

## ECON 5103 Unit 12, Video 1

Note: Chapter 12 seems poorly titled.

Chapter 12 contains some items regarding

1. Asymmetric information and its consequences for managers
2. Decision-making under uncertainty, including auctions

We will skip the portions of the chapter that use expected value, variance, and standard deviation, because these things are taught in MGMT 5113

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### Asymmetric information:

A situation in which one entity (e.g. person or firm) engaged in a transaction has more information than another entity (person or firm) on the other side of the transaction.

Example: Biff turns in a homework assignment whose answer are really similar to the answers in the textbook publisher's answer key. Biff knows that he cheated.

Professor Buffy reads the answers. She suspects that Biff cheated but she is not sure of it.

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Asymmetric information, more examples:

A buyer may have less information than a seller. (Buyer thinks he is purchasing pork sausage; seller knows it's made out of chicken.)

A buyer may have more information than a seller. (A dude who buys life insurance says he's healthy; actually he's dying.)

A worker may have more information than an employer. (Worker says he delivered newspapers; actually he dumped them in the trash.)

A worker may have less information than an employer. (Put your own example here.)

It is difficult to make optimal decisions when asymmetric information exists. In fact, asymmetric information can prevent transactions from occurring. (Non-existence of markets makes society worse off, usually.)

One solution: Get more information

But, it is costly to gather information, and it is sometimes impossible to get some information that the other entity already has.

**"Adverse selection"** - a term that is very difficult to define! ( I won't ask you to define it.)

Adverse selection describes a situation in which asymmetric information will result in a "bad" outcome for the entity that has less information.

Consider the life insurance problem.

An insurer could potentially make a decent profit selling life insurance to generally healthy people. And generally healthy people who are risk averse would benefit from buying health insurance.

But...suppose that sick people lie to insurers and sign up for life insurance meant for generally healthy people. This will make it costly to pay claims, so life insurance may be too expensive for health people to buy.

Consider the used car problem.

A lot of people may benefit from being able to buy a quality used car. But it is hard to distinguish a quality used car from a bad used car.

As a result, used car buyers are willing to pay depressed prices for used cars because there is a possibility that the car will be bad.

Therefore, sellers who might potentially sell quality used cars do not bother to sell them because the price that they could get would be so low.

Hence it becomes impossible to buy a quality used car because none are for sale.

Obama Health Care:

Why does it force healthy people to buy health insurance?

(Note: Obama health care also does not allow insurance companies to deny health insurance to anyone, nor to charge a higher premium to unhealthy people.)

Suppose that Obama's plan did not force healthy people to buy health insurance.

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Then, many healthy people would avoid buying insurance until they became sick or injured.

Hence, mostly sick and injured people would buy health insurance (few healthy people). So:

- Insurers would have little money coming in from premiums

- Insurers would be paying a lot of claims to their sick/injured customers.

- Combine the last two points, and insurers would have to charge very high premiums, making health insurance unaffordable for healthy people who would like to buy it..

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You will see the term "**moral hazard**" when discussing adverse selection as it relates to HIDING information from an insurer or CHANGING behavior after obtaining insurance. Moral hazard is a specific type of adverse selection in which an entity deliberately hides information from an insurer or changes behavior after being insured.

Example: A dude rents a car, buys the collision damage insurance, then smashes the car into his enemy's store. (He hid from the rental company the fact that he was intending to wreck the car.)

Example: A lady buys health insurance that allows her to visit to doctor for \$10. After buying insurance, she goes to the doctor because she is bored and wants to talk to him.

The **principal-agent problem** (between owners and high-level managers, or between managers and workers) is an example of adverse selection.

How to mitigate the problem of adverse selection.

1. Get more information  
(Business Intelligence, or "BI")

A. Screening

B. A self-selection device. Example: offer workers two ways of being compensated--straight salary, or salary & commission. The best salespeople will probably opt for salary & commission.

How to mitigate the problem of **moral hazard** in insurance:

1. Require physical exams for life insurance

2. Have health insurance policies with high deductibles/low premium (for health people) and low deductible/high premium (for sick people).