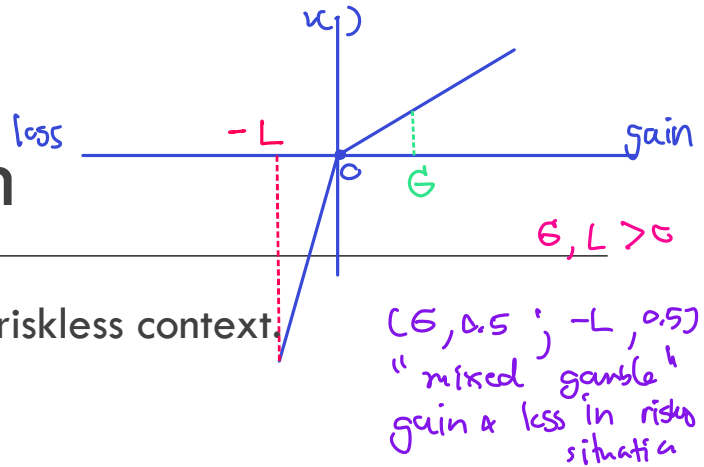
Risk Preferences part 3:

Riskless Loss aversion

Riskless Loss Aversion



Loss aversion can also be viewed in a riskless context.

Experiments have examined people's willingness to pay for a good, compared to their willingness to accept money in exchange for the same good.

Willingness to Pay(WTP) vs. Willingness to Accept(WTA)

- Standard economic theory says that an individual has a single value (i.e. some price **p**) that she associates with any good

➢ If she is given the opportunity to buy the good at (or below) that price, she will pay it. The price is her "willingness to pay(WTP)."

➢ Similarly, if someone offers to buy the good from her at (or above) that price, she will accept it. The price is her "willingness to accept (WTA)."

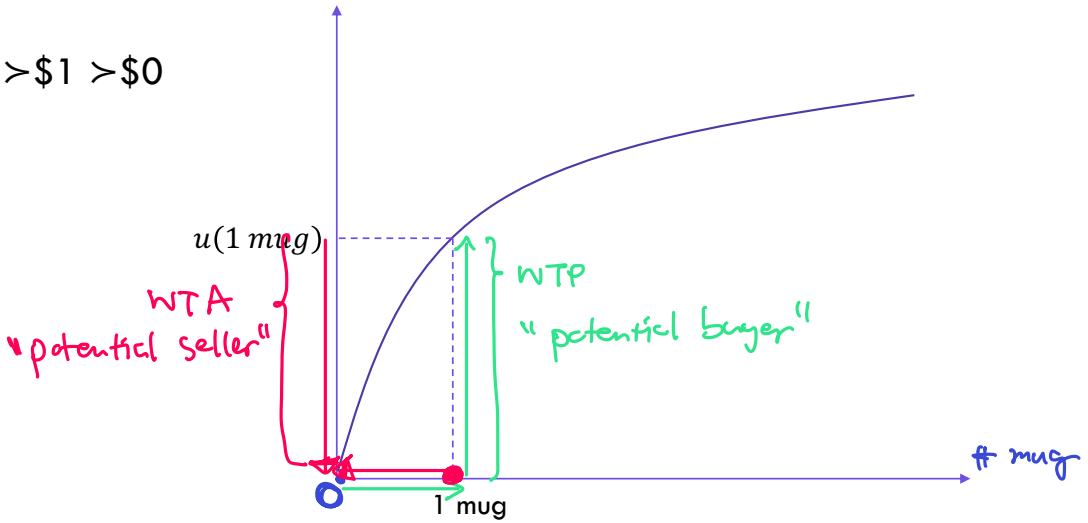
- Standard economic theory says that WTP=WTA.

