

## TWENTIETH SUMMER SCHOOL IN INTERNATIONAL AND DEVELOPMENT ECONOMICS

# Investment Choices in Developing Economies

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Castello di Gargonza, Tuscany, Italy**

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Starred (\*) papers will be the primary focus of the lectures; remaining papers can be used as reference/additional reading.

### **Lecture 1 – Professor Mobarak – Under-investment Problems in Developing Countries**

Introductory lecture that provides an overview of under-investment problems. Discuss the range of sectors where this appears – insurance, sanitation, migration, health investments, and during the COVID period – masks, vaccines. Discuss the categories of theories that can explain these issues - risk aversion, networks and social norms, intra-household dynamics, liquidity/credit/savings constraints, behavioral factors.

The poor often appear unwilling to invest in new products, behaviors and technologies that (we think) are welfare-enhancing. This suggests that either we need to re-visit our assumptions, or that we need to better understand those consumers' decision-making environment, constraints and preferences, both rational and 'behavioral' or psychological.

This lecture is designed to motivate the rest of the course, so the readings are very light:

1. "Sure, we can build a better toilet, but will people use it?" *Wired Science News*, August 17, 2012, <http://www.wired.com/wiredscience/2012/08/gates-foundation-toilets/>

2. "What Cookstoves Tell us about the Limits of Technology," *The Washington Post*, May 8, 2012. [http://www.washingtonpost.com/blogs/wonkblog/post/what-cook-stoves-tell-us-about-the-limits-of-technology/2012/05/08/gIQAApp8YAU\\_blog.html](http://www.washingtonpost.com/blogs/wonkblog/post/what-cook-stoves-tell-us-about-the-limits-of-technology/2012/05/08/gIQAApp8YAU_blog.html)

## **Lecture 2 – Professor Kinnan – Misallocation: Why doesn't capital flow to poor countries?**

\*Banerjee, Abhijit and Esther Duflo, "Growth theory through the Lens of Development Economics.", in Philippe Aghion & Steven Durlauf (ed.), *Handbook of Economic Growth*, edition 1, volume 3, chapter 1, Elsevier. [Link](#)

Buera, F. J., Kaboski, J. P., & Shin, Y. (2011). "Finance and Development: A Tale of Two Sectors." *American Economic Review*, 101(5), 1964-2002. [Link](#)

Banerjee, Abhijit V., and Benjamin Moll. 2010. "Why Does Misallocation Persist?" *American Economic Journal: Macroeconomics*, 2(1): 189–206. [Link](#)

Aghion, Philippe; Bolton, Patrick (1997) "A Theory of Trickle-Down Growth and Development." *Review of Economic Studies*, v. 64, iss. 2, pp. 151-72. [Link](#)

Banerjee, A. and A. Newman, "Risk-Bearing and the Theory of Income Distribution." *Review of Economic Studies*, 58 (2), 1991, pp. 211-235. [Link](#)

Banerjee, A. and A. Newman, (1993) "Occupational Choice and the Process of Development." *Journal of Political Economy*, 101 (2), pp. 274-298. [Link](#)

Townsend, Robert M; Ueda, Kenichi (2006) "Financial Deepening, Inequality, and Growth: A Model-Based Quantitative Evaluation." *Review of Economic Studies* Volume 73, Issue 1, pp. 251-293, January 2006. [Link](#)

## **Lecture 3 – Professor Mobarak - The Role of Social Networks in Promoting or Hindering Investments**

*Networks permit technology adoption –*

\* A. BenYishay and A. M. Mobarak, "Social Learning and Incentives for Experimentation and Communication," *Review of Economic Studies*, 2018 [Paper](#) , [Supplementary Materials \(Appendix, Data, Replication Code\)](#)

\* L. Beaman, A. BenYishay, J. Magruder and A.M. Mobarak, "Can Network Theory-Based Targeting Increase Technology Adoption?" *American Economic Review*, 111 (6): 1918-1943, June 2021. [Paper](#), [Online Appendix](#), [Data Set](#)

Abhijit Banerjee, A. Chandrasekhar, E. Duflo and M. Jackson "[The diffusion of microfinance](#)". *science* (2013): vol. 341 no. 6144 1236498 doi:10.1126/science.1236498 [\[abstract, full text\]](#) [\[supplementary material\]](#) [\[full data\]](#)

*But networks can impose a kin tax –*

\* P. Jakiela and O. Ozier, 2012. "Does Africa Need a Rotten Kin Theorem? Experimental Evidence from Village Economies," *Review of Economic Studies* [http://pamjakiela.com/jakielaozier\\_20121106c.pdf](http://pamjakiela.com/jakielaozier_20121106c.pdf)

