



WELCOME TO LSE ECONOMICS

OFFER HOLDERS' DAY 2019







Meet the Undergraduate Team



Prof Wouter Den Haan UG Programme Director Dr Dimita Petropoulou Deputy UG Programme Director Dr Judith Shapiro Departmental Tutor Junius Olivier Undergraduate Tutor Katarzyna Krajniewska Undergraduate Tutor Sarah Burton Undergraduate Programme Manager

Department of Economics -





Welcome to LSE Economics Professor Steve Pischke Head of Department

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Today we will cover

- **1. Frequently Asked Questions**
- 2. A student's perspective, BSc Economics alumna Ms Rahat Siddique
- 3. Taster lecture: *Economics of Procrastination*, Dr Judith Shapiro

Afterwards:

Meet students and staff over refreshments after the session in the Shaw Library, 6th Floor, Old Building Opportunity for individual advice

Frequently Asked Questions



Frequently Asked Questions

- 1. I read that the LSE workload is 'huge'. Is this true?
- 2. Why should I prefer LSE Economics to Cambridge?
- **3**. These 'outside options'... how would I choose?
- **4**. Does everyone here become a banker?
- 5. I've heard LSE students are dissatisfied? Is this true? What improvements will I see?
- 6. Is LSE really one of the best economics departments in the world? How does that matter to me, except for bragging about it? Aren't most classes taught by PhD students?
- 7. What about the social life? How do I get to meet other students?







#Group25 #LseEconomics #TheBestGroup #icedlatte #groupbonding #KeynesHouse

Careful because those guys have had enough of taking pictures of people from LSE 😂 😂 . #lastonestanding





presenting group twenty four.







Student Feedback

"The FYC has given me the opportunity to meet friends. I am glad to say that my groupmates and I still keep in touch"

"Insightful and engaging way to start my first year education in LSE"

"The challenge was certainly very edifying. Rigorous research on the GFC gave me numerous insights that really bolstered my understanding of economics in general. It also further ignited my passion for the subject to see these economic concepts in action in the GFC. Very importantly, through the challenge I have made some of my closest friends in LSE and for that I am very grateful"





A student's perspective Ms Rahat Siddique

BSc Economics alumna

Research Assistant at the Centre for Economic

Performance

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The Economics of Procrastination Dr Judith Shapiro Departmental Tutor

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The Economics of Procrastination





Preface: Laibson's question

In lectures on temptation, procrastination and "intertemporal comparisons of utility" Harvard behavioural economist David Laibson posed these questions:

- "Would you like a small glass of orange juice now or a (2x) large glass in 5 minutes?
- "Would you like a small glass of orange juice in 20 minutes or a (2x) large glass in 25 minutes?
- Each involves a 5 minute delay.

How many chose "larger later" rather than "smaller sooner"?



Preface: Laibson's question

David Laibson questions:

 "Would you like a small glass of orange juice now or a (2x) large glass in 5 minutes? 60% chose "right now"

 "Would you like a small glass of orange juice in 20 minutes or a (2x) large glass in 25 minutes? 30% chose "right now"



The salience (importance) of now

- An extreme example of the behavioural economist's "present bias": a "cognitive bias"
- In the spirit of 2017 Nobel Laureate Richard Thaler, who in 1981 surveyed Oregon undergraduates: how much they would require in 3 months, 6 months and a year to persuade them not to take \$30 at once.
- This, and related evidence, prompted the new behavioural economics to develop a model of "hyperbolic discounting" to help explain procrastination better.



Discounting functions

- To make decisions on "now versus later" we need some "mapping" a function which takes values in the future and translates them into the present value
- How much is £100 in one year worth to you now?
- We long used Samuelson's "discounted utility" (1937):

$$\sum_{t=0}^{T} \beta^{t} u(x_t),$$

where $\beta \in (0,1)$ is the "discount factor", which is constant over time e.g. $\beta = 0.8$



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Why "exponential"?

Consider β^t : time enters the discount function as an exponent....but notice the

discount function declines at a constant rate

- Future discount rate: $\frac{D(t) D(t+1)}{D(t)} = \frac{\beta^t \beta^{t+1}}{\beta^t} = 1 \beta = 0.2$
- Present discount rate: $\frac{D(0) D(1)}{D(0)} = \frac{\beta^0 \beta^1}{\beta^0} = 1 \beta = 0.2$
- The discount function does not decline more quickly in the short-run than in the long-run – exponential discounters are equally patient whether choosing for the future or for the present.
- This approach thus cannot explain evidence similar to that of Thaler and Laibson!



But we observe a persistent anomaly

Which do you prefer?





The type of impatience singled out by future Nobel laureate George
 Akerlof in a talk on "Procrastination and Obedience" to the American
 Economic Association in 1991 as one explanation for procrastination:

 "Procrastination occurs when present costs are unduly salient in comparison with future costs, leading individuals to postpone tasks until tomorrow without foreseeing that when tomorrow comes, the required action will be delayed yet again."