Willingness to Pay(WTP) vs. Willingness to Accept(WTA)

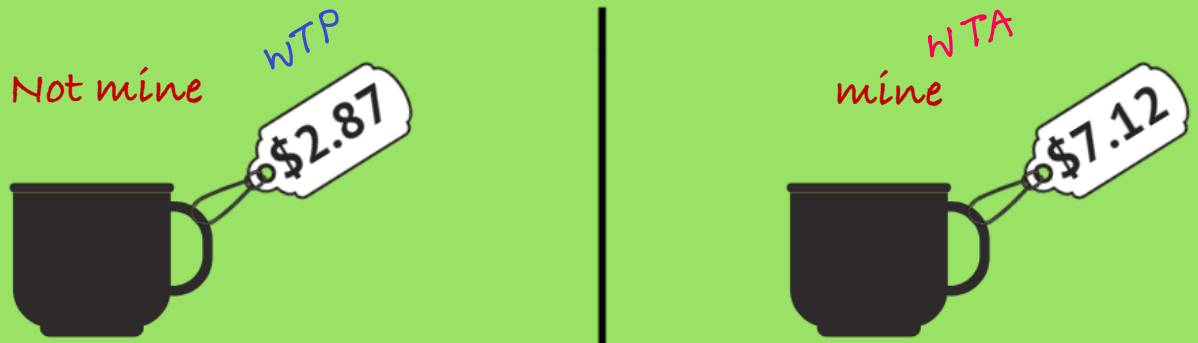
WTA

$\$4 \succ \$3 \succ \$2 \sim mug \succ \$1 \succ \$0$

WTP



The Endowment Effect



Around the same time Kahneman and Tversky were working on their model of Prospect Theory, economist Richard Thaler was noticing (and writing about) some of his own "anomalies".

RICHARD THALER

Thaler (1980) attributes gap between WTP and WTA to what he coined the endowment effect.

Willingness to Pay(WTP) vs. Willingness to Accept(WTA)

In reality, we often observe behavior that suggests otherwise...

Thaler's professor was a wine collector who frequently shopped at wine auctions

- He never paid more than $35 for a bottle ("willingness to pay")
- ...but he never sold them for less than $100 ("willingness to accept")

The Endowment Effect

Why is there the gap between willingness to pay and willingness to accept?

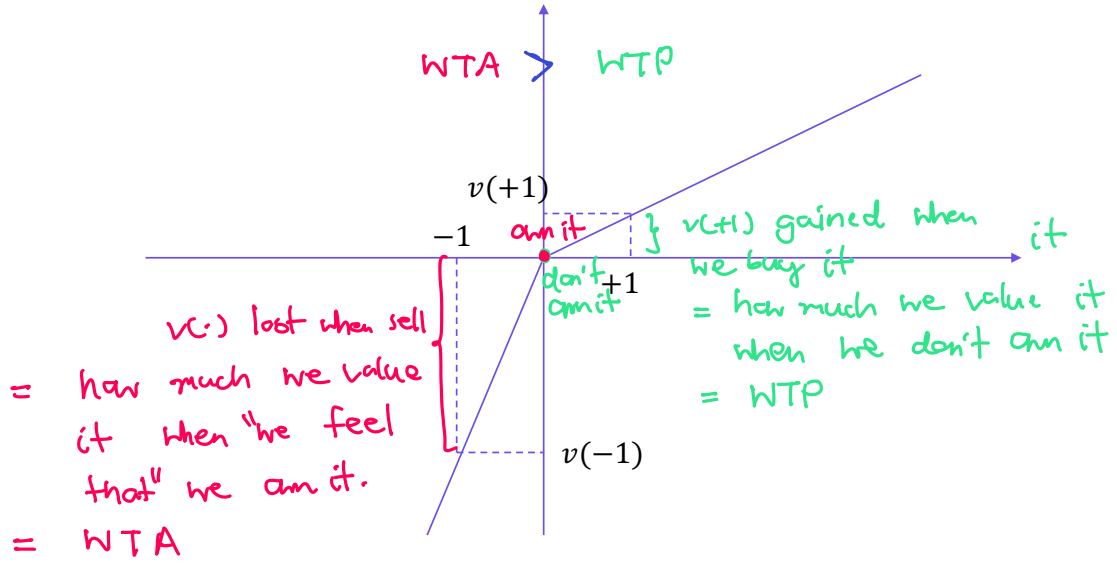
Thaler (1980) attributes gap to what he coined **the endowment effect.**

"People tend to value an object more highly when they own it than when they do not."

The Endowment Effect

- Related to loss aversion – the disutility from giving up an item is larger than the utility from receiving that same item

The Endowment Effect



Mug Experiment

Endowment Effect: Mug Experiment

Kahneman, Knetsch, and Thaler (1990) test these ideas in their famous "mug experiments" at Cornell University.

