

Introduction to Public Finance

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Open Question: What does the government do?

What should the government do?

Syllabus review: What are some key questions/concepts?

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- What should interventions look like?
- What is the effect of these interventions on economic outcomes?
- How should interventions be financed?
- Why do governments choose to do what they do?

Reasons for interventions in markets

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- **Paternalism:** Stop people from making bad choices

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Examples: public health care and education, vaccines, Social Security

Effects of interventions

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- Indirect effects, i.e., due to individuals altering their behavior in response to the intervention. This is the main subject of empirical public finance.

Example of direct and indirect effects

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Indirect effects: other home owners not paying on time to qualify for a subsidy, increased demand for mortgages, more risky loans made, effects on prices, effect on solvency of lenders, dynamic implications.

Context for this class

- Last time I taught this class, students were dismayed by the heavy math load
- An anonymous student felt they learned little public economics and instead only learned utility maximization with some tricks to include taxes
- I hate to break it to that anonymous student, but that's about 95% of public economics
- Public economics is a vast field with many subfields, but taxes (and regulations) tie it them all together

- Tax design: “Unemployment and tax design” (Jan Hummel)
- Tax responses: “Avoidance Responses to the Wealth Tax” (Mas-Montserrat et al.)
- Tax enforcement: “Wealth tax enforcement in Sweden: Filing requirements and pre-populated returns” (Saez and Seim)
- Taxes to fit market failures: “Driving innovation? Carbon tax effects in the Swedish transport sector” (Moore et al.)
- Tax “incidence”: “Uniform brand-variant pricing and heterogeneous firm responses to excise taxes: Evidence from six U.S. cities” (Thomas)

Only certainty in public econ class is taxes and more taxes

- Paper might help estimate an “optimal” tax, the (in)direct effects of a new tax or regulation, etc.
- Other papers estimate might simulate a tax vs. regulation vs. no tax to see which is more effective and make a policy recommendation
- Or might claim to be about minimum wage, which is just a regulation, contrasted with a tax/transfer system
- A macro public paper on debt financing might model borrowing as a tax on future generations, adjusted based on the interest rate
- Why so much emphasis on taxes?
 - Flexible tool for policy makers to achieve a variety of goals
 - Simplify many different problems into one common framework based on adjusting “prices”
 - All governments have them, all people pay them
 - So let’s take a look at taxes!

How big is the government?

Expenditures (state, local and federal): \$9,803.6 billion, 34.0% of GDP (2024), federal spending constituted approximately 68.8% of that.

Source: <https://www.whitehouse.gov/omb/budget/historical-tables/> Table 14.1-14.3

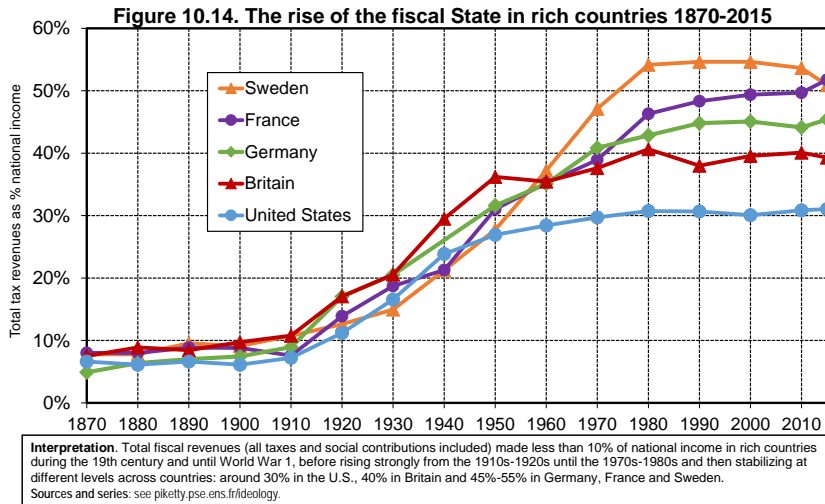
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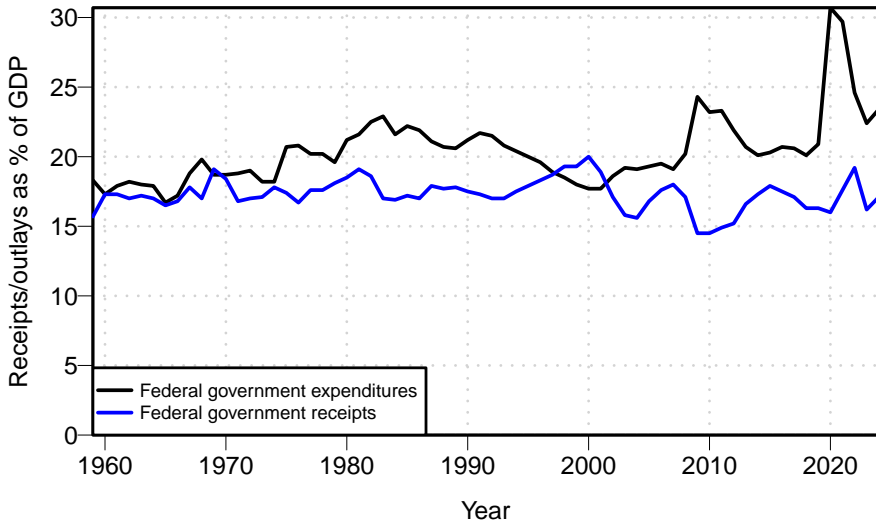
Receipts: \$7,712.5 billion, 26.8% of GDP (2024), federal government — 63.8% of the total.

