

**Harvard University
Department of Economics**

**Economics 970 (Spring 2010)
Microeconomics of Health and Development
MW 6:00-7:30PM
Location: TBA**

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COURSE DESCRIPTION:

Despite it being a huge humanitarian problem, why is HIV/AIDS the wrong disease to attack in Africa, even if our objective is lowering overall HIV prevalence? What do neuroscience and economics have in common? If monthly gym members pay higher fees than annual gym members for the option to cancel each month, why are they much more likely to stay enrolled beyond one year than users committing for a year? If the price for an average meal has stayed relatively stable, how can restaurants afford offering increasingly bigger food portions to their customers? Does poor health cause poverty or poverty cause poor health? This course illuminates the answers to many of these questions and examines health issues pertinent to developing countries from the standpoint of economics. Traditionally, economics has focused on understanding prices, competitive markets, and the interactions between markets. Important topics such as monopolies and antitrust, income inequality, economic growth, and the business cycle continue to be central areas of inquiry in economics. Recently, though, the subject matter of economics has broadened so that economists today-and especially economists at Harvard-address a remarkable variety of social science questions. In this course, we will examine behavior of both individuals and social systems -such as markets, corporations, legislatures, and families- as the outcome of interactions through institutions between goal-directed individuals in the context of health.

The course, intended as a broad survey of health economics, will focus on microeconomic approaches to understanding households, markets and institutions in developing countries. The course is organized into six blocks. The first block deals with a general overview of the conceptual, methodological and empirical basis for quantifying levels of health in individuals, and econometric identification of causal effects on health. The second block covers demand for health and inputs into the health production function, including health behaviors, income, the environment, education and primary care. The third block covers workhorse development economics models with applications to health. We will cover a basic theoretical framework that emphasizes three elements: inter-temporal tradeoffs, missing markets, and contracting structures. There will be a basic model for each of these three. The fourth block introduces institutional considerations in the health sector, in particular the role of public health infrastructure and the private sector. In the final weeks, we will cover specific health conditions, including: HIV/AIDS, malaria and environmental pollutants. For each of these topics, we will pay special attention to

the identifying causal effects that inform the design of public policies, and contrast the lessons learned from this approach to those obtained from observational studies.

This course is quantitative level 2.

OFFICE HOURS: By appointments

COURSE WEBSITE: [HTTP://ISITES.HARVARD.EDU/ICB/ICB.DO?KEYWORD=K67401](http://isites.harvard.edu/icb/icb.do?keyword=k67401)

COURSE REQUIREMENTS:

Class participation and quality circles. Attendance is mandatory. Class discussions are an essential component of the sophomore tutorial. Your full participation is expected in the discussion of assigned readings and general course themes. Additionally, “Quality Circles” will be held every two weeks to provide an avenue for student feedback and in-course modifications (further explanation will be provided during the first week of class). Quality circle participation is voluntary.

Response Papers. 15% of grade divided among 3 (out of 4 options) response papers (~2 pp. each). Students must complete a ~2-page reading response pertaining to the journal article assigned for class (**marked with #**). The reading response must address all of the points below. Reading responses should be submitted online via the ‘Submission Box’ tool at the beginning of class.

1. State clearly the central research question of the paper and why is it important?
2. How does the author use economic theory to derive testable predictions?
3. How do the authors establish causality (what is the identification strategy)? Is the approach valid, and if not, why not?
4. What data are studied?
5. How does the author improve upon previous research?
6. Summarize the main findings from the paper. How do the findings contribute to our understanding of health or human behavior in general?
7. What is the leading alternative explanation for the findings?
8. What is the most important policy implication of the findings?
9. To what extent are the findings externally valid?

These papers are intended to facilitate class preparation. Topics will range from summarizing assigned readings to raising ideas for discussion.

Class participation/facilitation. 30% of grade divided between 2 presentations. For some classes, one to two students will be designated the lead discussant(s); this student will summarize and critique the required readings, and offer questions for discussion. Assigned presentations will be based on class discussions and readings. Presentations will include presenting the assigned paper and criticizing the assigned reading.

