Course Overview

1. Social Insurance
2. Redistribution
3. Place-Based Policies / Local Public Finance
Outline of (27) Lectures

1 Social Insurance (~14)
   - Why Have Social Insurance (~1.5)
   - Empirical Analysis of Private Insurance Markets (~5)
   - Optimal Provision of Social Insurance Benefits (~6)
   - Choice of Instrument (~1 lecture)

2 Redistribution (~6)
   - Social Welfare Frameworks (~3)
   - Cash vs. In Kind (~1.5)
   - Take-up and self-targeting (~1.5)

3 Place-Based Policies (3)

4 Synthesis: Health Insurance Policy for Low Income Adults (2)
(Some) course goals

- Key economic concepts
- (Some of the) highlights of (some of the) literature
  - (Some of) what we know
  - Will also emphasize what we don’t know (i.e. good research topics!)
- Exposure to a range of empirical techniques
  - Including: RCTs, "reduced form" quasi-experimental work; sufficient statistics; "structural estimation"; calibrated life cycle models
- Key theme: complementarities
  - between theory and empirics
  - across empirical approaches
Institutional background

- Will spend minimal time on key institutional details
  - Not an efficient use of limited class time
  - Have tried to focus course around economic issues rather than programs per se
    - In practice a given economic issue has often have been studied in the context of a particular program
    - Good strategy for students: can you apply these ideas / tools to a different program?
- A deep understanding of institutional details essential for own research
  - You should also familiarize yourself with the basics on any topic we are discussing
  - Good sources (listed on syllabus)
    - For general orientation: Gruber textbook
    - For more details: Moffit 2016
Course mechanics

- **Reading list**
  - Read a small number of papers carefully
    - For maximal learning: read the bolded papers before class
    - Read actively / critically.
    - Keep a list of research ideas that occur to you!
  - Additional listing hopefully a useful reference when a topic sparks your interest

- **Strongly recommended**
  - Attend public finance lunch (Mondays 12 – 1)
  - Attend applied micro seminar (Mondays 4 – 5:30)
Will cover some essential topics that I will assume knowledge of
  - e.g. this week will cover Rothschild-Stiglitz model (emphasizing its public finance implications)

Will also cover (as needed / useful):
  - Review (or introduction) of techniques that I assume knowledge of in class
  - Sorting out confusions I introduce in class

Attendance strongly advised (if time conflicts with another section we can re-optimize)
Course Requirements

- Class participation (cold calling)
- Written response papers (~12)
- Two problem sets
- Research proposal
  - Pose a question motivated by class and a randomized evaluation that could answer it
  - Will have section(s) to discuss aspects of design of randomized evaluation
- Final exam (closed book, 3 hours)
Assignment: Provide two "big picture" comments on the assigned paper

- At least one must at least attempt to be constructive
- No more than 1 page (double spaced).
- Due: HARD COPY with your name outside my office by 9am
  - Feel free to coordinate
Written comments

- Assignment: "Big picture" comments

- Examples:
  - Suggestions for future research
  - Important question related to paper that paper does not address or leave unanswered
  - Alternative interpretation for paper’s findings
  - Major substantive concern with analysis (ideally with suggestions for investigating / addressing)

- What is the objective?
  - Ensure you read paper carefully so we can have a more informed discussion in class
  - Get you to think actively, critically, and constructively about research

- If you have specific / narrow questions / concerns about paper please write them down and bring them up in class when we discuss the paper
Lecture 1: Why have Social Insurance?

- What is Social Insurance?
- Potential Rationales for Social Insurance
- What can government do?
- Should government intervene?
What is insurance?

- Insurance transfers resources from states of the world with low marginal utility of consumption to those with high MU of consumption
  - Goal: equate (smooth) marginal utility of consumption across states of the world
  - States of world: e.g. sick vs. healthy; car accident vs. not
- Key point: risk averse individual prefers to pay $10 for sure than face a one in ten thousand risk of having to pay $100,000
  - By pooling idiosyncratic risk, can make everyone better off
Insurance: A Free Lunch!

\[ U(\bar{y}) = E[U(\bar{y})] \]

\[ \pi = \text{risk premium} \]

\[ \pi \text{ satisfies } U(\bar{y} - \pi) = E[U(\bar{y})] \]
What is Social Insurance?

- Government intervention in provision of insurance
  - E.g: unemployment, disability, health, death
  - Motivation: insurance against shocks to individual
    - Consumption smoothing value to risk averse individuals (recall graph: free lunch!!)

