Introduction (Chapter 1, Gruber textbook)

131 Undergraduate Public Economics Emmanuel Saez UC Berkeley

COURSE LOGISTICS

External Course Website: For lecture slides and assignments

http://eml.berkeley.edu/~saez/course131/course131.html

B-Course Website: For lecture recordings, announcements

https://bcourses.berkeley.edu/courses/1542724

Course follows loosely Gruber, Jonathan *Public Finance and Public Policy*, 2019. Textbook not required, older editions are fine. Links to references are the back of slides.

LECTURES AND SECTIONS

Lectures are essential, count for 8% of grade. .5 point per lecture for attendance and participation in quizzes (i-clicker).

Need 16 lectures out of 25 to get the full 8%. No excuses except long-term (3 weeks+) medical absence.

Strict policy: no laptops, earphones, phones (except for quizzes). Only tablets flat on desk.

Slides will be posted by 3pm on the day of lecture.

Sections taught by GSI also incredibly valuable

Office hours for Professor and GSIs on syllabus

Feel free to ask questions during and after class

I-clicker quizzes

Lectures will have quizzes using iClicker cloud free for students, make sure you register (enrollment then synced with B-course)

Quizzes are to test your understanding, or poll the class.

Participation is part of the attendance grade.

FIRST QUIZ: Do you want to be (or are you) an econ major?

A. Yes

B. No

C. I dont know yet

GRADED ASSIGNMENTS

Attendance and participation in **lectures**: (8% of grade)

Three Problem Sets: (30% of grade), due March 5, April 2, April 30 midnight on gradescope. Assign pages on gradescope (to help grading)

One Midterm at class time: (25% of grade) on Wed, March 12, 5:10-6:30pm

Final exam: (37% of grade) Friday, May 16, 3pm-5pm (120 minutes)

No alternative times for midterm and final

Midterm and final are closed notes, no electronic devices

GRADE DISTRIBUTION FROM 2023

Grade distributions posted on external website (next to past finals)

A + = top 10%, A = next 10%, A - = next 10%

B+ = next 20%, B = next 20%, B- = next 10%

$$C+ = next 5\%$$
, $C = next 5\%$, $C- = next 5\%$

D, F = bottom 5% [non passing grade] typically happen when exams and psets are missing with no valid excuse

Avoid bottom 5% to get passing grade: C- or better

PUBLIC ECONOMICS DEFINITION

Public economics = 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 30-50% of National Income in taxes

3) Expenditures: tax revenue funds traditional **public goods** (infrastructure, public order and safety, defense), and **social state** (education, retirement benefits, health care, income support)

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

Bigger view on government (Saez 2021)

Economists have a narrow minded view of individual behavior: selfish and rational individuals interacting through markets

But social cooperation is pervasive at many levels: families, workplaces, communities, nation states

Cooperation leads to joint production and then requires distribution explaining why humans are so attuned to inequality

Governments are a formal way to organize cooperation/distribution

Archaic human societies depended on social cooperation for protection and taking care of the young, sick, and old

 \Rightarrow Explains best why our modern nation states provide defense, education, health care, and retirement benefits

More modest role for economists

Replacing social institutions by markets does not always work:

Education is primarily government funded: student loans work in economic theory but in practice end up being a huge lifetime burden. For-profit education has a tendency to become a scam

Retirement benefits: Saving for your own retirement works in theory but in practice most people unable to do so unless institutions (government/employers) help them

Health care: Health care relies heavily on government/employers support in all rich countries. People are not able to afford or shop rationally for health care

Economists can still play a useful role in understanding when markets can help and how individualistic forces can undermine institutions

Three questions in public economics

1) When should the government intervene in the economy?

