Economics 270B: Development Economics (Ph.D. course)

SPRING 2023 SYLLABUS (17 January 2023) Professor Edward Miguel (emiguel@berkeley.edu)

This course covers current research topics and methods in Development Economics. It is appropriate for Ph.D. students in Economics and related fields. Prerequisites include graduate coursework in economic theory and econometrics.

>> Course Logistics

Lectures: Monday 2-4pm PT in Evans 597.

Office hours: Please sign up for Prof. Miguel's office hours online at https://bit.ly/200eCAv.

Grady Killeen (gkilleen@berkeley.edu) and Sam Wang (samzwang@berkeley.edu) will serve as additional resource people for the course.

>> Course Assignments and Grading

(Note: assignments should be uploaded on bCourses by 2pm PT on the due date.)

- (1) Referee reports on papers by job market candidates (30 percent):
- -- Each referee report should be no more than 3 pages double-spaced. The report should start off with a one paragraph summary of the main argument of the article. You should describe your main 3-4 points in detail <u>as if you were writing directly to the author</u>. Conclude the report with more minor comments. A good referee report not only clearly states the shortcomings of the work, but also lays out constructive, detailed and realistic suggestions for improvement.
- -- These assignments will allow you to read and critique papers on the research frontier of development economics, and get a concrete sense of the quality of work being done by leading Ph.D. candidates in the field. These papers are also posted on bCourses.
- -- Report 1 on Jacob Moscona (MIT), "Inappropriate Technology: Evidence from Global Agriculture" (link), due Friday 2/3
- -- Report 2 on Awa Ambra Seck (Harvard), "En Route: The French Colonial Army, Emigration and Development in Morocco" (link), due Friday 3/3
- -- Report 3 on Jonah Rexer (Princeton), "The local advantage: Corruption, organized crime, and indigenization in the Nigerian oil sector" (link), due Friday 3/17
- * Extra credit option: please critically assess the presentation of data in each of the referee report papers. You can receive one point of extra credit for each report if you also include a detailed discussion of the shortcomings of one particular table / figure in the paper, and the concrete modifications you would make to improve the presentation of the data. (This does not count toward the 3 page limit for the referee report itself. Please restrict yourself to 1 page for this additional discussion of data presentation.) A classic treatment on the presentation of quantitative data is: Tufte, Edward R. (1983). *The Visual Display of Quantitative Information*. Cheshire: Graphics Press.
- (2) Two problem sets (30 percent):

- -- Problem set 1, posted by Friday 2/3 and <u>due Friday 2/17</u> PS1 will require econometric exercises involving randomized control trial (RCT) data, and machine learning applications using LMIC household data.
- -- Problem set 2, posted by Friday 3/17 and <u>due Friday 4/14</u> PS2 will require replication and extension of the econometric analysis in a published development economics article.
- (3) One research proposal, 8-9 pages (30 percent):
 The research proposal should first briefly (3-4 pages) survey an existing literature in Development

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Economics, and then describe a planned research project (5-6 pages). Proposals should be in 12 point font, double-spaced with 1 inch margins. Proposals exceeding 9 pages in length (excluding references, tables and figures) will lose credit. This assignment will encourage you to generate, refine and receive feedback on a research idea that might form part of your dissertation.

- -- The research proposal is <u>due Friday 5/5</u> at 2pm (uploaded on bCourses).
- (4) Class participation (10 percent): In borderline cases, attendance at lecture and the quality of classroom comments may be a factor in assigning grades. Active class participation enriches the course, benefiting other students (and the instructor), and is highly encouraged.
- (5) Exams: There are no exams for this course. The Development Economics Ph.D. Field Exam this summer will cover all readings on this syllabus (as well as material from Econ 270A and 270C).

>> Course Policies

<u>Special Accommodations:</u> If you need disability-related accommodations in this class, please inform me immediately by email or in office hours.