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Long term trends in government revenue

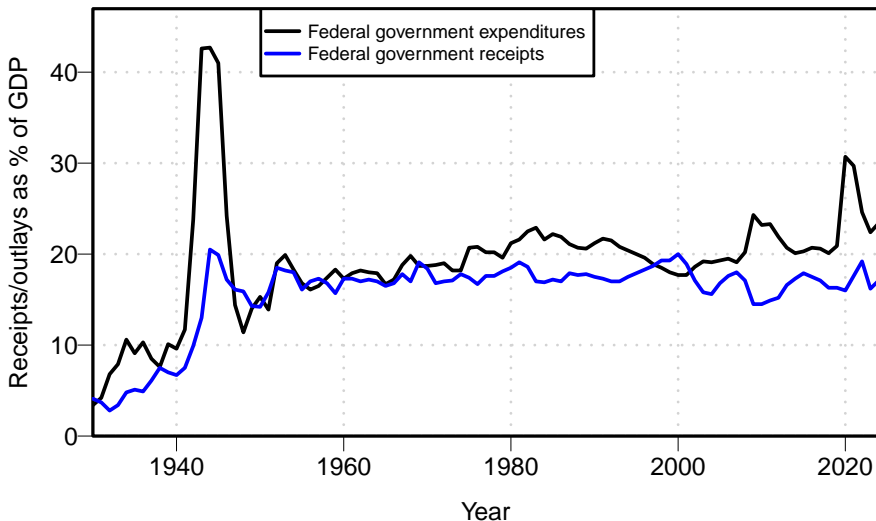


Trends in federal spending and revenue, 1960-2024



Source: <https://www.whitehouse.gov/omb/budget/historical-tables/> Table 1.3

Trends in federal spending and revenue, 1940-2024



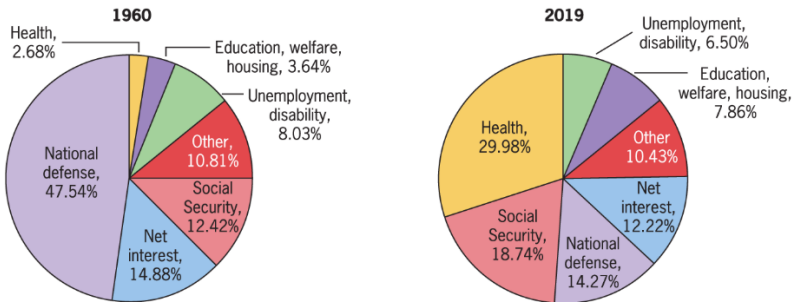
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Government expenditures — composition

