Behavioral Economics and Policy Evaluation

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Introduction

• Behavioral economics: failure to act in self-interest
  o Cognitive limitations, biases
  o Framing effects; default options
  o Laboratory results: Preference reversals, endowment effects
  o Real world: Taxis, putting

• Policy relevant examples
  o Energy efficiency adoption: Negative cost of carbon
  o Pension plan adoption depending on opt-in
  o Ubiquitous, non-means tested Social Security?

• Implications for benefit-cost analysis (BCA)?
  o Revealed preference might not match actual valuation
  o What might take its place?
Part of a larger behavioral economics critique

• Is behavioral economics “economics”?  
  o Depends what you mean by “economics”  
  o If estimating empirical determinants of outcomes, perhaps  
  o If providing theoretical explanations, not so much

• On the negative  
  o Throwing in the towel on coming up with explanations  
  o Coming up with “biases” to suit the phenomena  
  o Today: Issues in undercutting BCA

• On the other side  
  o Standard economics can also come up with “transaction costs”  
  o Weakness of will, preference creation outside the paradigm

• Why not just call it “psychology”?
Major example: McKinsey CO$_2$ abatement MC

- “Negative” costs on the left

- Economics: WTP to avoid quality degradation
- Psychology, policy: Look at all the $20 bills on sidewalk
Five methodological advantages of BCA

• Don’t hold replacement to something BCA can’t meet

• Ideal, not actual
  o Not disputing data difficulties, biases in application

• 1. Connection of measure to benefits and costs
  o Obvious for monetary benefits (e.g., profit)
  o Perhaps less obvious for monetizing (e.g., VSL)

• 2. Decentralized measure of benefits and costs
  o Data are “out there” in principle, same for all sides

• 3. Interpersonal comparability
  o Crudely, adding up WTP for benefit of –WTP for cost
Continuing

• 4. Pareto feasibility
  o Comparability by adding implies dollar of WTP same for all: Income effects
  o Avoided because passing BCA => winners could compensation losers
  o “Win-win” allows BCA user to defer to policy maker
  o Not perfect: Income effects change valuations; compensation practically infeasible or politically impossible
  o [But see Zerbe – portfolio approach renders individual hypothetical compensation unnecessary consideration]

• 5. Internal consistency
  o Decentralized measure of benefit, aggregated, is also the means for ensuring possibility of “win-win”
  o Side point: virtue of standard economics
Behavioral economics as threat to all five

• 1. Disconnects measure from benefits and cost
   o Choices don’t reflect value; revealed WTP isn’t “real” WTP
   o Not just inaccuracy, but sensitivity to framing: WTP vs. WTA
   o Broader because of endowment effects

• 2. Centralizing the measurement of benefits, costs
   o Who adjusts for error? Who decides the right frame?
   o Who decides there isn’t underlying cause for “anomaly”? 

• 3. Creating or extending doubt for interpersonal comparison

• 4. Pareto feasibility: Endowment effects reduce compensation possibilities

• 5. Internal consistency may require centralization
Three potential approaches: First, Cass Sunstein

- Both academia and OIRA
- Claims BE and “BCA” complements, not substitutes
- Why? BE biases distort voting outcomes
  - Overweighing publicized, salient, near-term, new risk relative to others
  - Also framing risks in a bundle (all cancer) or separately (breast cancer)
- Hence, public needs regulatory “filters”
- Important point: Why substitute BCA for democracy?
  - But don’t need these; just look to voting mechanism flaws
- Specifically leaves aside how to do “BCA”
Robert Sugden

• Argues that behavioral economics does not justify market interventions

• Disagrees with Sunstein-Thaler “Nudge” position that intervention warranted because judgments always biased by defaults

• Let the market decide, for both positive and normative reasons: Transactions reflect actual consent

• Add: The default is there presumably because it reflects greater net benefit on some account; it isn’t uninformative and shouldn’t be neutral

• But BCA in policy can’t rely on actual consent, only hypothetical
Bernheim and Rangel

- Attempt to formalize and constrain error in welfare measures taking behavioral economics into account
- Choice function of alternatives and “ancillary conditions”
- When conditions matter, BCA estimates (e.g., compensating variations) span a range
- Requires important restriction: No preference reversals!
- Also requires centralization to determine when “ancillary conditions” can be ignored, to limit range
What might replace BCA in a BE world?

- **Identifying “true” WTP? How?**
  - Non-market surveys have own well known problems
  - Leaves centralized authority to identify what’s right

- **Libertarian paternalism**
  - Design rules so people still have choices, just change defaults
  - But policy projects entailing BCA not like that
  - Expanding a highway, reducing emissions, public R&D …

- **Use post-intervention WTP**
  - Presumably, people will have “true” benefits once intervention done on their behalf
  - But how can one know this? What happens with error?
More options

• Changing preferences
  o One behavioral economics possibility is that the preferences don’t exist prior to the decision
  o Opens the door to preference change
  o Measuring policy outcomes by ex ante or ex post preferences?
  o Eliminate an externality by eliminating relevant preference: Solve climate by getting us not to care about future generations

• Choose policies democratically
  o Has decentralization benefits
  o But mechanism problems of voting
  o Also, if we’re doing this because of BE, Sunstein’s biases don’t go away
Reluctantly left with democratic delegation

• Reproduces to some degree the benefits of BCA
  o Decentralization, relevance, consistency

• Reflected in policies now
  o Regulation as making choices on water, electricity provider so we don’t have to shop and decode contracts
  o Keeping us from buying prescription drugs
  o Self-paternalism

• Also, already done because efficiency isn’t everything
  o Delegate to officials (including judges) decisions on redistribution, moral rights
  o BCA limited

• Still, wouldn’t some guidance to those officials be nice?
Perhaps the main takeaway:

Behavioral economics better be right—and you’d better be sure about it!