Asymmetric Information

RIDLEY COLLEGE

SINCE 1889

Assessment Objectives

Specific Expectations	
AO2	Distinguish between adverse selection and moral hazard
AO3	Evaluate government responses to the problem of asymmetric information, including legislation and regulation, and provision of information
AO3	Evaluate private responses to the problem of asymmetric information, including signalling and screening

Asymmetric Information

- **Asymmetric information** is a type of market failure where buyers and sellers do not have equal access to information.
  - Usually resulting in an underallocation or resources to the production of goods and services, and therefore allocative inefficiency.
  - Parties to a transaction with less access to information try to protect themselves against the consequences of of the information asymmetry.
  - In some cases buyers may have more information than sellers; in other cases the opposite holds where sellers have more information than buyers.
  - Usually, the competitive market mechanism presupposes that all firms and all consumers have complete information regarding products, prices, resources and methods of production.

Adverse Selection

- **Adverse selection** a type of asymmetric information where one party has more information than the other party about the quality of the product being sold.
  - In a free unregulated market, the result is usually to underallocate resources to the production of the good.
    - If the seller has more information, such as when selling a used car, the buyer will reduce demand.
    - If the buyer has more information, such as regarding one's health condition when buying health insurance, the seller will reduce supply.
  - Consumers are likely to be aware of the possible dangers to themselves, and will be cautious about buying the good or service, resulting in lower demand, less production and lower sales.
  - However, if consumers are unaware of the possible hidden dangers, there could be overallocation of resources to the production of these goods and services.

Adverse Selection: Solutions

- There are several possible solutions to adverse selection where the seller knows more than the buyer including:

1. **Regulation**
   - Government can pass laws and regulations that ensure quality standards and safety features that must be maintained by producers and sellers of goods and services.
   - Legislation and regulation are time-consuming bureaucratic procedures, which sometimes work to slow down economic activities
   - Regulatory and quality control activities have very large opportunity costs.
2. **Provision of information**
   - Governments may also respond by directly supplying information to consumers, or by forcing producers to provide information, thus protecting consumers in their purchasing decisions.

Adverse Selection: Solutions

- There are difficulties involving the collection and dissemination of all the necessary information to consumers, the accuracy of the information, as well as the opportunity costs in providing the information.
- It is sometimes not possible to eliminate an information asymmetry between sellers and buyers, because no matter what regulations and information are provided, there is still room for the seller to hide some information from the buyers.
- **Example:** Doctors and lawyers have specialized, technical information about their clients that the clients themselves do not possess. Doctors and lawyers often use this information for their own private gain by selectively revealing information to their clients that causes them to demand more services than are necessary.
- **"Supplier-induced demand"** is the demand that is induced (created) by the supplier, which would not have appeared if the client has equal access to information.

Adverse Selection: Solutions

3. **Licensure**
   - Licensing if often required for professions in many countries in order to ensure adequate training and professional competence.
   - Licensing may limit the supply of people in a profession, raising the price of their services and increasing their incomes at the expense of consumers who must pay higher prices.
4. **Screening**
   - Method used by the party with the limited information, in this case the buyer.
   - The buyer may try to get more information about what they are buying, in other words they screen the product or the producer or seller of the product.
   - It may in providing consumers with some missing information, but it can not on its own provide systematic and complete information to match the information available on the seller's side.

Adverse Selection: Solutions

5. **Signalling**
   - Method used by the party that has more information, or in this case the seller.
   - The purpose of signalling is to convince the buyers that the produce being sold is of good quality.
   - Common methods include the use of warranties, and the establishment of brand names that convey feelings of reliability.
   - The problem with signalling is that it is unlikely to provide full information to buyers, and it may even provide inaccurate or misleading information by sellers eager to promote and sell their product.

- Adverse selection may also arise where the buyer has information not available to the seller.
  - Often arises in the area of insurance services, where the buyer of insurance has more information than the seller.
  - In a free unregulated market, adverse selection results in an underallocation of resources to health insurance services, as the insurance company reduces the supply of insurance to protect itself.

Adverse Selection: Solutions

- There are several possible solutions to adverse selection where the buyer knows more than the seller including:

  1. **Private responses**
     - Private insurance companies usually protect themselves by offering a range of policies where the lower the cost of the insurance, the higher the deductible (out-of-pocket payment).
     - This offers people choice, so that those who believe they have a low risk, can buy a low-cost policy with a higher deductible, while higher-cost policies with lower deductibles can be selected by people who believe the have high levels of risk.
     - This is a method of **screening** undertaken by the party with the limited information, or the seller of the insurance.
     - The choice of high or low deductible given to the buyers of insurance is intended to screen them by indirectly providing information about their state of health to the seller of the insurance.
     - However, lower-income earners choose the low-cost policies with high out-of-pocket payments because they are affordable, regardless of the

Adverse Selection: Solutions

- Trying to protect themselves against high risks, insurance companies usually refuse to insurance people with specific criteria.
- The result is that those who most need insurance coverage, and poor people who cannot afford to buy coverage in the private market, are left with little to no insurance coverage.

2. **Government responses**

   - Government responses may take the form of direct provision of health care services at low or zero prices to an entire population, financed by tax revenues, thus ensuring that the entire population has health insurance coverage.
   - The benefit of these approaches, is that no one in need of health care goes without it.
   - A potential problem with government-funded or social health care systems involves difficulties in controlling costs of providing health are and growing burdens on the government budget.

Moral Hazard

- **Moral hazard** refers to situations where one party takes risks, but does not face the full costs of these risks because the full costs of the risks are borne by the other party.
  - Usually arises when the buyer of the insurance changes his or her behaviour after obtaining insurance, so that the outcome works against the interests of the seller of the insurance.
  - **Example:** Buyers of car theft insurance may be less careful about protecting their car against theft, because they know they will be reimbursed if someone steals their car.
  - In all these cases, the buyers of insurance have information about their future intentions that is not available to the sellers of the insurance.
  - In a free, unregulated market, the result of moral hazard is to underallocate resources to the production of insurance services, as sellers of insurance try to protect themselves against higher costs due to the risky behaviour of the buyers of insurance.

Moral Hazard: Solutions

- Problems of moral hazard in insurance are usually dealt with by the provider of the insurance.
  - This is often done by making the buyer of insurance pay for part of the cost of damages through deductibles (out-of-pocket payments).
  - This is intended to make the insurance buyer face the consequences of risky behaviour, thus leading to less risky behaviour.
  - Deductibles are a form of **screening**.
  - The problem with deductibles is that it has different effects depending on the income level of insurance buyers.
  - Higher-income earners usually choose higher-cost policies with low deductibles, while lower-income earners choose low-cost policies with high deductibles because these are more affordable.
  - In the financial area, moral hazard is dealt with through government regulation of financial institutions, intended to oversee and prevent highly risky behaviour.