#### **ECON 2338: Behavioral Development Economics**

[Syllabus as of 2022/01/15] Spring 2022 Harvard University

Meetings: Tue and Thurs 9-10.15 am (1/25-4/26, 2022) Location: Littauer Ctr 301 (Mason Hanson Room)

Note: In case a student (or instructor) is in quarantine or is unwell, class will be hybrid provided we have enough advance notice. The first week will be remote (see canvas for zoom links)

**Professor**: Gautam Rao grao@fas.harvard.edu

Office Hours (Schedule Online): <a href="https://raoofficehours.as.me/">https://raoofficehours.as.me/</a> or email me if those times don't work

TF: Yihong Huang

yihong huang@g.harvard.edu

Office Hours: Mondays 9–10 a.m. ET: <a href="https://harvard.zoom.us/my/yihongh">https://harvard.zoom.us/my/yihongh</a> or email me if those times don't work

# **Overview & Course Objectives**

This course will cover the *intersection* of two rapidly growing fields in economics - development economics, and behavioral economics. Behavioral development economics brings *insights* and *tools* from psychology and behavioral economics to the study of developing economies and poverty more generally. In additional to applying existing behavioral-economics ideas to important development questions, we will also ask whether there is a need for a special behavioral science of poverty and development. That is, what is special about the behavioral economics of poverty and underdevelopment?

The class is aimed at students interested in conducting research in either (or both) of the fields of behavioral and development economics. The class can be used to count towards either the development field exam (in combination with 2360) or the behavioral field exam (in combination with one of 2030 or 2035 or 2040). For students specializing in behavioral economics, this class provides training in empirical methods and introduces new topics on the behavioral science of poverty. For students focused on development economics, this class covers innovative applications of behavioral economics to development research, and highlights ideas which could be particularly ripe for application to development questions. Methods covered will include field experiments, lab experiments (although much less focus on this), testing behavioral theory, and combining experiments with structural estimation. There is an emphasis on experimental design, although we will also briefly discuss some applied econometric topics, including structural estimation, instrumental variables, randomization inference, and multiple hypotheses testing.

The following is a partial list of course objectives:

- 1) Obtain exposure to the frontier of research in behavioral development economics
- 2) Learn how to *design* a field experiment to test (behavioral) economic theory
- 3) An introduction to structural estimation using field experimental data
- 4) An introduction to the use of lab experiments in development economics research
- 5) Learn applications of behavioral science to policy, especially in developing countries.

6) Learn to give a short presentation of a research proposal, as well give feedback to others.

# **Prerequisites**

The course is designed for PhD students in Economics, Business Economics, Political Economy and Government (PEG), and Public Policy. Any student in these programs may enroll. Qualified PhD students from other programs (or, rarely, undergraduates or master's students) may also enroll with the permission of the instructor if, and only if, they meet the following pre-requisites: 1) satisfactory completion or concurrent enrollment in Economics 2010a/2010b or 2020a/2020b; 2) satisfactory completion of Economics 2110, 2120, 1123, 1126, or concurrent enrollment in 2115 or 2140.

Auditing. Students not meeting the pre-requisites are welcome to audit the course. Due to current Covid-19 restrictions, auditors are required to be Harvard students or visitors who are on the same testing schedule as other participants. Auditors are gently requested to also complete the course readings, failing which they are (still gently) requested to not ask clarifying questions in class, since the lectures presume that students have prepared by completing the necessary readings, and that students have the relevant background.

#### Course requirements and grading

Grades will be determined based on (i) a presentation of a research proposal (30%), (ii) constructive feedback provided on two other students' presentations (10%), (iii) four problem sets (40%), and (iv) class participation and weekly reading summaries (20%). There will be no exams.

# Required Readings (20% of grade)

By the evening before each class (i.e., 6 pm on Monday and Wednesday), students are required to do two things:

- (1) Write a short (less than one page) summary of the required reading for that day and upload the summary to the course website under the "Assignments" tab. Please only submit PDF documents. Late submissions will not be accepted and will receive a zero grade. The summaries should cover the following: (i) Why is the paper important (or why not)? (ii) An overview of the core contributions of the paper. (iii) What you liked or did not like about the paper.
- (2) Optional: Any questions you have about the paper. This is a separate assign

# Problem Sets (40% of grade) – Due at 6 pm Sunday on the dates listed

PS1 (10%) Self-Control – Model solving and calibration – Due 2/13

PS2 (10%) Empirical Exercise – Model Simulation and Estimation – Due 2/27

PS3 (10%) Design a field experiment. Design a lab experiment. – Due 3/13

PS4 (10%) Take a behavioral view of classic development questions. – Due 4/3

Late submissions will have points deducted at the rate of 1% per day.