## Lecture 4 – Professor Kinnan - Networks and investment II

### *Incentives, insurance and investment*

\*Squires, Munir. "Kinship taxation as an impediment to growth: Experimental evidence from Kenyan microenterprises." Working paper, 2018. [Link](#)

### *Networks and nonconvexities*

Advani, Arun. "Insurance Networks and Poverty Traps." (2019). [Link](#)

### *(How) do networks allocate productive credit?*

Kinnan, Cynthia, and Robert Townsend. "Kinship and financial networks, formal financial access, and risk reduction." *American Economic Review* 102, no. 3 (2012): 289-93. [Link](#)

Vera Cossio, Diego Alejandro. "Targeting credit through community members." No. IDB-WP-989. IDB Working Paper Series, 2019. [Link](#)

Kinnan, Cynthia, Krislert Samphantharak, Robert Townsend, and Diego Vera-Cossio. "Propagation and Insurance in Village Networks." (2021). [Link](#)

Maitra, Pushkar, Sandip Mitra, Dilip Mookherjee, and Sujata Visaria. "Decentralized targeting of agricultural credit programs: Private versus political intermediaries." No. w26730. National Bureau of Economic Research, 2020. [Link](#)

Hussam, Reshmaan, Natalia Rigol, and Benjamin Roth. "Targeting high ability entrepreneurs using community information: Mechanism design in the field." (2021). [Link](#)

## Lecture 5 – Professor Mobarak - Investments in Education: Demand vs Supply Side Failures

\* R. Heath and A. M. Mobarak, "Manufacturing Growth and the Lives of Bangladeshi Women," *Journal of Development Economics*, 115: 1-15, July 2015 [Paper](#)

\* Jensen, Robert (2010). "The (Perceived) Returns to Education and the Demand for Schooling," *Quarterly Journal of Economics*, 125(2), p. 515-548.

### *More on Information Failures -*

1. Jensen, Robert (2012). "Do Labor Market Opportunities Affect Young Women's Work and Family Decisions? Experimental Evidence from India," *Quarterly Journal of Economics*, 127(2), p. 753-792.
2. Jensen, R. (2007). "The digital divide: Information (technology), market performance, and welfare in the South Indian fisheries sector". *The quarterly journal of economics*, 122(3), 879-924. [Paper](#).
3. Jensen, R. T., & Miller, N. H. (2018). "Market Integration, Demand and the Growth of Firms: Evidence from a Natural Experiment in India" (No. w24693). National Bureau of Economic Research. [Paper](#).

## Lecture 6 – Professor Kinnan - Overcoming investment market failures

### *Overcoming indivisible investments through cash and credit*

Banerjee, Abhijit, Emily Breza, Esther Duflo, and Cynthia Kinnan. "Can microfinance unlock a poverty trap for some entrepreneurs?" National Bureau of Economic Research WP 26346, (2020). [Link](#)

Bari, Faisal, Kashif Malik, Muhammad Meki, and Simon Quinn. "Asset-based microfinance for microenterprises: Evidence from Pakistan." CSAE Working Paper Series, (2021). [Link](#)

\*Balboni, Clare, Oriana Bandiera, Robin Burgess, Maitreesh Ghatak, and Anton Heil. "Why Do People Stay Poor?" STICERD - Economic Organisation and Public Policy Discussion Papers Series 067, Suntory and Toyota International Centres for Economics and Related Disciplines, LSE, (2021). [Link](#)

*Overcoming indivisible investments through markets*

Caunedo, Julieta, and Namrata Kala. "Mechanizing Agriculture." (2021). [Link](#)

Bassi, Vittorio, Raffaella Muoio, Tommaso Porzio, Ritwika Sen, and Esau Tugume. "Achieving Scale Collectively." No. w28928. National Bureau of Economic Research, 2021. [Link](#)

Johnson, Terence R., and Molly Lipscomb. "Pricing people into the market: Targeting through mechanism design." Working paper (2019). [Link](#)

## **Lecture 7 – Professor Mobarak – Migration and Risk Aversion**

\* G. Bryan, S. Chowdhury and A. M. Mobarak. "Under-investment in a Profitable Technology: The Case of Seasonal Migration in Bangladesh." *Econometrica*. [Paper](#).