- Increased role of “entitlement” programs

Composition of government spending — federal

(a) Federal government expenditure by function



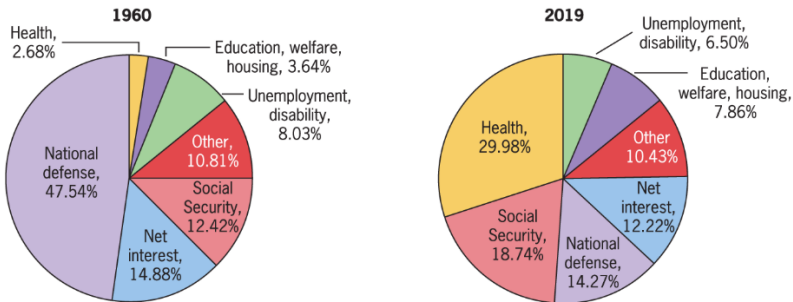
Gruber, *Public Finance and Public Policy*, Figure 1.7a

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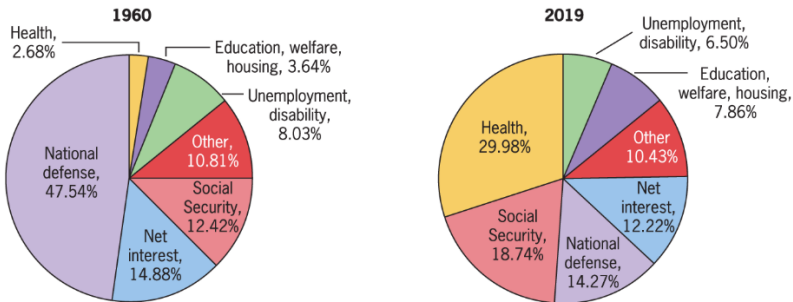
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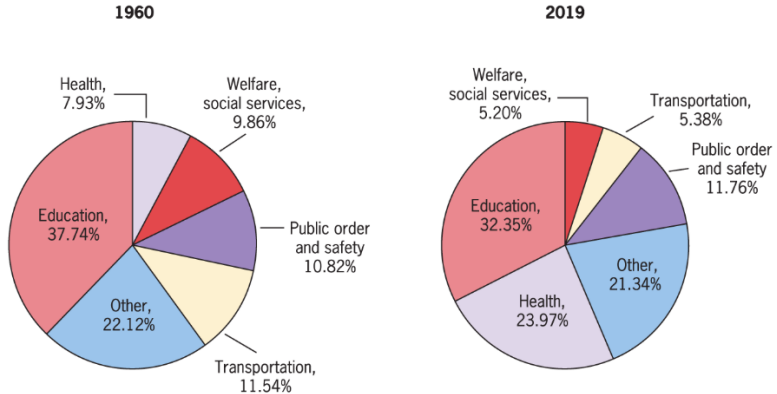


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Composition of government spending — local



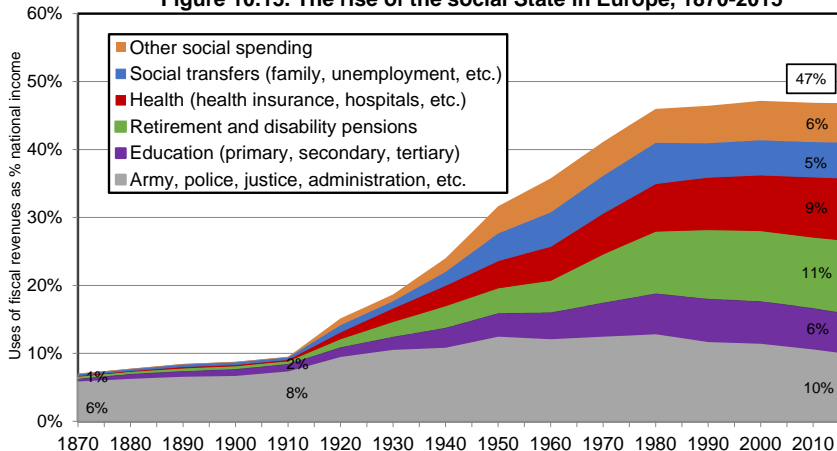
Gruber, *Public Finance and Public Policy*, Figure 1.7b

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- Ad hoc stabilization policy spending

Trends in composition of spending in Western Europe

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 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.

