

Economics 2360: The Microeconomics of Development

Draft Syllabus

Fall 2023

Administration:

- Instructor: Emily Breza ebreza@fas.harvard.edu
- Teaching fellow: Oluchi Mbonu ombonu@g.harvard.edu
- Lecture: TTh 3:00pm-4:15pm

• Office Hours:

- Emily will post her office hours on a google sheet that will be shared the first day of class. Feel free to come to discuss the course or research. (Littauer M18.) Please email if the slots are full and you would like to talk about the course.
- Oluchi will have office hours, time TBD.

- Recitation: the course will have an optional recitation. The TF will use this time to answer questions, present related papers, and to work through practice problems. Time and location TBD.

Course Description:

This course covers the microeconomic foundations of development economics. We will focus on market frictions that may hinder growth in developing countries. Topics include labor markets, land markets, and credit markets. We will also discuss the economics of social networks. The course will use both theoretical and empirical tools.

Prerequisites:

Students **must** be pursuing a PhD in an economics-related field to enroll in the course.

Prerequisites: graduate-level first year microeconomics sequence, graduate-level econometrics first-year sequence. Prior exposure to dynamic programming is recommended. The course will also require a working knowledge of Matlab and Stata (or R).

Requirements:

- **Problem sets:** There will be 6-8 problem sets. You can drop one.
- **Class participation:**
 - Attendance and participation in the class discussions is expected
 - Reading responses approximately once a week. We'll give prompts, and **brief** responses should be uploaded to Canvas by 9pm the night before lecture. Responses should be limited to a few hundred words. Bullet points are just fine. The associated readings are marked with *** below.
 - Students will sign up to present one reading during the lecture using a few (≤ 5) slides. These are marked by ^*, and all students should read these papers when preparing for class. Students can skip the written reading response the week of their presentation.
- **Referee report:**
 - I will provide a list of working papers to pick from. I will give some examples of referee reports and discussion slides. We will also discuss in-

class what referee reports and discussion slides should contain.

- **Exams:** This class will have a final exam that will count toward 50% of the final grade.
- **Late Policy:** Assignments will not be accepted late. In some cases, deadlines will be flexible.
- **Adaptive AI:** Unless explicitly stated, AI tools such as ChatGPT are not permitted in the preparation of reading responses, referee reports or problem set solutions (theory, reading prompts and calculations). You may use AI tools to troubleshoot your Matlab or Stata code. This will be indicated on the relevant problem sets.
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Course Goals

1. What is different about developing economies (at a micro level)? Why is development its own field?
2. Learn foundational, workhorse models
3. Relate frontier research back to those workhorse concepts
4. Practice econometric techniques
5. Practice evaluating research papers
6. Look for gaps in the literature
7. Understand what makes a successful paper?
 - a. Modeling choices
 - b. Empirical/econometric choices
 - c. Framing choices

Schedule of Lectures, Required Readings and Problem Set Due Dates

Lecture 1 – September 5: Introduction and Poverty Traps

Lecture 2 – September 7: Poverty Traps 2

Lecture 3 – September 12: Poverty Traps 3

Lecture 4 – September 14: Separation Failures 1

- [PSET 1] – due

Lecture 5 – September 19: Separation Failures 2

Lecture 6 – September 21: Contracting 1 (Land)

Lecture 7 – September 26: Contracting 2

Lecture 8 – September 28: Contracting 3

Lecture 9 – October 3: Learning and networks 1

- [PSET 2] – due

Lecture 10 – October 5: Learning and networks 2

Lecture 11 – October 10: Learning and networks 3

Lecture 12 – October 12: Learning and networks 4

- *Read intro of savings monitors and referee reports from the QJE.