Economic Naturalist Assignment. 10% of grade. Students will complete a short paper assignment.

Short data exercise. 10% of grade. Students will complete one short statistical exercises in groups in preparation for the final research paper.

Empirical paper. 35% of grade. (~ 15 pp.) You will construct a simple model, report your findings, and analyze the results. Bi-weekly meetings will be scheduled to track progress for this assignment. You can choose any topic relating to international health economics, subject to my approval. Start thinking about this early! The grade will be based on a prospectus (literature review) and class discussion of your topic and the final ~ 15-20 page paper itself. The prospectus should provide a basic description of the proposed research topic and will be due Thursday, April 10. The final paper will be due Friday, May 10.

Writing is a crucial part of the sophomore tutorial and of the Harvard experience. Development of good writing skills is essential to your success as an economist, or in any other profession. A good paper has a clear thesis, is well organized, and employs solid economic analysis. A good paper will address the problem posed by the assignment. A good paper should be stylistically and grammatically correct and free of typographical and spelling errors. You should proofread your papers.

Should you need additional help with your writing, please take advantage of the services of the Harvard Writing Center, on the Garden Level of the Barker Center, at 12 Quincy Street. You should read *Writing with Sources* and otherwise develop a general familiarity with the University's policies on plagiarism.

Tentative Empirical Research Project Deadlines

Month	Day	Assignment
February	15	Familiarize yourself with a statistical software package (e.g. SAS, STATA)
March		Presentations in class of interesting and feasible research questions with descriptions of data available to answer them. Use the input you receive in class to finalize your research paper question.
March	Last week of March	Due date for literature review on your research topic. Be sure to clearly and succinctly state your research question at the beginning.
April	13	Due date for description of the empirical models you plan to estimate and for the summary statistics of the key variables. The gold standard in research is replicability; be very clear how you will organize the data and what models you will estimate.
	22	Due data for revised literature review and introduction, data, and methods sections.
May	1	Due date for completed papers

PREREQUISITES:

Microeconomics (Economics 1010a) and Macroeconomics (Economics 1010b).

COURSE POLICIES:

Attendance. Attendance is mandatory at all regular class meetings. Exceptions for personal or family emergencies will be granted on a case-by-case basis. For each class, bring copies of the assigned readings to class and expect to participate in a discussion.

Tardiness. No assignment will be accepted beyond the announced deadline. As with attendance, exceptions for personal or family emergencies will be allowed on a case-by-case basis.

Office hours. I will agree to meet with students during office hours, which I will announce at the start of the semester. If for some reason a student is unable to meet during the posted office hours, it may be possible to arrange a mutually convenient time.

READINGS:

Readings cover relevant economic theory and economic history for each topic. Readings are selected from required texts, the course reading packet, and the course website. Additionally, throughout the semester, the coursepack readings will be supplemented with more recent materials.

Reading loads vary from 40 to 70 pages per week. This will depend largely on the complexity of the assigned readings. Two to three hours of preparation for each class is a reasonable demand. You are expected to complete the readings assigned for each tutorial session in advance of that session, and to attend class prepared to discuss the ideas set forth in those readings. Some of the required articles are intended for an advanced audience and will be challenging at first. Students will not be expected to understand all the mathematics or econometrics. Instead, our focus will be on grappling with the author's key insights. We will read for enlightenment and entertainment rather than regurgitation and recitation.

Supplemental readings are intended: (1) to supplement the intellectual appetite of the more curious student, and (2) as a springboard for further research (e.g. senior thesis).

All students must come to class prepared to discuss the required readings. For each class, one to two students will be designated the lead discussant(s); this student will summarize and critique the required readings, and offer questions for discussion. All other students must come to class with at least one discussion question based on the reading.

