

How Much Relevance does Reality Imply? (Re)Considering the Endowment Effect

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***Very preliminary; comments greatly appreciated.**

Outline

- **Why the endowment effect is plausible?**
 - Preferences come from somewhere
 - Examples of anchoring
- **Shouldn't be lumped with behavioral economics**
 - Endowment effect consistent with neoclassical utility
 - Anchored preferences not the same as cognitive bias
- **Clarifying its meaning**
 - Not the same as “loss aversion”
 - Instantaneous switching
 - Kinked indifference curves
- **WTP vs WTA?**
 - Endowment effect not enough, need kink
 - Moral argument? What should the endowment be?

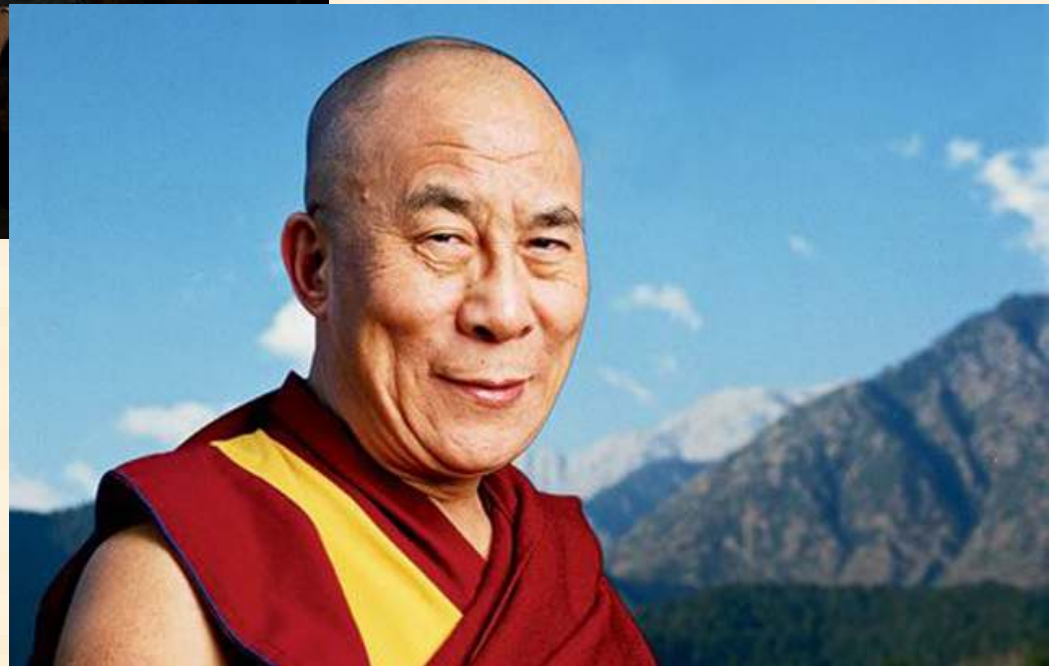
Giving the endowment effect its due

- Defining it, casually, as that willingness to pay to increase the amount of a good one has depends on how much of the good one has to start with
- Preferences based on an “anchor”
- Without a theory of preference formation, standard economics can't say that there isn't an endowment effect
- Without a theory of preference formation, one can't say that anchoring doesn't matter

What makes it interesting to a non-psychologist

- An economist, that is ...
- Nothing about anchoring, that is, the endowment effect implies a departure from neoclassical utility
 - In and of itself, that is!!
 - Other challenges will be discussed
 - Risk preference for losses; malleability
- The implicit comparison of willingness to pay with different anchors is about different utility functions
 - Within the same person with different anchors?
- But—important!!—it does not imply consumer error arising from biases
 - No inherent “private benefits” or paternalism challenges

Examples from opposite ends of the spectrum



Illuminate the malleability problem

- For both advertising and Buddhism, changing preference is not easy
- Advertising: expensive repetition (assuming the advertising is not directly or indirectly informative)
- Buddhism: long-term mindfulness meditation discipline
- How to reconcile failure to trade coffee mugs or tokens in student experiments?
 - Well, maybe they're students!
- Important point is that one can get endowment dependent $WTA > WTP$ with different endowments—in policy relevant settings (health care, environment)

But first, confessing a personal example



- If you keep doing it after it's understood, is it still a bias? Real options?