- Is it different from means-tested redistribution (e.g. cash welfare, food stamps, subsidized housing, subsidized health insurance)
  - Yes: Redistribution based on “permanent” differences (vs smoothing shocks)
  - Note: Redistribution can be thought of as insurance behind the Rawlsian veil of ignorance
  - Some programs explicitly involve both insurance and redistribution (e.g. Social Security / public pensions)
The changing function of government

Government Spending by Function, 1953 and 2014 • Government today devotes a much larger portion of its budget to social insurance than it did 50 years ago.

Data from: Office of Budget and Management (2014); Bureau of Economic Analysis, nIPA Table 3.16.
SI share of federal expenditures has increased from ~9% (1953) to ~55% (2014)

“Loosly speaking, the post-cold-war federal government is a big pension fund that also happens to have an army” (Krugman 2001)
Federal Outlays by Major Category 2017

- Social Security: 22%
- Medicare: 17%
- Medicaid: 8.8%
- Defense: 14%
- Net Interest: 6.2%
- Other: 32%

Source: CBO 2018
Share of Federal Spending (Projected for 2048)

- Social Security: 21%
- Medicare: 21%
- Medicaid, CHIP, and Marketplace Subsidies: 20%
- Other: 26%
- Net Interest: 11%

Source: CBO 2018
# Main Social Insurance Programs in the US

<table>
<thead>
<tr>
<th>Program</th>
<th>People Receiving Benefits (Millions)</th>
<th>Annual Federal Spending (Billion $)</th>
<th>Year</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Care</td>
<td></td>
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<tr>
<td>Medicare</td>
<td>57</td>
<td>583</td>
<td>2016</td>
<td>HHS 2016 budget-in-brief</td>
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<tr>
<td>Medicaid</td>
<td>72.6</td>
<td>344</td>
<td>2016</td>
<td>HHS 2016 budget-in-brief</td>
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<tr>
<td>Old Age Assistance</td>
<td>50</td>
<td>765.6</td>
<td>2016</td>
<td>SSA monthly statistical snapshot, June 2016</td>
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<tr>
<td>Workplace Insurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment Compensation</td>
<td>?</td>
<td>32.3</td>
<td>2016</td>
<td>Congressional Research Service Report 33362</td>
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<tr>
<td>Workers Compensation</td>
<td>?</td>
<td>61.9</td>
<td>2015</td>
<td>Congressional Research Service Report 44580</td>
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<tr>
<td>Disability Insurance</td>
<td>10.7</td>
<td>132</td>
<td>2016</td>
<td>SSA monthly statistical snapshot, June 2016</td>
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<td>EITC</td>
<td>62.9</td>
<td>54.9</td>
<td>2012</td>
<td>Congressional Research Service Report 44327</td>
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<td>Welfare</td>
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<tr>
<td>SSI</td>
<td>8.3</td>
<td>56.4</td>
<td>2016</td>
<td>SSA monthly statistical snapshot, June 2016</td>
</tr>
<tr>
<td>TANF</td>
<td>5.8</td>
<td>6.7</td>
<td>2012</td>
<td>Congressional Research Service Report 44327</td>
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<td>SNAP</td>
<td>58</td>
<td>77.8</td>
<td>2012</td>
<td>Congressional Research Service Report 44327</td>
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<td>WIC</td>
<td>8.1</td>
<td>7.2</td>
<td>2012</td>
<td>Congressional Research Service Report 44327</td>
</tr>
<tr>
<td>Housing Assistance</td>
<td>10.8</td>
<td>33.4</td>
<td>2012</td>
<td>Congressional Research Service Report 44327</td>
</tr>
</tbody>
</table>
Main Social Insurance Programs in US

- Prior slide gives (crude) sense of relative magnitudes (in terms of $ and "beneficiaries") of different programs (c. 2016)
  - Note: actual “beneficiaries” exceed those who receive benefits ex post (insurance value ex ante; incidence of costs to uninsured)
- In terms of $ and people, Old Age Assistance and Medical Insurance dominate
- In terms of insurance value?
  - Insurance value is about variance, not mean
- Meta question: How to think about optimal allocation of $$ across programs (including those with potentially different goals - eg insurance vs redistribution)?
  - Stay tuned for lecture on Hendren’s "Marginal Value of Public Funds" (MVPF) and his new WP...
Rationales for social insurance

Thus far: insurance can be very valuable and government is very involved

Now: why would government be involved?