Research Design Presentation (30%) – Randomly assigned to 4/14-4/26 (presentation only, no written proposal required)

Students are required to *present* a research proposal on a topic related to the themes of the class. By the end of March, and ideally earlier, you *must* have met me in office hours to discuss your idea for the research proposal. I can help you choose between ideas if necessary.

The ideal presentation will formulate a clear research question, provide a convincing identification strategy (such as the design of an experiment, or a natural experiment paired with existing or potentially collectable data) and also provide power calculations.

Students will be randomly assigned to present on one of the four final class meetings. The presentation will be 20 minutes long, including Q&A. Some of these details may be adjusted based on course enrollment.

**Peer Feedback (10% of grade)** Each student will be required to provide written feedback (at least one single-spaced page each) on 2 other students' research proposals based on their presentations. The task is to provide constructive feedback and suggestions on ways to improve the proposal. Peer review reports will be due by May 3.

**Sections** The course will have optional sections led by the TF that review the core models of behavioral economics.

# **Summary of Assignment Due Dates**

- Twice weekly: 1-page response to required readings

Feb 13: PS1 dueFeb 27: PS2 dueMarch 13: PS3 dueApril 03: PS4 due

- Presentation: Apr 14 - Apr 26 (randomly assigned presentation date)

- Peer feedback: May 3

Note: All of the above assignments (save for the in-class presentations) should be uploaded to the course website by 6 pm on the due date. All page limits mentioned above refer to double-spaced text.

# **Course outline**

Lecture	Date	Торіс
1	1/25 (T)	History of behavioral development +
		The Euler Equation Puzzle
2	1/27 (Th)	Default Effects (and related choice anomalies)
3	2/1 (T)	Self Control – I – Evidence, Measurement, Sophistication vs Naivete
4	2/3 (Th)	Self Control – II – Applications (Guest lecture by Frank Schilbach)
5	2/8 (T)	Limited Attention – I
6	2/10 (Th)	Limited Attention – II
7	2/15 (T)	Social Preferences – I – Altruism, Fairness, Envy, Reciprocity
8	2/17 (Th)	Social Preferences – II – Social Image, Norms and Pressure
9	2/22 (T)	Preference and Identity Formation
10	2/24 (Th)	Culture and Variation in Preferences (Guest lecture by Ben Enke)
11	3/1 (T)	Mental Accounting and Heuristic Thinking
12	3/3 (Th)	Reference-Dependent Preferences – I
13	3/8 (T)	Reference-Dependent Preferences – II
14	3/10 (Th)	Beliefs and learning - I
15	3/15 (T)	Spring Recess, No Class
16	3/17 (Th)	Spring Recess, No Class
17	3/22 (T)	Beliefs and learning - II
18	3/24 (Th)	Psychology for Economists
19	3/29 (T)	Psychology of Poverty – I
20	3/31 (Th)	Psychology of Poverty – II
21	4/5 (T)	Topics: Behavioral Labor and Firms
22	4/7 (Th)	Topics: Gender – I
23	4/12 (T)	Topics: Gender – II
24	4/14 (Th)	In-Class Presentations
25	4/19 (T)	In-Class Presentations
26	4/21 (Th)	In-Class Presentations
27	4/26 (T)	In-Class Presentations

### **Course Readings**

There is no textbook for the class. However, some useful references and general readings are the following:

Kremer, Michael, Rao, Gautam and Schilbach, Frank. 2019. Behavioral Development Economics. Chapter in the Handbook of Behavioral Economics Vol 2 (Eds. Douglas Bernheim, David Laibson, Stefano DellaVigna).

Douglas Bernheim, David Laibson, Stefano DellaVigna (Eds.). Handbook of Behavioral Economics. Vol 1 and Vol 2.

World Bank. 2015. "World Development Report 2015: Mind, Society, and Behavior"

Della Vigna, Stefano. 2009. "Psychology and Economics: Evidence from the Field." *Journal of Economic Literature* 47(2): 315-372.

\*Starred Readings are Required Readings. Summaries of required readings must be uploaded to the course website by 6 pm of the day before each lecture.