<u>Honor Code:</u> The student community at U.C. Berkeley has adopted the following Honor Code: "As a member of the U.C. Berkeley community, I act with honesty, integrity, and respect for others." The hope and expectation is that all students and course instructors will adhere to this code at all times.

<u>Academic Honesty Policy:</u> Cheating will be harshly punished. Any evidence of cheating will result in a score of zero (0) on that assignment. Cheating includes, but is not limited, to copying off another person's assignment, allowing someone to copy off of your assignment, having someone else do an assignment for you, and plagiarizing written or other materials. Incidences of cheating are reported to Center for Student Conduct, which administers additional punishment. See also http://sa.berkeley.edu/conduct/students/standards.

<u>Limits to Confidentiality:</u> As University of California employees, all course instructors are Responsible Employees and are required to report incidents of sexual violence, harassment or other conduct prohibited by university policy to the Title IX officer. We cannot keep reports confidential, but the Title IX officer will consider requests for confidentiality. There are confidential resources available, including the CARE Advocate Office (http://sa.berkeley.edu/dean/confidential-care-advocate).

>> COURSE SYLLABUS

I. Macroeconomic patterns of growth and development

Lecture 1: Understanding economic growth and development (1/23)

Deaton, Angus. (2005). "Measuring Poverty in a Growing World (or Measuring Growth in a Poor World)," *Review of Economics and Statistics*, 87(1), 1-19.

Henderson, J. Vernon, Adam Storeygard, and David N. Weil. (2012). "Measuring Economic Growth from Outer Space", *American Economic Review*, 102(2), 994-1028.

Jones, Charles I. (2016). "The Facts of Economic Growth", *Handbook of Macroeconomics*, Vol. 2A, (eds.) John B. Taylor and Harald Uhlig, Elsevier B.V.

Additional readings:

Burke, Marshall, Anne Driscoll, David B. Lobell, and Stefano Ermon. (2021). "Using satellite imagery to understand and promote sustainable development", *Science*, 371, eabe8628.

Nunn, Nathan. (2020). "The Historical Roots of Economic Development", Science, 367, eaaz9986.

Lecture 2: General equilibrium effects and infrastructure (1/30)

Asher, Sam, Alison Campion, Douglas Gollin, and Paul Novosad. (2022). "The Long-run Development Impacts of Agricultural Productivity Gains: Evidence from Irrigation Canals in India", unpublished working paper.

Egger, Dennis, Johannes Haushofer, Edward Miguel, Paul Niehaus, and Michael Walker. (2022). "General Equilibrium Effects of Cash Transfers: Experimental Evidence from Kenya", *Econometrica*, 90(6), 2603-2643.

Lee, Kenneth, Edward Miguel, and Catherine Wolfram. (2020). "Experimental Evidence on the Economics of Rural Electrification", *Journal of Political Economy*, 128(4): 1523-1565.

Additional Readings:

Donaldson, Dave. (2018). "Railroads of the Raj: Estimating the Impact of Transportation Infrastructure", *American Economic Review*, 108(4-5), 899-934.

Lecture 3: Sectoral Productivity Gaps (** for week of 2/20, no lecture)

Gollin, D., D. Lagakos, and M.E. Waugh. (2014). "The Agricultural Productivity Gap," *Quarterly Journal of Economics*, 129, 939-993.

Hamory, Joan, Marieke Kleemans, Nicholas Y Li, and Edward Miguel. (2021). "Reevaluating Agricultural Productivity Gaps with Longitudinal Microdata", *Journal of the European Economic Association*, 19(3), 1522–1555.

Additional readings:

Bryan, G., S. Chowdhury, and A. Mobarak. (2014). "Underinvestment in a Profitable Technology: The Case of Seasonal Migration in Bangladesh", *Econometrica*, 82, 1671-1748.

Hendricks, L. and T. Schoellman. (2018). "Human Capital and Development Accounting:

New Evidence from Wage Gains at Migration", Quarterly Journal of Economics, 133(2), 665-700.

