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TOPIC 07: ASYMMETRIC INFORMATION

I. Asymmetric Information

a. *Asymmetric information* is when two parties don't have equal information concerning the other (e.g. lending, hiring, buying a used car, dating). Two problems occur:

b. *Moral hazard* is when a person reacts to being chosen in an undesirable way. Being chosen (for insurance, for a job, for a relationship) means the chooser trusts that person to act a certain way. That position of trust changes the incentives and thus the trusted may act in a way that's undesirable.

   i. In moral hazard, there's an implicit ethical dilemma. The person was put in a tacit or explicit position of trust and they've betrayed that trust. You can think of moral hazard as dealing with dynamic troubles, people respond to the incentives engendered from the deal itself.

c. *Adverse selection* has no trust issues. Adverse selection occurs when the trade itself is rigged because one party can use its information better. 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.

II. Examples

a. Mastering the difference between these two is best done with many examples.

b. Insurance

   i. *Adverse selection*. Accident-prone individuals love insurance.

   ii. *Moral hazard*. Because they have insurance, people take more risks.

c. Dating

   i. *Adverse selection*. Good liars or very attractive people can get dates even when the other party wants something different from the relationship.

   ii. *Moral hazard*. Knowing it's hard to untangle their lives together, spouses may be less caring and more callous.

d. Hiring

   i. *Adverse selection*. Employers must be careful not to hire the stupid, the incompetent, the lazy, the rude, or other kinds of people with undesirable personality traits. Such individuals are fundamentally flawed from a business perspective.

   ii. *Moral hazard*. Once employed, employers know it is expensive to fire someone. They might also discover how easy it is to get away with things employers may not like. The whole point of hiring someone, after all, is so don't have to worry about whatever task they are doing.

e. Loaning money
   i. *Adverse selection*. Irresponsible people want to borrow money so they can waste it. Irresponsible people rarely think of themselves as irresponsible.
   ii. *Moral hazard*. Banks want to make sure that person remains the right person after they get their money. No longer needing to impress the bank, borrowers may act recklessly.

f. Note that moral hazard only involves choosing people because moral hazard is fundamentally an incentive story. People react to the new incentives that come from being involved.

g. Adverse selection focuses on attributes, qualities that don't change as a result of being involved. Therefore, adverse selection can involve choosing both people and things.

III. Combating Asymmetric Information

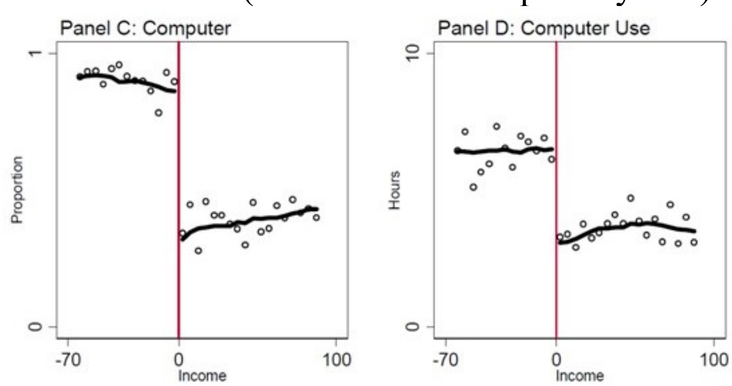
a. It's sometimes tricky to distinguish between the two types of asymmetric information. One way to help highlight the difference is think of how one combats each of them.

b. Combating adverse selection involves sorting through choices before any decision is made.
   i. *Screening*—directly collecting information about possible choices to reduce the asymmetric of information.
   ii. *Signaling*—conveying meaningful information through demonstrative actions (it's a kind of screening).
   iii. *Efficiency wages*—offering a higher-than-market wage to improve the quality of the pool of candidates, thus reducing the chance of getting a bad employee