#### Default Effects and related choice-anomalies (1/27)

Papers on Default Effects

Madrian, Brigitte C., and Dennis F. Shea. 2001. "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior." Quarterly Journal of Economics 116(4): 1149-1187.

Carroll, Gabriel D., James J. Choi, David Laibson, Brigitte C. Madrian, and Andrew Metrick. 2009. "Optimal Defaults and Active Decisions." Quarterly Journal of Economics 124(4): 1639-1674.

\*Chetty, Raj, John N. Friedman, Soren Leth-Petersen, Torben Heien Nielsen, and Tore Olsen. 2014. "Active vs. Passive Decisions and Crowd-Out in Retirement Savings Accounts." Quarterly Journal of Economics 129(3): 1141-1219.

Thaler, Richard H. and Shlomo Benartzi. 2004. "Save More TomorrowTM: Using Behavioral Economics to Increase Employee Saving." Journal of Political Economy 112(S1): S164-187.

Blumenstock, Joshua, Michael Callen, and Tarek Ghani. Mobile-izing savings with automatic contributions: Experimental evidence on dynamic inconsistency and the default effect in afghanistan. mimeo, 2016.

Brot-Goldberg, Zarek C., Timothy Layton, Boris Vabson & Adelina Yanyue Wang. 2021. The Behavioral Foundations of Default Effects: Theory and Evidence from Medicare Part D. NBER Working 28331. DOI 10.3386/w28331

Papers on Choice Overload and Dominated Choices

Iyengar, S. and M. Lepper.2000. "When Choice Is Demotivating: Can OneDesire Too Much of a Good Thing?" Journal of Personality and Social Psychology, 79(6):995-1006.

Abaluck, Jason and Jonathan Gruber. 2020. "When Less is More: Improving Choices by Limiting Choices in Health Insurance Markets", conditionally accepted, Review of Economic Studies

Bhargava, Saurabh, George Loewenstein, and Justin Sydnor. "Choose to lose: Health plan choices from a menu with dominated option." *The Quarterly Journal of Economics* 132, no. 3 (2017): 1319-1372.

Abaluck, J. and Gruber, J., 2011. Choice inconsistencies among the elderly: evidence from plan choice in the Medicare Part D program. *American Economic Review*, 101(4), pp.1180-1210

Abaluck, J. and Gruber, J., 2016. Evolving choice inconsistencies in choice of prescription drug insurance. *American Economic Review*, 106(8), pp.2145-84.

Abaluck, Jason and Abigail Adams. 2020. "What Do Consumers Consider Before They Choose? Identification from Asymmetric Demand Responses" forthcoming, Quarterly Journal of Economics

#### Self Control – Background Theory Papers

Laibson, David. 1997. "Golden Eggs and Hyperbolic Discounting." *The Quarterly Journal of Economics* 112 (2): 443–77.

O'Donoghue, Ted, and Matthew Rabin. 1999. "Doing It Now or Later." *The American Economic Review* 89 (1): 103–24.

O'Donoghue, Ted, and Matthew Rabin. 2001. "Choice and Procrastination." *The Quarterly Journal of Economics* 116 (1): 121–60.

#### Self Control I – Basic Evidence, Measurement, Sophistication and Naivete (2/1)

Frederick, Shane, George Loewenstein, and Ted O'Donoghue. 2002. "Time Discounting and Time Preference: A Critical Review." Journal of Economic Literature 40(2): 351-401.

- \* Ericson, K.M. and Laibson, D., 2018. Intertemporal choice (No. w25358). National Bureau of Economic Research.
  - → This is an important recent review, and is a chapter in the Handbook of Behavioral Economics, Vol 2.

Cohen, J.D., Ericson, K.M., Laibson, D. and White, J.M., 2016. Measuring time preferences (No. w22455). National Bureau of Economic Research.

Andreoni, James and Charles Sprenger. 2012. "Estimating Time Preferences from Convex Budgets." *American Economic Review* 102(7): 3333-3356.

Augenblick, Ned, Muriel Niederle, and Charles Sprenger. 2015. "Working over Time: Dynamic Inconsistency in Real Effort Tasks." *Quarterly Journal of Economics*, 130(3): 1067-1115.

Meier, Stephan and Charles Sprenger. 2015. "Temporal Stability of Time Preferences." *Review of Economics and Statistics* 97(2): 273-286.