- [PSET 3] – due

Lecture 13 – October 17: Learning and networks 5

Lecture 14 – October 19: Savings 1

- [Referee report] – due (can turn it in without penalty until 10/26)

Lecture 15 – October 24: Savings 2

Lecture 16 – October 26: Insurance 1

- [PSET 4] – due

Lecture 17 – October 31: Insurance 2

Lecture 18 – November 2: Mobile Money

Lecture 19 – November 7: Credit 1

- [PSET 5] – due

Lecture 20 – November 9: Credit 2

Lecture 21 – November 14: Credit 3

Lecture 22 – November 16: Labor 1

Lecture 23 – November 21: Labor 2

- [PSET 6] – due

Lecture 24 – November 28: GE

Lecture 25 – November 30: Productivity and Personnel Economics

Exam – December 5, last day of class

Course Content

During the first part of the class, we will discuss some theoretical themes that show up over and over again in the literatures. These themes are relevant for new research in development economics. The second part of the course will cover a core set of topics. We will discuss where and how the theoretical themes emerge across these topics.

*Note: * indicates required reading, *** denotes paper with required reading response, ^* denotes paper on student presentation list (also required for all).*

1. Poverty Traps

- a. Introduction: the health/productivity poverty trap
- b. Static and dynamic models of nutrition-based poverty trap
- c. Testing poverty trap models
- d. Other micro-foundations for poverty traps?
- e. Readings:
 - i. *Dasgupta, P., & Ray, D. (1986). Inequality as a determinant of malnutrition and unemployment: Theory. *The Economic Journal*, 96(384), 1011-1034.
 - ii. Dasgupta, P., & Ray, D. (1987). Inequality as a determinant of malnutrition and unemployment: policy. *The Economic Journal*, 97(385), 177-188.
 - iii. Strauss, J., & Thomas, D. (1998). Health, nutrition, and economic development. *Journal of economic literature*, 36(2), 766-817.
 - iv. Subramanian, S., & Deaton, A. (1996). The demand for food and calories. *Journal of political economy*, 104(1), 133-162.
 - v. Deaton, A. and Drèze, J., 2010. From calorie fundamentalism to cereal accounting. *Economic and Political Weekly*, pp.87-92.
 - vi. *** Haushofer, J., & Shapiro, J. (2016). The short-term impact of

- unconditional cash transfers to the poor: experimental evidence from Kenya. *The Quarterly Journal of Economics*, 131(4), 1973-2042.
- vii. *** Almås, I., Haushofer, J., & Shapiro, J. P. (2019). *The Income Elasticity for Nutrition: Evidence from Unconditional Cash Transfers in Kenya* (No. w25711). National Bureau of Economic Research.
 - viii. Schofield, H. (2014). The economic costs of low caloric intake: Evidence from India. *Unpublished Manuscript*.
 - ix. Banerjee, A. (2000). The Two Poverties. *Nordic Journal of Political Economy*, 26, 129-141.
 - x. * Banerjee, A., Duflo, E., Goldberg, N., Karlan, D., Osei, R., Parienté, W., & Udry, C. (2015). A multifaceted program causes lasting progress for the very poor: Evidence from six countries. *Science*, 348(6236), 1260799.
 - xi. Banerjee, A., Duflo, E., Chattopadhyay, R., & Shapiro, J. (2016). The long-term impacts of a graduation program: Evidence from West Bengal. *Unpublished manuscript*.
 - xii. *** Bandiera, O., Burgess, R., Das, N., Gulesci, S., Rasul, I., & Sulaiman, M. (2017). Labor markets and poverty in village economies. *The Quarterly Journal of Economics*, 132(2), 811-870.
 - xiii. Banerjee, A., Karlan, D., Osei, R. D., Trachtman, H., & Udry, C. (2018). *Unpacking a Multi-Faceted Program to Build Sustainable Income for the Very Poor* (No. w24271). National Bureau of Economic Research.
 - xiv. ^*Balboni, Clare, Oriana Bandiera, Robin Burgess, Maitreesh Ghatak, and Anton Heil (2021). "Why do people stay poor?." *Working Paper*.

