The Behavioralizing of Economics: Why Did it Take So Long?

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What is behavioral economics?

The phrase “behavioral economics” appears to be a pleonasm. What “non-behavioral” economics can we contrast with it? The answer to this question is found in the specific assumptions about human behavior that are made in neoclassical economic theory.

- Herbert Simon

  • The core assumption of classical economics is that agents choose by optimizing.
  • Is that accurate?
Econs and Humans
How do Humans differ from Econs?

Econs are:
- Perfect calculators
- Have rational expectations
- Have no self-control problems
- Are complete jerks

Humans are:
- Dumber
- Weaker willed
- Nicer
The Optimal Number of Points on an Exam

100?

Score: 72
Percentage: 72%

137?

Score: 96
Percentage: 70%

How can 70% be better than 72%?
Supposedly Irrelevant Factors (SIFs)

• Economist’s strongest predictions are about the things that supposedly do not matter.
• Econs would not care what the number of points on the exam are, but Humans might? What else might matter?
  • Social Norms
  • Framing
  • Defaults
• But economists had a long list of excuses.
“As if”

- Milton Friedman: don’t just a theory by the realism of its assumptions, but rather by the validity of its predictions.
- Question: In the U.S. what is the ratio of gun deaths by homicides to gun deaths by suicide?
- Most think more deaths by homicide.
- Twice as many gun deaths by suicide.
- Moral: errors are predictable. Humans are not “as if” maximizers.
Raising the Stakes

- “If we raise the stakes, people will get it right.”
- Another claim: “in the real world, people will learn.”

- Note that these claims are contradictory. In general, the higher the stakes, the less practice we get.
  - Milk
  - Suit
  - House
  - Marriage
  - Retirement
“If the stakes are high, people will hire experts”

- Hard to find unbiased experts
  - Real estate agents?
  - Mortgage brokers?
  - Financial advisors?
- How many people hire a matchmaker to choose a spouse?

- Bottom line: there is no evidence to support the claim that decisions get smarter at higher stakes.
- What about “fairness” concerns?
Classic Game Theory: Prisoner’s dilemma

• Two players, one shot game.
• If both players cooperate the pie is maximized, but each has an individual incentive to defect.
• Game theory prediction: 100% of people defect.
• Lab results: about 40-50% cooperate.
• What if we raise the stakes?
One Illustrative Test: Golden Balls

- Game Show shown in UK, ends with Prisoner’s dilemma.
- Each player can choose “split or steal”. If both split they each get half, if one steals he gets everything, if both steal they each get nothing. Theory says both steal if they are selfish and rational. But in PD lab experiments about 40-50 cooperate.
  - Total prize money distributed is £2.8 million.
  - Are players more likely to be selfish and rational as the stakes go up? In other words, does cooperation fall as the stakes rise?
  - Sort of.
Cooperation rates as a function of stakes

High stakes cooperation rates similar to those in the lab.
What about markets?  
A Memorable Dinner

- Dinner with Michael Jensen (Chicago PhD 1968) and Amos Tversky, psychology deity
- Tversky asks Jensen to describe the behavior of:
  - His wife
  - His students
  - Members of Congress …
- Conclusion: All are terrible at economics.
- Tversky: “so everyone you know is dumb but the agents in your models are geniuses. What’s up?”
- Jenson: you just don’t understand, …
The Invisible Hand Wave

- The invisible hand wave: “If people behaved in markets the way they do in your experiments, then they would …”
- Not possible to finish with both hands still.
- What did Adam Smith actually say about the invisible hand? “[a business owner is] “led by an invisible hand to promote an end which was no part of his intention. Nor it is always the worse for society …”
- “Not always the worse for society ≠ always for the best! Same for individuals.”
How is the Magic Market Supposed to Work?

What is supposed to happen in markets? If you:

- Choose the wrong career
- Marry the wrong spouse
- Fail to save for retirement
- Take out a mortgage you will not be able to repay if rates go up and house prices fall
- It is easier to make money by catering to consumers’ biases than trying to correct them.
- Example: $27B of extended warranties sold each year.
What about the biggest stakes of all? Efficient Market Hypothesis

- Two components:
  - No free lunch: you can’t beat the market.
  - The price is right. Asset prices are equal to intrinsic value.

- The no free lunch component is “approximately” true.
  - It is possible to beat the market, but most professional managers do not.
  - The only coherent approach to active management is “behavioral”. Find the biases that lead to mispricing.
Are Prices Right?

• This component of the EMH was long thought to be untestable.
• Who can say what the intrinsic value of Apple is?
• But in some cases we can say for sure that prices are wrong.
Cuba anyone?

- CUBA fund: A very small closed-end fund, the Herzfeld Caribbean Basin Fund, has 69% of its holdings in US stocks with the rest in foreign stocks, chiefly Mexican. It was set up in 1994. It gave itself the ticker "CUBA" despite the fact that it owns no Cuban securities nor was it legal for any US company to do business in Cuba (although that may change at some point).

- Historically, the CUBA fund traded at a 15% discount to Net Asset Value, already a bit of misbehavior.
Rational Markets?

On December 18th, Obama announced he was going to lift several restrictions against Cuba.
Assessment of the Price is Right Component.

• Major misbehaving.
  ▪ October 1987
  ▪ Tech bubble of late 1990s
  ▪ Real estate bubble of early 2000s

• Fischer Black: “We might define an efficient market as one in which price is within a factor of 2 of value”
  ▪ If a car or house is within 2 or 3 times the correct value would we call that “efficient”?
  ▪ What about labor markets?
Implications for policy

• If we agree that SIFs can matter, than there are many more policy options. We can “nudge”.
• Nudge: small changes (SIFs) that alter the behavior of Humans but not Econs.
• Example: retirement savings plans.
• Problem: many don’t join, those who do join save too little, and investment choices are poor (buy high, sell low).
Solutions to Retirement Savings Plans

• Automatic Enrollment: make joining the plan the default.
  ▪ Economic theory says no effect. But initial enrollments go from 60% to 90+%.
  ▪ In national UK plan opt out rate is less than 10%.
• Save More Tomorrow
  ▪ Invite people to save more later, when they get their next raise.
  ▪ First company to adopt this tripled savings rates.
• Good default investment plans.
Standard Economics vs. Behavioral Economics

• The traditional economic tool to encourage saving is to create tax free accounts.

• Chetty et al (AER, 2015) compares the power of “nudges” (plan design features) to tax break.

• Conclusion
  ▪ 99% of new savings created by nudges
  ▪ 1% from tax breaks (and only influences the rich)
Conclusion

• When all economists become open-minded and are willing to incorporate variables in their research, even if the rational models say those variables are supposedly irrelevant, then….

• …The field of behavioral economics will disappear.
• … economics will be as behavioral as it needs to be.
• …and those who have been stubbornly clinging to an imaginary world that consists only of Econs will be waving a white flag, rather than an invisible hand.