Ariely, Dan and Klaus Wertenbroch. 2002. "Procrastination, Deadlines, and Performance: Self-Control by Precommitment." *Psychological Science* 13(3): 219-224.

Laibson, David. 2015. "Why Don't Present-Biased Agents Make Commitments?" *American Economic Review* 105(5): 267-272.

Bryan, G., Karlan, D. and Nelson, S., 2010. Commitment devices. Annu. Rev. Econ., 2(1), pp.671-698.

Augenblick, N. and Rabin, M., 2015. An experiment on time preference and misprediction in unpleasant tasks. The Review of Economic Studies.

Carrera, M., Royer, H., Stehr, M., Sydnor, J. and Taubinsky, D., 2019. *How are preferences for commitment revealed?* (No. w26161). National Bureau of Economic Research.

# **Self Control II – Applications (2/3)**

\*Schilbach, Frank. 2019 "Alcohol and Self-Control: A Field Experiment in India." Mimeo.

Casaburi, Lorenzo and Jack Willis, Time vs. State Insurance: Experimental Evidence from Contract Farming in Kenya (2016)

Kaur, Supreet, Michael Kremer, and Sendhil Mullainathan. 2015. "Self-Control at Work." *Journal of Political Economy*.

Ashraf, Nava, Dean Karlan, and Wesley Yin. 2006. "Tying Odysseus to the Mast: Evidence from a Commitment Savings Product in the Philippines." *Quarterly Journal of Economics* 121(2): 635-672.

Duflo, E., Kremer, M. and Robinson, J., 2011. Nudging Farmers to Use Fertilizer: Theory and Experimental Evidence from Kenya. *American Economic Review*, 101, pp.2350-2390.

Andreoni, James, Michael Callen, Karrar Jaffar, Yasir Khan, and Charles Sprenger. 2015. "Tailoring Intertemporal Incentives: An Application to Polio Vaccination Drives in Pakistan." Mimeo.

Milkman, Katherine L., Julia A. Minson, and Kevin G.M. Volpp. 2014. "Holding the Hunger Games Hostage at the Gym: An Evaluation of Temptation Bundling." *Management Science*, 60(2): 283-299.

Brown, J.R. and Previtero, A., 2014. Procrastination, Present-Biased Preferences, and Financial Behaviors.

Samek, Anya, Charles Sprenger, and Sally Sadoff. 2015. "Dynamic Inconsistency in Food Choice: Experimental Evidence from a Food Desert." Mimeo.

Beshears, John, James Choi, Christopher Clayton, Christopher Harris, David Laibson, and Brigitte Madrian. 2015. "Optimal Illiquidity." Mimeo.

Hershfield, Hal. 2011. "Future Self-continuity: How Conceptions of the Future Self Transform Intertemporal Choice." Annals of the New York Academy of Sciences 1234: 30-43.

Giné, X., Karlan, D. and Zinman, J., 2010. Put your money where your butt is: a commitment contract for smoking cessation. *American Economic Journal: Applied Economics*, pp.213-235.

John, A., 2014. When Commitment Fails-Evidence from a Regular Saver Product in the Philippines. Suntory and Toyota International Centres for Economics and Related Disciplines, LSE.

Bai, Liang, Edward Miguel, Benjamin Handel and Gautam Rao (2018). "Self Control and Chronic Illness: Theory and Evidence from a Field Experiment"

Sally Sadoff, Anya Samek, Charles Sprenger, Dynamic Inconsistency in Food Choice: Experimental Evidence from Two Food Deserts, The Review of Economic Studies, , rdz030, https://doi.org/10.1093/restud/rdz030

#### Limited Attention, Memory and Salience – Background Theory and Review Papers

Gabaix X. Behavioral Inattention. In: Handbook of Behavioral Economics, Vol 2, edited by D Bernheim, S DellaVigna and D Laibson, Forthcoming. Elsevier. 2019.

→ Important new review article by Gabaix.

Sims, Christopher. 2003. "Implications of Rational Inattention," *Journal of Monetary Economics* 50: 665-690.

Gabaix, Xavier. 2014. "A sparsity-based model of bounded rationality," *The Quarterly Journal of Economics*, 129(4), pp.1661-1710.

Kőszegi, Botond, and Adam Szeidl. "A model of focusing in economic choice." The Quarterly Journal of Economics 128.1 (2013): 53-104.

Bordalo, P., Gennaioli, N. and Shleifer, A., 2012. Salience and consumer choice (No. w17947). National Bureau of Economic Research.

