ARE 251/ Econ 270A: First Half
Topics in Development Economics
Fall 2017-18

Lecture: MW 10-12 PM in 248 Giannini.
Instructor: Aprajit Mahajan
Office: Giannini 219
Office Hours: MW 12-1 and by appointment.Lecture: M (7 Evans) W (2011 VLSC) 10-12 PM
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Course Web: https://bcourses.berkeley.edu/courses/1463645

Course Description

This course is part of the graduate sequence in development economics. The second half of the course will be taught by Professor Jeremy Magruder. The main aim of this course is to develop student skills in reading and writing papers in empirical micro-economic development. In particular, I will spend time working through a few papers in detail rather than attempting a synthesis of the literature. In addition, I will provide an introduction to the relevant econometric methods when appropriate.

Textbooks

Deaton (1997) is a great reference for empirical work and if you are considering writing an applied thesis, I strongly encourage you to purchase a copy. Bardhan and Udry (1999) is a textbook type treatment and while not comprehensive, is a good introduction to some of the material we will cover. Ray (1998) is an undergraduate text and often a useful place to start.

Prerequisites: I will assume familiarity with the microeconomics and econometrics covered in the first year ARE (or Econ) Ph.D. sequence.

Course Requirements

I expect you to do the required reading and to participate in class discussion. Papers marked with two asterisks will be discussed in some detail during lecture while the others are recommended reading. The figures in parentheses below are the absolute weights used in computing the grade for the course. In particular, the presentation, referee report and problem set from my half of the course will count for 40% of your total grade for the course and the (common) research proposal which is due at the end of the semester will count for 20% of your total grade.

Presentation (10%): Each student is expected to be part of a group that will make one joint presentation on a paper of my choosing and lead class discussion on it.The presentations will be scheduled by the third week of class and I will provide more details on the format and expectations.

Referee Reports (10%): Each student will write a referee report on any one of the following three papers: Rosenzweig and Udry (2014),[1] Jensen and Miller (2017)[2] or Kala (2017).[3] Alain de Janvry has a useful guide[4] on how to write a referee report that is also available on the course web-site. **Due: September 18 In Class**

Research Proposal (20%): Each student will write a proposal on a development topic that could serve as the basis for a second-year paper. There will only be one research proposal due for the entire course (i.e. for both this and the second half of the course). **Due: December 1 in Instructor Mailbox**

Problem Set (20%): Finally, there will be one problem set. The exercise that will involve a substantial amount of work with data (and using STATA is recommended). **Due: October 11 in Class**

Other Details

- We will make extensive use of the course `https://bcourses.berkeley.edu/courses/1463645` throughout the quarter. Lecture handouts, problem sets and solutions will all be posted on coursework. In addition, important announcements about office hours, times and locations will also be made on coursework. Please make sure to check the site regularly.

- A good way to learn STATA is to use it to carry out the empirical exercise. STATA is available at Berkeley via Citrix (see here for more information).[5] Students are welcome to use any other statistical package that they wish to use (and R and MATLAB are possible alternatives). A useful resource for working with STATA is here.[6] You can also purchase a student version of STATA for your own computer but that is not required for the course. The appendix in Deaton (1997) contains STATA code for the empirical analyses in the book and it is instructive to examine these in some detail.

- Engaging with scholars' work in seminars is an integral part of becoming an economist and all students are actively encouraged to attend the Economic Development Seminar on Mondays and the Development Lunch on Tuesdays. In addition, the ARE Seminar and the Political Economy Seminar at the Haas School often have development speakers as well.

Statement on Accommodation of Religious Creed

We will follow the guidelines set out by the university that are available here.[7]

Statement on Accommodation for Pregnancy and Parenting

In compliance with Title IX of the Education Amendments of 1972, and with the California Education Code, Section 66281.7, it is the official policy of the University of California at Berkeley to not discriminate against or exclude any person on the basis of pregnancy or related conditions, and to provide reasonable

[1] Available at `http://www.econ.yale.edu/~cru2//pdf/forecasting_profitability.pdf`.

[2] Available at `https://goo.gl/xiqWWP`.

[3] Available at `https://goo.gl/LEm9ru`.

