

Economics 265: Agriculture and Economic Development

*University of California, Riverside
Spring 2004*

Professor: Steven M. Helfand
4102 Sproul Hall
Tel. 827-1572
shelfand@mail.ucr.edu

Spring 2004 Office Hours:
TBA

Course Description

The goal of this course is to expose students to a variety of issues and techniques that could be explored further in the writing of a dissertation. The focus will be on economic development in general and issues related to the agricultural sectors in developing countries in particular. The course will adopt a quantitative approach to policy analysis. It seeks to provide students with an understanding of how to integrate microeconomic theory and econometrics in order to assess the implications of alternative policies. Examples will be given of how development economists build models consistent with economic theory, estimate key parameters that can influence policy decisions, and then combine the model and the estimates to simulate the welfare and efficiency effects of different policy scenarios. Quantitative policy analysis is not limited to price policy: public goods, technological change, institutions, and issues of political economy can also be analyzed with this approach.

Course Requirements

The grade for the course will be calculated as a weighted average of the following four components:

- | | |
|---|-----|
| 1. A final paper related to a topic on the syllabus
(The paper will be due on the last day of class.) | 40% |
| 2. A journal with 10 reaction pieces to readings on the syllabus
(One reaction piece will be due each week. These should have about one page of summary and one page of critical analysis for each reading.) | 25% |
| 3. One computer policy simulation | 15% |
| 4. Presentations and class participation | 20% |

Brief Course Outline

1. Introduction
 - a) Quantitative Analysis of Development Policy
 - b) Agricultural Issues in Developing Countries
2. Measures of Agricultural Protection: Indicators and Applications
3. The Real Exchange Rate: Alternative Approaches and Applications
4. Agricultural Supply Response and Factor Demand: Theory and Applications
5. Household Models: Theory and Applications
6. Transactions Costs, Productivity, and Agrarian Institutions
7. Rural Poverty, Income Diversification, and Land Reform
8. Spatial Analysis of Agricultural Markets
9. Multimarket and Multisector Models
10. Political Economy, Interest Groups, and Development

Course Outline and Readings

1. Introduction

a) Quantitative Analysis of Development Policy

Sadoulet Elisabeth, and Alain de Janvry. 1995. *Quantitative Development Policy Analysis*, Baltimore: Johns Hopkins University Press. Read the preface and chapter 1.

Bardhan, Pranab. 1988. "Alternative Approaches to Development Economics," in *Handbook of Development Economics*, edited by H. Chenery and T. N. Srinivassan, Amsterdam: North-Holland.

de Janvry, Alain, Andre Fargeix, and Elisabeth Sadoulet. 1992. "The Political Feasibility of Rural Poverty Reduction," *Journal of Development Economics* 37:351-367.

de Janvry, Alain, and Elisabeth Sadoulet. 1989. "Alternative Approaches to the Political Economy of Agricultural Policies: Convergence of Analytics, Divergence of Implications," in *Agriculture and Governments in an Interdependent World*. Proceedings of the Twentieth International Conference of Agricultural Economists (1988), edited by Allen Maunder and Alberto Valdés, Brookfield, Vt.: Gower.

Just, Richard, Darell Hueth, and Andrew Schmitz. 1982. *Applied Welfare Economics and Public Policy*, Eglewood Cliffs, N.J.: Prentice Hall.

Stiglitz, Joseph E. 1989. "On the Economic Role of the State," chapter 1 in *The Economic Role of the State*, edited by Arnold Heertje, Oxford: Basil Blackwell Ltd.

b) Agricultural Issues in Developing Countries

Binswanger, H. P and Klaus Deininger. 1997. "Explaining Agricultural and Agrarian Policies in Developing Countries," *Journal of Economic Literature*, 35:1958-2005.

Hoff, Karla, Avishay Braverman, and Joseph E. Stiglitz. 1993. "Introduction" in *The Economics of Rural Organization: Theory, Practice and Policy*, edited by Hoff, Braverman, and Stiglitz, New York: Oxford University Press.

Reardon, T. and C.B. Barrett, "Agroindustrialization, Globalization, and International Development: An Overview of Issues, Patterns, and Determinants," *Agricultural Economics* 23, 2000, 195-205.

Timmer, P. C. 1997. "Farmers and Markets: The Political Economy of New Paradigms," *American Journal of Agricultural Economics*, 79(2):621-627.