Typical Experiment: Class of 50 - 75 economics students.

After students sit down, half of them are given a coffee mug.

Endowment Effect: Mug Experiment

Design

students were randomly chosen to be in each group.

 WTA	WTP 
Potential "Sellers"	Potential Buyers
How much willing to accept for the mug?	How much willing to pay for the mug?
Each seller were given a coffee mug.	Each buyer were shown a coffee mug.

If there is a WTP > WTA in the group, they trade.

Endowment Effect: Mug Experiment
Prediction

What does standard economic theory predict? How many will trade?

When markets clear, mugs will be owned by those who value them the most

Since mugs were assigned at random, on average:

- WTP = WTA
- If roughly half of "mug lovers" was given mugs, and half wasn't, then about half of the mugs should trade.

Endowment Effect: Mug Experiment
Result

- Cornell bookstore price is $6.00 for the mug
- Students might value the mug more or less than this price, but standard theory says that, on average, we should find WTP = WTA
- Results:

Buyers: (median) WTP = $2.25

Sellers: (median) WTA = $5.75

WTA > WTP

This result is even for goods they just received (and didn't necessarily want).

This result was claimed as an endowment effect.

Endowment Effect: Mug Experiment

Result

- Add a "Chooser" group: elicit the amount of money at which they would be indifferent between receiving a mug and receiving the money

if money is $5

Sellers (were given mugs and have a choice to sell a mug) :

+ the sense of belonging

Sellers' choice: (mug, $0) vs. (no mug, $5)

Buyers(were not given mugs and have a choice to buy a mug):

Buyers' choice: (mug, -$5) vs. (no mug, $0)

Choosers(have a choice to choose between a mug or money):

Choosers' choice: (mug, $0) vs. (no mug, $5)

- But sellers and choosers have the exact same choice!

Endowment Effect: Mug Experiment

Design

WTP–WTA elicitation

Elicit people's reservation values (or reservation prices):

A buyer's WTP is the maximum amount she is willing to pay to obtain the object.

A seller's WTA is the minimum amount she is willing to accept to part with the object.

If there is a WTP > WTA in the group, they trade.

Sellers / [Buyers]	I will sell [I will buy]	I will keep mug [I will not buy]
If the price is $0.00:	✓	
If the price is $0.50:	✓	
…	✓	
If the price is $9.00:	-	✓ WTP
If the price is $9.50:		✓

Choosers: indicate for each price whether they want the mug or the money.

Endowment Effect: Mug Experiment
Result

Results:

Sellers: $7.12 WTA

Buyers: $2.87 WTP

Choosers: $3.12

"endowment effect"

Endowment Effect: Mug Experiment
Robustness check

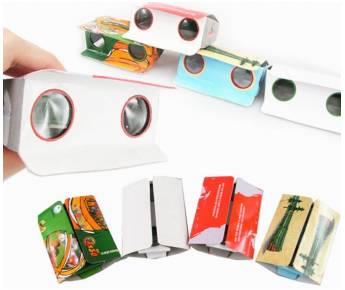
- Different products: chocolate bars, pens, "folding binoculars in a cardboard frame"

- Multiple products: Subjects can be endowed with either: {mug, candy, choice}

(i) Endowed with mug >> 89% choose mugs

(ii) Endowed with candy >> 10% choose mugs

(iii) Choosers >> 56% choose mugs



Example:
30-day no-questions-asked return policies

Loss aversion can explain why many company have 30-day no-questions-asked return policies.

Such policies may serve to convince a customer who otherwise would not make the purchase to take the product home and try it out.

Example: 30-day no-questions-asked return policies

Once taken home, however, the product becomes part of the customer's endowment and loss aversion kicks in, meaning that the customer is unlikely to return the product.

Exercise:

Nobel laureate Milton Friedman and Rose Friedman wrote:

"Nothing is so permanent as a temporary government program"

(a.) Use the concept of loss aversion to explain why supposedly temporary government programs have a tendency to last longer than originally intended.

Exercise:

Nobel laureate Milton Friedman and Rose Friedman wrote:

"Nothing is so permanent as a temporary government program"

(b.) Some government programs come with a sunset provision, which states that the law will be cancelled after a specific date. Explain how such provisions aim to solve the problem you identified under (a.)