Using economics to understand health and welfare in America

Jonathan Fox, FU Berlin

jfox@zedat.fu-berlin.de

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Introduction

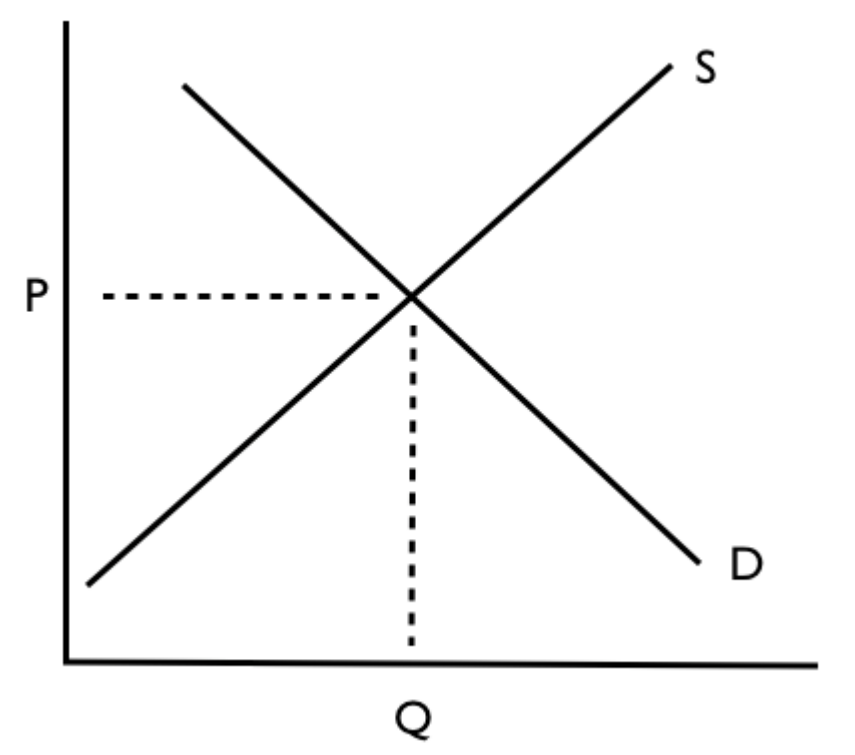
- Will look at the development of three areas of health and welfare in the U.S. to try to understand why there exists such a patchwork safety net there
  - Health care provision and health insurance
  - Public poor relief (tax and transfer)
  - Social insurance (contributions to a community pool)
- Focus is on the 20th century forward, and mainly on the origins of these

Goals of the talk

- Show how economists think about these concepts, and hopefully provide some tools for understanding and discussing these subjects
- Use the framework of information problems to help understand why the provision of health and welfare has been such a challenge in America and other societies
- Get a sense of how these challenges contributed to the historical and current patchwork safety net in the U.S.

Basic model of Supply and Demand and its assumptions

- As the price of a good rises, consumer demand less of it and suppliers are willing to supply more
- Example economy: Brewers, Bakers, and Butchers with Beer, Bread, and Meat
- For market to work as expected, participants must be:
  - Rational
  - Self-interested
  - Subject to no costs of transaction (information or otherwise)
    - Consumers have perfect information about goods and services purchased
    - Firms have perfect information about productivity of inputs (labor and capital)



Trouble of transactions costs

- If transactions costs are high, it can be difficult to allocate resources efficiently
- The cost to acquire information a particularly troublesome form of transactions costs
  - George Akerlof and his market for lemons

Information costs in the areas of health and welfare

- Areas of health and welfare particularly vulnerable to problems of information
  - Provision of health care and doctor-patient relationship
  - Enrollment of the sickest people in health insurance plans
  - Increased risky behavior with insurance coverage
  - Reduced work incentive for recipients of poor relief

- Economists classify detrimental behavior resulting from information problems into two different groups:
  - Adverse Selection
  - Moral Hazard

Problems of information: Adverse Selection

- When there are different types of individuals or goods, and it is difficult to distinguish between types, serving them both may require averaging across the two groups

- This may lead to the “bad” individuals or goods (lower productivity, higher costing, lower quality, etc.), crowding out the “good” individuals or goods (higher productivity, lower costing, higher quality, etc.)

Problems of information: Moral Hazard

- When it is difficult to observe behavior, an economic agent may behave in ways harmful to bargaining partners
- Economists like to call this the Principal-Agent problem
  - Voter and Politician
  - Stockholder and CEO
  - Manager and Worker
  - Insuree and Insurer

General mechanisms for dealing with these problems of information

- Mechanisms sometimes developed in the markets
  - Signaling and screening
  - Cost and risk sharing between the different economic agents
- Mechanisms sometimes involve cultural or institutional solutions
  - Limiting economic interactions with unknown economic agents
  - Religious connections between current actions and future rewards
  - TUV system in Germany
  - FDA approval system in U.S.