RESOURCES

GUIDES FOR WRITING

Improving your writing skills is an important goal of this course. The paper assignments will require you to demonstrate understanding of economic arguments and models, to comfortably use the terminology of economics, and to use evidence and logical arguments to support your views and to criticize those of other writers. Papers should be well-written and free of grammatical errors. The Economics Department has produced a guide to writing that you should consult before writing your first paper

(http://isites.harvard.edu/fs/docs/icb.topic141255.files/Writing_Economics.pdf). I also encourage you to take advantage of the services provided by the Harvard Writing Center on the Garden Level of the Barker Center (<http://www.fas.harvard.edu/~wricntr/>).

STATA

The Economics Department now has a Stata help site (<http://isites.harvard.edu/icb/icb.do?keyword=k12758>) and a Stata tutor (see website for details) for any help that you may need with your empirical exercise or final paper. The Biostatistics Department at the Harvard School of Public Health has a 40-minute online tutorial at <http://www.biostat.harvard.edu/courses/STATA/stata%20tutorial.html> . Also hosted at the Harvard School of Public Health is the Stata listserv, where over 2,500 Stata users from experts to neophytes maintain a lively dialogue about all things statistical and Stata at <http://www.stata.com/statalist/> . You can subscribe and ask any questions about how to implement particular data or econometric procedures in Stata!

OTHER STUDENTS

Your fellow students are your most important resource, and I encourage you to discuss paper topics and other ideas with each other as much as possible.

ACADEMIC HONESTY

The 2009-2010 Handbook for Students (p. 66) states: “Students who, for whatever reason, submit work either not their own or without clear attribution to its sources will be subject to disciplinary action, and ordinarily required to withdraw from the College.” You are encouraged to discuss ideas and work with your classmates, but all submitted work should be your own. In addition, all sources should be properly cited. In order to use and cite sources properly, please consult *Writing with Sources: A Guide for Harvard Students*, available at the Writing Center’s website (<http://www.fas.harvard.edu/~wricntr/>). Please contact me with any questions or concerns.

OTHER EVENTS YOU MIGHT WANT TO ATTEND:

If you are interested in ongoing research on health economics issues, you can attend the many health economics seminars held each semester on campus at the Global Demography of Aging PGDA Series <http://www.hsph.harvard.edu/pgda/seminars.htm>

IMPORTANT DATES & COURSE STRUCTURE

#	Day	Date	Block I. Introduction, health measures and econometric estimation techniques	Due
1	Mon.	2/1/10	Introduction and what is Health Economics?	Assignment #1 handed out
2	Wed	2/3/10	Introduction: why and how to measure health?	
3	Mon	2/8/10	Causal inference I: Basic econometrics overview and STATA	
4	Wed	2/10/10	Causal inference III: Instrumental variables, experimental and quasi-experimental techniques	
–			***2/15/10 – Presidents' Day Holiday***	
5	Wed	2/17/10	Causal inference III: Instrumental variables, experimental and quasi-experimental techniques	Assignment #1 Due on 2/21
6	Mon	2/22/10	Film: <i>The Name of the Disease</i>	Response # 1 Assignment #2 handed out
7	Wed	2/24/10	Health markets: how are they different? (S)	
Block II. Microeconomic Foundations of Health. Generating the Demand and Supply of Health. Economic models of health and disease transmission				
8	Mon	3/1/10	The demand for health and medical services	
9	Wed	3/3/10	Discussion of Research Paper Ideas	Assignment #2 Due on 3/7
10	Mon	3/8/10	Guest Lecture: DHS and PUMS Data for developing countries	
11	Wed	3/10/10	Health production and health behaviors	
–			*** Spring Break ***	
	Mon	3/22/10	Film: <i>A Closer Walk</i>	
12	Wed	3/24/10	Economic Models of Disease Transmission (S)	Response # 2 on Oster's paper
13	Mon	3/29/10	Behavioral Economics and Health	Lit Rev due 3/29
Block III. Development Facts and Models with Health Applications				
14	Wed	3/31/10	The Economic Lives of the Poor	
15	Mon	4/5/10	Inter-temporal substitution and risk-coping mechanisms	
16	Wed	4/7/10	Nutrition poverty traps	
17	Mon	4/12/10	Behavioral Economics and Development (S)	Response #3
18	Wed	4/14/10	Missing markets	Revised drafts of Intro/Lit Review and Empirical Model Specification Sections due
Block IV: The role of institutions				
20	Mon	4/19/10	Human capital: what is the role of public health? (S)	Response # 4
21	Wed	4/21/10	Human capital: health and economic growth	
Block V: Specific Health Conditions				
22	Mon	4/26/10	Malaria (S)	

