Class hours: Wednesday 17h30-19h30 Office hours: Monday 15h30-17h00, Tuesday 15h00-17h00 Jenny.Aker@tufts.edu

EIB E242 Microeconomics of Development

Course Description:

The goal of this course is to better understand the microeconomic foundations of development issues in poor countries, with a particular focus on sub-Saharan Africa. The course will first focus on microeconomic theory as a framework for analyzing households' and policymakers' behavior. We will then review the empirical methods that can be used to understand such behavior, to develop individual and institutional-level interventions, and to evaluate the impact of such interventions.

The course will first focus on the microeconomic foundations of household-level decision-making behavior in low-income countries. We will then discuss issues that constrain and support development: risks and shocks, labor and human capital, risk and vulnerability; social networks, learning and technology adoption' human capital (education and health), markets (including land, labor, credit and information); and institutions and conflict. For each topic, we will take a twofold approach: using the theory to analyze behavior and outcomes, and then using empirical tools to make (or evaluate) policy recommendations.

This course is complementary to EIB E241, but is different in two ways. First, it will rely primarily upon the examination of empirical research papers by academic economists, in an effort to understand more about the challenges and methods and value of good empirical research. Second, the course discusses the way in which an academic approach to development economics can be used to complement and improve practical field projects, and vice versa.

<u>Pre-requisites:</u> Intermediate microeconomics. Introductory econometrics is strongly recommended as a prerequisite or as a concurrent course.

<u>Requirements:</u> There will be weekly graded quizzes, a midterm, a final exam and a group project (including a policy paper and presentation). Class sessions will be a combination of lecture and discussion. Students are also expected to prepare for class by completing the required readings before each class and actively participating in class discussion. In addition, weekly (timed) quizzes will be posted each week the day before class and available for 24 hours. Lecture slide handouts will be posted on Blackboard the day of class. Classes are scheduled for 2 hours. Grades will be based upon the following:

Weekly quizzes (10% of grade)

Midterm exam (30% of grade)

Final exam (30% of grade):

Group assignment (policy brief and presentation) (30% of grade)

Readings:

There is <u>no required text</u> for this course. The lectures and discussion will be primarily based on journal articles in the reading list provided below. However, here are some texts that you may find useful to consult from time to time (the books will be available in the library):

Ray, Debraj. (1998). Development Economics, Princeton University Press, Princeton.

Wooldridge, Jeffrey. (2003). *Introductory Econometrics: A Modern Approach*, Second or Third edition, South-Western College Publishing.

Wooldridge is an excellent introduction to econometrics. Ray's book is an advanced undergraduate or Master's level text that contains intuitive treatments of some of the material covered in this course. Having access to an intermediate microeconomics textbook will also be useful as a reference.

For most classes, readings include theoretical and empirical papers. You should try to understand the empirical approach and results. Readings with a "*" are required; the rest are suggested.

Course Outline:

I. Introduction: Why should we care about development?

*"The Bottom 1.4 Billion". The Economist, 28 August 2008.

*Sen, Amartya. "The Concept of Development," Chapter 1 in *Handbook of Development Economics*, Volume 1, pp. 9-26.

*Miguel, Edward. "Is it Africa's Turn?" May/June 2008. *The Boston Review*.

http://bostonreview.net/BR33.3/miguel.php. (This article is no longer available online and is only available in book format. Copies will be available in the library by Friday).

*Collier, Paul. "Development in Dangerous Places". July/August 2009. The Boston Review. http://bostonreview.net/BR34.4/collier.php

Shaohua Chen and Martin Ravallion. "The Developing World Is Poorer Than We Thought, But No Less Successful in the Fight against Poverty." The World Bank Development Research Group, August 2008.

II. Using Microeconomic Theory in Development Economics: Poverty and Household Decision-Making

*Perloff, Jeffrey. Microeconomics, 5th Edition. Pp. 134-143 (labor supply curve), p. 654

*Aline Coudouel, Jesko S. Hentschel, and Quentin T. Wodon (2002). Chapter 1: Poverty Measurement and Analysis. Washington, D.C. The World Bank. Pp. 29-63.

Ravallion, Martin (1999). "Poverty Comparisons: A Guide to Concepts and Methods." LSMS Working Paper Number 88. Pp 1-66.

Atkinson, A. B. (1970), "On the Measurement of Inequality," Journal of Economic Theory 2, 244-63.

