1. **Tax or Subsidize Private Sale or Purchase**
2. **Restrict or Mandate Private Sale or Purchase**
3. **Public Provision**
4. **Public Financing of Private Provision**

III. What is the Effect of those Interventions on economic outcomes?

- 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 economics** 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

IV. Why Do Governments Do What They Do?

- Governments do not always choose efficient or socially desirable outcomes (not always benevolent)

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: branch of political economy that focuses on the behavior of individuals within the political process, treating politicians, bureaucrats, voters, and other political agents as self-interested actors, similar to the way economists treat individuals in markets.

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?)

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:

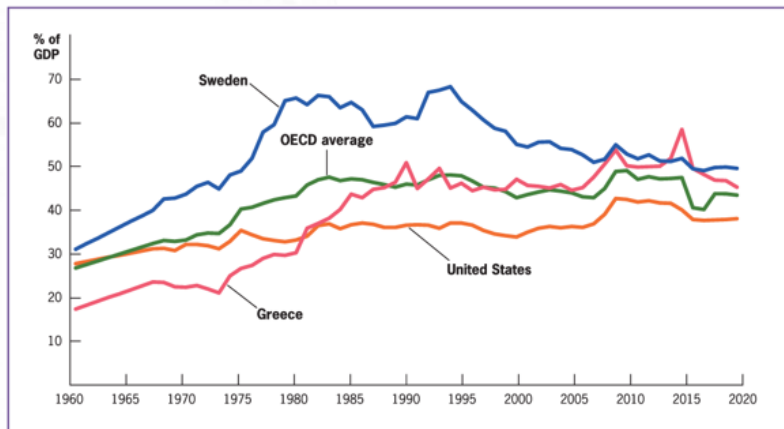
1. **Paternalism (Libertarian View)** Individual failures do not exist and government wants to impose its own preferences against individuals' will
2. **Individual Failures (Behavioral Economics View)** Individual Failures exist: Self-control problems, Cognitive Limitations

Distinguishing the 2 views: Under Paternalism, individuals are opposed to government interventions. If individuals understand they have failures, they will support govt interventions.

Key Facts on Taxes and Spending

1. **Government Growth:** Size of government relative to National Income 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. **Govt spending** > **Taxes**: Most rich countries run deficits and have significant public debt (relative to GDP), particularly during Great Recession of 2008-10

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



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DIFFERENT LEVELS OF GOVERNMENTS

(Decentralization)

US Federal govt raises about 20% of National Income in taxes

State and Local govts raise about 10% of Nat. Income in taxes

Decentralized govt = a larger fraction of taxes/spending take place at local level

Decentralized govt give additional power to individuals who can also vote with their feet

Tailors govt to local views and creates competition between local govts: If local govt is inefficient, residents can leave, putting the local govt "out of business"

Redistribution through taxes and transfers harder to achieve at local level (rich can leave if local taxes are too high)

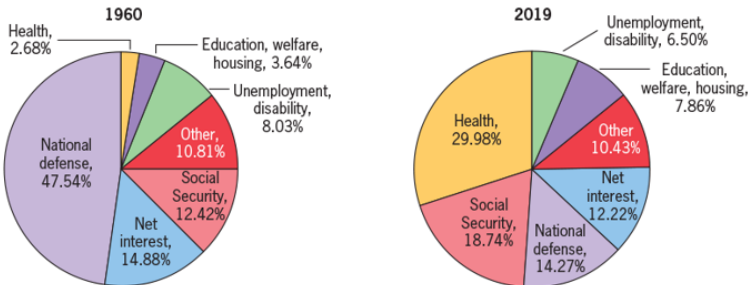
⇒ Conservatives/libertarians tend to prefer decentralized states

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
- Over time, spending has shifted dramatically toward social insurance, especially health insurance.

DISTRIBUTION OF FEDERAL SPENDING

(a) Federal government expenditure by function

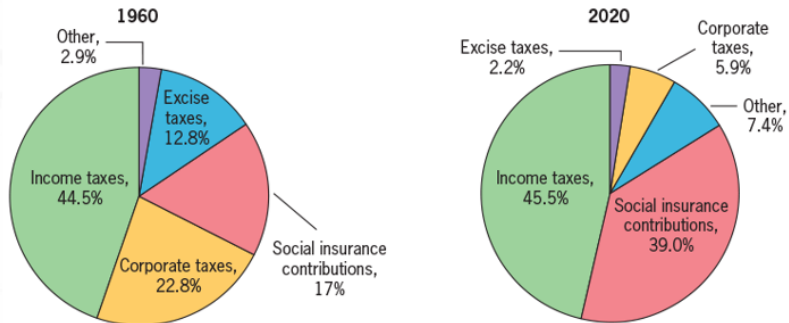


Distribution of Revenue Sources

- *Individual income tax*: A tax levied on the income of U.S. residents.
- *Corporate tax revenues*: The funds raised by taxing the incomes of businesses in the United States.
- *Excise taxes*: Taxes levied on the consumption of certain goods such as tobacco, alcohol, or gasoline.
- *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

(a) Sources of federal receipts



Corporate tax revenue once provided almost 25% of federal government

REGULATORY ROLE OF THE GOVERNMENT

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

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

PUBLIC DEBATES OVER TAXES, HEALTH CARE, AND CLIMATE CHANGE

Taxes, health care, and climate change are each the subject of debate, with both the “liberal” and “conservative” positions holding differing views in their approach to each problem.

Taxes: Trump administration decreased taxes on corporations and individuals in 2018. Senator Warren wants new progressive wealth tax and Ocasio-Cortez 70% top individual tax rates.

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: Up to 2013, about 20% of the non-elderly U.S. population not insured. With Obamacare down to 10% but Trump administration would like to repeal Obamacare

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.