23	Wed	4/28/10	HIV/AIDS (S)
<i>***Reading Period Begins 4/29/10***</i>			Paper due 5/1

READINGS

Required readings are marked with a star (*), recommended readings are not starred. Response paper readings are marked with a pound sign (#): note some of them are among the supplemental readings.

Most readings are available online, and can be found on the class page. Readings not available online can be found on reserve at the Lamont library.

COURSE OUTLINE AND READINGS

I. Block I: Introduction, health measures and econometric estimation techniques

1. What is International Health Economics? (RP, January 30)

Required:

***Fill out Student Info Cards on website

***Culyer, Anthony J. And Joseph P. Newhouse (2000). "The State and Scope of Health Economics." In Anthony Culyer and Joseph Newhouse, editors, *Handbook of Health Economics*. Available Online at <http://ideas.repec.org/b/eee/health/1.html>

***Cawley, John. "[An Economic Framework for Understanding Physical Activity and Eating Behaviors](#)." *American Journal of Preventive Medicine*, October 2004, 27(3S): 117-125.

Supplemental:

Mills A. Leopard or Chameleon? [The changing character of international health economics](#). *Tropical Medicine and International Health*, 1997, 2: 963-977.

Read "Tips on skimming" posted on the course website

Victor Fuchs, Fuchs, Victor R. (2000), '[The future of health economics](#),' *Journal of Health Economics* 19, 141-157.

Maynard, Alan and Panos Kanovos (2000). "[Health Economics: An Evolving Paradigm](#)." *Health Economics* 9: 183-190.

Morrisey, Michael A., and John Cawley. "Health Economists Views of Health Policy." Forthcoming, *Journal of Health Politics, Policy, and Law*, August 2008, 33(4).

2. SAS and Stata tutorials

Required:

***Stata preliminaries. http://siteresources.worldbank.org/PGLP/Resources/ap_two.pdf

Supplemental:

SAS tutorial:

http://learn.sdstate.edu/dwight_galster/510docs/Tutorial%20Programs/sas_tutorial_contents.htm

Regression with Stata and SAS: <https://www.hmdc.harvard.edu/training/tutorials/>

3. Introduction: why and how to measure health?

Required:

***Salomon JA et al. (2003) [Quantifying individual levels of health: definitions, concepts and measurement issues](#). In: Murray CJL, Evans DB (eds). Health Systems Performance Assessment. Geneva: World Health Organization.

***Haines A, Cassels A (2004) [Can the millennium development goals be attained?](#) BMJ 329:394-7.

***Murray CJL, Chen LC (1992) [Understanding morbidity change](#). Population and Development Review 18(3): 481-503.

Supplemental:

Patrick and Erickson (1993) Chapter 6: Assigning values to health states. In: Health Status and Health Policy.

Sen Amartya (2002) [Health: perception versus observation](#). BMJ 324:860-1.

Michaud CN, Murray CJL, Bloom BR (2001) [Burden of disease – implications for future research](#). JAMA 285:535-9.

Mathers CD et al. (2003) [Population health metrics: crucial inputs to the development of evidence for health policy](#). Population Health Metrics 1:6.

Patrick DL, Erickson P (1993) Chapter 5: Types of health-related quality of life assessments. In: Health Status and Health Policy: Allocating Resources to Health Care. New York: Oxford UP.

***Richardson J (1994) [Cost utility analysis: what should be measured?](#) Soc Sci Med 39:721.

Dolan P (1997) [Modeling valuations for EuroQol health states.](#) Medical Care 35:1095-1108.

Murray CJL, Chen LC (1992) [Understanding morbidity change.](#) Population and Development Review 18(3): 481-503.