Staatz, John M. and Carl K. Eicher. 1998. "Agricultural development Ideas in Historical Perspective," in *International Agricultural Development*, 3rd edition, edited by Carl K. Eicher and John M. Staatz, Baltimore: The Johns Hopkins University Press.

Stiglitz, Joseph. 1987. "Some Theoretical Aspects of Agricultural Policies," *The World Bank Research Observer* 2(1):43-60.

2. Measures of Agricultural Protection: Indicators and Applications

Sadoulet Elisabeth, and Alain de Janvry. 1995. *Quantitative Development Policy Analysis*, Baltimore: Johns Hopkins University Press. Read chapter 7.

Anderson, Kym, and Yujiro Hayami. 1986. *The Political Economy of Agricultural Protection*. London: Allen and Unwin, Ltd.

Beghin, John C., and Larry S. Karp. 1991. "Estimation of Price Policies in Senegal: An Empirical Test of Cooperative Game Theory," *Journal of Development Economics*, Vol. 35, No. 1, pp.49-67.

Byerlee, Derek, and Michael L. Morris. 1991. "Calculating Levels of Protection: Is It Always Appropriate to Use World Reference Prices Based on Current Trading Status?" *World Development*, Vol. 21, No. 5, pp. 805-815.

David, Cristina C., and Jikun Huang. 1996. "Political Economy of Rice Protection in Asia," *Economic Development and Cultural Change*, Vol. 44, No. 3, pp. 463-483.

Fulginiti, Lilyan E., and Jason F. Shogren. 1992. "Agricultural Protection in Developing Countries," *American Journal of Agricultural Economics*, Vol. 74, No. 3, pp. 795-801.

Gardner, Bruce. 1987. *The Economics of Agricultural Policies*. New York: Macmillan.

Gardner, Bruce L. 1987. "Causes of U.S. Farm Commodity Programs," *Journal of Political Economy*, Vol. 95, No. 2, pp. 290-310.

Helfand, Steven M., "Interest Groups and Economic Policy: Explaining the Pattern of Protection in the Brazilian Agricultural Sector." *Contemporary Economic Policy*, Vol. 18, No. 4, October 2000, pp. 462-476.

Krueger, Anne O., Maurice Schiff, and Alberto Valdés. 1988. "Agricultural Incentives in Developing Countries: Measuring the Effect of Sectoral and Economywide Policies," *The World Bank Economic Review*, Vol. 2, No. 3, 255-72.

Krueger, Anne O. 1992. *The Political Economy of Agricultural Pricing Policy, Volume 5: A Synthesis of the Political Economy in Developing Countries*, Baltimore: The Johns Hopkins University Press.

Schiff, Maurice, and Alberto Valdés. 1992. *The Political Economy of Agricultural Pricing Policy, Volume 4: A Synthesis of the Economics in Developing Countries*, Baltimore: The Johns Hopkins University Press.

Tsakok, Isabelle. 1990. *Agricultural Price Policy: A Practitioner's Guide to Partial-Equilibrium Analysis*, Ithaca: Cornell University Press.

Zusman, Pinhas, and Amotz Amiad. 1977. "A Quantitative Investigation of a Political Economy: The Israeli Dairy Program," *American Journal of Agricultural Economics*, Vol. 59, No. 1, pp. 88-98.

3. The Real Exchange Rate: Alternative Approaches and Applications

Sadoulet Elisabeth, and Alain de Janvry. 1995. *Quantitative Development Policy Analysis*, Baltimore: Johns Hopkins University Press. Read chapter 8.

Barret, C. B. 1997. "The Effects of Real Exchange Rate Depreciation on Stochastic Producer Prices in Low-Income Agriculture," mimeo, 37 pages.

Corden, W. M. 1984. "Booming Sector and Dutch Disease Economics: Survey and Consolidation," *Oxford Economic Papers* 36:359-380.