II. Human capital and labor in economic development

Lecture 4: Education I (2/6)

Ganimian, Alejandro J., Karthik Muralidharan, and Christopher R. Walters. (2021). "Augmenting State Capacity for Child Development: Experimental Evidence from India", unpublished working paper.

Mbiti, Isaac, Karthik Muralidharan, Mauricio Romero, Youdi Schipper, Constantine Manda, and Rakesh Rajani. (2019). "Inputs, Incentives, and Complementarities in Education: Experimental Evidence from Tanzania", *Quarterly Journal of Economics*, 134(3), 1627-1673.

Muralidharan, Karthik and Venkatesh Sundararaman. (2011). "Teacher Performance Pay: Experimental Evidence from India", *Journal of Political Economy*, 119(1), 39-77.

Additional readings:

Muralidharan, Karthik, Abhijeet Singh, and Alejandro Ganimian. (2019). "Disrupting Education? Experimental Evidence on Technology-Aided Instruction in India", *American Economic Review*, 109(4), 1426-1460.

Royal Swedish Academy of Sciences. (2019). "Scientific Background on the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel: Understanding Development and Poverty Alleviation".

Lecture 5: Education II (2/13)

Akresh, Richard, Daniel Halim, and Marieke Kleemans. (2021). "Long-Term and Intergenerational Effects of Education: Evidence from School Construction in Indonesia", forthcoming *Economic Journal*.

Ashraf, Nava, Natalie Bau, Nathan Nunn and Alessandra Voena. (2020). "Bride Price and Female Education," *Journal of Political Economy*, 128 (2), 591-641.

Duflo, Esther. (2001). "Schooling and Labor Market Consequences of School Construction in Indonesia: Evidence from an Unusual Policy Experiment," *American Economic Review*, 91(4).

Additional readings:

Baird, Sarah, Craig McIntosh, and Berk Ozler. (2011). "Cash or condition? Evidence from a Randomized Cash Transfer Program", *Quarterly Journal of Economics*, 126(4), 1709-1753.

Hanushek, Eric A., and Ludger Woessmann. (2021). "Education and Economic Growth", *Oxford Research Encyclopedias – Economics and Finance*, doi: 10.1093/acrefore/9780190625979.013.651.

Lecture 6: Labor markets (2/27) - Guest Lecture Prof. Supreet Kaur

Breza, Emily, Supreet Kaur, and Yogita Shamdasani. (2021). "Labor Rationing", *American Economic Review*, 111(10), 3184-3224.

Kaur, Supreet. (2019). "Nominal Wage Rigidity in Village Labor Markets", *American Economic Review*, 109(10): 3585-3616.

Additional Readings

Beaman, Lori and Jeremy Magruder. (2012). "Who gets the Job Referral? Evidence from a Social Networks Experiment", *American Economic Review*, 102(7): 3574-93.

Behrman, Jere. (1999). "Labor Markets in Developing Countries," in O. Ashenfelter and D. Card. (eds), *Handbook of Labor Economics*, Vol. 3.

Carranza, Eliana, Aletheia Donald, Florian Grosset, and Supreet Kaur. (2022). "The Social Tax: Redistributive Pressure and Labor Supply", unpublished working Paper.

Carranza, Eliana, Robert Garlick, Kate Orkin, and Neil Rankin. (2022). "Job Search and Hiring with Limited Information about Workseekers' Skills", *American Economic Review*, 112(11): 3547-83.

McKenzie, David. (2017). "How Effective Are Active Labor Market Policies in Developing Countries? A Critical Review of Recent Evidence", *World Bank Research Observer*, 32(2): 127–154.

Lecture 7: Health and nutrition I (3/6)

Das, Jishnu, Alaka Holla, Aakash Mohpal, and Karthik Muralidharan. (2016). "Quality and Accountability in Health Care Delivery: Audit-study Evidence from Primary Care in India", *American Economic Review*, 106(12), 3765-3799.

