

Economics 469
Economics of Global Health and Population
Spring 2008

Professor Brainerd
Stocking 5
x2408
Elizabeth.Brainerd@williams.edu

Office hours:
Tuesdays 2:00 - 3:00 pm
Wednesdays 10:30 am - 12:30 pm
and by appointment

Course description: This course examines issues in global health and population in developing and formerly socialist countries, with a focus on econometric methods and applied microeconomic theory. The principal goal is for students to become proficient in evaluating empirical analyses and in applying economic reasoning to health- and population-related issues. The course covers selected topics in two related areas: (1) the economics of health, and (2) the economics of population and the family. The topics we will cover in the economics of health include the determinants and consequences of changing population health, the relationship between education and health, mortality and economic crisis, and the economics of HIV/AIDS. The topics we will discuss in the economics of population include intrahousehold allocation, marriage and fertility, causes and consequences of unbalanced sex ratios, and the economics of contraception and abortion.

The course is primarily a discussion course, but the first few weeks of class will include several lectures on (1) historical and current issues in health and population and (2) review of empirical methods in economics such as OLS, fixed effects, difference-in-differences, natural experiments, and instrumental variables. Many of these techniques will be discussed in the context of one or more of the papers on the syllabus for that day.

Prerequisites: Economics 251 and Economics 255

Course requirements: Students will be evaluated on the basis of class participation, an empirical exercise, short evaluative papers on journal articles, two “referee reports” on the research papers written by other students in the class, and an empirical research paper:

Class participation and attendance	25%
Empirical exercise	5%
Article critiques (3)	20%
Referee reports (2)	10%
Research paper	40%

Class participation: It is essential that you have done the readings before class and are prepared to actively participate in the class discussion about the readings. You will be graded on the quality of your comments and your ability to respectfully engage your fellow students. You should plan to speak during every class; I will call upon students who do not volunteer. Readings marked by a * on the syllabus are required; other readings are optional but provide useful background or additional evidence.

Class participation “opt outs”: I recognize that, very occasionally, you may not be able to do the reading due to unexpected personal circumstances or work pressures. *Twice* during the semester you may email me the night before class to excuse yourself from the class discussion for the day (unexcused absence from class also counts as an “opt out”). An excess of two “opt outs” or unexcused class absences will negatively affect your class participation grade.

Empirical exercise: Class on Thursday, February 14th will be devoted to a review of Stata and a discussion of how to use Stata to write your research paper. I will give you an empirical exercise to help you practice using Stata which will be due in class on Thursday, February 21st. The empirical exercise will be graded on a check, check-plus, check-minus basis.

Article critiques: Each student will write three article critiques which review and critique a journal article on the syllabus (only articles with a * may be used for the critiques). You may write on any article that you choose, but you must write two critiques before spring break. Critiques are due at the beginning of class on the day the article is being discussed. There are no exceptions to this rule, as it would be unfair to write a critique after we have already discussed an article in class.

Referee reports: These will be 2-3 page reviews offering constructive criticism of the rough drafts of the research paper that other students are writing for the course.

Research paper: The research paper is a 15-20 page paper which addresses a topic in health or population economics. The paper must include some original empirical work. The paper will be written in stages throughout the course and each student will give a presentation on their research at the end of the course. The components of the research paper are as follows:

- Research proposal (due Thursday, February 28)
- Research paper Table 1 (due Monday, March 10)
- Rough draft (due Thursday, May 1)
- Final paper (due Thursday, May 15)

Further information on how to write the research paper will be provided early in the semester.

Course materials: Course readings are primarily from academic journals. Part I of the course reading packet is available in Seeley. There is no textbook for this course, but it will be useful to have an econometrics textbook such as Wooldridge’s *Introductory Econometrics* for reference. In addition, some useful articles on econometric methods and chapters from econometrics textbooks are posted on the course website on Blackboard as additional sources of information on econometric methods.

Honor Code issues: All written work must be your own work. You must provide citations for all sources and any ideas which are not your own. Further details on proper citation will be included in the instructions on written assignments, but please do not hesitate to ask me if you have any questions about this.