[4] `http://are.berkeley.edu/courses/ARE251/2004/assignments/RRGuidelines.pdf`

[5] `http://guides.lib.berkeley.edu/Citrix`

[6] `https://stats.idre.ucla.edu/stata/modules/`

[7] `http://guide.berkeley.edu/religious-creed-policy/`

accommodations to students as appropriate. I will make allowances for medically necessary absences for pregnancy and related conditions and make reasonable accommodations for classes, exams, and problem sets. For more information about accommodations for students who are pregnant or parenting, please contact the Office for the Prevention of Harassment and Discrimination.[8]

Statement on Academic Integrity

Any test, paper or report submitted by you and that bears your name is presumed to be your own original work that has not previously been submitted for credit in another course unless you obtain prior written approval to do so from your instructor. If you are not clear about the expectations for completing an assignment or taking a test or examination, be sure to seek clarification from me beforehand.

Academic dishonesty and misconduct will be handled according to university regulations with no exceptions. Please see the relevant sections on academic integrity at UCB Official Notices.[9]

Out of Class Collaboration

You are allowed to work together in groups for the problem set, but each student must turn in an individual problem set with their own solutions. It is not a violation of this policy to submit essentially the same answer on a problem set as another student, but is a violation of this policy to submit a close to exact copy. Academic dishonesty and misconduct will be handled according to university regulations with no exceptions.

COURSE OUTLINE

1 Tools

Econometrics of Household Surveys

Deaton (1997) (Chapter 1.4, 2.1 and 2.2). Useful references for survey sampling include Groves, Floyd, Cooper, Lepkowski, Singer, and Tourangeau (2004), Lohr (1998) and for a modern GMM based treatment of the issues see Bhattacharyya (2003) and Chapter 20 of Wooldridge (2010). A recent practical guide for clustering issues is Cameron and Miller (2013).

Non-Parametric and Semi-parametric Methods

Deaton (1997) (Chapter 3.2 and 3.3). From an applied perspective, Silverman (1986), Jones and Wand (1995) are both quite good and Yatchew (2003) is also useful.

Resampling Methods

Deaton (1997) (Chapter 1.4). Efron and Tibshirani (1994) is a good introduction to applying the bootstrap as is Horowitz (2001). For a good introduction to the bootstrap as well as to subsampling, see Politis et al. (1999).

Causal Inference and Experiments

Heckman and Vytlacil (2007), Imbens and Rubin (2014), Duflo et al. (2006), Morgan and Rubin (2012), Bruhn and McKenzie (2009), Cox and Reid (2000).

[8] http://ophd.berkeley.edu/

[9] http://teaching.berkeley.edu/campus-policies-regarding-teaching-and-learning#ai

2 The Agricultural Household Model and Separation

Bardhan, P. and C. Udry (1999): *Development Microeconomics*, Oxford University Press (Chapters 1 and 2)

Singh, I., L. Squire, and J. Strauss (1986): *Agricultural Household Models: Extensions, Applications and Policy*, Johns Hopkins University Press

⋆⋆ Benjamin, D. (1992): "Household Composition, Labor Markets, and Labor Demand: Testing for Separation in Agricultural Models," *Econometrica*, 60, 287–322

——— (1995): "Can Unobserved Land Quality explain the Inverse Productivity Relationship," *Journal of Development Economics*, 46

⋆⋆ LaFave, D. and D. Thomas (2016): "Farms, Families, and Markets: New Evidence On Completeness Of Markets In Agricultural Settings," *Econometrica*, 84, 1917–1960

Lafave, D., E. Peet, and D. Thomas (2017): "Who Behaves as if Rural Markets are Complete?" Colby College Working Paper. Available at https://goo.gl/Jzmdn1

Jacoby, H. (1993): "Shadow Wages and Peasant Family Labour Supply: An Econometric Application to the Peruvian Sierra," *The Review of Economic Studies*, 60, 903–921

Barrett, C. B., S. M. Sherlund, and A. A. Adesina (2008): "Shadow wages, Allocative Inefficiency, and Labor Supply in Smallholder Agriculture," *Agricultural Economics*, 38, 21–34

Foster, A. and M. Rosenzweig (2002): "Household Division and Rural Economic Growth," *Review of Economic Studies*, 69, 839–869