Karing, Anne. (2021). "Social Signaling and Childhood Immunization: A Field Experiment in Sierra Leone", unpublished working paper.

Okeke, Edward. (2022). "When a Doctor Falls from the Sky: The Impact of Easing Doctor Supply Constraints on Mortality", forthcoming *American Economic Review*.

Additional readings:

Dupas, Pascaline, and Edward Miguel. (2017). "Impacts and Determinants of Health Levels in Low-Income Countries", *Handbook of Field Experiments*, (eds.) Esther Duflo and Abhijit Banerjee.

Lecture 8: Health and nutrition II (3/13)

Alsan, Marcella. (2015). "The Effect of the TseTse fly on African Development", *American Economic Review*, 105(1), 382-410.

Hamory, Joan, Edward Miguel, Michael Walker, Michael Kremer, and Sarah Baird. (2021). "Twenty Year Economic Impacts of Deworming", *Proceedings of the National Academy of Sciences*, 118(14): e2023185118, doi: 10.1073/pnas.2023185118.

Miguel, Edward, and Michael Kremer (2004). "Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities", *Econometrica*, 72(1), 159-217.

Additional readings:

Miguel, Edward, and A. Mushfiq Mobarak. (2022). "The Economics of the COVID-19 Pandemic in Poor Countries", *Annual Review of Economics*, 14(1), 253-285.

Lecture 9: Behavioral development economics (3/20)

Baranov, Victoria, Sonia Bhalotra, Pietro Biroli, and Joanna Maselko. (2020). "Maternal Depression, Women's Empowerment, and Parental Investment: Evidence from a Randomized Control Trial", *American Economic Review*, 110(3): 824-859.

Hussam, Reshmaan, Erin M. Kelley, Gregory Lane, and Fatima Zahra. (2022) "The Psychosocial Value of Employment: Evidence from a Refugee Camp", *American Economic Review*, 112 (11), 3694-3724.

Kaur, Supreet, Sendhil Mullainathan, Suanna Oh, and Frank Schilbach. (2022). "Do Financial Concerns Make Workers Less Productive?" forthcoming *Quarterly Journal of Economics*.

Additional Readings

Kremer, Michael, Gautam Rao, and Frank Schilbach. (2019). "Behavioral Development Economics", *Handbook of Behavioral Economics*, Volume 2.

Lecture 10: Issues in research design and transparency (for week of 3/27, no lecture)**Miguel, Edward. (2021). "Evidence on Research Transparency in Economics", *Journal of Economic Perspectives*, 35(3), 193-214.

Mullainathan, Sendhil, Jens Ludwig, and Jeff Kling. (2011). "Mechanism Experiments and Policy Evaluations", *Journal of Economic Perspectives*, 25(3) 17-38.

Muralidharan, Karthik, and Paul Niehaus. (2017). "Experimentation at Scale", *Journal of Economic Perspectives*, 31(4), 103-124.

III. The political economy of development

Lecture 11: Institutions, democracy and development (4/3)

Acemoglu, Daron, Suresh Naidu, Pascual Restrepo, and James A. Robinson. (2019). "Democracy Does Cause Growth", *Journal of Political Economy*, 127(1), 47-100.

Casey, Katherine, Rachel Glennerster, & Edward Miguel. (2012). "Reshaping institutions: Evidence on aid impacts using a pre-analysis plan", *Quarterly Journal of Economics*, 127(4), 1755-1812.

Martinez, Luis R. (2022). "How Much Should We Trust the Dictator's GDP Growth Estimates?" *Journal of Political Economy*, 130(10), 2731-2769.

Additional readings:

Dal Bó, Ernesto, Frederico Finan, and Martín A. Rossi (2013) "Strengthening State Capabilities: The Role of Financial Incentives in the Call to Public Service", *Quarterly Journal of Economics*, 128(3), 1169-1218.

