Social Welfare and Social Insurance

EC3060 Economics of Policy Issues
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Social welfare and Social Insurance

- Relation between social justice and social insurance provided by the government
1. Social Welfare and Social Insurance

What is Social Justice?

- Social justice through actual compensation
- Social justice through competitive markets
- Social justice as equality
- Social justice as equal opportunity
- Social justice as the right of possession
- Social justice with reference to insurance
- People want to protect themselves against personally adverse outcomes
- If insurance could be provided by private insurance market
  Then nobody would require assistance from the government
The private demand for insurance

- Risk-averse people seek risk insurance because they wish to avoid risk
- A risk-averse person values additions to income less than losses to income
- Risk aversion is reflected in declining marginal utility of income
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Social welfare and social insurance

- Governments can act as an insurance company and provide social insurance.
- Social insurance is related to the idea of a social welfare function.
- A social welfare function measures the social (total) welfare of the entire population.
- Suppose there are \( n \) people in the population.
- Social welfare function:

\[
W = f(U_1, U_2, \ldots, U_n)
\]
Social welfare function:

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Where

\[ \frac{\partial W}{\partial U_i} > 0 \]

\[ i = 1, 2, \ldots, n \]
A Pareto improving change increases social welfare

When any person is better off, the measure of social welfare indicates that the society as a whole is better off.

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• The social weights of the persons change along the social welfare contour.

• The slope of the contour is defined by the ratio of the two individual’s social weights.

• The slope indicates a society’s willingness to trade off the utility of one person for the utility of another.
Efficiency and Income distribution

- Governments redistribute rather than distribute income
- Because of the excess burden of taxation, a government faces a leaky bucket of income redistribution
Social Insurance

- A government that redistributes income to maximizing social welfare is providing social insurance
Rawls and the weakest link

- People would want to choose a social welfare that focuses on improving the well-being of the poorest person in the society

- Social welfare function:
  \[ W = \max(\min U) \]
Bentham: The greatest good for the greatest number

- Social welfare is defined by adding the utilities of everybody in society.
- For $n$ people in a society, the social welfare function is:
  \[ W = U_1 + U_2 + \ldots + U_n \]
- All $n$ people have equal social weights
Summing up

- Risk averse individuals seek protection against personally adverse events that are beyond their control.
- Government acts as an insurance company that spreads risk among the population.
- By spreading risk through social insurance, the government increases personal utilities of the risk averse population.
Why cannot private insurance markets provide the insurance that a government provides through social insurance??
Three main reasons why private insurance companies refuse to provide insurance

- Adverse selection

- Inability to verify the outcomes against which insurance is sought

- Moral hazard
1. Adverse selection

- Adverse selection occurs when people know more about their own characteristics and personal risk than do suppliers of insurance.

- Individuals can be High-risk/Low-risk.
Low-risk people might self-insure themselves or underwrite their own risk.

Low-risk people leave the insurance pool of the general population.

But high-risk people DON’T!

Insurance premium increases.

Demand for private insurance becomes restricted to high-risk people.

The private insurance market collapses!
2. Inability to verify outcomes

- The insurance company does NOT know the true reason for a person’s inability to work, while the person seeking insurance does
3. Moral Hazard

- Moral hazard describes personal behaviour that influences the likelihood that an adverse outcome arises
Government as insurer of last resort

- Government can cope with Adverse selection by making participation in social insurance compulsory
- Government CANNOT verify outcomes
- Government CANNOT solve problems of moral hazard/
Entitlements and Incentives

- Entitlements: benefits provided by the government through social insurance

- Two types of entitlements:
  - Payments of money
  - In-kind transfer (health care, education, housing, food)

- Government uses public finance to provide private goods
When entitlements are targeted to particular people, a restriction on income, or wealth (=means tests) or on age defines eligibility.

Some entitlements are not targeted to particular people in need, but they are universally available.
- For example: health care or schooling for children.
Moral hazard and entitlements

- Moral hazard is the basis for a principal-agent problem between society and the beneficiaries of the entitlements, when the beneficiaries are led to act in ways that the society did not intend.

- Principal-agents problems can be solved through incentives.
Entitlements can be linked to work by designing an income tax that encourages work at low levels of earned income

Example: tax credit

- Earning income is subsidized through the income tax structure. Marginal tax rates are negative!
- As income increases, the subsidy of earned income is eliminated and the marginal tax rate becomes positive
Consider an entitlement to a personal income of Y euros

Y euros is a minimum entitlement to income

An individual will always have minimally Y euros

Question:

- How is the entitlement provided??

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The public policy of providing a subsidy for earned income of $s$ euros per hour

- has changed incentives
- has led the recipient of tax-financed income transfers to choose to work to earn the minimal entitlement income of $Y$ euros

- The society does not value the disutility of effort that the beneficiary must now exert by having a job
Unemployment insurance

- Unemployment insurance provides entitlements to income, conditional on first having had a job and then becoming unemployed.
- The entitlements are generally paid by payroll taxes paid by employers on behalf of employees.
- Private markets fail to provide unemployment insurance due to the three reasons:
  - Adverse selection
  - Moral hazard
  - Inability to verify outcomes
What can the government do?

- In response to adverse selection, government can make unemployment insurance compulsory.

- In response to moral hazard, unemployment insurance is usually provided for a limited time period.