Information problems in health care: Consumers

- Consumers of health care generally seeking health care as a means, not an end
  - Want health, not medical care
  - Medical care is one input to the individual production of health
  - Health is also "produced" through environment and individual behaviors

Information problems in health care: Providers

- Consumers (patients) are dependent on providers (physicians) for treatment
  - Provider offers both the information, and the service
  - Hard to know the quality of a physician or hospital beforehand
  - Imperfect connection between treatment and outcomes

Information problems in health care: Uncertain futures

- Perhaps the biggest problem facing the consumers and providers of health care is the uncertainty surrounding future outcomes
  - Consumers uncertain of health status in future and when care will be needed
  - Providers uncertain when consumers will need their services
- Small, regular issues can be dealt with, large irregular issues harder
  - A car accident or cancer diagnosis can be financially devastating for a household
  - Possible to save or borrow for such an event
  - Or possibly insure

Provision of health care through insurance

- Most individuals do not pay directly for health care, insurance companies pay
  - Protects against risk and reduces variability of income

- If insurance companies are profit maximizing and exist in competitive markets, then
  - $Profits = Revenues - Costs = R - C$
  - $Profits = Premium * Policy\ value - \left(P^{sick} * C^{sick} + P^{not\ sick} * C^{not\ sick}\right)$
  - Then, $Premium = P^{sick} + \frac{Processing\ costs}{Policy\ value}$
  - And the premium is actuarially fair

Individual health insurance decisions when firms are profit maximizing and markets are competitive

- Under the above conditions, possible to purchase nearly full insurance
  - Full insurance: wealth is equal in both states of the world (sick and not sick)
- If transactions or processing costs exist, then can still get nearly there
- However, know that this is not always the case
  - Traditionally been very difficult for elderly individuals to purchase insurance
- The implicit assumption here is that insurance firms can determine for each individual the probability of getting sick or not

Moral hazard in health insurance markets

- In reality, the cost of insurance can increase with the insurance purchase
  - Engagement in more risky behaviors
  - Consumption of more expensive care, or care that is less necessary
- Now, the premium has to incorporate two parts:
  - Premium for protection of risk
  - Extra cost due to moral hazard
- If demand for health care is sensitive to changes in price, then this effect exists
  - Can help us understand why it is easier to obtain insurance for emergency services, which are not very sensitive to changes in price, versus elective/preventative procedures, which are much more sensitive to changes in price

Adverse selection in health insurance markets

- As the price of insurance rises, those who choose to purchase insurance will be those most certain of using it
- Much easier for an individual to asses their health risks than a health insurance firm
- Then, the average health of the applicants for insurance declines as the price level rises

U.S. solution (Pre Affordable Care Act)

- Group insurance:
  - Mitigate adverse selection by pooling the risks across a certain group
  - For instance, only those who are employed or enrolled in universities receive insurance
- Individuals left out would have to find insurance themselves or through managed care systems of Medicare and Medicaid

Historical origins of employer-based insurance

- Prior to WWII, health insurance sometimes offered through unions or fraternal organizations
- During WWII: Price controls over all types of different markets, including labor markets
- Employers use non-wage benefits to get around these

Persistence of employer-based care in the U.S.

- After WWII, price and wage controls gradually lifted, so less of a bargaining chip for employers
- However, fringe benefits were exempted from the taxable income of employees
- Some inherent value of organizing insurance through employment
  - Health risks are pooled
  - Decentralization allowed experimentation and innovation
  - Employees liked it

Moving on from health insurance as a non-wage benefit

- However, significant costs in having health insurance given as a non-wage benefit
  - Insurance tied to having a job
  - Lack of choice in plan
  - Privacy concerns with employer knowledge of medical conditions
  - Creates more administrative expenses
  - Employees don't know how much plans actually cost
- ACA doesn't eliminating dependence on employer-based insurance, but does transform it from an optional benefit to a required mandate
  - Much like worker's compensation

20th century origins of poor relief in the United States

- America always had a complicated attitude towards providing relief to the poor
- Poor relief attitudes passed down from the English poor laws, and the programs of Indoor Relief versus Outdoor Relief
- Mrs. Charles Russell Lowell, "The Economic and Moral Effects of Outdoor Relief"
  - Outdoor relief supports a valley of idleness over a valley of industry
  - Outdoor relief "serves to weaken the character, to excite the gambling spirit, the recklessness and extravagance which come of chance gains"
- Before 1910s, the prevailing philosophy was combination of indoor relief and private charities

Information problems and poor relief

- Hard to observe how recipients of poor relief behave
  - Recipients could be choosing poor relief over available work (Moral Hazard)
  - Could lead to a change in the composition of a population (Adverse Selection)
- Fears regarding the problems of moral hazard and adverse selection have led to limited transfer payment programs
  - Limitation to "deserving classes" (i.e. war veterans, mothers with children, disabled workers)
  - Food stamps instead of cash
  - Minimum residency requirements for financial aid, etc.
- In U.S., these sorts of programs only exist when there is a supporting organization politically strong enough