Dupas, P. "Short-Run Subsidies and Long-Run Adoption of New Health Products: Evidence from a Field Experiment," *Econometrica* <http://www.stanford.edu/~pdupas/Subsidies&Adoption.pdf>

D. Lagakos, A. M. Mobarak, M. E. Waugh. "The Welfare Effects of Encouraging Rural-Urban Migration," [Paper](#)

## **Lecture 8 – Professor Kinnan - Microcredit and investment**

*Overview*

\*Banerjee, Abhijit, Dean Karlan, and Jonathan Zinman. "Six Randomized Evaluations of Microcredit: Introduction and Further Steps." *American Economic Journal: Applied Economics*, 7(1), (2015): 1-21. [Link](#)

Robin Burgess and Rohini Pande. "Do Rural Banks Matter? Evidence from the Indian Social Banking Experiment." *American Economic Review*, Vol. 95, no. 3 (2005). [Link](#)

Giorgia Barboni, Erica Field and Rohini Pande. "Rural Banks Can Reduce Poverty: Evidence from 870 Indian Villages." (2021). [Link](#)

*Microcredit, moral hazard and investment*

Giné, X., Goldberg, J., & Yang, D. "Credit market consequences of improved personal identification: Field experimental evidence from Malawi." *The American Economic Review*, 102(6), (2012): 2923-2954. [Link](#)

Kremer, Michael, William Jack, Joost de Laat, and Tavneet Suri. "Borrowing Requirements, Credit Access, and Adverse Selection: Evidence from Kenya." (2019). [Link](#)

*Microcredit in equilibrium: liquidity, prices and aggregate demand*

Breza, Emily, and Cynthia Kinnan. "Measuring the equilibrium impacts of credit: Evidence from the Indian microfinance crisis." *The Quarterly Journal of Economics* 136, no. 3 (2021): 1447-1497. [Link](#)

Buera, Francisco J, Joseph P Kaboski, and Yongseok Shin. "The macroeconomics of microfinance." *The Review of Economic Studies*, 88 (2021), 126–161. [Link](#)

Burke, Marshall, Lauren Falcao Bergquist, and Edward Miguel. "Sell low and buy high: arbitrage and local price effects in Kenyan markets." *The Quarterly Journal of Economics*, 134 (2019), 785–842. [Link](#)

#### *Microcredit and commitment to invest*

Afzal, Uzma, Giovanna d'Adda, Marcel Fafchamps, Simon R. Quinn, and Farah Said. "Implicit and explicit commitment in credit and saving contracts: a field experiment." No. w25802. National Bureau of Economic Research, (2019). [Link](#)

Gugerty, Mary Kay. "You can't save alone: Commitment in rotating savings and credit associations in Kenya." *Economic Development and cultural change* 55, no. 2 (2007): 251-282. [Link](#)

#### *Microcredit and social networks*

Banerjee, Abhijit, Emily Breza, Arun G. Chandrasekhar, Esther Duflo, Matthew O. Jackson, and Cynthia Kinnan. "Changes in social network structure in response to exposure to formal credit markets." No. w28365. National Bureau of Economic Research, (2021). [Link](#)

### **Lecture 9 – Professor Mobarak - How to Build a Research Agenda: Scaling up Programs and its Complexities**

\* Gollin, D., Lagakos, D., & Waugh, M. E. (2013). "The agricultural productivity gap". *The Quarterly Journal of Economics*, 129(2), 939-993.

G. Khanna, W. Liang, A. M. Mobarak, R. Song, "The Productivity Consequences of Pollution-Induced Migration in China," Yale Economic Growth Center [Discussion Paper 1083](#).

\* A. Akram, S. Chowdhury and A. M. Mobarak. "Effects of Emigration on Rural Labor Markets" [Paper](#)

C. A. Davis and A. M. Mobarak, "The Challenge of Scaling Effective Interventions: A Path Forward for Research and Policy," *World Development*, v 127, March 2020 [Paper](#)

\* Abaluck et al, "Normalizing Community Mask-Wearing: A Cluster Randomized Trial in Bangladesh," <https://elischolar.library.yale.edu/egcenter-discussion-paper-series/1086/>

C. Meghir, A. M. Mobarak, C. Mommaerts, M. Morten, "Migration and Informal Insurance: Evidence from a Randomized Controlled Trial and a Structural Model," *Review of Economic Studies* [Paper](#)

Fink, G., B.K. Jack and F. Masiye (2018) "[Seasonal liquidity, rural labor markets and agricultural production](#)" NBER Working Paper 24564. [Appendix](#)

Lagakos, S. Marshall, A. M. Mobarak, C. Vernot and M. Waugh, "Migration Costs and Observational Returns to Rural-Urban Migration in the Developing World," *Revise and Resubmit, Journal of Monetary Economics*, [Paper](#)