3 Economics of Scale

⋆⋆ Deaton, A. and C. Paxson (1998): "Economies of Scale, Household Size and the Demand for Food," *Journal of Political Economy*, 106, 897–930

Gan, L. and V. Vernon (2003): "Testing the Barten Model of Economies of Scale in Household Consumption: Toward Resolving a paradox of Deaton and Paxson," *Journal of Political Economy*, 111, 1361–1377

——— (2003): "Engel's What? A Response to Gan and Vernon," *Journal of Political Economy*, 111, 1378–1382

Attanasio, O. P. and C. Frayne (2006): "Do the Poor Pay More?" UCL Working Paper

Attanasio, O. and E. Pastorino (2015): "Nonlinear Pricing in Village Economies," Available at http://www.nber.org/papers/w21718.pdf

Bergquist, L. F. (2017): "Pass-Through, Competition and Entry in Agricultural Markets: Experimental Evidence from Kenya," Available at https://www.dropbox.com/s/lxbluh9j3f74tn5/Bergquist_JMP.pdf?dl=0

Tools: Kernel Density Estimation, Non-parametric Regressions, Semi-Parametric Methods (Partially linear model, Fourier flexible forms)

4 Credit

Ch. 7 of Bardhan, P. and C. Udry (1999): *Development Microeconomics*, Oxford University Press

★★ Stiglitz, J. E. and A. Weiss (1981): "Credit Rationing in Markets with Imperfect Information," *American Economic Review*, 71, 393–410

Hoff, K. and J. Stiglitz (1997): "Moneylenders and Bankers: Price Increasing Subsidies with Monopolistic Competition," *Journal of Development Economics*, 52, 429–462

Ghosh, P., D. Mookherjee, and D. Ray (2000): "Credit Rationing In Developing Countries: An Overview Of The Theory," in *Readings in the Theory of Economic Development*, Blackwell, vol. ch 11, 383–401

★★ Karlan, D. and J. Zinman (2009): "Observing Unobservables: Identifying Information Asymmetries With a Consumer Credit Field Experiment," *Econometrica*, 77, 1993–2008

Banerjee, A. (2004): "Contracting Constraints, Credit Constraints and Economic Development," in *Advances in Economics and Econometrics: Theory and Applications: Eighth World Congress of the Econometric Society*, ed. by M. Dewatripoint, L. Hansen, and S. Turnovsky, Cambridge University Press, vol. III

★★ Banerjee, A. and E. Duflo (2014): "Do Firms Want to Borrow More? Testing Credit Constraints Using a Directed Lending Program," *Review of Economic Studies*, 81, 572–607

★★ Beaman, L., D. Karlan, B. Thuysbaert, and C. Udry (2015): "Selection into Credit Markets: Evidence from Agriculture in Mali," Northwestern University

★★ Karlan, D., R. Osei, I. Osei-akoto, and C. Udry (2014): "Agricultural Decions After Relaxing Credit and Risk Constraints," *Quarterly Journal of Economics*, 129, 597–652

Banerjee, A. and K. Munshi (2004): "How Efficiently is Capital Allocated? Evidence from the Knitted Garment Industry in Tirupur," *Review of Economic Studies*, 71, 19–42

de Mel, S., D. McKenzie, and C. Woodruff (2008): "Returns to Capital in Microenterprises: Evidence from a Field Experiment," *The Quarterly Journal of Economics*, 123, 1329–1372

Keniston, D. (2011): "Experimental vs. Structural Estimates of the Return to Capital in Microenterprises," Tech. rep., mimeo Yale

Imbens, G. W. and J. Angrist (1994): "Identification and Estimation of Local Average Treatment Effects," *Econometrica*, 62, 467–475

Vytlacil, E. (2002): "Independence, Monotonicity, and Latent Index Models: An Equivalence Result," *Econometrica*, 70, 331–341

Cox, D. and N. Reid (2000): *The Theory of the Design of Experiments*, CRC Press

von Lilienfeld-Toal, U., D. Mookherjee, and S. Visaria (2012): "The Distributive Impact of Reforms in Credit Enforcement: Evidence From Indian Debt Recovery Tribunals," *Econometrica*, 80, 497–558

Tools: Neyman-Rubin Notation, Experimental Designs, Local Average Treatment Effects (LATE), Multiple Testing.