Naughton MJ, Shumaker SA (2003) [The case for domains of function in quality of life assessment.](#) Qual Life Res 12 Suppl 1:73-80.

Ware JE, Gandek B (1998) [Overview of the SF-36 health survey and the international quality of life assessment \(IQOLA\) project.](#) J Clin Epidemiol 51:903-12.

4. Basic econometrics overview

Required:

***Basics of econometrics. Gujarati. Chapters 1; 7-9;

***Freedman, David. 1999. “[From Association to Causation: Some Remarks on the History of Statistics](#),” Statistical Science, 14(3), pp. 243—258. LINK

Supplemental:

Simon, Herbert. [Spurious Correlation: A Causal Interpretation](#). *Journal of the American Statistical Association*, Vol. 49, No. 267 (Sep., 1954), pp. 467-479

Manski, Charles. 1995. “Introduction,” in Identification Problems in the Social Sciences, Harvard University Press, Chapter 1, pp. 1—9.

5. Instrumental variables, experimental and quasi-experimental techniques to identify causal impacts identify causal impacts

Required:

***Meyer, Nicholas. 1995. Natural and Quasi-experiments in Economics. *Journal of Business and Economic Statistics*. http://www.iew.unizh.ch/home/rlalive/innsbruck04/v11/p11_meyer.pdf

***Joshua D. Angrist & Alan B. Krueger, 2001. "[Instrumental Variables and the Search for Identification: From Supply and Demand to Natural Experiments](#)," *Journal of Economic Perspectives*, vol. 15(4), pages 69-85.

Supplemental:

Nichols, Austin. "Causal Inference with observational data".
<http://www.stata.com/meeting/6nasug/causal.pdf>

7. Health markets: how are they different?

Required:

***Arrow, "[Uncertainty and the Welfare Economics of Medical Care](#)," AER 53(5), 1963: 941-973.

***Hsiao W.C. [Abnormal economics in the health sector](#). Health Policy, Volume 32, Number 1, April 1995 , pp. 125-139(15).

#Manning, Willard G., and others. 1987. "[Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment](#)," American Economic Review, vol. 77, no. 3, pp. 251–277.

Supplemental:

Pauly, "[Is Medical Care Different? Old Questions, New Answers](#)," Journal of Health Politics, Policy and Law 13(2), 1988: 227-236.

II. Block II: Microeconomic foundations. Economic models of health and disease transmission

1. Demand for health

Required:

***Sloan, Frank. (ed) *Incentives and Choice in Health Care*. Cambridge, MA: MIT Press, *in press*, 2008. pp. 51-68.

***Grossman, Michael, " On the Concept of Health Capital and the Demand for Health," Journal of Political Economy, 1972, 80(2), 223-255.

***Lleras-Muney, Adriana, "[The Relationship Between Education and Adult Mortality in the U.S.](#)," Review of Economic Studies, 2005, 72(1), 189-221.

Supplemental:

Rexford E. Santerre and Stephen P. Neun. Health Economics. Chapter 5: The Demand for Medical Services

Wagstaff, A., [The demand for health: a simplified Grossman model](#). Bulletin of Economic Research 38 (1986), pp. 93–95.

Grossman, Michael, 1972. "[On the Concept of Health Capital and the Demand for Health](#)," Journal of Political Economy, Vol. 80 (2) pp. 223-55

Grossman, M. 2000, "[The human capital model of the demand for health](#)," In *The Handbook of Health Economics*, edited by J. P. Newhouse and A. J. Culyer. Amsterdam: Elsevier. [Available at KSG, Littauer]

Strauss, John and Thomas, Duncan. (1995) "Human resources: Empirical modeling of household and family decisions", in J.R. Behrman and T.N. Srinivasan, eds., *Handbook of Development Economics, Volume 3A*, Amsterdam: North Holland Press. (Methods section)

Strauss, J and D. Thomas. (2008) "Health over the life course" in T. Paul Schultz and John Strauss, (eds.), *Handbook of Development Economics Volume 4*, Elsevier Press, forthcoming. (Methods section)

Note on Grossman's Model on website

2. Expanded Model of Health Production and Health Behaviors

Required:

***Sloan, Frank. (ed) *Incentives and Choice in Health Care*. Cambridge, MA: MIT Press, in press, 2008. pp. 69-80.

***Mokdad, Ali H., James S. Marks, Donna F. Stroup, and Julie L. Gerberding, "[Actual Causes of Death in the United States 2000](#)," JAMA, 2004, 291(1), 1238-1245.