Social insurance

- For the U.S., compared to poor relief, social insurance more successfully enacted
  - E.g. Workman's compensation
- Social insurance: Public program paid for or on behalf of the individuals that benefit
- Still subject to the same information problems as normal insurance markets, so often are limited to specific population groups where contribution is mandatory
  - Mandatory contribution can mitigate problem of adverse selection
  - Still problems with moral hazard, and perspectives differ with how to address this

Origins of U.S. social insurance and the Social Security Act

- Programs that developed and spread at the state level were eventually combined into federal legislation with the 1935 SSA

- Brought together, set minimum standards, provided matching grants to states
  - Old Age Assistance
  - Mothers' Pensions
  - Aid to the Blind
  - Workman's Compensation
  - Unemployment Insurance

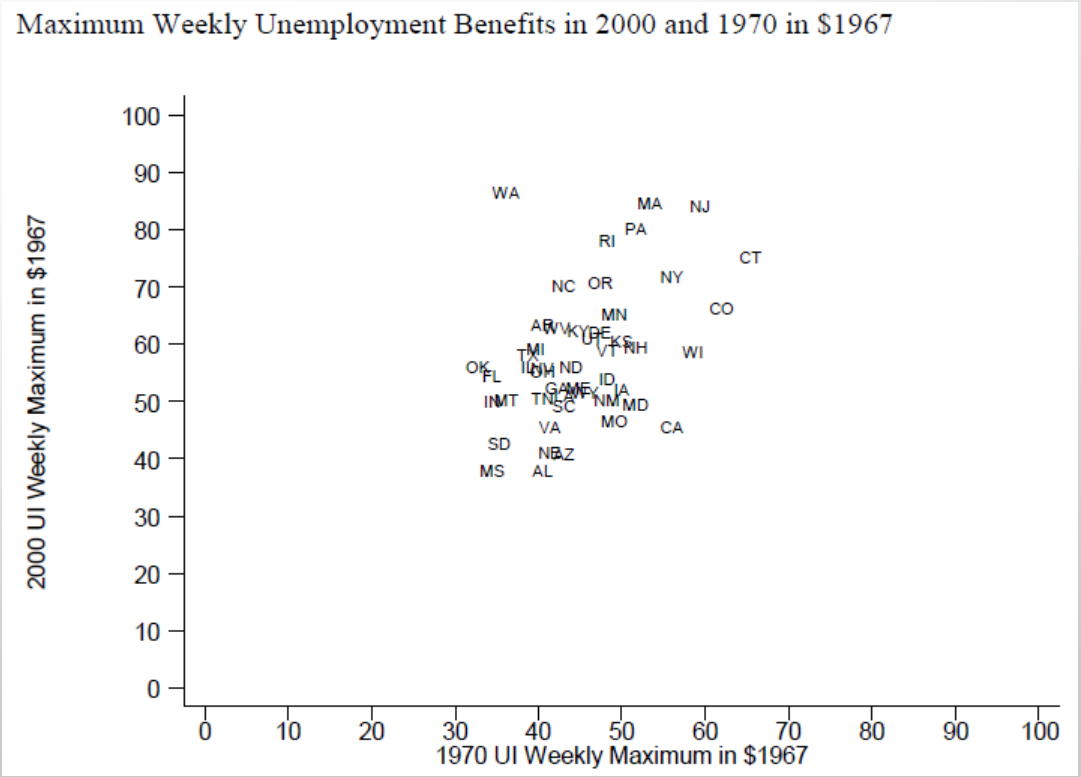
- One program, organized solely at federal level: Old age insurance

Evolution of SSA programs

- Many of the programs expanded in their coverage or eligibility, some programs added
  - Medicare and Medicaid added in 1965
  - Mothers pensions to Aid to Dependent Children to Aid to Families with Dependent Children to Temporary Assistance to Needy Families
  - Aid to Blind replaced with disability insurance
- In the original SSA, states given power over disbursement of funds
  - Exception was the Old Age Insurance Programs
- Allowed states to choose their own path and invest in health and welfare generously or sparingly
  - If political interest groups and powerful organizations in favor, get generous benefits
  - If moral hazard considered to be a large problem, and these groups not in favor, benefits end up sparse

Historical origins of current variation

- Those states that participated more at the beginning also tend to participate more today



Persistence of attitudes across U.S. states

Expanded ACA Medicare coverage in 2013	% of State Church members Catholic in 1916	% of the State Urban in 1910	Alcohol prohibition	Women's suffrage	Mothers' Pensions	Workers Compensation	Old Age Assistance laws
Yes	47	48	1913.6	1913.2	1916	1914.1	1932.6
No	24	27	1910	1907.4	1917.5	1919.5	1935.2

Finishing points

- Information problems can lead to moral hazard and adverse selection
- These issues seem to manifest themselves particularly strongly in the areas of health and welfare
- Leads towards limited direct transfer programs in the U.S.
- Perceptions regarding the severity of moral hazard problems led towards differences in the public provision of health and welfare
- Seems to be some level of path dependence in terms of this provision