- Devereux, John, and Michael Connolly. 1996. "Commercial Policy, the Terms of Trade and the Real Exchange Rate Revisited," *Journal of Development Economics* 50: 91-99.
- Dornbusch, Rudiger, and Leslie Helmers. 1989. *The Open Economy: Tools for Policymakers in Developing Countries*. New York: Oxford University Press.
- Edwards, Sebastian. 1989. *Real Exchange Rates, Devaluation, and Adjustment*. Cambridge: MIT Press.
- Engel, Charles. 1996. "Real Exchange Rates and Relative Prices: An Empirical Investigation," *Journal of Monetary Economics* 32: 35-50.
- Engel, Charles. 1995. "Accounting for U.S. Real Exchange Rate Changes," NBER Working Paper 5394.
- Harberger, Arnold. 1986. "Economic Adjustment and The Real Exchange Rate," in *Economic Adjustment and Exchange Rates in Developing Countries*, edited by Edwards and Ahmed. Chicago: University of Chicago Press.
- Harberger, Arnold. 1989. "Applications of Real Exchange Rate Analysis," *Contemporary Policy Issues* 7(2):1-26.
- Kahn, Mohsin, and Jonathan Ostry. 1992. "Response of the Equilibrium Real Exchange Rate to Real Disturbance in Developing Countries," *World Development* 20:1325-34.
- Mundlak, Yair, Domingo Cavallo, and Roberto Domenech. 1990. "Effects of Macroeconomics Policies on Sectoral Prices," *World Bank Economic Review* 4:55-79.
- Valdés, Alberto. 1986. "Exchange Rates and Trade Policy: Help or Hindrance to Agricultural Growth?" In *Agriculture in A Turbulent World Economy*. Proceedings of the Nineteenth International Conference of Agricultural Economists, edited by A. Maunder and U. Renborg. Brookfield, Vt.: Gower.
- White, Howard, and Ganeshan Wignaraja. 1992. "Exchange Rates, Trade Liberalization, and Aid: The Sri-Lankan Experience," *World Development* 20:1471-80.
- Williamson, John. 1994. "Introduction" in *Estimating Equilibrium Exchange Rates*, edited by John Williamson, Washington, D.C.: Institute for International Economics.

4. Agricultural Supply Response and Factor Demand: Theory and Applications

- Sadoulet Elisabeth, and Alain de Janvry. 1995. *Quantitative Development Policy Analysis*, Baltimore: Johns Hopkins University Press. Read chapters 3 and 4.
- Mundlak, Y. 2001. "Production and Supply," Chapter 1 in *Handbook of Agricultural Economics*, edited by Rausser, Gordon, and Bruce Gardner, Amsterdam: Elsevier, 2001.
- Askari, Hossein, and John Cummings. 1976. *Agricultural Supply Response: A Survey of Econometric Evidence*. New York: Praeger.
- Ball, Eldon. 1988. "Modeling Supply Response in a Multiproduct Framework," *American Journal of Agricultural Economics* 70:813-25.
- Binswanger, Hans. 1989. "The Policy Response of Agriculture," *World Bank Economic Review*, Proceedings of the World Bank Annual Conference of Development Economics, 231-58.
- Binswanger, Hans, M.C. Yang, Alan Bowers, and Yair Mundlak. 1987. "On the Determinants of Cross Country Aggregate agricultural Supply," *Journal of Econometrics* 36:111-31.