***Rosenzweig, Mark R. and T. Paul Schultz. 1983. "Estimating a Household Production Function: Heterogeneity, the Demand for Health Inputs, and the Effects on Birthweight" Journal of Political Economy 91 (5): 723-46

***Cutler, David and Adriana Lleras-Muney, "[Understanding Differences in Health Behavior by Education](#)," mimeo, 2009.

Supplemental:

Rosenzweig, Mark R. and T. Paul Schultz. 1983. "[Estimating a Household Production Function: Heterogeneity, the Demand for Health Inputs, and the Effects on Birthweight](#)" *Journal of Political Economy* 91 (5): 723-46

William, J. *Principles of Health Economics for Developing Countries*. Washington, DC: The World Bank, 1999. pp.37-41; pp. 119-149.

3. Economic Models of Disease Transmission

Required:

***Mark Gersovitz. 2000. "[A preface to the economic analysis of disease transmission.](#)" *Australian Economic Papers* 39(1):68-83.

Oster, Emily F., "[HIV and Sexual Behavior Change: Why Not Africa?](#)" (April 2007). NBER Working Paper No. W13049 Available at SSRN: <http://ssrn.com/abstract=986899>

Supplemental:

David Bloom and Ajay Mahal. 1995. [The AIDS Epidemic and Economic Policy Analysis](#). Columbia University. Discussion Paper 9495-728

Michael Kremer. 1996. "[Integrating behavioral choice into epidemiological models of AIDS](#)" *Quarterly Journal of Economics* 111(2):549-575.

Tomas Philipson. 2000. "Economic epidemiology and infectious disease." In Joseph Newhouse and Anthony Culyer (eds.) [Handbook of Health Economics](#) Elsevier, B.V.: North Holland.

David Bloom, Ajay Mahal and Dan O'Flaherty. 2005. "The economics of needle use and re-use." Draft.

V. Rao, I. Gupta, M. Lokshin, S. Jana. 2003. "[Sex workers and the cost of safe sex: The compensating differential for condom use in Calcutta](#)" *Journal of Development Economics* 72(2): 585-603.

4. Behavioral Economics and Health

***Rabin, Matthew (March 1998). "[Psychology and Economics](#)". *Journal of Economic Literature* (American Economic Association) (1): 11-46.

***Della Vigna, Malmendier, "Paying not to go to the gym," *American Economic Review*, June 2006, Vol. 96, No. 3, pp. 694-719.

Skim only if you have time:

Frank, Richard. Behavioral Economics and Health Economics, NBER Working Paper No. 10881. October 2004. <http://www.nber.org/papers/w10881.pdf>

III. Block III: Development models with health applications.

1. The Economic Lives of the Poor

Banerjee, Abhijit V., and Esther Duflo. 2007. "The Economic Lives of the Poor." *Journal of Economic Perspectives*, 21(1): 141–168.

Ray, Chapter 7 Inequality and Development (Online)

Ray, Chapter 8 Poverty and Undernutrition (Online)

Supplemental:

Ray, Chapter 6 Economic Inequality (Online)

2. Inter-temporal substitution

Required:

***Ray, Ch. 15 (Online)

Skim the Townsend article:

***Townsend, Robert (1995), "Consumption Insurance: An Evaluation of Risk-Bearing Systems in Low-Income Economies," *Journal of Economic Perspectives* 9 (3): 83-102. <http://links.jstor.org/sici?sici=0895-3309%28199522%299%3A3%3C83%3ACIAEOR%3E2.0.CO%3B2-H>

