

Economics 425-2 – Winter 2021
Development Economics
Northwestern University

Chris Udry

This course is the second of a three-part graduate sequence on development economics, focusing mainly on microeconomic topics. The goal of this sequence is to introduce students to the central issues in development economics and to explore the application of microeconomic analysis to gain deeper insights into these questions. Prof. Seema Jayachandran taught the Fall course; Prof. Lori Beaman will teach the Spring course. To satisfy the field requirement, you must take the entire sequence.

I will assume that you have taken the first-year graduate sequences in microeconomics and econometrics.

The goal of this course is to prepare you for research in development economics. We begin with an example of a sustained research program on risk, saving, credit and insurance that illustrates the interplay between observation, theory, empirical testing and experimentation, bringing together many of the themes of the field. We continue with the analysis of households, agricultural technology and markets.

Office Hours

Tuesdays 3:30pm – 5:00pm on Zoom <https://northwestern.zoom.us/my/cudry>

Course Requirements (% of final grade):

A primary goal of this course is a critical reading of the current literature on the empirical microeconomics of development. I expect you to do all of the required reading and to participate in class discussion. This will include guiding the discussion on one paper. Papers eligible for presentation are marked with an asterisk. (25%)

2 referee reports. (25%)

Due 2/3: Balboni, Clare, Oriana Bandiera, Robin Burgess, Maitreesh Ghatak, Anton Heil. (2020) “[Why Do People Stay Poor?](#)”

Due 3/4: Bryan, G. & Morten, M. (2019). The Aggregate Productivity Effects of Internal Migration: Evidence from Indonesia. *Journal of Political Economy*, 127(5), 2229-2268.

Final project: a working paper on any topic in development economics. This can build on your research proposal from the fall or be a new project. Deadline: end of exam period. (40%). Presentation of final project (10%).

You are encouraged to attend the Development Lunch on Wednesdays and the Development sessions of the applied micro workshop on Thursdays.

Other Policies

[Accessibility](#)

Any student requesting accommodations related to a disability or other condition is required to register with AccessibleNU (accessiblenu@northwestern.edu; 847-467-5530) and provide professors with an accommodation notification from AccessibleNU, preferably within the first two weeks of class. All information will remain confidential.

[Sexual Misconduct and Reporting](#)

Northwestern University is committed to fostering an environment where students are safe and free from sexual misconduct. [Confidential resources](#) are available to those who have experienced sexual misconduct. Faculty, instructors, and TAs are not confidential resources and are required to report incidents of sexual misconduct, whether discussed in your assignments or in person, to the Office of Equity, which can provide information about resources and options. I encourage students who have experienced sexual misconduct to talk with someone to get support. For more information, including how to request interim protective measures and academic accommodations or file a complaint, see [the Get Help page](#).

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Recording by the Instructor: This class or portions of this class will be recorded by the instructor for educational purposes. These recordings will be shared only with students enrolled in the course in Canvas and will be deleted at the end of the quarter.

Note that this applies to recording of synchronous class components and not to pre-recorded lectures by the instructor and not featuring student contributions.

Recording by Students: Unauthorized student recording of classroom or other academic activities (including office hours) is prohibited. Unauthorized recording is unethical and may also be a violation of University policy and state law. Students requesting the use of assistive technology as an accommodation should contact [AccessibleNU](#).

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Class Schedule

1. Village Finance

A. The Efficient Allocation of Risk (Village Finance 1) (1/11)

Townsend, Robert (1994) ‘Risk and Insurance in Village India.’ *Econometrica* 62(3), 539–591. [Link](#).

Udry, Christopher (1994) ‘Risk and Insurance in a Rural Credit Market: An Empirical Investigation in Northern Nigeria.’ *Review of Economic Studies* 61(3), 495–526. [Link](#).

Kazianga, Harounan, and Christopher Udry. 2006. “Consumption Smoothing? Livestock, Insurance and Drought in Rural Burkina Faso.” *Journal of Development Economics* 79 (2): 413–446.

B. Saving

i. Risk and Saving (Village Finance 2) (1/13)

Recursive Macroeconomic Theory Ch 16.