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

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

When should the government intervene in the economy? Economists' traditional view:

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

Inequality is an issue because we are "social beings"

 \Rightarrow 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

1) Externalities: (example: greenhouse carbon emissions) \Rightarrow require government intervention (such as corrective taxation)

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

3) Imperfect or Asymmetric Information: (example: health insurance markets are subject to death spirals as the healthy don't buy)

4) Individual are not rational (= individual failures) analyzed in behavioral economics, field in huge expansion. Example: myopic individuals may not save enough for retirement

Inequality and Redistribution

Even if market outcome is efficient, society might not be happy with the market outcome because it 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





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

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 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 find ways to evade/avoid taxes, reducing tax revenue relative to mechanical calculation

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 in a democracy

Public choice is a sub-field of political economy from a Libertarian perspective that focuses on **government failures**

government failures = situations where the government does not act in the benefit of society (e.g., government captured by a dictator or special interests)

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

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 **social state:** (a) public education, (b) public retirement benefits, (c) public health insurance, (d) income support programs

4) Government spending larger than Taxes: Most rich countries run deficits and have significant public debt (relative to GDP), particularly during since COVID





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.

DIFFERENT LEVELS OF GOVERNMENTS

US Federal government raises about 20% of GDP in taxes (and can run deficits)

State+Local government raise about 10% of GDP in taxes (cannot run deficits)

Decentralized government = a larger fraction of taxes/spending are decided at local level

Decentralized govt can tailor policy to local views (example: California has more liberal policies than Texas)

Redistribution through taxes and transfers harder to achieve at local level (rich can leave local jurisdiction if local taxes are too high) \Rightarrow Local governments tend to do less redistribution

 \Rightarrow Conservatives/libertarians tend to prefer decentralized states

Figure 1-3.

Federal goverment only (state+local excluded) **Total Federal Outlays and Revenues**



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.

DISTRIBUTION OF TAXES IN THE US

Federal government raises about 2/3 of total taxes, State+Local government raises 1/3 of total taxes.

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

Main State taxes: (1) real estate property taxes (30% of state+local tax revenue), (2) sales and excise taxes on consumption (30%), (3) individual and corporate state taxes (30%)

Key questions: how are these taxes distributed by income groups (Saez-Zucman '19 book)? what impact do they have on the economy?



Source: Saez and Zucman (2019)

REGULATORY ROLE OF THE GOVERNMENT

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

1) Minimum wage at the federal level is \$7.25/hour (states or cities can adopt higher min wages: Berkeley \$18.7/hour) \Rightarrow potential impact on inequality

2) The Food and Drug Administration (FDA) regulates the labeling and safety of nearly all food products and approves drugs and medical devices to be sold to the public

3) The Occupational Safety and Health Administration (OSHA) is charged with regulating the workplace safety of American workers

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

PUBLIC DEBATES OVER GOVERNMENT POLICIES

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 cut taxes on corporations and individuals in 2018. Will these tax cuts be extended by Trump in 2025?

Health Care: Up to 2013, 17-18% of the non-elderly U.S. population not insured. Obamacare lowered this down to 10%.

Climate change: Carbon emissions are generating global warming with potentially devastating future consequences. Biden passed law subsidizing green energy. Will Trump undo this?

PROFESSOR SAEZ' RESEARCH

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

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

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

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

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

REFERENCES

Jonathan Gruber, Public Finance and Public Policy, Fifth Edition, 2019 Worth Publishers, Chapter 1

Piketty, Thomas, A Brief History of Equality, Cambridge: Harvard University Press, 2022 (web)

Piketty, Thomas, Emmanuel Saez, and Gabriel Zucman, "Distributional National Accounts: Methods and Estimates for the United States", Quarterly Journal of Economics, 133(2), 553-609, 2018 (web)

Saez, Emmanuel "Public Economics and Inequality: Uncovering Our Social Nature", AEA Papers and Proceedings, 121, 2021 (web)

Saez, Emmanuel and Gabriel Zucman. The Triumph of Injustice: How the Rich Dodge Taxes and How to Make them Pay, New York: W.W. Norton, 2019. (web)