***P. Gertler and J. Gruber (2002), 'Insuring consumption against illness', *American Economic Review*, 92(1):51–70.

Supplemental:

Udry, Christopher (1990), "Credit Markets in Northern Nigeria: Credit as Insurance in a Rural Economy," *World Bank Economic Review* 4 (3): 251-269.
<http://wber.oxfordjournals.org/cgi/reprint/4/3/251>

Hoddinott, J. (2006). [Shocks and their consequences across and within households in rural Zimbabwe](#). *Journal of Development Studies*, vol. 42, pp. 301-321.

1. Poverty trap models

Required:

***Ray, pp. 272-279, 489-504. (Online)

***S. Subramanian and A. Deaton (1996), 'The demand for food and calories', *Journal of Political Economy*, 104(1):133-162.

Supplemental:

Dasgupta, Partha. 1997. "Nutritional Status, the Capacity for Work, and Poverty Traps." *Journal of Econometrics*, 77: 5-37.

Thomas, Duncan and Elizabeth Frankenberg (2002), "Health, Nutrition, and Prosperity: A Microeconomic Perspective," *Bulletin of the World Health Organization* 80 (2): 106-113. <http://chd.ucla.edu/dthomas/ppr/whobull-2002.pdf>

2. Missing markets

Required:

***Joseph E. Stiglitz. 1989. "Markets, Market Failures, and Development". *The American Economic Review*, Vol. 79, No. 2, Papers and Proceedings of the Hundred and First Annual Meeting of the American Economic Association (May, 1989), pp. 197-203

***de Janvry, Alain & Fafchamps, Marcel & Sadoulet, Elisabeth, 1991. "Peasant Household Behaviour with Missing Markets: Some Paradoxes Explained," *Economic Journal*, Royal Economic Society, vol. 101(409), pages 1400-417.

Supplemental:

Barrett, Christopher. Displaced distortions: financial market failures and seemingly inefficient resource allocation in low-income rural communities. In "Development economics

between markets and institutions” pp.73-83.

Mendola, Maria. [Farm Household Production Theories: A Review of “Institutional” and “Behavioral” Responses.](#)

5. Behavioral Economics and Development

***Marianne Bertrand, Sendhil Mullainathan, and Eldar Shafir. “Behavioral Economics and Marketing in Aid of Decision Making Among the Poor”, American Marketing Association, Vol. 25 (1) Spring 2006, 8–23

***Development Economics through the lens of psychology.
http://environment.harvard.edu/docs/faculty_pubs/mullainathan_psychology.pdf

****Tying Odysseus to the Mast: Evidence from a Commitment Savings Product in the Philippines” (with Nava Ashraf and Dean Karlan) *Quarterly Journal of Economics*, May 2006, 121(2) Awarded the TIAA-CREF Certificate of Excellence, 2006

Supplemental:

Duflo, E. (2003). Poor but rational? Unpublished manuscript, Available at <http://econ-www.mit.edu/files/747>.

IV. Block IV: The Role Of Institutions, Public Health and the private sector.

3. Human and financial capital: The role of public health?

Required:

****Cutler, David M. and Miller (2005). [The Role of public health improvements in health advances](#): The Twentieth-century United States. *Demography* 42(1):1-22.

***David Bloom, David Canning and Mark Weston. ‘[The Value of Vaccination](#)’, *World Economics*, Vol. 6, No. 3, July-September 2005, 15-39.

Supplemental:

Lee L-F, Rosenzweig M, Pitt M. The effects of improved nutrition, sanitation, and water quality on child health in high-mortality populations. *J Econometrics*. 1997;77:209–235.

Film: *The Name of the Disease* (2006). Edited by Sumit Ghosh. Directed by Abhijit Banerjee.

William, J. Principles of Health Economics for Developing Countries. Washington, DC: The World Bank, 1999. pp. 174-194.

Edward Miguel, Michael Kremer, Jessica Leino and Alix Peterson Zwane, [Spring Cleaning: A Randomized Evaluation](#) of Source Water Quality Improvement, August 2007.