About time for a rough definition

- I hope not too sloppy; but inherently sloppy about “all else equal” regarding preferences, income/wealth
- Let $WTP(a; b)$ be the willingness to pay for a units of a good with b units of that good as the anchoring parameter

- The endowment effect is that b matters

- Notation: If $j > i$,

$$WTP(i \rightarrow j; k) = WTP(j; k) - WTP(i; k)$$

- Suppose $b > a$. The endowment effect is:

$$WTP(a \rightarrow b; b) > WTP(a \rightarrow b; a)$$

- One would pay more to go from a to b if b is part of one’s endowment than if the endowment is only a

WTP vs. WTA: A first look

- Maybe it's the endowment, not a difference
- Write the WTA to accept a loss from j to i given anchor/endowment k as $WTA(j \rightarrow i; k)$
- Suppose that regardless of the endowment, the utility function looks neoclassical, that is, $WTA \approx WTP$
 - That is, suppose WTA to go down from b to a is just about the same as the WTP to go from a to b , but is endowment dependent (as is WTP)
- $WTA(b \rightarrow a; b) \approx WTP(a \rightarrow b; b)$
- The endowment effect implies $WTA > WTP$ with varied endowments, but consistent with $WTA \approx WTP$ holding the endowment fixed

Surveys and framing

- **Accept that people give implausibly larger answers to WTA than to WTP in surveys**
- **Just mention responses**
 - WTA unconstrained by budget
 - Ethical interpretation of the frame
 - Lack of substitutes if public good taken away
- **Add how people approach a question**
 - WTA interpreted as “suppose this were your endowment, then...?”
 - WTP interpreted as “suppose this weren’t your endowment, then ...?”
 - Implicit implication from how question is framed
- **Policy implications at end**

Does “loss aversion” fit?

- Neo-classical “risk aversion” implies that “losses outweigh gains”
- Need above endowment effect definition to be clear about the effect of the endowment on the difference between “losses” and “gains”
- Level of money not an endowment by that definition: money includes everything, so nothing left to vary WTP
 - What’s left in the Buddhist “no endowment” conception?
- The insurance counterexample

Something to the “kink”

- Mahasuweerachai and Knetsch, SBCA 2015
- How to get $WTA > WTP$ within a preference structure holding the endowment fixed
- Imagine indifference curve with a “kink” at the endowment at some value of x , call it x^*
- Implies WTA losses from $x^* > WTP$ for gains beyond x^* (where one “pays” by giving up endowment of other goods)
- Nothing theoretically implausible here
- Does have other testable implication: Inelastic demand over some price range at the endowment amount: What advertising does?

Maybe this is “just” ethics?

- It’s all ethics, in the end, even saying one should choose only policies that pass neoclassical BCA
- Not the first time ethical discussions disguised as methodological discussions: Multiple utility
- **PERHAPS**: pick as starting point endowments that people should have
 - Health care
 - Environmental quality
- Think of WTA as asking what people would pay as if those were part of their endowment
- Still need to deal with “money where mouth is” problem
- And, of course, justify “should have” endowments

Ending observations

- **The endowment effect should not be threatening**
 - Preferences come from somewhere
 - They can be parameterized
 - **Examples: advertising, Buddhism**
 - Not about error
- **Policy assessment should recognize possibility of endowment effect**
 - Verification, especially if endowment not *ex ante* allocation
 - Health, environment
 - Status quo bias if *ex ante* allocation parameterizes preferences
- **Could the debate be about what should be in one's endowment?**