Brief course outline and due dates

Class 1: Thursday, January 31	Introduction
Class 2: Monday, February 4	Overview: historical perspectives on population; current state of global health and population
Class 3: Thursday, February 7	The relationship between income and health Identification and empirical strategies in economics
Class 4: Monday, February 11	Effect of income on health Tools: OLS and nonparametric regression
Class 5: Thursday, February 14	Computer lab on using Stata
Class 6: Monday, February 18	Effect of nutrition on productivity and income Tools: difference-in-differences
Class 7: Thursday, February 21	Long-run returns to health Tools: natural experiments <i>Stata exercise due</i>
Class 8: Monday, February 25	Schooling and health Tools: instrumental variables
Class 9: Thursday, February 28	Schooling and health, continued <i>Research paper proposal due</i>
Class 10: Monday, March 3	Mortality and health effects of economic crisis
Class 11: Thursday, March 6	Economics of HIV/AIDS
Class 12: Monday, March 10	Economics of HIV/AIDS, continued <i>Research paper Table 1 due</i>
Class 13: Thursday, March 13	Class cancelled for research paper meetings
Class 14: Monday, March 31	Economic approach to the family: theory
Class 15: Thursday, April 3	Bargaining within families
Class 16: Monday, April 7	Bargaining within families, continued
Class 17: Thursday, April 10	Causes and consequences of unbalanced sex ratios
Class 18: Monday, April 14	Causes and consequences of unbalanced sex ratios, cont.

Class 19: Thursday, April 17	Effects of population policies
Class 20: Monday, April 21	Effects of population policies
Class 21: Thursday, April 24	Class cancelled for research paper meetings
Class 22: Monday, April 28	Fertility and education
Class 23: Thursday, May 1	Economics of contraception and abortion <i>Research paper rough draft due</i>
Class 24: Monday, May 5	Student presentations of research papers
Class 25: Thursday, May 8	Student presentations of research papers <i>Referee reports due</i>
Thursday, May 15	<i>Research paper due</i>

Course outline and assigned readings

I. OVERVIEW: HISTORICAL PERSPECTIVES ON POPULATION AND THE CURRENT STATE OF GLOBAL HEALTH AND POPULATION (Monday, February 4)

Deaton, Angus (2006), "Global Patterns of Income and Health: Facts, Interpretations, and Policies," NBER Working Paper 12735.

Acemoglu, Daron, Simon Johnson and James A. Robinson (2003), "Disease and Development in Historical Perspective," *Journal of the European Economic Association* 2(1).

II. ECONOMICS OF HEALTH

A. Background: the relationship between income and health (Thursday, February 7)

Smith (1999) "Healthy Bodies and Thick Wallets: The Dual Relationship Between Health and Economic Status," *Journal of Economic Perspectives*, 13(2): 145-166.

Moffitt, Robert (2003), "Causal Analysis in Population Research: An Economist's Perspective," *Population and Development Review*, 29(3): 448-458.

B. Evidence: effect of income on health (Monday, February 11)

*Subramanian, Shankar and Angus Deaton (1996), "The Demand for Food and Calories," *Journal of Political Economy* 104(1): 133-162.

*Case, Anne (2003), "Does Money Protect Health Status? Evidence from South African Pensions," NBER Working Paper 8495.

C. Evidence: effect of nutrition on productivity and income (Monday, February 18)

*Thomas, Duncan et al. (2003), "Iron Deficiency and the Well-Being of Older Adults: Early Results from a Randomized Nutrition Intervention," unpublished manuscript, UCLA.

Strauss, John (1986), "Does Better Nutrition Raise Farm Productivity?" *Journal of Political Economy*, 297-320.

D. Long-run returns to health: impact of disease eradication (Thursday, February 21)

*Almond, Douglas (2006), "Is the 1918 Influenza Pandemic Over? Long-term Effects of

In Utero Influenza Exposure in the Post-1940 U.S. Population,” *Journal of Political Economy* 114(4): 672-712.

E. The effects of poor health: schooling and health (Monday, Feb. 25 and Thursday, Feb. 28)

*Glewwe, Paul, Hanan G. Jacoby, and Elizabeth M. King (2001), “Early Childhood Nutrition and Academic Achievement: A Longitudinal Analysis,” *Journal of Public Economics*, 81(3): 345-68.

*Miguel, Edward and Michael Kremer (2004), “Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities,” *Econometrica* 72(1): 159-218.

F. Mortality and health effects of economic crisis (Monday, March 3)

*Cutler, David, et al (2002), “Financial Crisis, Health Outcomes and Aging: Mexico in the 1980s and 1990s,” *Journal of Public Economics*, 84(2): 279-303.

Cutler, David, Angus Deaton and Adrian Lleras-Muney (2007), “The Determinants of Mortality,” *Journal of Economic Perspectives*.

G. Economics of HIV/AIDS (Thursday, March 6 and Monday, March 10)

1. Background

Canning, David (2006), “The Economics of HIV/AIDS in Low-Income Countries: The Case for Prevention,” *Journal of Economic Perspectives*, 20(3): 121-142.

2. Impact on labor productivity

*Thirumurthy, Harsha, Joshua Graff Zivin, and Markus Goldstein. (2005). “The Economic Impact of AIDS Treatment: Labor Supply in Western Kenya”, NBER Working Paper #11871.