III. Using Econometric Tools in Development Economics: Impact Evaluation

- *Center for Global Development. "When will we ever learn? Improving Lives through Impact Evaluation." Report of the Evaluation Gap Working Group, Washington, D.C.: 2006. Pp. 9-33.
- *Nelson, Jodi Lee. 2007. Are we Ready for RCTs? New York: International Rescue Committee.
- *Martin Ravallion, 2001, "The Mystery of the Vanishing Benefits: An Introduction to Impact Evaluation", World Bank Economic Review, 15. Pp 2-29.
- *Blattman, Chris 2008. Evaluation 2.0. February 2008.
- Deaton, Angus (2009). "Instruments of development: Randomization in the tropics, and the search for the elusive keys to economic development." NBER Working Paper #14690. Pp. 23-47. http://www.princeton.edu/~deaton/downloads/Instruments of Development.pdf
- Banerjee, Abhijit. 2007. Making Aid Work. Boston Review/MIT Press: Boston.
- Duflo, Esther, Rachel Glennerster, and Michael Kremer. (2008). "Using Randomization in Development Economics Research: A Toolkit", Chapter 61, *Handbook of Development Economics*.
- Bruhn, Miriam and David McKenzie. October 2009. "In Pursuit of Balance: Randomization in Practice in Development Field Experiments." *American Economic Journal-Applied*. Pp. 200-232.

IV. Consequences of Shocks and Risks

- *Jensen, Robert, 2000, "Agricultural Volatility and Investments in Children", American Economic Review, 90(2): 399-404.
- Maccini, Sharon and Dean Yang. 2009 Under the Weather: Health, Schooling, and Economic Consequences of Early-Life Rainfall, *American Economic Review*, 99(3): 1006-1026. link
- *Jayachandran, Seema, "Selling Labor Low: Wage Responses to Productivity Shocks in Developing Countries." *Journal of Political Economy*, volume 114 (2006), pp. 538–575.
- *Bundervoet, Tom, Philip Verwimp, and Richard Akresh. Health and Civil War in Rural Burundi, Journal of Human Resources, Spring 2009, 44(2), 551-563.
- *Miguel, Edward, 2005, "Poverty and Witch Killing", Review of Economic Studies, 72(4): 1153-1172.
- Kochar, Anjini. "Smoothing Consumption by Smoothing Income: Hours-of-Work Responses to Idiosyncratic Agricultural Shocks in Rural India." Review of Economics and Statistics (1999), Vol. 81, No. 1: 50-61, link

V. Labor and Human Capital

5.1. Education

- *Case, Anne, 2006. "The Primacy of Education", Chapter 18, in Banerjee, Benabou and Mookherjee (eds.), Understanding Poverty, Oxford University Press, Oxford, pp. 460-471. http://www.princeton.edu/~accase/papers.html
- Orazem, Peter F. and Elizabeth M. King. "Schooling in Development Countries: The Roles of Supply, Demand and Government Policy." Chapter 55. *Handbook of Development Economics*. Pp. 3496-3504.
- *Schultz, Paul T., 2004, "School subsidies for the poor: evaluating the Mexican Progresa poverty program", *Journal of Development Economics*, 74(1): 199-220.
- *Michael Kremer, Edward Miguel, and Rebecca Thornton. 2009. "Incentives to Learn." Review of Economics and Statistics.
- *Duflo, Esther, 2004, "The Medium Run Effects of Educational Expansion: Evidence from a Large School Construction Program in Indonesia", *Journal of Development Economics*, 74(1): 163-97.
- Herbert, Bob. "Where the Bar Ought to Be." Op Ed, New York Times, February 22, 2010. http://www.nytimes.com/2010/02/23/opinion/23herbert.html?em

5.2. Health and Nutrition

- *John Strauss, and Duncan Thomas, 1998, "Health, Nutrition, and Economic Development", *Journal of Economic Literature*, 36(2): 766-817.
- Mwabu, Germano. "Health Economics for Low-Income Countries." Chapter 53. *Handbook of Development Economics*. Pp. 3361-3363
- *Miguel, Edward and Michael Kremer. 2004. "Worms: Identifying the Impacts on Education and Health in the Presence of Treatment Externalities," *Econometrica* 72(1): 159-217
- *Thirumurthy, Harsha, Joshua Graff Zivin, and Markus Goldstein. 2008. "The Economic Impact of AIDS Treatment: Labor Supply in Western Kenya." *Journal of Human Resources*. 43(2008): 511-552.
- *Kremer, Michael. 2002, "Pharmaceuticals and the Developing World", Journal of Economic Perspectives, 16(4), 67-80.

http://www.bu.edu/today/node/10513

5.3. Labor Markets: Migration and Rural Off-farm Employment

- *Gibson, John and David McKenzie. May 2009. "The Microeconomic Determinants of Emigration and Return Migration of the Best and Brightest: Evidence from the Pacific." Working Paper Number 173. Washington, D.C.: Center for Global Development.

 http://www.cgdev.org/content/publications/detail/1422179/
- Behrman, Jere R. 2005. "Labor Markets in Developing Countries". *Handbook of Labor Economics*, Chapter 43. Pp. 2859-2939. Please read pp. 2859-2882.
- *Yang, Dean. 2008. "International Migration, Human Capital, and Entrepreneurship: Evidence from Philippine Migrants' Exchange Rate Shocks". *The Economic Journal*.

*Chand, Satish and Michael Clemens. September 2008. "Skilled Emigration and Skill Creation: A Quasi-Experiment." Working Paper Number 152. Center for Global Development: Washington, D.C.

