**SPI 593j: Combining Theory and Data to Evaluate Policy**

Princeton University
Spring 2021, Session II

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(subject: SPI-593j)

**Overview**

Many key policy debates, including raising top taxes, EITC expansion, and health insurance reform, involve assessing how policy changes would affect economic activity, government budgets, and the distribution of resources. This course will explore several policy areas and focus on applied economic and empirical methods to show how economists combine theory and data to evaluate such policies. The goal is to enhance applied modeling skills and provide students with methods and practical examples of how these policies are evaluated in agencies such as the Congressional Budget Office, the Joint Committee on Taxation, the US Treasury, and state- and municipal-level economic development agencies.

After illustrating how these approaches apply to inequality and intergenerational mobility and covering some key applied tools, we will evaluate local economic development policies, the Tax Cuts and Jobs Act, Ultra-millionaire wealth taxation, capital gains tax reform, enhancing the EITC, and other policies. For each policy, we will usually start with applied theory of how the policy change could affect behavior, and then turn to how to structure the empirical analysis in light of the theory, estimate effects and important parameters, and then assess policy implications.

**Course Outline (subject to change)**

1. Combining theory and data to understand inequality and intergenerational mobility
   a. Topics: market and non-market causes of inequality, intergenerational mobility, pay disparities, optimization
   b. Methods: linking applied theory to regression, elasticities, calibration, potential outcomes and selection, Roy models, decomposition techniques, counterfactuals

2. Local economic development, place-based policies, Million dollar plants
   a. Topics: regional disparities, state and local business tax incentives, migration decisions, state and local fiscal policy
   b. Methods: Using Rosen-Roback model, event studies, discrete choice

3. Effects of Corporate Tax Reforms at State and National Levels
   a. Topics: Evaluating the Tax Cuts and Jobs Act, firm location decisions, distributional effects of corporate tax cuts, revenue maximizing tax rates
   b. Methods: revenue estimation, minimum distance, linking theory and regression specifications in practice, investment models and user cost of capital

4. Capital Taxation: Mechanical and Behavioral Responses
   a. Topics: wealth disparities, tax avoidance, mechanical and behavioral responses
b. Methods: Using individual-level data and simulation to do revenue scoring, distributional analysis, using structural methods to model the effects of new policies

5. EITC, Value of Health Insurance, and Effects of Tax and Transfer System on Inequality
   a. Topics: labor force participation, labor supply models, mechanical and behavioral responses, Mandated benefits, Measuring inequality
   b. Methods: Using individual-level data and simulation to do revenue scoring, distributional analysis, behavioral responses, using structural methods to model the effects of new policies, Distributional National Accounts

Office Hours:
Office hours will be by appointment.

Grades:
The course grade will be determined as follows:
- Weekly participation: 30%
- Two small group problem sets: 40%
- Final small group empirical project: 30%

Course Format and Requirements:
The first class will describe the course, illustrate how to connect theory and data to analyze policy issues, and then provide an introductory discussion of recent theory and evidence on inequality and intergenerational mobility. Starting with the second class, each class will begin with a discussion of the following week’s problem set, and then move on to that week’s content.

Participation
Attendance and participation in class discussion are important components of the class. Students are expected to come to class having read and thought about the materials and problem set.

Two problem sets (small groups of three or fewer students)
Every week at the start of class will begin with a review of a problem set (due at midnight the day before class). You will pick one from the first set (on program evaluation) and one from the second set (on revenue scoring) via a signup at the start of class. [TBD – may provide additional problem set options that examine effects of reducing discrimination and expanding opportunity]

1. Program evaluation and local fiscal policy (signup for a or b)
   a. Million Dollar Plants. Due midnight before 2nd class.
      i. Analysis of selection
      ii. Analysis of effects
      iii. Welfare maximizing million dollar plant policy
   b. State and local tax policy. Due midnight before 3rd class. Please focus on one of the following taxes: corporate, sales, income, estate, or property.
      i. Analysis of selection
      ii. Analysis of effects
      iii. State revenue maximizing rate
2. **Revenue Scoring** (signup for a, b, c, or d)
   a. **Wealth Taxation.** Due midnight before 4th class
      i. Mechanical Effects of Warren and Sanders wealth tax
      ii. Behavioral and Avoidance Effects
      iii. Bottom line: how much revenue would the Warren and Sanders wealth tax raise?
   b. **Raising Capital Gains Tax Rate to top ordinary rates.** Due midnight before 4th class
      i. Mechanical Effects
      ii. Behavioral and Avoidance Effects
      iii. Bottom line: how much revenue would the capital gains tax raise?
      iv. Bonus. How much more would removing step-up-basis raise if the reform was top rates+ step-up?
   c. **Distributional Impacts of Reducing Student Loan Debt.** Due midnight before 4th class
      i. Mechanical Effects
      ii. Behavioral Effects
      iii. Bottom line: what is the effect on the distribution of wealth? How does this policy affect the racial wealth gap?
   d. **EITC Expansion** (5K max for single, 10K for married, and expanding to qualifying non-parents). Due midnight before 5th class.
      i. Mechanical Effects of EITC expansion
      ii. Behavioral Effects of EITC expansion
      iii. Bottom line: how much would this EITC expansion cost in terms of tax revenue?

