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:

$$W=f(U_1, U_2, \ldots, U_n)$$

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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:

$$W=U1+U2+\ldots+Un$$

- 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

Work and welfare

- 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 fails 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.