Deaton, Angus. The Analysis of Household Surveys, Chapter 6: Savings and consumption smoothing. John Hopkins, 1997.

*Paxson, Christina H. (1992) ‘Using weather variability to estimate the response of savings to transitory income in Thailand.’ *American Economic Review* 82(1), 15–33. [Link](#).

Rosenzweig, M. and K. Wolpin. 2000. “Natural ‘Natural Experiments’ in Economics”. *Journal of Economic Literature*. Section 4.

ii. Liquidity Constraints (Village Finance 3) (1/13)

Deaton, Angus (1991). Saving and Liquidity Constraints. *Econometrica*, Vol. 59, No. 5. [Link](#)

Deaton, Angus (1990) “Saving in Developing Countries: Theory and Review,” *World Bank Economic Review*, (Proceedings of the World Bank Annual Conference on Development Economics 1989), pp. 61-96. [Link](#)

Angus Deaton (1992). [Household saving in LDCs: Credit markets, insurance and welfare](#), *Scandinavian Journal of Economics*.

Abhijit Banerjee (2000). “The Two Poverties,” *Nordic Journal of Political Economy*, Volume 26 pp 129-141. [Link](#)

Carroll, C. [Buffer-Stock Saving and the Life Cycle/Permanent Income Hypothesis](#), *Quarterly Journal of Economics*, 1997.

Deaton, Angus and Christina Paxson (1994), “Saving, Growth, and Aging in Taiwan,” in Wise, David A., ed. [Studies in the economics of aging](#). Chicago and London: University of Chicago Press, pp. 331-57. [Link](#)

iii. *Behavioral Economics and Saving (Village Finance 4) (1/20)*

Kremer, M., Rao, G., Schilbach, F., 2019. Behavioral development economics. *Handbook of Behavioral Economics* 2.

*Dupas, P. and J. Robinson (2013), “[Savings Constraints and Microenterprise Development: Evidence from a Field Experiment in Kenya](#),” *American Economic Journal: Applied Economics* 2013, 5(1): 163–192.

*Karlán, D., Mullainathan, S. and Roth, B.N., 2019. Debt traps? Market vendors and moneylender debt in India and the Philippines. *American Economic Review: Insights*, 1(1), pp.27-42.

Dupas, P. and J. Robinson (2013). Why Don't the Poor Save More? Evidence from Health Savings Experiments. *American Economic Review* [\[PDF\]](#)

C. Constraints to Risk Sharing (Village Finance 5) (1/20)

*Mauricio Mazzocco and Shiv Saini (2012). [Testing Efficient Risk Sharing with Heterogeneous Risk Preferences](#), *American Economic Review*, 102(1): 428–468.

*Casaburi, Lorenzo and Jack Willis. 2018. [Time versus State in Insurance: Experimental Evidence from Contract Farming in Kenya.](#) (PDF, 804 KB) with Jack Willis, *American Economic Review*, 108.12: 3778-3813.

William Jack and Tavneet Suri (2014) “[Risk Sharing and Transaction Costs: Evidence from Kenya's Mobile Money Revolution](#)”, *American Economic Review* Vol. 104, No. 1: 183-223.

Kinnan, Cynthia. 2017. [Distinguishing barriers to insurance in Thai villages](#).

Riley E. 2018. Mobile money and risk sharing against aggregate shocks. *Journal of Development Economics*

D. Credit Markets (Village Finance 6) (1/25)

*Suresh de Mel and David McKenzie and Chris Woodruff (2008). "Returns to Capital in Microenterprises: Evidence from a Field Experiment," *Quarterly Journal of Economics*, Vol 123(4), pp. 1329-1372.

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

McKenzie, D. J. and Woodruff, C. (2006). Do entry costs provide an empirical basis for poverty traps? Evidence from Mexican microenterprises. *Economic Development and Cultural Change*, 55(1):3-42. [Link](#)

E. Microfinance (Village Finance 7, 8) (1/27)

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

*Banerjee, A., Duflo, E., Glennerster, R., Kinnan, C., 2015. The miracle of microfinance? Evidence from a randomized evaluation. *American Economic Journal: Applied Economics* 7, 22–53.

