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Econ 280—Bethany College

**Lecture 10: Asymmetric Information**

1. The problems of asymmetric information.
   1. Instead of assuming perfect information (complete and symmetric) as we do in perfect competition, let us assume asymmetric information.
   2. When people don’t know what the other is thinking, we run into two general problems:
   3. *Adverse Selection*—when a person makes a choice that was never the right one. In adverse selection, the problem occurs *before* the transaction was made. You can think of adverse selection as dealing with static troubles, the moment you encounter something or someone, there’s already some quality you won’t like.
      1. Ex: Most short-term relationships, used cars, hiring an established slacker, lending to a con artist
   4. *Moral Hazard*—when a person chooses someone who then becomes the bad choice after the decision is made. In moral hazard, the problem occurs *after* the transaction was made (hence the name, as there’s an implicit ethic dilemma). You can think of moral hazard as dealing with dynamic troubles, people respond to the incentives engendered from the deal.
      1. Ex: Most long-term relationships, national health care, hiring a potential slacker, lending to MC Hammer
      2. Consider the RAND health insurance experiment. Between 1974 and 1982 the government gave 7700 people varying degrees of health insurance. Those with full coverage consumed 30% to 40% more medical services but were not healthier than those that had to pay for all of their medical services.[[1]](#footnote-1)
   5. In both cases, we experience waste and lost opportunities.
   6. Application: Housing bailouts. There is much talk in Congress and the country at large to help people who defaulted on their home loans, such as forcing banks to reduce their debt.
      1. Adverse Selection: Banks have a strong incentive to figure out who they can loan to and who they can’t. But one of the untold stories of the housing market is that loan candidates lied on their loan application. Around 70% overstated their incomes, sometimes as much as five times as much.
      2. Moral Hazard: Not only are borrowers less innocent than people think, bailing them out will have unintended consequences. Bailouts encourage honest people to become dishonest as they realize bad behavior (such as lying) will be rewarded, not punished.
2. Combating asymmetric information
   1. Screening: learning about a target before making a choice.
      1. Combats adverse selection.
      2. Ex: Asking particular questions during a date, Googling the target, credit reports, contacting previous employers
   2. Monitoring: keeping tabs on a target after making a choice
      1. Combats moral hazard
      2. Ex: Following the target around, requiring progress reports, investing insurance claims
   3. Rewarding: creating incentives to discourage bad behavior
      1. Combats moral hazard
      2. Ex: Prenups, profit sharing, deals to loyal bank customers
   4. Signaling: conveying information using demonstrative actions
      1. Combats adverse selection
      2. By definition, signaling must be unspoken: merely telling someone that you are a good person does little.
      3. Ex: Bringing flowers to a date, listening, getting a college degree, dressing nicely, wedding rings, stock-piling weapons
3. More on Signaling
   1. Signaling is a particularly interesting because it’s so subtle and thus crops up in areas we wouldn’t normally expect. In some ways it is tremendously inefficient (people signal their wealth with a nice suit when they could prove their wealth with a bank statement). But yet we do it all the time and intuitively understand its rules.
      1. If you have the quality in question, the signal must be easy to send.
      2. If you lack the quality in question, the signal must be difficult to send.
   2. Signaling becomes doubly complicated when you introduce *countersignaling*—when people shun a signal to show they are better than the people who rely on it.
      1. In reality, there’s a spectrum of quality instead of just good and bad.
      2. High quality people ignore signals medium quality people rely on. They instead focus on other signals to distinguish themselves from the mediums.
      3. “For Nash to deviate from convention is not as shocking as you might think. They were all prima donnas. If a mathematician was mediocre he had to toe the line and be conventional. If he was good, anything went.”   
          **-Z. Levinson, *A Beautiful Mind***
   3. Suppose there are three types of applicants for a job (good, average, and poor) and two ways of judging student quality (grades and recommendations). An applicant may submit grades, a recommendation, or both.
      1. Good applicants always have good grades and good recommendations
      2. Average applicants always have good grades with *either* good or bad recommendations. Average students don’t know if the recommendation is good or bad.
      3. Poor applicants always have poor grades and poor recommendations.
      4. If you are an average applicant, what do you submit?
      5. If you are a good applicant, what do you submit?
      6. Hence countersignaling is sometimes called “too cool for school.”
   4. Applications
      1. Economist Tyler Cowen suggests to never read a book when the author adds Ph.D. (or other title) after her name.
      2. Don’t put irrelevant work experience on your resume

1. <http://www.overcomingbias.com/2007/05/rand_health_ins.html> [↑](#footnote-ref-1)