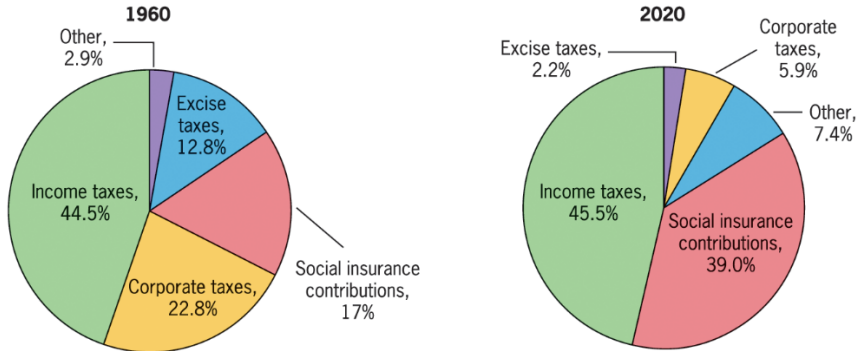
Piketty (2020), *Capital and Ideology*, Figure 10.14

Revenue — composition

- Personal income tax

Composition of revenue — federal

(a) Sources of federal receipts



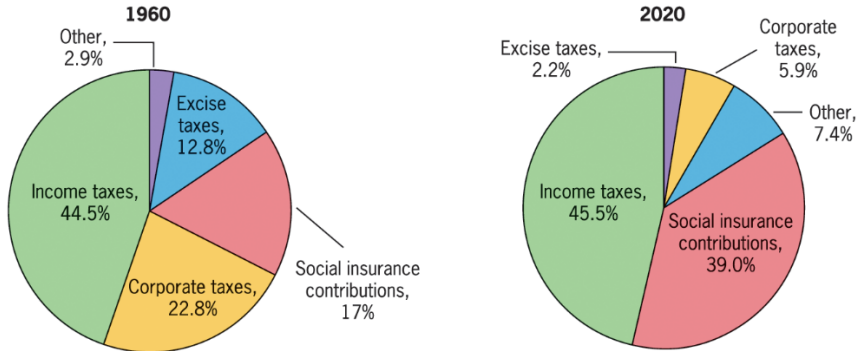
Gruber, *Public Finance and Public Policy*, Figure 1.8a

Revenue — composition

- Personal income tax
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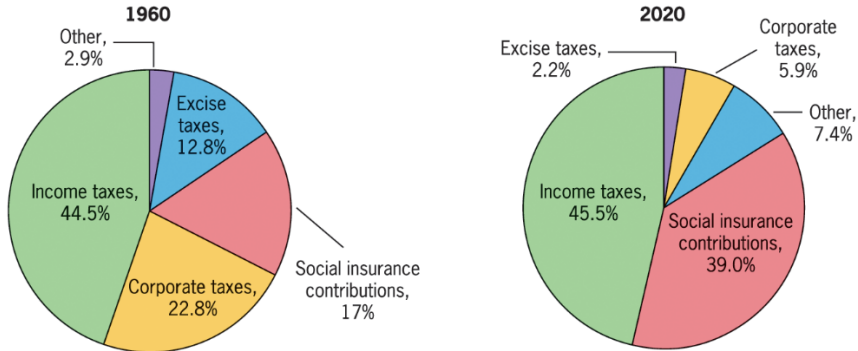
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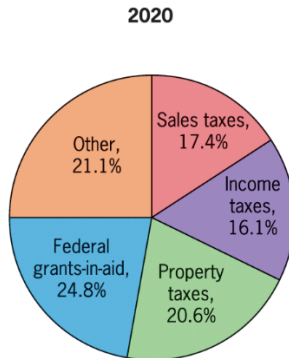
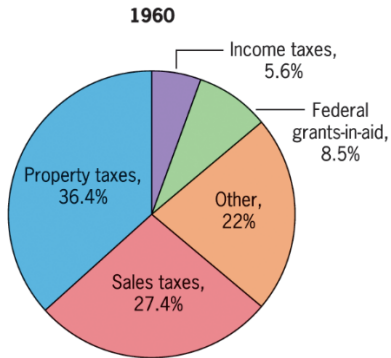
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Revenue — composition

- Personal income tax
- Revenue from corporate taxation decreased over time
- Payroll tax — contributions out of paycheck (is it really a tax?)
- State and local — changing structure toward more federal aid

Composition of revenue — local

(b) Sources of state/local receipts



Gruber, *Public Finance and Public Policy*, Figure 1.8b

Current and recent policy debates

- Financing the cost of crisis and fiscal sustainability
- Tariffs and trade
- Health care
- Inequality and progressivity
- Low income support (Child tax credit)
- Tax reform (wealth tax vs. consumption tax vs. VAT)
- Environmental policy
- and many more “smaller” issues