# Limited Attention, Memory and Salience I (2/8)

\*Chetty, R., Looney, A. and Kroft, K., 2009. Salience and Taxation: Theory and Evidence. *The American Economic Review*, 99(4), p.1145.

Goldin, Jacob and Tatiana Homonoff, "Smoke Gets in Your Eyes: Cigarette Tax Salience and Regressivity", *American Economic Journal: Economic Policy* 5(1), pp 302-336 (2013)

Bertrand, M., Karlan, D., Mullainathan, S., Shafir, E. and Zinman, J., 2010. What's Advertising Content Worth? Evidence from a Consumer Credit Marketing Field Experiment. *The Quarterly Journal of Economics*, 125(1), pp.263-306.

Karlan, D., McConnell, M., Mullainathan, S. and Zinman, J., 2010. *Getting to the top of mind: How reminders increase saving* (No. w16205). National Bureau of Economic Research.

Pop-Eleches, C., Thirumurthy, H., Habyarimana, J.P., Zivin, J.G., Goldstein, M.P., De Walque, D., Mackeen, L., Haberer, J., Kimaiyo, S., Sidle, J. and Ngare, D., 2011. Mobile phone technologies improve

adherence to antiretroviral treatment in a resource-limited setting: a randomized controlled trial of text message reminders. *AIDS (London, England)*, 25(6), p.825.

Hallsworth, Michael, et al. The behavioralist as tax collector: Using natural field experiments to enhance tax compliance. No. w20007. National Bureau of Economic Research, 2014.

#### Limited Attention, Memory and Salience II (2/10)

\*Hanna, R., Mullainathan, S. and Schwartzstein, J., 2014. Learning through noticing: Theory and evidence from a field experiment. *The Quarterly Journal of Economics*, 129(3), pp.1311-1353.

Banerjee, Abhijit and Sendhil Mullainathan. 2008. "Limited Attention and Income Distribution." *American Economic Review* 98(2): 489-493.

Taubinsky, D. and Rees-Jones, A., 2017. Attention variation and welfare: theory and evidence from a tax salience experiment. The Review of Economic Studies, 85(4), pp.2462-2496.

Ericson, K. M. (2017). On the interaction of memory and procrastination: Implications for reminders, deadlines, and empirical estimation. Journal of the European Economic Association, 15(3), 692-719.

Dertwinkel-Kalt, M., Gerhardt, H., Riener, G., Schwerter, F. and Strang, L., 2016. Concentration bias in intertemporal choice (pp. 626-653). mimeo.

Abaluck, Jason and Abigail Adams. 2020. "What Do Consumers Consider Before They Choose? Identification from Asymmetric Demand Responses" forthcoming, Quarterly Journal of Economics

#### Social Preferences – Background Theory and Reading

Banerjee, Abhijit. 1990. "Envy." in *Economic Theory and Policy: Essays in Honour of Professor Dipak Banerjee*, Bhaskar, Dutta (ed.), Bombay and New York: Oxford University Press.

Bernheim, Douglas. 1994. "A Theory of Conformity." Journal of Political Economy 102(5): 841-877.

Charness, G. and Rabin, M., 2002. Understanding social preferences with simple tests. *Quarterly journal of Economics*, pp.817-869.

Levitt, S.D. and List, J.A., 2007. What do laboratory experiments measuring social preferences reveal about the real world? *The journal of economic perspectives*, pp.153-174.

Imas, Alex and Uri Gneezy. 2015. Lab in the Field: Measuring Preferences in the Wild. (Prepared for the forthcoming Handbook of Field Experiments in Economics)

#### Social Preferences I – Altruism, Fairness, Envy, Reciprocity (2/15)

\* Hjort, J., 2014. Ethnic Divisions and Production in Firms. *The Quarterly Journal of Economics*, 129(4), pp.1899-1946.

Breza, E., Kaur, S. and Shamdasani, Y., 2015. The Morale Effects of Pay Inequality. Working paper.

Finan, F. and Schechter, L., 2012. Vote-Buying and Reciprocity. *Econometrica*, 80(2), pp.863-881.

Haushofer, J., Reisinger, J. and Shapiro, J., 2015. *Your Gain Is My Pain: Negative Psychological Externalities of Cash Transfers*. Working Paper.