2. Separation Failures

- a. What is a missing market?
- b. The canonical model of separation failures: Benjamin (1992)
- c. Other types of separation failures
- d. Testing for separation failures
- e. Readings:
 - i. * Benjamin, D. (1992). Household composition, labor markets, and labor demand: testing for separation in agricultural household models. *Econometrica: Journal of the Econometric Society*, 287-322.
 - ii. ^* LaFave, D. and Thomas, D., 2016. Farms, families, and markets: New evidence on completeness of markets in agricultural settings. *Econometrica*, 84(5), pp.1917-1960.
 - iii. Udry, C., 1996. Gender, agricultural production, and the theory of the household. *Journal of Political Economy*, 104(5), pp.1010-1046.
 - iv. Banerjee, A. and Munshi, K., 2004. How efficiently is capital

- allocated? Evidence from the knitted garment industry in Tirupur. *The Review of Economic Studies*, 71(1), pp.19-42.
- v. Jayachandran, S. (2006). Selling labor low: Wage responses to productivity shocks in developing countries. *Journal of Political Economy*, 114(3), 538-575.
 - vi. *** Jones, Maria, Florence Kondylis, John Loeser, and Jeremy Magruder (2021). Factor Market Failures and the Adoption of Irrigation in Rwanda. *NBER Working Paper* No. w26698.

3. Contracting

- a. Land & Credit Contracts
- b. Moral Hazard with Risk Aversion and Limited Liability
- c. Relational Contracting
- d. Readings:

- i. Bolton, P. and Scharfstein, D.S. (1990). A theory of predation based on agency problems in financial contracting. *The American economic review*, pp.93-106.
- ii. *Bulow, J., & Rogoff, K. (1989). A constant recontracting model of sovereign debt. *Journal of political Economy*, 97(1), 155-178.
- iii. Bolton, P., & Dewatripont, M. (2005). Chapter 4: Hidden Action, Moral Hazard. In *Contract theory*. MIT press.
- iv. Tirole, J. (1996). A theory of collective reputations (with applications to the persistence of corruption and to firm quality). *The Review of Economic Studies*, 63(1), 1-22.
- v. Banerjee, A. (1999). Land reforms: prospects and strategies. *Unpublished manuscript*.
- vi. * Banerjee, A.V., Gertler, P.J. and Ghatak, M., 2002. Empowerment and efficiency: Tenancy reform in West Bengal. *Journal of Political Economy*, 110(2), pp.239-280.
- vii. ^* Burchardi, K. B., Gulesci, S., Lerva, B., & Sulaiman, M. (2018). Moral hazard: Experimental evidence from tenancy contracts. *The Quarterly Journal of Economics*, 134(1), 281-347.
- viii. Baker, G., Gibbons, R., & Murphy, K. J. (2002). Relational Contracts and the Theory of the Firm. *The Quarterly Journal of Economics*, 117(1), 39-84.
- ix. * McMillan, J., & Woodruff, C. (1999). Interfirm relationships and informal credit in Vietnam. *The Quarterly Journal of Economics*, 114(4), 1285-1320.
- x. Blouin, A. and Macchiavello, R., 2019. Strategic default in the international coffee market. *The Quarterly Journal of Economics*, 134(2), pp.895-951.
- xi. Banerjee, A. V., & Duflo, E. (2000). Reputation effects and the limits of contracting: A study of the Indian software industry. *The Quarterly Journal of Economics*, 115(3), 989-1017.
- xii. *** Karlan, D. and Zinman, J., 2009. Observing unobservables: Identifying information asymmetries with a consumer credit field experiment. *Econometrica*, 77(6), pp.1993-2008.

- xiii. Macchiavello, Rocco, and Ameet Morjaria. "Competition and relational contracts in the Rwanda coffee chain." *The Quarterly Journal of Economics* 136, no. 2 (2021): 1089-1143.
- xiv. 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, 2021.