- Chavas, Jean-Paul, Rulon Pope, and Robert Kao. 1983. "An Analysis of the Role of Futures Prices, Cash Prices, and Government Programs in Acreage Response," *Western Journal of Agricultural Economics* 8:27-33.
- Coeymans, JE, and Y. Mundlak. Feb. 1991. "Aggregate Agricultural Supply Responses in Chile, 1962-82," *Food Policy* 16(1):17-22.
- Diebold, FX, and R. L. Lamb, 1997. "Why Are Estimates of Agricultural Supply Response so Variable?" *Journal of Econometrics* 76(1-2): 357-73.
- Esfahani, Hadi Salehi. 1987. "Technical Change, Employment, and Supply Response of Agriculture in the Nile Delta: A System-Wide Approach," *Journal of Development Economics* 25:167-96.
- Evenson, Robert E., and Carl E. Pray. 1991. *Research and Productivity in Asian Agriculture*. Ithaca, N.Y.: Cornell University Press.
- Fulginiti, Lilyan, and Richard Perrin. 1993. "The Theory and Measurement of Producer Response under Quotas," *The Review of Economics and Statistics* 75(1):97-106.
- Fulginiti, Lilyan, and Richard Perrin. 1990. "Argentine Agricultural Policy in a Multiple-Input, Multiple-Output Framework," *American Journal of Agricultural Economics* 72(2):279-88.
- Hallam, D, and R. Zanolli. 1993. "Error Correction Models and Agricultural Supply Response," *European Review of Agricultural Economics* 20(2):151-166.
- Heltberg, R., and F. Tarp, "Agricultural Supply Response and poverty in Mozambique," *Food Policy* 27, 2002, 103-24.
- Huffman, W. E., and R. E. Evenson. 1989. "Supply and Demand Functions for Multiproduct U.S. Cash Grain Farms: Biases Caused By Research and Other Policies," *American Journal of Agricultural* 71(3):761-773.
- Jaforullah, M. 1993. "Asymmetric Agricultural Supply Response-Evidence from Bangladesh Agriculture," *Journal of Agricultural Economics* 44(3):490-95.
- Kaneda, Hiromitsu. 1982. "Specification of Production Functions for Analyzing Technical Change and Factor Inputs in Agricultural Development," *Journal of Development Economics*, 11:97-108.
- McGuirk, AM, and Y. Mundlak. 1992. "The Transition of Punjab Agriculture: A Choice of Technique Approach," *American Journal of Agricultural* 74(1):132-143.
- Mundlak, Y. 1996. "Production Function Estimation: Reviving the Primal," *Econometrica* 64(2):431-38.
- Rao, Mohan. 1989. "Agricultural Supply Response: A Survey," *Agricultural Economics* 3:1-22.
- Reziti, I. and A. Ozanne, "Testing Regularity Properties in Static and Dynamic Duality Models: The Case of Greek Agriculture," *European Review of Agricultural Economics*, V. 26, N. 4, 1999, pp. 461-77.
- Schiff, Maurice, and Claudio E. Montenegro. 1997. "Aggregate Agricultural Supply Response in Developing Countries: A Survey of Selected Issues," *Economic Development and Cultural Change*, V. 45 N. 2, pp. 393-410.
- Shideed, Kamil, and Fred White. 1989. "Alternative Forms of Price Expectations in Supply Analysis for U.S. Corn and Soybean Acreages," *Western Journal of Agricultural Economics* 14(2):281-92.
- Sidhu, Surjit, and Carlos Baanante. 1981. "Estimating Farm-Level Input Demand and Wheat Supply in the Indian Punjab Using a Translog Profit Function," *American Journal of Agricultural Economics* 63(1):237-46.

5. Household Models: Theory and Applications

Sadoulet Elisabeth, and Alain de Janvry. 1995. *Quantitative Development Policy Analysis*, Baltimore: Johns Hopkins University Press. Read chapter 6.

Singh, Inderjit, Lyn Squire, and John Strauss, eds. 1986. *Agricultural Household Models*. Baltimore: Johns Hopkins University Press.

Azam, Jean-Paul, and Timothy Besley. 1991. "Peasant Supply Response under Rationing: The Role of the Food Market," *European Journal of Political Economy* 7:331-43.

Bardhan, Pranab, and Christopher Udry, *Development Microeconomics*, New York: Oxford University Press, 1999. Read Chapter 2, "Household Economics."

Becker, Gary. 1965. "A Theory of the Allocation of Time," *Economic Journal* 75:493-517.

Benjamin, Dwayne. 1992. "Household Composition, Labor Markets, and Labor Demand: Testing for Separation in Agricultural Household Models," *Econometrica* 60:287-322.

Bourguignon, Francois, and Pierre-Andre Chiapiorri. 1992. "Collective Models of Household Behavior," *European Economic Review* 36:355-64.

de Janvry, Alain, and Elisabeth Sadoulet. 1996. "Household Modeling for the Design of Poverty Alleviation Strategies," Working Paper No. 787, Department of Agricultural and Resource Economics, University of California, Berkeley.

de Janvry, Alain, M. Fafchamps, and E. Sadoulet. 1991. "Peasant Household Behavior with Missing Markets: Some Paradoxes Explained," *Economic Journal* 101:1400-17.

Ellis, Frank. 1989. *Peasant Economics: Farm Households and Agrarian Development*. Cambridge: Cambridge University Press.

Lopez, Ramon. 1984. "Estimating Labour Supply and Production Decisions of Self-Employed Farm Producers," *European Economic Review* 24:61-82.

Quisumbing, Agnes R. (ed.), *Household Decisions, Gender, and Development*, Washington D.C.: International Food Policy Research Institute, 2003.