Della Vigna, S., List, J.A., Malmendier, U. and Rao, G., 2016. *Estimating social preferences and gift exchange at work* (No. w22043). National Bureau of Economic Research.

Enke, B., Rodriguez-Padilla, R. and Zimmermann, F., 2019. Moral universalism: Measurement and heterogeneity.

# Social Preferences II – Social Image, Norms and Pressure (2/17)

(Review Article) Bursztyn, Leonardo, and Robert Jensen. *Social Image and Economic Behavior in the Field: Identifying, Understanding and Shaping Social Pressure*. No. w23013. National Bureau of Economic Research, 2016.

\*Burzstyn, Leo and Rob Jensen. 2015. "How Does Peer Pressure Affect Educational Investments?" *Quarterly Journal of Economics* 130(3): 1329-1367.

Bursztyn, Leonardo, Thomas Fujiwara, and Amanda Pallais. "'Acting Wife': Marriage Market Incentives and Labor Market Investments." (2016).

Bursztyn, L., Ferman, B., Fiorin, S., Kanz, M., Rao, G. 2017. Social Image and Status Goods: Experimental Evidence from Platinum Credit Cards in Indonesia. *Mimeo*.

Burzstyn, Leo, Gonzalez, Alessandra and David Yanagizawa-Drott. 2018. "Misperceived Social Norms: Female Labor Force Participation in Saudi Arabia". Working Paper.

Bursztyn, L., Egorov, G. and Fiorin, S., 2017. From extreme to mainstream: How social norms unravel (No. w23415). National Bureau of Economic Research.

Della Vigna, Stefano, John A. List, Ulrike Malmendier, and Gautam Rao. *Voting to tell others*. Review of Economic Studies, January 2017.

Perez-Truglia, R. and Cruces, G., 2015. Partisan interactions: Evidence from a field experiment in the united states. *Forthcoming, Journal of Political Economy*.

Della Vigna, Stefano, John A. List, and Ulrike Malmendier. "Testing for altruism and social pressure in charitable giving." *The Quarterly Journal of Economics* (2012).

#### **Preference and Identity Formation (2/22)**

Callen, M., Isaqzadeh, M., Long, J.D. and Sprenger, C., 2014. Violence and risk preference: Experimental evidence from Afghanistan. *The American Economic Review*, 104(1), pp.123-148.

\*Rao, G., (2019). Familiarity does not breed contempt: Diversity, discrimination and generosity in Delhi schools. *The American Economic Review*.

Lowe, M., 2020. Types of contact: A field experiment on collaborative and adversarial caste integration. Forthcoming, *The American Economic Review* 

Voors, M.J., Nillesen, E.E., Verwimp, P., Bulte, E.H., Lensink, R. and Van Soest, D.P., 2012. Violent conflict and behavior: a field experiment in Burundi. *The American Economic Review*, 102(2), pp.941-964.

Callen, M., 2015. Catastrophes and time preference: evidence from the Indian Ocean earthquake. *Journal of Economic Behavior & Organization*.

Fisman, R., Kariv, S. and Markovits, D., 2009. Exposure to ideology and distributional preferences. *Unpublished paper*.

Yanagizawa-Drott, D. (2014). "Propaganda and Conflict: Evidence from the Rwandan Genocide". Quarterly Journal of Economics, 129(4), pp.1947-1994.

Jensen, R. and Oster, E., 2009. The power of TV: Cable television and women's status in India. *The Quarterly Journal of Economics*, 124(3), pp.1057-1094.

Bursztyn, L. and Cantoni, D., 2015. A tear in the iron curtain: The impact of western television on consumption behavior. *Review of Economics and Statistics*, (0).

Blouin, Arthur Thomas, Mukand, Sharun W., 2017. Erasing ethnicity? Propaganda, nation building and identity in Rwanda.

Cassan, Guilhem. "Identity-based policies and identity manipulation: Evidence from colonial Punjab." *American Economic Journal: Economic Policy* 7.4 (2015): 103-131.

#### Culture and Variation in Preferences (2/24)

Kremer, Michael, Rao, Gautam and Schilbach, Frank. 2019. Behavioral Development Economics. Sec 9.

Nunn, Nathan, and Leonard Wantchekon. "The slave trade and the origins of mistrust in Africa." *The American Economic Review* 101.7 (2011): 3221-3252.

Schulz, Jonathan, Bahrami-Rad, Duman, Beauchamp, Jonathan, Henrich, Joseph, 2018. The origins of WEIRD psychology.