4. Social Networks and Learning

- a. Learning & Information Diffusion
- b. Introduction to Social Networks
- c. Signaling and Shaming
- d. Methodology, targeting and optimal seeding
- e. Readings:
 - i. * 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.
 - ii. Cole, S. A., & Fernando, A. (2016). 'Mobile'izing Agricultural Advice: Technology Adoption, Diffusion and Sustainability. *Harvard Business School Finance Working Paper*, (13-047).
 - iii. *** Foster, A. D., & Rosenzweig, M. R. (1995). Learning by doing and learning from others: Human capital and technical change in agriculture. *Journal of Political Economy*, 103(6), 1176-1209.
 - iv. * Conley, T. G., & Udry, C. R. (2010). Learning about a new technology: Pineapple in Ghana. *American economic review*, 100(1), 35-69.
 - v. Jensen, R. (2010). The (perceived) returns to education and the demand for schooling. *The Quarterly Journal of Economics*, 125(2), 515-548.
 - vi. * Banerjee, A., Chandrasekhar, A. G., Duflo, E., & Jackson, M. O. (2013). The diffusion of microfinance. *Science*, 341(6144), 1236-498.
 - vii. * Beaman, L., BenYishay, A., Magruder, J., & Mobarak, A. M. (2018). Can network theory-based targeting increase technology adoption? (No. w24912). *National Bureau of Economic Research*.
 - viii. *** Banerjee, A., Chandrasekhar, A. G., Duflo, E., & Jackson, M. O. (2014). Gossip: Identifying central individuals in a social network (No. w20422). *National Bureau of Economic Research*.
 - ix. Heß, S., Jaimovich, D., & Schündeln, M. (2021). Development projects and economic networks: Lessons from rural Gambia. *The Review of Economic Studies*, 88(3), 1347-1384.
 - x. ^*Cai, J., & Szeidl, A. (2017). Interfirm relationships and business performance. *The Quarterly Journal of Economics*, 133(3), 1229-

1282.

- xi. Fafchamps, Marcel, and Simon Quinn. "Networks and manufacturing firms in Africa: Results from a randomized field experiment." *The World Bank Economic Review* 32, no. 3 (2018): 656-675.
- xii. Chandrasekhar, A. G., Larreguy, H., & Xandri, J. P. (2020). Testing models of social learning on networks: Evidence from two experiments. *Econometrica*, 88(1), 1-32.
- xiii. Chandrasekhar, Arun G., Esther Duflo, Michael Kremer, João F. Pugliese, Jonathan Robinson, and Frank Schilbach (2021) "Blue Spoons: Sparking Communication About Appropriate Technology Use." Working Paper.
- xiv. Manski, C. F. (1993). Identification of endogenous social effects: The reflection problem. *The review of economic studies*, 60(3), 531-542.
- xv. Bramoullé, Y., Djebbari, H., & Fortin, B. (2009). Identification of peer effects through social networks. *Journal of econometrics*, 150(1), 41-55.
- xvi. Jackson, M. O. (2010). *Social and economic networks*. Princeton university press.
- xvii. Breza, E. (2016). Field experiments, social networks, and development. In *The Oxford handbook of the economics of networks*. Oxford University Press.
- xviii. Breza, Emily, Arun G. Chandrasekhar, Tyler H. McCormick, and Mengjie Pan. "Using aggregated relational data to feasibly identify network structure without network data." *American Economic Review* 110, no. 8 (2020): 2454-84.
- xix. Conlon, John J., Malavika Mani, Gautam Rao, Matthew W. Ridley, and Frank Schilbach. Not Learning from Others. No. w30378. National Bureau of Economic Research, 2022.
- xx. Bursztyn, L., Egorov, G., & Jensen, R. (2018). Cool to be smart or smart to be cool? Understanding peer pressure in education. *The Review of Economic Studies*, 86(4), 1487-1526.
- xxi. Chandrasekhar, A. G., Golub, B., & Yang, H. (2018). Signaling, shame, and silence in social learning (No. w25169). *National Bureau of Economic Research*.
- xxii. Karing, A. (2018). Social Signaling and Childhood Immunization: A Field Experiment in Sierra Leone. *Unpublished manuscript*, University of California, Berkeley.
- xxiii. * Banerjee, A. V., Breza, E., Chandrasekhar, A. G., & Golub, B. (2018). When Less is More: Experimental Evidence on Information Delivery During India's Demonetization. *Unpublished manuscript*.
- xxiv. *** Breza, E., & Chandrasekhar, A. G. (2019). Social networks, reputation and commitment: Evidence from a savings monitors experiment. *Econometrica*.
- xxv. * Jackson, M. O., Rodriguez-Barraquer, T., & Tan, X. (2012).

Social capital and social quilts: Network patterns of favor exchange.
American Economic Review, 102(5), 1857-97.