*Dean Karlan, Robert Osei, Isaac Osei-Akoto, and Christopher Udry (2014) "Agricultural Decisions after Relaxing Credit and Risk Constraints" *Quarterly Journal of Economics* 129 (2): 597-652

*Auriol, Emmanuelle, Lassebie, Julie, Panin, Amma, Raiber, Eva, Seabright, Paul, 2020. "God Insures Those Who Pay? Formal Insurance and Religious Offerings in Ghana." *Quarterly Journal of Economics*

Mobarak, Ahmed Mushfiq, and Mark R. Rosenzweig. 2012. "Selling Formal Insurance to the Informally Insured."

Rosenzweig, Mark and Christopher Udry (2020) "External Validity in a Stochastic World". *Review of Economic Studies*

Karlan, D., Zinman, J., 2009. Observing Unobservables: Identifying Information Asymmetries with a Consumer Credit Field Experiment. *Econometrica* 77, 1993–2008.

F. Smoothing Income (Village Finance 9) (2/1)

*Mark R. Rosenzweig and Hans P. Binswanger (1993). Wealth, Weather Risk and the Composition and Profitability of Agricultural Investments. *The Economic Journal*, Vol. 103, No. 416 (Jan., 1993), pp. 56-78. [Link](#).

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. [Link](#)

Morten, M. (2019). [Temporary Migration and Endogenous Risk Sharing in Village India](#). *Journal of Political Economy*

Shawn Cole, Xavier Giné and James Vickery (2013). "How Does Risk Management Influence Production Decisions? Evidence from a Field Experiment. [Link](#)

Morduch, Jonathan (1995) 'Income Smoothing and Consumption Smoothing,' *Journal of Economic Perspectives* 9(3), 103–114. [Link](#).

Chetty, Raj, and Adam Looney. "[Consumption smoothing and the welfare consequences of social insurance in developing economies](#)." *Journal of Public Economics* 90 (2006): 2351-2356.

Emerick, Kyle, Alain de Janvry, Elisabeth Sadoulet, and Manzoor Dar (2014). "Risk and the modernization of agriculture." [Link](#)

G. **Equilibrium Effects (Village Finance 10, 11) (2/1, 2/3)**

*Egger, Dennis, Johannes Haushofer, Edward Miguel, Paul Niehaus, Michael Walker. 2019. "General equilibrium effects of cash transfers: experimental evidence from Kenya" NBER working paper.

*Burgess, Robin, and Rohini Pande. 2005. "Do Rural Banks Matter? Evidence from the Indian Social Banking Experiment." *American Economic Review*, 95 (3): 780-795.

*Buera, Francisco J., Joseph P. Kaboski, and Yongseok Shin. 2011. "Finance and Development: A Tale of Two Sectors." *American Economic Review*, 101 (5): 1964-2002.

Banerjee, Abhijit V., and Andrew F. Newman. "Occupational Choice and the Process of Development." *Journal of Political Economy* 101, no. 2 (1993): 274-98.

Angelucci, Manuela, and Giacomo De Giorgi. "Indirect Effects of an Aid Program: How Do Cash Transfers Affect Ineligibles' Consumption?." *American Economic Review* 99, no. 1 (2009): 486-508. [Link](#)

Karlan Guest Lectures: 2/8, 2/10

2. Households

A. The AHM (Households 1) (2/15)

*LaFave, D., & Thomas, D. (2018). "Farms, Families, and Markets: New Evidence on Agricultural Labor Markets" *Econometrica*.

<https://ipl.econ.duke.edu/dthomas/docs/ppr/16May-FarmHH.pdf>

Jayachandran, Seema (2006) "Selling Labor Low: Wage Responses to Productivity Shocks in Developing Countries," *Journal of Political Economy*, 11 (3): 538-575.

B. Gender (Households 2) (2/17)

*Qian, Nancy. "Missing Women and the Price of Tea in China." *Quarterly Journal of Economics* 123, no. 3 (2008): 1251-1285.