1. Private market failures
2. Redistribution
3. Individual failures of rationality / optimization
4. Paternalism
Private market failures

- Imperfect competition [go take IO]
- Asymmetric Information
- Aggregate Shocks
- Externalties
Asymmetric Information

- Adverse selection
  - Individuals have private information about their costs to insurer
  - My favorite private market failure

- Moral hazard
  - Individuals take hidden actions in response to insurance contract
  - In general not something the government has a comparative advantage in addressing.
  - Critical though for optimal design of insurance (public or private)
    - Tradeoff between insurance (risk spreading) and incentives (moral hazard)
Aggregate Shocks

- Economic downturn (UI), natural disasters, terrorist attacks
- Private insurance markets can diversify idiosyncratic risk cross-sectionally but if want to smooth intergenerationally, government may have comparative advantage.
  - Or perhaps the capital markets ("act of god" bonds)
  - Relatively little work here.
Externalities

Examples:

- Infectious disease (mandatory vaccines)
- Third-party damages from driving (mandatory automobile liability insurance)

Good Samaritan’s problem

- Samaritan’s dilemma (Buchanan 1975; Coate 1995): we can’t commit not to take care of people in certain circumstances, which will distort their private choices (e.g. food pantries; hospital charity care)

Note: Traditionally, externalities have gotten relatively little attention as motivation for social insurance

- But are potentially important in some contexts
  - Spoiler Alert: Samaritan’s dilemma may be crux to health insurance policy / reform
- Will return to later in course / a great area for work
Figure 4: Potential Rationales for Government Intervention

Notes: The above figure depicts potential justifications for government intervention to increase coverage. Panel A depicts a competitive market in which there is adverse selection (characterized by a downward sloping marginal cost curve). Panel B depicts a setting with no selection but with market power, where \( \mu \) represents the per unit profit. Panel C depicts a setting with no selection but with a positive externality associated with insurance; the figure depicts the case of a constant positive externality, where the social marginal cost curve is represented by shifting the private marginal cost curve downward by the size of the externality.

Source: Cabral et al. (2019)
Want to redistribute based on hidden information ("ability")

- Social Insurance as Akerlovian tag (Akerlof 1978)
- lifetime earnings (SS); health insurance (poor are sicker).
- (Can think of as a form of ex-ante insurance - insurance against being born a given "type")

Do we want this type of redistribution (i.e. from losers to winners)?

Is this the most efficient way to do redistribution (vs. e.g. progressive income tax)

Note many models of redistribution share features w models of asymmetric information / adverse selection (e.g. Diamond-Mirlees and other screening models)
Behavioral Biases

- In purchasing insurance
  - Overconfidence / don’t understand probabilities (young think they’re invincible)
  - Overweight low probability events (buy flight insurance)
  - Inattention / inertia / confusion...

- In consumption decisions
  - e.g. Myopia: too little savings; under-investment in preventive care
Paternalism

- Social planner wants to encourage behavior individuals would not choose
  - "We as a society don’t want access to health care to depend on income" (even if poor would prefer the cash equivalent)

- Why?
  - Non-individualistic social welfare function
    - Consumption of that particular good enters SWF not through individual utilities
  - "Consumption Externalities" My utility depends on your consumption
What can government do?

- Power to change prices
  - tax/ subsidize
  - regulate pricing (levels, formulas)

- Power to change quantities
  - Mandate purchases or offering
  - Publicly provide
  - Regulate (e.g. minimum standards)
Choice of Instrument

- SI takes many different forms:
  - Public provision of insurance (Medicare, Social Security, UI)
  - Mandate that firms provide insurance (Worker’s Comp)
  - Subsidize / Regulate private insurance markets
    - Tax subsidy to employer provided health insurance
    - Regulate pricing and contracts in health insurance exchanges
    - Provide "public option" (Traditional Medicare or Medicare Advantage) or not (Medicare Part D)

- Choice of Instrument = understudied question
  - Conditional on intervention, what form should it take?
  - {Pay attention to the dog that didn’t bark}
Empirical Analysis of Social Insurance Programs

- Theoretical possibility of market failure per se does not tell us if or how govt should intervene
  - Enter empirical work
- Empirical questions for any given insurance market / social insurance program:
  - Is there a market failure / what are the market failures
  - What is the magnitude of their efficiency costs?
  - What is the optimal policy intervention? (choice of instrument)
  - How large is welfare gain from a given (or optimal policy) intervention?
  - What are costs from policy intervention (vs. benefits)?
    - How to think about costs? (Transfers vs fiscal externalities)