The Endowment Effect, Loss Aversion, and Status Quo Bias

Daniel Kahneman, Jack L Knetsch, and Richard H Thaler (1991)

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Agenda

- Understanding the terms
- Summary
- Example
- Discussion
- Implications in Markets?
- Further Questions

Understanding the terms

- Endowment Effect: Gain of value of product by just owning it increases WTA-WTP spread
- Loss Aversion: Regret minimization in some senses causes the other phenomena.
- Status Quo Bias: Inertially staying in same state a form of underadjustment.



Terminology

- Omission v Commission Repenting changing states to find it unfavorable > regret of staying in state.
- Income Effect People change budget share for certain items based on income.
- Reversibility of Indifference curves if you have 5 pens and 0 dollars → have to give up 4 pens for 8 dollars → when you have 1 pens and 8 dollars → you should be willing to buy the 4 pens for 8 dollars.

Summary



Value function replaces traditional utility function (which predicts linear fit).



Reference points make a difference !

Summary (2)



Kahneman says:

The curves intersect because with endowment, the curves are no longer reversible.



Standard Assumption:

Indifference curves do not cross. This is a consequence of the assumption that they are reversible.

Round 1: Please make a choice between (1) and (2)

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- Round 2: Please make a choice between (1) and (2)
- Hypothesis: In simple, controlled repeated choice scenarios, it is difficult and inaccurate to continue these studies people learn!
- True in this case... but not always !!
- Even now, 80 deg in winter seems warm but in summer seems cool. Trivial but important consideration.

Illustration of problem in decision making



Cubitt, Starmer and Sugden, EJ 98

Stocks v Bonds - Effect of Loss Aversion

"While stocks and bonds provide a reasonably comparable neo-classical economic risk function, stocks have always commanded a higher rates of return than bonds."

Stocks v Bonds

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Loss Aversion explanation?

Stocks can be bought/sold at will \rightarrow more chance for profit \rightarrow even greater chance for loss \rightarrow require higher compensation for additional "risk".

Effect on Markets?

- Implementation on portfolio is obvious long term investment.
- How is it applicable to short-term trading (like day trades)?
- Pitting rational agents with irrational agents – how to model this irrational behavior into market when trying to design a competing automated agent?

Other Anomalies?

- Intertemporal Choice
- Preference Reversals
- Mental accounts.....

Is it always a negative effect?

Apparently .. No!

The tumbling DOW Jones Index was explained to be "propped up" because of loss averse behavior – people refused to sell losing stock for fear of seeing their paper loss translated into actual "irreversible" loss....

Discussion

- Opportunity cost: Is a GOOD consideration to get <u>out</u> of status quo ?
- Wine collector: Market price assumed no undervaluation by seller.
- Transaction costs are usually negligible for large trades or money decisions.
- Lack of information or overwhelmed by math... does it explain something?
- Grand Canyon example: Not part with money for social benefit? No private gain?

References

- Why smart people make big money mistakes – Gary Belsky/Thomas Gilovich (book).
- Loss Aversion in repeated games Jonathan Shalev
- Prospect Theory and Asset Prices Barberis, Huang and Santos