Fox, Matthew et al. (2004), “The Impact of HIV/AIDS on Labour Productivity in Kenya,” *Tropical Medicine and International Health* 9(3): 318-324.

3. Impact on growth

*Young, Alwyn (2005), “The Gift of the Dying: The Tragedy of AIDS and the Welfare of Future African Generations,” *Quarterly Journal of Economics*.

*Evans, David and Edward Miguel (2007), "Orphans and Schooling in Africa: A Longitudinal Analysis," *Demography*, Vol. 44 no. 1.

4. Interventions

*Rebecca Thornton (2005), "The Demand for and Impact of Learning HIV Status: Evidence from a Field Experiment," unpublished manuscript, Univ. of Michigan.

III. ECONOMICS OF POPULATION AND THE FAMILY

A. The economic approach to the family: theory (Monday, March 31)

Becker, Gary S. (1991), *A Treatise on the Family*, Introduction and Chapters 1 and 2 (Cambridge: Harvard University Press, enlarged edition).

Lundberg, Shelly and Robert A. Pollack (1996), "Bargaining and Distribution in Marriage," *Journal of Economic Perspectives*, Vol. 10 (4), 139 - 158.

B. Bargaining within families and intrahousehold allocation (Thurs., April 3 and Mon., April 7)

*Udry, Christopher (1996), "Gender, Agricultural Production and the Theory of the Household," *Journal of Political Economy* 104(5): 1010-1046.

*Duflo, Esther (2003), "Grandmothers and Granddaughters: Old-Age Pensions and Intrahousehold Allocation in South Africa," *World Bank Economic Review*, 17(1): 1-25.

Lundberg, Shelly J., Robert A. Pollak and Terence J. Wales (1997), "Do Husbands and Wives Pool their Resources? Evidence from the United Kingdom Child Benefit," *Journal of Human Resources*, 32(4): 463-480.

Duflo, Esther and Christopher Udry (2003), "Intrahousehold Resource Allocation in Côte d'Ivoire: Social Norms, Separate Accounts and Consumption Choice," NBER Working Paper 10498, May 2004.

C. Causes and consequences of unbalanced sex ratios (Thurs., April 10 and Monday, April 14)

1. Background

Sen, Amartya (1990), "More than 100 Million Women Are Missing," *New York Review of Books* (December 20).

Sen, Amartya (2003), "Missing Women – Revisited," *British Medical Journal*, Vol. 327, December 6, 2003.

2. Causes

*Oster, Emily (2005), "Hepatitis B and the Case of the Missing Women," *Journal of Political Economy*.

*Qian, Nancy (2006), "Missing Women and the Price of Tea in China: The Effect of Sex-Specific Income on Sex Imbalance," forthcoming, *Quarterly Journal of Economics*.

3. Consequences

*Rao, Vijayendra (1993), "The Rising Price of Husbands: A Hedonic Analysis of Dowry Increases in Rural India," *Journal of Political Economy*, 101(4): 666-77.

*Porter, Maria (2007), "The Effects of Sex Ratio Imbalance in China on Marriage and Household Decisions," mimeo, University of Chicago.

D. Determinants and consequences of fertility change

1. Effects of population policies (Thursday, April 17 and Monday, April 21)

Becker, Gary S. (1981), "Chapter 5: The Demand for Children," *A Treatise on the Family* (Cambridge, MA: Harvard University Press).

Pritchett, Lant H. (1994), "Desired Fertility and the Impact of Population Policies," *Population and Development Review* 20(1), 1-55.

*Cohen, Alma, Rajeev Dehejia and Dmitri Romanov, "Do Financial Incentives Affect Fertility?" NBER Working Paper 13700, December 2007.

*Rosenzweig, Mark R. and Junsen Zhang (2006), "Do Population Control Policies Induce More Human Capital Investment? Twins, Birthweight, and China's 'One Child' Policy," IZA Discussion Paper 2082.

2. Fertility and education (Monday, April 28)

*Osili, Una Okonkwo and Bridget Terry Long (forthcoming), "Does Female Schooling Reduce Fertility? Evidence from Nigeria," *Journal of Development Economics*.

*Miller, Grant, "Contraception as Development? New Evidence from Family Planning in Colombia," mimeo, Stanford University, May 2007.

3. Economics of contraception and abortion (Thursday, May 1)

*Pop-Eleches, Cristian (2006), "The Impact of an Abortion Ban on Socioeconomic Outcomes of Children: Evidence from Romania," *Journal of Political Economy*, 114(4): 744-773.

*Lin, Ming-Jen, Jin-Tan Liu and Nancy Qian (2008), "Missing Women More and More: The Effect of Access to Abortion on Sex Ratios at Birth and Excess Female Mortality," unpublished manuscript.