INTERTEMPORAL CHOICES 2

Surajeet Chakravarty, David Reinstein

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- in choices over sequences of outcomes, improving sequences are often preferred to declining sequences though positive time preference dictates the opposite; and
- in choices over sequences, people seem to prefer spreading consumption over time in a way that diminishing marginal utility alone cannot explain.

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- small outcomes are discounted more than large ones

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- Save the best/better thing for last.

week1week2week3week4week5AfrenchhomehomehomehomeBhomehomefrenchhomehome

A B A A B A

Image: Image:

| | week1 | week2 | week3 | week4 | week5 |
|---|--------|-------|--------|-------|---------|
| С | french | home | home | home | lobster |
| D | home | home | french | home | lobster |

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• $B \succ A$ (89%)

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• *B* ≻ *A* (89%)

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• C ≻ D (49%)

A B < A B </p>

• This result could be explained by the simple desire to spread consumption over time.

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- Procrastination

Procrastination and self control

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- After eating the cake, I once again intend to follow a diet in the future.

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- Thinking about retirement savings, savings in the far future, people use a much smaller discount rate for delayed rewards.
- This makes it more attractive to invest in alternatives providing a higher expected return in the longrun.

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- This can cause preference reversals.

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- Design a savings program for the government:

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 - People will save more out of future salary increases than current salary.

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- Most of the employees were unwilling to save more out of their current incomes.
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- Over only 28 months the average savings rate rose from 3.5% to 11.8% of income.

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- What if this is not the only reason for high debts?

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Image: Image:

토어 세종

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• Decision makers are real tax payers MA, USA. Typically low income.

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- Creditworthiness are associated with long-run discount factors

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 - if offered a choice between two rewards that differ only in delay, individuals tend to choose the reward available sooner rather than the one available later.
 - if offered a choice between two alternatives that differ only in probability, they tend to choose the more certain reward.

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- Amount, delay, and probability
- To decide whether to purchase a less expensive item that can be enjoyed now or to save for a more expensive one
- To choose a risky investment that potentially could pay off at a high rate or one that pays a low but guaranteed rate of return

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- Decision making with delayed and probabilistic outcomes involve the same underlying processes ??? (if followed this line of thought)

Discounting and Choice Between Probabilistic Rewards

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- Similar reversals are also possible in case of choices over time.

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 - temporal discounting arises because with longer delays there could be a greater risk that the expected or promised reward will not actually be received.

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- The effect of amount on discounting probabilistic rewards in humans appears to be opposite in direction to that observed with delayed rewards
 - humans discount smaller probabilistic rewards less steeply than larger probabilistic rewards

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 - If delayed rewards, the degree of discounting decreased from \$200 to \$5,000.

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- The measure of risk aversion involved choices over real-stakes lotteries
- The measure of impatience involved making tradeoffs between payments available immediately and payments available in one year.
- Subjects also took two different tests of cognitive ability

• Risk aversion measurement:

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 - If subjects have monotonic preferences, they prefer the lottery up to a certain point then switch

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- Y will increase by a factor 2.5 percentage point which helps to measure the time preferences

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- Individuals with higher cognitive ability are significantly more willing to take risks in the lottery experiments, and are significantly more patient over the year-long time horizon studied in the intertemporal choice experiment.