Micro-Finance

Aghion, B. A. D. and J. Morduch (2005): *The Economics of Microfinance*, MIT Press

Fischer, G. and M. Ghatak (2011): "Spanning the Chasm: Uniting Theory and Empirics in Microfinance Research," in *The Handbook Of Microfinance*, World Scientific Publishing Co. Pte. Ltd., chap. 3, 59–75

★★Banerjee, A. V., D. Karlan, and J. Zinman (2015b): "Six Randomized Evaluations of Microcredit: Introduction and Further Steps," *American Economic Journal: Applied Economics*, 7, 1–21

See also Banerjee et al. (2015a), Tarozzi et al. (2015), Attanasio et al. (2015), Crépon et al. (2015), Angelucci et al. (2015) and Augsburg et al. (2015) in the same issue of *AEJ: Applied Economics.*

——— (2011): "Microcredit In Theory And Practice: Using Randomized Credit Scoring For Impact Evaluation." *Science (New York, N.Y.)*, 332, 1278–1284

★★ Kaboski, J. P. and R. M. Townsend (2011): "A Structural Evaluation of a Large-Scale Quasi-Experimental Microfinance Initiative." *Econometrica*, 79, 1357–1406

——— (2012): "The Impact of Credit on Village Economies," *American Economic Journal: Applied Economics*, 4, 98–133

Townsend, R. M. and S. S. Urzua (2009): "Measuring the Impact of Financial Intermediation: Linking Contract Theory To Econometric Policy Evaluation," *Macroeconomic Dynamics*, 13, 268

Banerjee, A., A. G. Chandrasekhar, E. Duflo, and M. O. Jackson (2013): "The Diffusion of Microfinance," *Science*, 341

Field, E., R. Pande, J. Papp, and N. Rigol (2013): "Does the Classic Microfinance Model Discourage Entrepreneurship among the Poor? Experimental Evidence from India," *American Economic Review*, 103, 2196–2226

Aguirregabiria, V. and P. Mira (2010): "Dynamic discrete choice structural models: A survey," *Journal of Econometrics*, 156, 38–67 (Survey of Dynamic Discrete Choice)

Tools: Dynamic Discrete Choice Models.

5 Learning and Technology Adoption

Ch. 12 of Bardhan, P. and C. Udry (1999): *Development Microeconomics*, Oxford University Press

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

——— (2010): "Microeconomics of technology adoption," *Annual Review of Economics*, 2, 395–424

Suri, T. (2011): "Selection and comparative advantage in technology adoption," *Econometrica*, 79, 159–209

★★ Foster, A. D. and M. R. Rosenzweig (1995): "Learning by Doing and Learning from Others: Human Capital and Technical Change in Agriculture," *Journal of Political Economy*, 103, 1176–1209

Bloom, N. and J. V. Reenen (2007): "Measuring and Explaining Management Practices across Firms and Countries," *The Quarterly Journal of Economics*, 122, 1351–1408

★★ Bloom, N., B. Eifert, A. Mahajan, D. McKenzie, and J. Roberts (2013): "Does Management Matter? Evidence From India," *Quarterly Journal of Economics*, 1–51, available at `http://qje.oxfordjournals.org/content/128/1/1.short`

Giorcelli, M. (2016): "The Long-Term Effects of Management and Technology Transfers," UCLA Working Paper

Conley, T. and C. Udry (2001): "Social Learning through Networks: The Adoption of New Agricultural Technologies in Ghana," *American Journal of Agricultural Economics*, 83, 668–73

Jensen, R. (2007): "The Digital Provide: Information (Technology), Market Performance, and Welfare in the South Indian Fisheries Sector," *The Quarterly Journal of Economics*, 122, 879–924

⋆⋆Jensen, R. and N. Miller (2017): "Information, Demand And The Growth Of Firms: Evidence From A Natural Experiment In India," Working Paper. Available at https://goo.gl/xiqWWP

Bandiera, O. and I. Rasul (2006): "Social Networks and Technology Adoption in Northern Mozambique," *The Economic Journal*, 116, 869–902