\*Enke, Benjamin. 2018. "Kinship, Cooperation and the Evolution of Moral Systems."

Lowes, Sara, Nathan Nunn, James A. Robinson and Jonathan Weigel. 2015. "The Interaction of Culture and Institutions: Evidence from the Kuba Kingdom." *Working Paper* 

Gneezy, Uri, Kenneth L. Leonard and John A. List. 2009. "Gender Differences in Competition: Evidence from a Matrilineal and a Patrileneal Society," Econometrica, 77(5), 1637–166

Hoff, Karla, Mayuresh Kshetramade, and Ernst Fehr. 2011. "Caste and Punishment: The Legacy of Caste Culture in Norm Enforcement," Economic Journal, 121 (556): F449–F475

Falk, Armin, Anke Becker, Thomas J. Dohmen, Benjamin Enke, and David Huffman. "The nature and predictive power of preferences: Global evidence." (2015).

# Mental Accounting and Heuristic Thinking (3/1)

Rabin, Matthew, and Georg Weizsäcker. "Narrow bracketing and dominated choices." The American economic review 99.4 (2009): 1508-1543.

Thaler, R., 1985. Mental accounting and consumer choice. *Marketing science*, 4(3), pp.199-214.

\* Hastings, J.S. and Shapiro, J.M., 2013. Fungibility and Consumer Choice: Evidence from Commodity Price Shocks. *The Quarterly Journal of Economics*, 128(4), pp.1449-1498.

Hastings, J. and Shapiro, J.M., 2018. How are SNAP benefits spent? Evidence from a retail panel. *American Economic Review*, 108(12), pp.3493-3540.

Prelec, Drazen, and Duncan Simester. "Always leave home without it: A further investigation of the credit-card effect on willingness to pay." Marketing letters 12.1 (2001): 5-12.

Milkman, K.L. and Beshears, J., 2009. Mental accounting and small windfalls: Evidence from an online grocer. Journal of Economic Behavior & Organization, 71(2), pp.384-394.

Rees-Jones, A. and Taubinsky, D., 2020. Measuring "schmeduling". *The Review of Economic Studies*, 87(5), pp.2399-2438.

Read, D., Loewenstein, G., Rabin, M., Keren, G. and Laibson, D., 1999. Choice bracketing. In *Elicitation of preferences* (pp. 171-202). Springer, Dordrecht.

Ito, K., 2014. Do consumers respond to marginal or average price? Evidence from nonlinear electricity pricing. *American Economic Review*, 104(2), pp.537-63.

#### Reference-Dependent Preferences – Background Theory

Kahneman, Daniel, and Amos Tversky. 1979. "Prospect Theory: An Analysis of Decision under Risk." *Econometrica* 47 (2): 263–91. doi:10.2307/1914185.

Kőszegi, Botond, and Matthew Rabin. 2006. "A Model of Reference-Dependent Preferences." *The* 

*Quarterly Journal of Economics* 121 (4): 1133–65.

Rabin, Matthew, 2000. "Risk Aversion and Expected-Utility Theory: A Calibration Theorem." Mimeo.

O'Donoghue, T. and Sprenger, C., 2018. Reference-dependent preferences. *Handbook of Behavioral Economics*-Foundations and Applications, 1, p.1.

#### Reference-Dependent Preferences I (3/3)

Fehr, E. and Goette, L., 2007. Do Workers Work More if Wages Are High? Evidence from a Randomized Field Experiment. *American Economic Review*, 97(1), pp.298-317.

\*Justin Sydnor. 2010. "(Over)insuring Modest Risks." American Economic Journal: Applied Economics, 2(4): 177–99.

Della Vigna, Stefano; Attila Lindner, Balazs Reizer, and Johannes Schmieder. "Reference Dependent Job Search: Evidence from Hungary"

#### **Reference-Dependent Preferences II (3/8)**

\*Carney, Kevin, Kremer, Michael, Lin, Xinyue and Gautam Rao. 2019. The Endowment Effect and Collateralized Loans.

Dupas, P. and Robinson, J., 2014. The Daily Grind: Cash Needs, Labor Supply and Self-Control. Unpublished paper.

Tanaka, T., Camerer, C.F. and Nguyen, Q., 2010. Risk and time preferences: linking experimental and household survey data from Vietnam. *The American Economic Review*, 100(1), pp.557-571.

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#### Learning – Background Theory

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