Exponential versus hyperbolic discount



A number of formulations of the "hyperbolic curve" possible; David Laibson's "quasihyperbolic" is the simplest



Quasi-hyperbolic discounting

• Adds a second discount factor δ when events are further away!

- Suppose $\beta = 0.8, \delta = 0.5$
- Future discount rate: $\frac{D(t) D(t+1)}{D(t)} = \frac{\delta\beta^t \delta\beta^{t+1}}{\delta\beta^t} = 1 \beta = 0.2$ • Present discount rate: $\frac{D(0) - D(1)}{D(0)} = \frac{1 - \delta\beta}{1} = 1 - \delta\beta = 0.6!$

- Quasi-hyperbolic discounters choose relatively patiently when choosing for the future and more impatiently when choosing for the present!
- Note if $\delta = 1$ we get back to exponential discounting.



- Like Laibson, Akerlof's example conforms to the idea that every day you wake up convinced that tomorrow is the day you will do your work.
- Notice Akerlof's model* assumes you do not learn from this process. You do not forecast your future self.
- This is now called "naïve" as opposed to "sophisticated" procrastination by behavioural economists.

*To "model": to offer a simplified version of reality that allows us to observe, understand and make predictions about behaviour



- Empirical evidence suggests about 20% of adults are chronic procrastinators, often with high welfare costs, but up to 50% of university students!
 - Steel; O'Donoghue and Rabin, many others

- What can account for this?
- What remedies might there be?



- People who are hyperbolic discounters want smaller sooner rather than larger later, right now
- They are more willing to wait and take larger later in a future period
- So they are likely to be "dynamically inconsistent" and switch behavior when they get to the later period

• How does this continue indefinitely?



- for Students (Tice and Baumeister)
- Procrastinators reported lower stress and less illness than nonprocrastinators early in the term, but reported higher stress and more illness late in the term, and overall were sicker.
- Procrastinators also received lower grades on all assignments.
- Procrastination thus appears to be a self-defeating behaviour pattern marked by short-term benefits and long-term costs



How can we explain chronic procrastination?

 If we define procrastination here as *postponement*, which involves trading off future gains for smaller immediate satisfaction, then chronic procrastination is much more: Postponing even though you know or should know it is harmful to you to do so!

 Standard ("neo-classical") assumptions postulate that we act rationally; with full information it is impossible to understand this widespread phenomenon!



- Behavioural economics offers two ways to model this apparent irrationality. We have seen one: repeated hyperbolic discounting
- The second major approach is to see procrastination as a coordination failure, in which a person's present self and future self do not work as a team
- This idea of competing selves was first developed informally by future Nobel laureate Tom Schelling in 1960
- Life is then a "game" you play against yourself!



Lessons from game theory

Future Self

		Postpone	Study
Current Self	Postpone	-5, -5	0, -20
	Study	-20, 0	-1, -1

- Postpone is a dominant strategy (both selves always prefer to postpone than do the work!)
- {Postpone, Postpone} is the Nash equilibrium of the game, despite the fact that {Study,
 Study} gives a better result for both selves!



Lessons from game theory

 If we model the "game" of your current self against your future self as a one-off game, it is like the Prisoner's Dilemma, and you won't get the best outcome.

• However, as we have seen, the game gets to be repeated: what then can we do?



- A chief strategy proposed by Schelling to improve the outcome of a repeated or iterated game is pre-commitment
- For this Ariely (2002) offered an experiment with deadlines: a market for commitment

 It is even possible to transform the payoff matrix in this case into a different game: if the current and future self can operate as a team, caring about collective utility (Bacharach).



Major Lesson: Pre-commitment

- Thomas Schelling, 2005 Nobel laureate for game theory:
- "I see all around me, and inside me, the occupational disease of procrastination. Many of us have to burden ourselves with **deadlines or short-term goals** to get anything written."
- Dan Ariely and Klaus Wertenbroch, *Procrastination, Deadlines, and Performance: Self-Control by Precommitment*, 2002:

"People have self-control problems, they recognize them, and they try to control them by **self***imposing costly deadlines*. These deadlines help people control procrastination, but they are **not as effective as some externally imposed deadlines** in improving task performance."

But analysis and evidence continues...





- Procrastination arises from "present bias", and often we see "dynamic inconsistency" - later regret
- Avoidance behaviour may be a driver
- Alternately, it may be seen as the conflict of different selves, present and future, planner and doer
- Pre-commitment in the form of deadlines is one key measure to transform this game and improve welfare
- Field experiments and observations have not yet been decisive.



Further Reading

• George Akerlof, "Procrastination and Obedience," American Economic Review, May 1991

http://socsci2.ucsd.edu/~aronatas/project/academic/akerlof%20on%20procrastination.pdf

• Don Ross, "Economic models of procrastination"

https://ww.researchgate.net/profile/Don_Ross/publication/295507760_Economic_Models_of_P rocrastination/links/5a5d1b67a6fdcc68fa96f21f/Economic-Models-of-

Procrastination.pdf?origin=publication_detail



Feel free to contact us!

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