VI. Agricultural Markets

- *Aker, Jenny C. 2008. "Does Digital Divide or Provide? The Impact of Cell Phones on Grain Markets in Niger." BREAD Working Paper No. 177.
- *Jensen, Robert. 2007. "The Digital Provide: Information (Technology), Market Performance and Welfare in the South Indian Fisheries Sector." *Quarterly Journal of Economics*. Vol. 122, Issue 3. Pp. 879-905.
- *Fafchamps, Marcel and Ruth Vargas-Hill. "Selling at the farmgate or traveling to market." American Journal of Agricultural Economics. v. 87. no. 3. 2005-08. p. 717-734
- *Goyal, Aparajita. "Information Technology and Rural Market Performance in Central India." Forthcoming, American Economic Journal-Applied.

 http://www.bu.edu/econ/ied/seminars/Aparajita Goyal Paper.pdf

VII. Credit, Microfinance and Savings

- *Murdoch, Jonathan, 1999, "The Microfinance Promise", Journal of Economic Literature, 37(4): 1569-1614.
- Karlan, Dean and Jonathan Morduch. "Access to Finance" in *Handbook of Development Economics*, Dani Rodrik and Mark Rozensweig, eds. http://karlan.yale.edu/p/HDE_June_11_2009_Access_to_Finance.pdf
- Ghatak, M; Guinnane, TW. "The economics of lending with joint liability: theory and practice." *Journal of Development Economics* 1999, 60(1):195-228.
- *Banerjee, Abhijit, Esther Dfflo Rachel Glennerster, and Cynthia Kinnan. "The miracle of microfinance? Evidence from a randomized evaluation". J-PAL Working Paper, 2009 povertyactionlab.org. http://econ-www.mit.edu/files/4162
- *Burgess, Robin and Rohini Pande, 2005, "Can Rural Banks Reduce Poverty? Evidence from the Indian Social Banking Experiment", *American Economic Review*, 95(3): 780-795.
- *Gine, Xavier, and Dean Karlan, Group versus Individual Liability: Long Term Evidence from Philippine Microcredit Lending Groups (May 2009), http://karlan.yale.edu/p/GroupversusIndividualLending-May2009.pdf
- Luoto, Jill, Craig McIntosh and Bruce Wydick. "Credit Information Systems in Less-Developed Countries: A Test with Microfinance in Guatemala." Economic Development and Cultural Change, 2007.
- Aker, Jenny C. "The Myth of Microfinance? Why MFIs Shouldn't be Freaking Out (Yet)." http://blogs.cgdev.org/globaldevelopment/2009/11/the-myth-of-microfinance-why-mfis-shouldn%e2%80%99t-be-freaking-out-yet.php#more-2400

VIII. Land Markets

- *Ray, chapter 12 (Land).
- *Bandiera, Oriana. 2007. "Land Tenure, Investment Incentives, and the Choice of Techniques: Evidence from Nicaragua" The World Bank Economic Review, 21 (3): 487-508 link
- *Banerjee, Abhijit, Paul Gertler and Maitreesh Ghatak, 2002, "Empowerment and Efficiency: Tenancy Reform in West Bengal", *The Journal of Political Economy*, 110(2): 239-280.
- *Deininger, Klaus and Songqing Jin. 2006. "Tenure security and land-related investment: Evidence from Ethiopia". European Economic Review 50(5), pp. 1245-1277 link
- Deininger, Klaus, 2003, Land Policies for Growth and Poverty Reduction, World Bank Policy Research Report, Executive Summary, xvii-xlvi.

IX. Learning and Technology Adoption

- *Foster, A. & 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.
- *Gine, Xavier and Dean Yang. "Insurance, Credit, and Technology Adoption: Field Experimental Evidence from Malawi." *Journal of Development Economics*, forthcoming.
- *Duflo, E., M. Kremer, and Jonathan Robinson (2009). Nudging Farmers to Use Fertilizer: Theory and Experimental Evidence from Kenya, *Harvard University Department of Economics working paper*. http://econ-www.mit.edu/files/4281

Bandiera, Oriana, and Imran Rasul (2006), "Social Networks and Technology Adoption in Northern Mozambique," *Economic Journal*, 116(514), pp. 862–902

X. Governance and Institutions

- *Blattman, Christopher and Jeannie Annan (2009). "The Consequences of Child Soldiering." Review of Economics and Statistics, forthcoming.
- *Bellows, John and Edward Miguel. "War and Local Collective Action in Sierra Leone." *Journal of Public Economics*, 2009, 93(11-12), 1144-1157.
- *Finan, Frederico and Claudio Ferraz. 2008. "Exposing Corrupt Politicians: The Effect of Brazil's Publicly Released Audits on Electoral Outcomes", Quarterly Journal of Economics, 123:2.

Dube, Oeindrile and Suresh Naidu. 2009. "Bases, Bullets, and Ballots: The Effect of U.S. Military Aid on Political Conflict in Colombia". CGD Working Paper 197

Lin, Justin Yifu and Jeffrey B. Nugent. 1995. "Institutions and Economic Development." *Handbook of Development Economics*, Chapter 38, pp. Pages 2301-2370