5. Savings and Income smoothing

- a. Permanent Income Hypothesis
- b. Buffer Stock Savings Model
- c. Saving constraints
- d. Readings:

- i. Deaton, A. (1989). Saving and liquidity constraints (No. w3196). *National Bureau of Economic Research*.
- ii. * Paxson, C. H. (1992). Using weather variability to estimate the response of savings to transitory income in Thailand. *The American Economic Review*, 15-33.
- iii. Fafchamps, M., Udry, C., & Czukas, K. (1998). Drought and saving in West Africa: are livestock a buffer stock?. *Journal of Development economics*, 55(2), 273-305.
- iv. Rosenzweig, Mark R., and Kenneth I. Wolpin. "Credit market constraints, consumption smoothing, and the accumulation of durable production assets in low-income countries: Investments in bullocks in India." *Journal of Political Economy* (1993): 223-244.
- v. Dupas, P., & Robinson, J. (2013). Savings constraints and microenterprise development: Evidence from a field experiment in Kenya. *American Economic Journal: Applied Economics*, 5(1), 163-92.
- vi. * Dupas, P., & Robinson, J. (2013). Why don't the poor save more? Evidence from health savings experiments. *American Economic Review*, 103(4), 1138-71.
- vii. Beaman, L., Karlan, D., & Thuysbaert, B. (2014). Saving for a (not so) rainy day: A randomized evaluation of savings groups in Mali (No. w20600). *National Bureau of Economic Research*.
- viii. Somville, V., & Vandewalle, L. (2018). Saving by default: Evidence from a field experiment in rural India. *American Economic Journal: Applied Economics*, 10(3), 39-66.
- ix. *** Karlan, D., Mullainathan, S., & Roth, B. N. (2019). Debt traps? Market vendors and moneylender debt in India and the Philippines. *American Economic Review: Insights*, 1(1), 27-42.
- x. * Liu, E., & Roth, B. (2017). Keeping the Little Guy Down: A Debt Trap for Lending with Limited Pledgeability. *Available at SSRN* 3080682.
- xi. Bachas, Pierre, Paul Gertler, Sean Higgins, and Enrique Seira. "How debit cards enable the poor to save more." *The Journal of Finance* 76, no. 4 (2021): 1913-1957.
- xii. Galiani, Sebastian, Paul Gertler, and Camila Navajas Ahumada. *Trust and saving in financial institutions*. No. w26809. National Bureau of Economic Research, 2020.

6. Insurance

a. Full Insurance

b. Barriers to Full Insurance

c. Readings:

- i. Townsend, R. M. (1994). Risk and insurance in village India. *Econometrica*, 539-591.
- ii. Udry, C. (1994). Risk and insurance in a rural credit market: An empirical investigation in northern Nigeria. *The Review of Economic Studies*, 61(3), 495-526.
- iii. Kocherlakota, Narayana R. "The equity premium: It's still a puzzle." *Journal of Economic literature* 34, no. 1 (1996): 42-71.
- iv. Deaton, Angus. *The analysis of household surveys: a microeconomic approach to development policy*. The World Bank, 1997.
- v. Ligon, E. (1998). Risk sharing and information in village economies. *The Review of Economic Studies*, 65(4), 847-864.
- vi. * Ligon, E., Thomas, J. P., & Worrall, T. (2002). Informal insurance arrangements with limited commitment: Theory and evidence from village economies. *The Review of Economic Studies*, 69(1), 209-244.
- vii. * Mazzocco, M., & Saini, S. (2012). Testing efficient risk sharing with heterogeneous risk preferences. *American Economic Review*, 102(1), 428-68.
- viii. Fafchamps, M. (2011). Risk sharing between households. In *Handbook of social economics* (Vol. 1, pp. 1255-1279). North-Holland.
- ix. Coate, S., & Ravallion, M. (1993). Reciprocity without commitment: Characterization and performance of informal insurance arrangements. *Journal of development Economics*, 40(1), 1-24.
- x. * Jakiela, Pamela, and Owen Ozier. (2015). Does Africa need a rotten kin theorem? Experimental evidence from village economies. *The Review of Economic Studies* 83.1: 231-268.
- xi. Rosenzweig, Mark R., and Oded Stark. "Consumption smoothing, migration, and marriage: Evidence from rural India." *Journal of political Economy* 97, no. 4 (1989): 905-926.
- xii. Ambrus, Attila, Markus Mobius, and Adam Szeidl. "Consumption risk-sharing in social networks." *American Economic Review* 104, no. 1 (2014): 149-82.
- xiii. Advani, A. (2017). Insurance Networks and Poverty Traps. *Working Paper*.
- xiv. Fischer, G. (2013). Contract Structure, Risk-Sharing, and Investment Choice. *Econometrica*, 81(3), 883-939.
- xv. Chandrasekhar, A. G., Kinnan, C., & Larreguy, H. (2018). Social networks as contract enforcement: Evidence from a lab experiment in the field. *American Economic Journal: Applied Economics*,