6 Psychology and Development I: Time Preferences

Kaur, S., M. Kremer, and S. Mullainathan (2015): "Self-Control at Work," *Journal of Political Economy*, 123, 1227–1277

Laibson, D. I. (1997): "Golden Eggs and Hyperbolic Discounting," *Quarterly Journal of Economics*, 112, 443–477

Sprenger, C. (2015): "Judging Experimental Evidence on Dynamic Inconsistency," *American Economic Review*, 105, 280–85

Banerjee, A. and S. Mullainathan (2010): "The Shape Of Temptation: Implications For The Economic Lives Of The Poor," *NBER Working Paper*

Ubfal, D. (2016): "How General Are Time Preferences? Eliciting Good-Specific Discount Rates," *Journal of Development Economics*, 118, 150–170

Andreoni, J. and C. Sprenger (2012): "Estimating Time Preferences from Convex Budgets," *American Economic Review*, 102, 3333–56

Augenblick, N., M. Niederle, and C. Sprenger (2015): "Working Over Time: Dynamic Inconsistency in Real Effort Tasks," *Quarterly Journal of Economics*, 130, 1067–1115

⋆⋆ Andreoni, J., M. Callen, and C. Sprenger (2015): "Using Preference Estimates to Customize Incentives : An Application to Polio Vaccination Drives in Pakistan," UCSD Working Paper

⋆⋆Bernheim, B. D., D. Ray, and . Yeltekin (2015): "Poverty and Self-Control," *Econometrica*, 83, 1877–1911

DellaVigna, S. (2009): "Psychology and Economics: Evidence from the Field," *Journal of Economic Literature*

⋆⋆Dean, M. and A. Sautmann (2016): "Credit Constraints and the Measurement of Time Preferences," SSRN 2423951

⋆⋆ Mahajan, A. and A. Tarozzi (2011): "Time Inconsistency, Expectations and Technology Adoption: The case of Insecticide Treated Nets," UC Berkeley Working Paper

7 Randomized Experiments and Structural Models (Mostly Education)

See here[10] For a general overview.

Attanasio, O., C. Meghir, and M. Szekely (2003): "Using Randomized Experiments and Structural Models for 'scaling up'. Evidence from the PROGRESA evaluation," in *Annual World Bank Conference*

[10] http://www.arts.cornell.edu/poverty/kanbur/NewDirectionsDevEcon.pdf

on Development Economics, World Bank

Attanasio, O. P., C. Meghir, and A. Santiago (2012): "Education choices in Mexico: Using a Structural Model and a Randomized Experiment to Evaluate Progresa," *Review of Economic Studies*, 79, 37–66

⋆⋆ Todd, P. and K. Wolpin (2006): "Using Experimental Data to validate a Dynamic Behavioral Model of Schooling: Assessing the Impact of a School Subsidy Program in Mexico," *American Economic Review*, 26, 1384–1417

Behrman, J. R., S. W. Parker, P. E. Todd, and K. I. Wolpin (2015): "Aligning Learning Incentives of Students and Teachers: Results from a Social Experiment in Mexican High Schools," *Journal of Political Economy*, 123, 325–364

Baird, S., C. McIntosh, and B. zler (2011): "Cash or Condition? Evidence from a Cash Transfer Experiment," *The Quarterly Journal of Economics*, 126, 1709–1753

⋆⋆ Duflo, E., R. Hanna, and S. P. Ryan (2012): "Incentives Work: Getting Teachers to Come to School," *American Economic Review*, 102, 1241–1278

——— (2010): "Structural Estimation and Policy Evaluation in Developing Countries," *Annual Review of Economics*, 2, 21–50

Heckman, J. (1992): "Randomization and Social Policy Evaluations,," in *Evaluating Welfare and Training Programs*, ed. by C. Manski and I. Garfinkel, Harvard University Press

Moffitt, R. (1992): "Evaluation Methods for Program Entry Effects," in *Evaluating Welfare and Training Programs*, ed. by C. Manski and I. Garfinkel, Harvard University Press

Heckman, J. and S. Urzua (2010): "Comparing IV With Structural Models: What Simple Iv Can And Cannot Identify," *Journal of Econometrics*, 156, 27–37

Banerjee, A. V. and E. Duflo (2009): "The Experimental Approach to Development Economics," *Annual Review of Economics*, 1, 151–178

References

Aghion, B. A. D. and J. Morduch (2005): *The Economics of Microfinance*, MIT Press.