2. Health and Development

Required:

Acemoglu, Daron, and Simon Johnson, "[Disease and Development: The Effect of Life Expectancy on Economic Growth](#)," *Journal of Political Economy*, 115 (6), December 2007, 925-985.

Bloom, David E., David Canning and Günther Fink (2009) "Disease and Development Revisited" NBER Working Paper 15137.

Acemoglu, Daron, and Simon Johnson "Disease and Development: A Reply to Bloom, Canning, and Fink," September 2009.

Supplemental:

Gold, Marsha, Joanna E. Siegel, Louise B. Russell and Milton C. Weinstein, editors. *Cost-Effectiveness in Health and Medicine*. Oxford University Press 1996

Kenkel, Donald S. "[On Valuing Morbidity, Cost-effectiveness Analysis, and Being Rude](#)," Editorial, *Journal of Health Economics*, Volume 16, No. 6, December 1997: 749-757.

Kenkel, Donald S. "[WTP- and QALY-Based Approaches to Valuing Health for Policy: Common Ground and Disputed Territory](#)," *Environmental and Resource Economics*. Special Issue (forthcoming).

Garber, Alan (2000). "[Advances in CE Analysis](#)." *Handbook of Health Economics*, Anthony Culyer and Joseph Newhouse, editors. Volume 1A, pp. 181-222.

Johannesson, Magnus, Jonsson, Bengt, and Karlsson, Goran. "[Outcome Measurement in Economic Evaluation](#)." *Health Economics* 5: 279-296 (July-August 1996).

V. Specific health conditions

1. Malaria

Required:

Skim

Joel G. Breman, Anne Mills, Robert W. Snow, Jo–Ann Mulligan, Christian Lengeler, Kamini Mendis, Brian Sharp, Chantal Morel, Paola Marchesini, Nicholas J. White, Richard W. Steketee, and Ogobara K. Doumbo, "Conquering Malaria." 2006. Disease Control Priorities in Developing Countries (2nd Edition), ed. , 413-432. New York: Oxford University Press. DOI: 10.1596/978-0-821-36179-5/Chpt-21. Available at <http://files.dcp2.org/pdf/DCP/DCP21.pdf>

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Cutler, David M., Fung, Winnie, Kremer, Michael and Singhal, Monica, "[Mosquitoes: The Long-Term Effects of Malaria Eradication in India](#)" (October 2007). NBER Working Paper No. W13539

Teklehaimanot, Awash, McCord, Gordon and Sachs, Jeffrey D., "[Scaling Up Malaria Control in Africa: An Economic and Epidemiological Assessment](#)" (December 2007). NBER Working Paper No. W13664

2. HIV/AIDS

Required:

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Stefano Bertozzi, Nancy S. Padian, Jeny Wegbreit, Lisa M. DeMaria, Becca Feldman, Helene Gayle, Julian Gold, Robert Grant, and Michael T. Isbell "HIV/AIDS Prevention and Treatment" /Chpt-18. Available at <http://files.dcp2.org/pdf/DCP/DCP18.pdf>

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Young, Alwyn. (2005). “The Gift of Dying: The Tragedy of AIDS and the Welfare of Future African Generations”, *Quarterly Journal of Economics*, 120(2), 423-466.
[<http://faculty.chicagogsb.edu/alwyn.young/research/Papers/AIDS.PDF>]

3. Air Pollution

Required:

Skim

Tord Kjellstrom, Madhumita Lodh, Tony McMichael, Geetha Ranmuthugala, Rupendra Shrestha, and Sally Kingsland “Air and Water Pollution: Burden and Strategies for Control” /Chpt-43. Available at <http://files.dcp2.org/pdf/DCP/DCP43.pdf>

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Supplemental:

Janet Currie & Matthew Neidell, 2005. "[Air Pollution and Infant Health: What Can We Learn from California's Recent Experience?](#)," *The Quarterly Journal of Economics*, MIT Press, vol. 120(3), pages 1003-1030, August.