- 10(4), 43-78.
- xvi. *Ambrus, A., & Elliott, M. (2018). Investments in social ties, risk sharing and inequality. *Economic Research Initiatives at Duke (ERID) Working Paper*, (179).
 - xvii. Bloch, F., Genicot, G., & Ray, D. (2008). Informal insurance in social networks. *Journal of Economic Theory*, 143(1), 36-58.
 - xviii. ^* Squires, Munir. *Kinship taxation as an impediment to growth: Experimental evidence from kenyan microenterprises*. [Working paper, 2021](#).
 - xix. Boltz, Marie, Karine Marazyan, and Paola Villar. "Income hiding and informal redistribution: A lab-in-the-field experiment in Senegal." *Journal of Development Economics* 137 (2019): 78-92.

7. Mobile Money

a. Readings:

- i. *** Jack, W., & Suri, T. (2014). Risk sharing and transactions costs: Evidence from Kenya's mobile money revolution. *American Economic Review*, 104(1), 183-223.
- ii. 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.
- iii. Gong, E. & Jones, K. (2019) Improving Shock-Coping with Precautionary Savings: Effects of Mobile Banking on Transactional Sex in Kenya. *Unpublished Manuscript*.
- iv. Suri, Tavneet. "Mobile money." *Annual Review of Economics* 9 (2017): 497-520.
- v. Suri, Tavneet, Jenny Aker, Catia Batista, Michael Callen, Tarek Ghani, William Jack, Leora Klapper, Emma Riley, Simone Schaner, and Sandip Sukhtankar. "Mobile Money." *50 Years of Central Banking in Kenya* (2021): 146.
- vi. Aiken, Emily, Suzanne Bellue, Dean Karlan, Christopher R. Udry, and Joshua Blumenstock. *Machine Learning and Mobile Phone Data Can Improve the Targeting of Humanitarian Assistance*. No. w29070. National Bureau of Economic Research, 2021.
- vii. Blumenstock, Joshua. "Machine learning can help get COVID-19 aid to those who need it most." *Nature* (2020).
- viii. Riley, Emma. "Mobile money and risk sharing against village shocks." *Journal of Development Economics* 135 (2018): 43-58.

8. Credit

- a. Returns to capital
- b. Testing credit constraints
- c. Does the insurance or credit constraint bind?
- d. How does Microfinance work?
- e. Informal Information and Credit

f. Readings:

- i. * De Mel, S., McKenzie, D., & Woodruff, C. (2008). Returns to capital in microenterprises: evidence from a field experiment. *The Quarterly Journal of Economics*, 123(4), 1329-1372.
- ii. Kremer, M., Lee, J., Robinson, J., & Rostapshova, O. (2013). Behavioral biases and firm behavior: Evidence from Kenyan retail shops. *American Economic Review*, 103(3), 362-68.
- iii. Banerjee, A.V., 2003, January. Contracting Constraints, Credit Markets, and Economic Development Abhijit V. Banerjee. In *Advances in Economics and Econometrics: Theory and Applications, Eighth World Congress* (Vol. 3, p. 1). Cambridge University Press.
- iv. * Banerjee, A. V., & Duflo, E. (2014). Do firms want to borrow more? Testing credit constraints using a directed lending program. *Review of Economic Studies*, 81(2), 572-607.
- v. McKenzie, D. (2017). Identifying and spurring high-growth entrepreneurship: Experimental evidence from a business plan competition. *American Economic Review*, 107(8), 2278-2307.
- vi. Banerjee, A. V., Breza, E., Duflo, E., & Kinnan, C. (2017). Do credit constraints limit entrepreneurship? Heterogeneity in the returns to microfinance. *Unpublished manuscript*.
- vii. Hussam, R., Rigol, N., and Roth, B. N. (2022) "Targeting High Ability Entrepreneurs Using Community Information: Mechanism Design in the Field." *American Economic Review*.
- viii. ^* Karlan, D., Osei, R., Osei-Akoto, I., & Udry, C. (2014). Agricultural decisions after relaxing credit and risk constraints. *The Quarterly Journal of Economics*, 129(2), 597-652.
- ix. Aleem, I. (1990). Imperfect information, screening, and the costs of informal lending: a study of a rural credit market in Pakistan. *The World Bank Economic Review*, 4(3), 329-349.
- x. Ghatak, M., & Guinnane, T. W. (1999). The economics of lending with joint liability: theory and practice. *Journal of development economics*, 60(1), 195-228.
- xi. Banerjee, A., Duflo, E., Glennerster, R., & Kinnan, C. (2015). The miracle of microfinance? Evidence from a randomized evaluation. *American Economic Journal: Applied Economics*, 7(1), 22-53.
- xii. Banerjee, A. V., Breza, E., Duflo, E., & Kinnan, C. (2019). Can microfinance unlock poverty traps for some entrepreneurs? *Working Paper*.
- xiii. * Field, E., Pande, R., Papp, J., & Rigol, N. (2013). Does the classic microfinance model discourage entrepreneurship among the poor? Experimental evidence from India. *American Economic Review*, 103(6), 2196-2226.
- xiv. Feigenberg, B., Field, E., & Pande, R. (2013). The economic returns to social interaction: Experimental evidence from microfinance. *Review of Economic Studies*, 80(4), 1459-1483.

- xv. Riley, Emma. "Resisting social pressure in the household using mobile money: Experimental evidence on microenterprise investment in Uganda." *University of Oxford* 25 (2020).
- xvi. Bari, Faisal, Kashif Malik, Muhammad Meki, and Simon Quinn. "Asset-based microfinance for microenterprises: Evidence from Pakistan." (2021).
- xvii. Gulesci, Selim, and Andreas Madestam. "Repayment Flexibility and Risk Taking: Experimental Evidence from Credit Contracts." (2018).
- xviii. Buera, F. J., Kaboski, J. P., & Shin, Y. (2012). The macroeconomics of microfinance (No. w17905). *National Bureau of Economic Research*.
- xix. 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.

9. Labor Markets

- a. Market features: Wage compression, Wage rigidity, Seasonal unemployment
- b. Labor Market in urban areas
- c. Labor Market information
- d. Returns to labor
- e. Readings:
 - i. Lewis, W. A. (1954). Economic development with unlimited supplies of labour. *The manchester school*, 22(2), 139-191.
 - ii. Schultz, T. W. (1964). Transforming traditional agriculture. *Transforming traditional agriculture*.
 - iii. Sen, A. K. (1967). Surplus labour in India: A critique of Schultz's statistical test. *The Economic Journal*, 77(305), 154-161.
 - iv. * Donaldson, D., & Keniston, D. (2016). Dynamics of a Malthusian Economy: India in the Aftermath of the 1918 Influenza.
 - v. Donovan, K., Lu, J., & Schoellman, T. (2019). Labor Market Flows and Development. Working Paper.
 - vi. *** Breza, Emily, Supreet Kaur, and Yogita Shamdasani. "The morale effects of pay inequality." *The Quarterly Journal of Economics* 133.2 (2017): 611-663.
 - vii. * Kaur, S. (2019). Nominal wage rigidity in village labor markets. *American Economic Review*.
 - viii. Breza, Emily, Supreet Kaur, and Yogita Shamdasani. *Labor rationing*. No. w28643. National Bureau of Economic Research, 2021.
 - ix. Fink, G., Jack, B.K. and Masiye, F., 2020. Seasonal liquidity, rural labor markets, and agricultural production. *American Economic Review*, 110(11), pp.3351-92.
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