Lecture 12: Corruption (4/10) – Guest Lecture Prof. Fred Finan

Avis, Eric, Claudio Ferraz, and Frederico Finan. (2018). "Do Government Audits Reduce Corruption?

Estimating the Impacts of Exposing Corrupt Politicians", *Journal of Political Economy*, 126(5), 1912-1964.

Olken, Ben and Patrick Barron. (2009). "The Simple Economics of Extortion: Evidence from Trucking in Aceh", *Journal of Political Economy*, 117(3), 417-452.

Additional readings:

Ferraz, Claudio, and Frederico Finan. (2008). "Exposing Corruption politicians: The Effects of Brazil's Publicly Released Audits on Electoral Outcomes", *Quarterly Journal of Economics*, 123(2), 703-745.

Fisman, Raymond and Edward Miguel. (2007). "Corruption, Norms, and Legal Enforcement: Evidence from Diplomatic Parking Tickets", *Journal of Political Economy*, 115(6), 1020-1048.

Olken, Ben and Rohini Pande. (2012) "Corruption in Developing Countries", *Annual Review of Economics*, Vol. 4.

Lecture 13: The political economy of conflict (4/17)

Chassang, Sylvain, and Gerard Padro-i-Miquel. (2010). "Economic Shocks and Civil War", *Quarterly Journal of Political Science*, 4(3), 211-228.

Hsiang, Solomon, Marshall Burke, and Edward Miguel. (2013). "Quantifying the Influence of Climate on Human Conflict", *Science*, 10.1126/science.1235367.

McGuirk, Eoin F., and Nathan Nunn. (2022). "Transhumant Pastoralism, Climate Change and Conflict in Africa", unpublished working paper.

Additional readings:

Blattman, Christopher and Edward Miguel. (2010). "Civil War", *Journal of Economic Literature*, 48(1), 3-57.

Dell, Melissa, and Pablo Querubin. (2018). "Nation Building through Foreign Intervention: Evidence from Discontinuities in Military Strategies", *Quarterly Journal of Economics*, 133(2), 701-764.

Lecture 14: Geopolitics, foreign aid, and economic development (4/24)

Andersen, Jorgen Juel, Niels Johannesen, and Bob Rijkers. (2022). "Elite capture of foreign aid: Evidence from Offshore Bank Accounts", *Journal of Political Economy*, 130(2), 388-425.

Dube, Arindrajit, Ethan Kaplan, Suresh Naidu. (2011). "Coups, Corporations, and Classified Information", *Quarterly Journal of Economics*, 126(3), 1375–1409.

Mueller, Joris. (2022). "China's Foreign Aid: Political Determinants and Economic Effects", unpublished working paper.

Additional readings:

Kuziemko, Ilyana, and Eric Werker. (2006) "How Much Is a Seat on the Security Council Worth? Foreign Aid and Bribery at the United Nations", *Journal of Political Economy*, 114(5), 905-930.

Lecture 15: Religion and culture in economic development (for week of 5/1, no lecture)** Auriol, Emmanuelle, Julie Lassebie, Amma Panin, Eva Raiber, and Paul Seabright. (2020). "God Insures Those Who Pay? Formal Insurance and Religious Offerings in Ghana", *Quarterly Journal of Economics*, 135(4), 1799–1848.

Bryan, Gharad T., James J. Choi, and Dean Karlan. (2021). "Randomizing Religion: The Impact of Protestant Evangelism on Economic Outcomes", *Quarterly Journal of Economics*, 136(1), 293–380.

Bursztyn, Leonardo, Alessandra L. González, and David Yanagizawa-Drott. (2020). "Misperceived Social Norms: Women Working Outside the Home in Saudi Arabia," *American Economic Review*, 110 (10), 2997-3029.

Additional readings:

Iyer, Sriya. (2016). "The New Economics of Religion", Journal of Economic Literature, 54(2).

Miguel, Edward. (2005). "Poverty and Witch Killing", Review of Economic Studies, 72, 1153-1172.