A. M. Mobarak and M. Rosenzweig. "Risk, Insurance and Wages in General Equilibrium" [Paper](#)

### **Lecture 10 – Professor Kinnan: Issues in access to finance for investment**

*Note: The specific focus of this lecture (within the broad topic of access to finance for investment) may be tailored to students' interest and will be announced closer to the lecture.*

\*Kaboski, Joseph P. and Robert M. Townsend. "A Structural Evaluation of a Large-Scale Quasi-Experimental Microfinance Initiative," *Econometrica*, 79 (2011), 1357–1406. [Link](#)

Agarwal, Sumit, Thomas Kigabo, Camelia Minoiu, Andre F Silva, and Andrea Presbitero. "Serving the Underserved: Microcredit as a Pathway to Commercial Banks." CEPR DP16013, (2021). [Link](#)

Azevedo, Viviane, Jeanne Lafortune, Liliana Olarte, and Jose Tessada. "Does Formal Credit Lead to More Financial Inclusion or Distress?" IDB Development through the Private Sector Series, TN No. 20, (2019). [Link](#)

Beaman, Lori, Dean Karlan, Bram Thuysbaert, and Chris Udry. "Selection into Credit Markets: Evidence from Agriculture in Mali." No. w20387. National Bureau of Economic Research, (2020). [Link](#)

Breza, Emily, Martin Kanz, and Leora F Klapper. "Learning to Navigate a New Financial Technology: Evidence from Payroll Accounts." No. w28249. National Bureau of Economic Research, (2020). [Link](#)

Cai, Jing and Adam Szeidl. "Direct and Indirect Effects of Financial Access on SMEs." Working paper, (2019). [Link](#)

Celerier, Claire and Adrien Matray. "Bank-branch supply, financial inclusion, and wealth Accumulation." *The Review of Financial Studies*, 32 (2019), 4767–4809. [Link](#)

Chodorow-Reich, Gabriel, Gita Gopinath, Prachi Mishra, and Abhinav Narayanan. "Cash and the economy: Evidence from India's demonetization." *The Quarterly Journal of Economics*, 135 (2020), 57–103. [Link](#)

Couture, Victor, Benjamin Faber, Yizhen Gu, and Lizhi Liu. "Connecting the countryside via E-Commerce: evidence from China." *American Economic Review: Insights*, 3 (2021), 35–50. [Link](#)

Davis, Jonathan MV, Jonathan Guryan, Kelly Hallberg, and Jens Ludwig. "The economics of scale-up." No. w23925. National Bureau of Economic Research, (2017). [Link](#)

Dupas, Pascaline and Jonathan Robinson. "Why Don't the Poor Save More? Evidence from Health Savings Experiments." *The American Economic Review*, 103 (2013), 1138–71. [Link](#)

Dupas, Pascaline, Anthony Keats, and Jonathan Robinson. "The effect of savings accounts on interpersonal financial relationships: Evidence from a field experiment in rural Kenya." *The Economic Journal*, 129 (2019), 273–310. [Link](#)

Dupas, Pascaline, Sarah Green, Anthony Keats, and Jonathan Robinson. "Challenges in banking the rural poor: Evidence from Kenya's western province." No. w17851. National Bureau of Economic Research (2012). [Link](#)

Galiani, Sebastian, Paul Gertler, and Camila Navajas Ahumada. "Trust and saving in financial institutions." No. w26809. National Bureau of Economic Research, (2020). [Link](#)

Higgins, Sean. "Financial technology adoption." Northwestern University: Kellogg School of Management, (2019). [Link](#)

Jayachandran, Seema. "Social norms as a barrier to women's employment in developing Countries." No. w27449. National Bureau of Economic Research, (2020). [Link](#)

Kaboski, Joseph P and Robert M Townsend. "A Structural Evaluation of a Large-Scale Quasi-Experimental Microfinance Initiative." *Econometrica*, 79 (2011), 1357–1406. [Link](#)

Meager, Rachael. "Understanding the Impact of Microcredit Expansions: A Bayesian Hierarchical Analysis of 7 Randomized Experiments." *American Economic Journal: Applied Economics*, 11 (2019). [Link](#)

Rotemberg, Martin. "Equilibrium effects of firm subsidies." *American Economic Review*, 109 (2019), 3475–3513. [Link](#)

Schaner, Simone. "The persistent power of behavioral change: Long-run impacts of temporary savings subsidies for the poor." *American Economic Journal: Applied Economics*, 10 (2018), 67–100. [Link](#)