*Problem set presentation*
Starting with the second week of class, each class session will have students who signed up for that week jointly lead a discussion of the problem set by presenting their analysis and bringing up points of discussion. We will schedule these during the first week of class at the break.

*Final empirical project (small groups of three or fewer students)*
Each student (group) will conduct an empirical analysis of one of the topics listed below. The empirical project will consist of a write up of their results with supporting tables and figures (3-6 pages including exhibits). The topic must be different than the topics that each student selected to work on for the problem sets (there is some overlap in topics). Here are potential topics (subject to change):

1. How much tax revenue could be raised by taxing the rich?
2. How expensive is Medicare for All?
3. Does the EITC pay for itself?
4. How would median worker compensation (wages + benefits) have evolved if health care costs grew with inflation? Or if healthcare costs were Medicare costs per beneficiary adjusted for demographic and cost differences?

5. How much does each state collect in federal tax revenue and how much does it receive in federal spending? How does that vary by tax and program? How has that changed overtime?

6. How will changing demographics affect social security and Medicare revenues and expenditures in the coming decades?

7. How progressive are state+local+federal taxes in the US (measured as tax liability/national income) in recent years? How has this varied over time and by program?

8. How much would New Jersey have to raise taxes or cut spending to prevent it’s pension obligations from growing as a share of GDP?

9. How much growth since 1980 went to the top 1% (using panel data rather than repeated cross sections)? How does this vary by type of income? How do health benefits fit in?

10. Tax Reform
   a. What are the revenue, growth, and distributional effects of raising capital gains taxes to personal income tax rates?
   b. What are the revenue, growth, and distributional effects of eliminating step up basis at death?
   c. What are the revenue, growth, and distributional effects of extending the EITC to childless adults?

11. How large are subsidies for housing in the United States? Please include the mortgage interest deduction, imputed rents, capital gains provisions for home sales, and other major provisions.

12. What are the effects on growth and the income distribution of reducing barriers to historically underrepresented groups? Use Hsieh, Hurst, Jones, Klenow (2019) and/or Chetty, van Reenen, Zidar, Zwick (2021) framework to explore this question

13. What is the effect of social security on the racial wealth gap? How would social security reforms affect wealth by group?

14. Other topics (approval from instructor required)

**Lecture Schedule and Readings (subject to change):**

**Week 1: Inequality and Intergenerational Mobility**


Week 2: Local Economic Development and place-based policies


https://research.upjohn.org/cgi/viewcontent.cgi?article=1277&context=up_press


https://eml.berkeley.edu/~pkline/papers/TVA_web.pdf


http://www.trouphoward.com/uploads/1/2/7/7/127764736/the_assessment_gap_-_racial_inequalities_in_property_taxation.pdf


Supplemental:


**Week 3: Tax Cuts and Jobs Act and State Corporate Taxes**

https://www.aeaweb.org/articles?id=10.1257/aer.20141702


Joint Committee on Taxation, December 2017.
- Macroeconomic Analysis Of The Conference Agreement For H.R. 1, The "Tax Cuts And Jobs Act"
- Distributional Effects Of The Conference Agreement For H.R.1, The "Tax Cuts And Jobs Act"
- Estimated Budget Effects Of The Conference Agreement For H.R.1, The "Tax Cuts And Jobs Act"
  - https://www.jct.gov/publications.html?func=select&id=76

https://fas.org/sgp/crs/misc/R45186.pdf

**Week 4: Capital Taxation**
(*) Saez, Emmanuel and Gabriel Zucman, 2019, Scoring of Warren Wealth Tax Proposal
https://eml.berkeley.edu/~saez/saez-zucman-wealthtax-warren-online.pdf


Saez, Emmanuel and Gabriel Zucman, 2019, “Response to Summers and Sarin, `A wealth tax presents a revenue estimation puzzle,’ Washington Post, April 4”

(*) Sarin, Natasha and Larry Summers, 2019, “Be very skeptical about how much revenue Elizabeth Warren’s wealth tax could generate” Washington Post

https://www.brookings.edu/bpea-articles/progressive-wealth-taxation/


(*) Saez, Emmanuel and Gabriel Zucman, 2019, “How would a progressive wealth tax work? Evidence from the economics literature
https://eml.berkeley.edu/~saez/saez-zucman-wealthtaxobjections.pdf

https://www.aeaweb.org/articles?id=10.1257/jep.29.1.47


Joint Committee on Taxation, 2015, “History, Present Law, and Analysis of the Federal Wealth Transfer Tax System,”
https://www.jct.gov/publications.html?func=startdown&id=4744


**Week 5 and 6: EITC, Health Benefits, and Effects of Tax and Transfer System on Inequality**


Supplemental:


https://www.journals.uchicago.edu/doi/10.1086/512249