Aguirregabiria, V. and P. Mira (2010): "Dynamic discrete choice structural models: A survey," *Journal of Econometrics*, 156, 38–67.

Andreoni, J., M. Callen, and C. Sprenger (2015): "Using Preference Estimates to Customize Incentives : An Application to Polio Vaccination Drives in Pakistan," UCSD Working Paper.

Andreoni, J. and C. Sprenger (2012): "Estimating Time Preferences from Convex Budgets," *American Economic Review*, 102, 3333–56.

Angelucci, M., D. Karlan, and J. Zinman (2015): "Microcredit Impacts: Evidence from a Randomized Microcredit Program Placement Experiment by Compartamos Banco," *American Economic Journal: Applied Economics*, 7, 151–82.

Attanasio, O., B. Augsburg, R. De Haas, E. Fitzsimons, and H. Harmgart (2015): "The Impacts of Microfinance: Evidence from Joint-Liability Lending in Mongolia," *American Economic Journal: Applied Economics*, 7, 90–122.

Attanasio, O., C. Meghir, and M. Szekely (2003): "Using Randomized Experiments and Structural Models for 'scaling up'. Evidence from the PROGRESA evaluation," in *Annual World Bank Conference on Development Economics*, World Bank.

Attanasio, O. and E. Pastorino (2015): "Nonlinear Pricing in Village Economies," Available at http://www.nber.org/papers/w21718.pdf.

Attanasio, O. P. and C. Frayne (2006): "Do the Poor Pay More?" UCL Working Paper.

Attanasio, O. P., C. Meghir, and A. Santiago (2012): "Education choices in Mexico: Using a Structural Model and a Randomized Experiment to Evaluate Progresa," *Review of Economic Studies*, 79, 37–66.

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Augsburg, B., R. De Haas, H. Harmgart, and C. Meghir (2015): "The Impacts of Microcredit: Evidence from Bosnia and Herzegovina," *American Economic Journal: Applied Economics*, 7, 183–203.

Baird, S., C. McIntosh, and B. zler (2011): "Cash or Condition? Evidence from a Cash Transfer Experiment," *The Quarterly Journal of Economics*, 126, 1709–1753.

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Banerjee, A., E. Duflo, R. Glennerster, and C. Kinnan (2015a): "The Miracle of Microfinance? Evidence from a Randomized Evaluation," *American Economic Journal: Applied Economics*, 7, 22–53.

Banerjee, A. and S. Mullainathan (2010): "The Shape Of Temptation: Implications For The Economic Lives Of The Poor," *NBER Working Paper*.

Banerjee, A. and K. Munshi (2004): "How Efficiently is Capital Allocated? Evidence from the Knitted Garment Industry in Tirupur," *Review of Economic Studies*, 71, 19–42.

Banerjee, A. V. and E. Duflo (2009): "The Experimental Approach to Development Economics," *Annual Review of Economics*, 1, 151–178.

Banerjee, A. V., D. Karlan, and J. Zinman (2015b): "Six Randomized Evaluations of Microcredit: Introduction and Further Steps," *American Economic Journal: Applied Economics*, 7, 1–21.

Bardhan, P. and C. Udry (1999): *Development Microeconomics*, Oxford University Press.

Barrett, C. B., S. M. Sherlund, and A. A. Adesina (2008): "Shadow wages, Allocative Inefficiency, and Labor Supply in Smallholder Agriculture," *Agricultural Economics*, 38, 21–34.

Beaman, L., D. Karlan, B. Thuysbaert, and C. Udry (2015): "Selection into Credit Markets: Evidence from Agriculture in Mali," Northwestern University.

Behrman, J. R., S. W. Parker, P. E. Todd, and K. I. Wolpin (2015): "Aligning Learning Incentives of Students and Teachers: Results from a Social Experiment in Mexican High Schools," *Journal of Political Economy*, 123, 325–364.