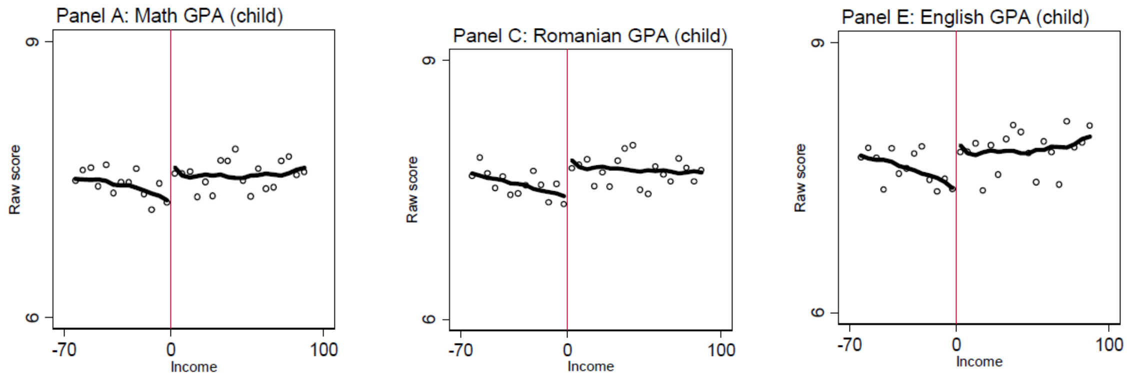
c. Combating moral hazard involves changing the incentives of whoever was chosen.
   i. *Monitoring*—watching the agent to see if they act as promised.
   ii. *Rewards/punishments*—granting bonuses for good work and demotions for poor work, etc. Collateral is an example.
   iii. *Efficiency wages*—these can also be used to combat moral hazard because employees fear losing their job.

IV. Incentives Matter
    a. *Unintended consequences*—outcomes not original intended by an acting individual
        i. What you pay for versus what you want
        ii. Strong incentives might help motivate people to action, but they also might incentivize them to do something unintended
    b. *Piece rates*—payment made directly for output
        i. Output may be hard to measure
    c. *Tournaments*—payment for relative performance to correct for environment
        i. May cause workers to turn on each other or not be motivated at all if a star always outshines everyone
    d. *Corporate culture*—shared collection of values and norms about how people interact
        i. Cannot be precisely constructed nor controlled

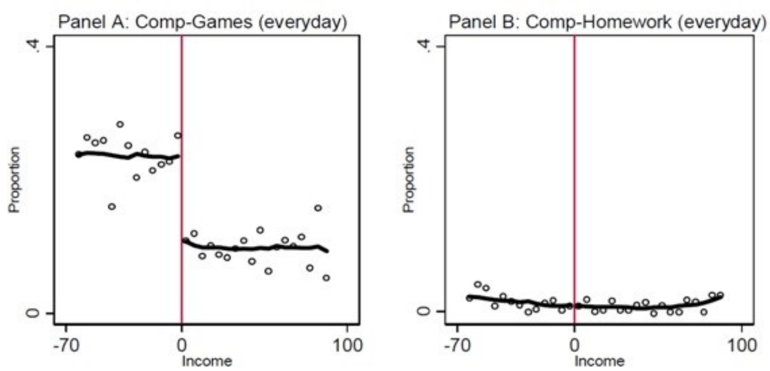
V. An Example
    a. When institutions are not aligned properly with incentives, you can get strange effects. You can even get the opposite of what you wanted.
    b. In 2008, the Romania government provided vouchers to buy computers to every family below the poverty line. Economists Ofer Malamud and Cristian Pop-Eleches examine the effects.
        i. First they noted that computer use among the poverty-stricken did increase (the red line is the poverty line).



        ii. But they found that math, Romanian, and English scores all fell.



iii. Why? Because they also found out that students just used their new computers for games.



VI. The Limits of Money

a. Money can be a weak incentive if:

i. If there already is an intrinsic motivation. (Bob *likes* cooking for his parents…you don't need to pay him. Indeed, paying him might spoil his intrinsic motivation.)

ii. If no social approval comes with the payment. (Bob getting paid by his parents for mowing the lawn can easily be seen as an elaborate allowance but being paid to mow strangers' lawns is a sign of adulthood.)

iii. If the reward is very high. (Bob can easily answer any Jeopardy! question when he's sitting on his couch but freaks out when he actually appears on the show.)

b. For example, if your friends pay you after you volunteer to make them dinner, you might feel cheap. What you meant as a friendly gesture becomes an impersonal market transaction.

i. Some economists have tried paying their kids to do dishes. This usually fails because the kids feel less like part of a family.