Calvi, Rossella. 2020. "Why Are Older Women Missing in India? The Age Profile of Bargaining Power and Poverty" *Journal of Political Economy*.

Anderson, Siwan, and Debraj Ray. "Missing women: age and disease." *The Review of Economic Studies* 77.4 (2010): 1262-1300.

Pitt, Mark, Mark Rosenzweig and MD Nazmul Hassan. 2010. "Short- and Long-Term Health Effects of Burning Biomass in the Home in Low-Income Countries"

<http://www.pstc.brown.edu/~mp/papers/iapchild7.pdf>

Hanna, Rema, Esther Duflo, and Michael Greenstone. *Up in smoke: the influence of household behavior on the long-run impact of improved cooking stoves*. National Bureau of Economic Research, 2012.

Deaton, *The Analysis of Household Surveys* Chapter 4.2

Duflo, Esther (2003), "Grandmothers and Granddaughters: Old Age Pension and Intra-household Allocation in South Africa," *World Bank Economic Review*, Vol. 17 (1), pp. 1-25.

C. Unitary and Collective household models (Households 3) (2/22)

Duflo, Esther and Chris Udry. 2003. "Intrahousehold Resource Allocation in Côte d'Ivoire: Social Norms, Separate Accounts and Consumption Choices"

Chiappori, Pierre-Andre, and Maurizio Mazzocco. 2017. "Static and Intertemporal Household Decisions." *Journal of Economic Literature*, 55(3): 985-1045.

Attanasio, Orazio and Valerie Lechene. 2014. "Efficient Responses to Targeted Transfers" *Journal of Political Economy*

D. Testing (Households 4) (2/22)

*Rangel, Marcos and Duncan Thomas. 2019. "Decision-Making in Complex Households."

Udry, Christopher. 1996. "Gender, Agricultural Productivity and the Theory of the Household." *JPE*.

Ashraf, Nava, Erica Field, and Jean Lee. ["Household Bargaining and Excess Fertility: An Experimental Study in Zambia."](#) *American Economic Review* 104, no. 7 (July 2014).

3. Agriculture and Learning

A. Farming technology and learning (Technology 1) (2/24)

*Foster, Andrew, Mark Rosenzweig. 1995. "Learning by Doing and Learning from Others: Human Capital and Technical Change in Agriculture." *Journal of Political Economy*.

Conley, Timothy and Chris Udry. 2010. "Learning About a New Technology: Pineapple in Ghana." *AER*

Gollin, Douglas and Christopher Udry. 2018. "Heterogeneity, Measurement Error, and Misallocation: Evidence from African Agriculture

B. Extension/extensions (Technology 2-3) (3/1)

*Hanna, Rema, Sendhil Mullainathan, and Joshua Schwartzstein. 2014. *Learning through noticing: theory and experimental evidence in farming*. QJE.

Casaburi, Lorenzo, Michael Kremer, Sendhidl Mullainathan, and Ravindra Ramrattan. 2019. "Harnessing ICT to Increase Agricultural Production: Evidence from Kenya." Working Paper.

BenYishay, Ariel, and A. Mushfiq Mobarak. 2018. Social learning and Incentives for Experimentation and Communication. *Review of Economic Studies*.

Jensen, R. "The Digital Divide: Information (Technology), Market Performance and Welfare in the South Indian Fisheries Sector." *Quarterly Journal of Economics* 122, no. 3 (2008): 879-924.

Karlan et al “Information, Market Access and Risk: Addressing Constraints to Agricultural Transformation in Ghana” Manuscript: Northwestern

4. Agricultural Markets (Markets 1) (3/3)

*Bergquist, Lauren Falcao and Michael Dinerstein. 2020. "Competition and Entry in Agricultural Markets: Experimental Evidence from Kenya." *American Economic Review*, 110(12):3705-47.

Lorenzo Casaburi and Tristan Reed. 2019. [Interlinked Transactions and Competition: Experimental Evidence from Cocoa Markets](#) (PDF, 1101 KB)

5. Presentations (3/8, 3/10)