Benjamin, D. (1992): "Household Composition, Labor Markets, and Labor Demand: Testing for Separation in Agricultural Models," *Econometrica*, 60, 287–322.

——— (1995): "Can Unobserved Land Quality explain the Inverse Productivity Relationship," *Journal of Development Economics*, 46.

Bergquist, L. F. (2017): "Pass-Through, Competition and Entry in Agricultural Markets: Experimental Evidence from Kenya," Available at https://www.dropbox.com/s/lxbluh9j3f74tn5/Bergquist_JMP.pdf?dl=0.

Bernheim, B. D., D. Ray, and . Yeltekin (2015): "Poverty and Self-Control," *Econometrica*, 83, 1877–1911.

Bhattacharyya, D. (2003): "Asymptotic Inference from Multi-stage Samples," *Journal of Econometrics*, 126, 145–171.

Bloom, N., B. Eifert, A. Mahajan, D. McKenzie, and J. Roberts (2013): "Does Management Matter? Evidence From India," *Quarterly Journal of Economics*, 1–51, available at http://qje.oxfordjournals.org/content/128/1/1.short.

Bloom, N. and J. V. Reenen (2007): "Measuring and Explaining Management Practices across Firms and Countries," *The Quarterly Journal of Economics*, 122, 1351–1408.

Bruhn, M. and D. McKenzie (2009): "In Pursuit of Balance: Randomization in Practice in Development Field Experiments," *American economic journal: applied economics*, 200–232.

Cameron, A. C. and D. L. Miller (2013): "A Practitioner's Guide to Cluster-Robust Inference," .

Conley, T. and C. Udry (2001): "Social Learning through Networks: The Adoption of New Agricultural Technologies in Ghana," *American Journal of Agricultural Economics*, 83, 668–73.

Cox, D. and N. Reid (2000): *The Theory of the Design of Experiments*, CRC Press.

Crépon, B., F. Devoto, E. Duflo, and W. Parient (2015): "Estimating the Impact of Microcredit on Those Who Take It Up: Evidence from a Randomized Experiment in Morocco," *American Economic Journal: Applied Economics*, 7, 123–50.

de Mel, S., D. McKenzie, and C. Woodruff (2008): "Returns to Capital in Microenterprises: Evidence from a Field Experiment," *The Quarterly Journal of Economics*, 123, 1329–1372.

Dean, M. and A. Sautmann (2016): "Credit Constraints and the Measurement of Time Preferences," SSRN 2423951.

Deaton, A. (1997): *The Analysis of Household Surveys: A Microeconometric Approach to Development Policy*, World Bank, International Bank for Reconstruction and Development.

Deaton, A. and C. Paxson (1998): "Economies of Scale, Household Size and the Demand for Food," *Journal of Political Economy*, 106, 897–930.

——— (2003): "Engel's What? A Response to Gan and Vernon," *Journal of Political Economy*, 111, 1378–1382.

DellaVigna, S. (2009): "Psychology and Economics: Evidence from the Field," *Journal of Economic Literature*.

Duflo, E., R. Hanna, and S. P. Ryan (2012): "Incentives Work: Getting Teachers to Come to School," *American Economic Review*, 102, 1241–1278.

Duflo, E., M. Kremer, and R. Glennerster (2006): "Using Randomization in Development Economics Research: A Toolkit," Available at http://econ-www.mit.edu/faculty/download_pdf.php?id=1444.

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

Efron, B. and R. Tibshirani (1994): *An Introduction to the Bootstrap*, Monographs on Statistics and Applied Probability, CRC Press.

Field, E., R. Pande, J. Papp, and N. Rigol (2013): "Does the Classic Microfinance Model Discourage Entrepreneurship among the Poor? Experimental Evidence from India," *American Economic Review*, 103, 2196–2226.

Fischer, G. and M. Ghatak (2011): "Spanning the Chasm: Uniting Theory and Empirics in Microfinance Research," in *The Handbook Of Microfinance*, World Scientific Publishing Co. Pte. Ltd., chap. 3, 59–75.

Foster, A. and M. Rosenzweig (2002): "Household Division and Rural Economic Growth," *Review of Economic Studies*, 69, 839–869.

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