Reardon, Thomas, Christopher Delgado, and Peter Matlon. 1992. "Determinants and Effects of Income Diversification Amongst Farm Households in Burkina Faso," *Journal of Development Studies* 28:264-96.

Sadoulet, E., Alain de Janvry and C. Benjamin, "Labor Market Imperfections and Selective Separability in Household Models: A Predictive Typology of Mexican Ejidatarios," mimeo.

Udry, Chris. 1997. "Recent Advances in Empirical Microeconomic Research in Poor Countries: An Annotated Bibliography," *Journal of Economic Education* 28(1):58-75.

6. Transactions Costs, Productivity, and Agrarian Institutions

a) Transactions Costs, Institutions, and Development

Bardhan, Pranab. 1989. "Alternative Approaches to the Theory of Institutions in Economic Development," in *The Economic Theory of Agrarian Institutions*, edited by P. Bardhan, Oxford: Clarendon Press.

Eggertssons, Thráinn. 1990. Read chapter 1 in *Economic Behavior and Institutions*, New York: Cambridge University Press.

Nabli, Mustapha K., and Jeffrey B. Nugent. 1989. *The New Institutional Economics and Development: Theory and Applications to Tunisia*, Amsterdam: North-Holland.

Lin, Justin Yifu, and Jeffrey B. Nugent. 1995. "Institutions and Economic Development," chapter 38 in *Handbook of Development Economics Volume 3A*, Amsterdam: Elsevier.

Ostrom, E. 1986. "An Agenda for the Study of Institutions," *Public Choice* 48:3-25.

b) Farm Size and Productivity

Sadoulet Elisabeth, and Alain de Janvry. 1995. *Quantitative Development Policy Analysis*, Baltimore: Johns Hopkins University Press. Read chapter 9.

Ali Mubarik, and John Flinn. 1989. "Profit Efficiency Among Basmati Rice Producers in Pakistani Punjab," *American Journal of Agricultural Economics* 71(2):303-10.

Barrett, C. B. 1997. "How Credible are Estimates of Peasant Allocative Scale, or Scope Efficiency? A Commentary," *Journal of International Development* 9(2):221-229.

Barrett, C. B. 1996. "On Price Risk and the Inverse Farm Size-Productivity Relationship," *Journal of Development Economics* 51(2):193-216.

Benjamin, D. 1995. "Can Unobserved Land Quality Explain the Inverse Productivity Relationship," *Journal of Development Economics* 46(1):51-84.

Berry, R Albert, and William Cline. 1979. *Agrarian Structure and Productivity in Developing Countries*, Baltimore: Johns Hopkins University Press.

Carter, M. 1984. "Identification of the Inverse Relationship between Farm Size and Productivity," *Oxford Economic Papers* 36:131-45.

Cornia, Andrea. 1985. "Farm Size, Land Yields, and the Agricultural Production Function: An Analysis for Fifteen Developing Countries," *World Development* 13(4):513-34.

Dawson, Philip, John Lingard, and Christopher Woodford. 1991. "A Generalized Method of Farm Specific Technical Efficiency," *American Journal of Agricultural Economics* 73(4):1098-1104.

Feder, Gershon. 1985. "The Relation between Farm Size and Farm Productivity: The Role of Family Labor, Supervision and Credit Constraints," *Journal of Development Economics* 18:297-313.

Helfand, Steven M., and Edward S. Levine, "Farm Size and the Determinants of Productive Efficiency in the Brazilian Center-West," forthcoming in *Agricultural Economics*, 2004.

Larson, Janelle M. 1997. "Technical Efficiency and Land Markets: Do the Most Efficient Really Get the Land?" Paper presented at the 1997 meeting of the Latin American Studies Association, Guadalajara, Mexico, 16 pages.

c) Efficiency and Productivity Measurement

Ball, Eldon V., "Output, Input, and Productivity Measurement in U.S. Agriculture, 1948-79," *American Journal of Agricultural Economics*, V. 67, August, 1985, 475-86.

Bayarsaihan, T., and T.J. Coelli, "Productivity Growth in Pre-1990 Mongolian Agriculture: Spiraling Disaster or Emerging Success?" *Agricultural Economics* 28, 2003, 121-37.

Capalbo, Susan M. and John M. Antle, *Agricultural Productivity: Measurement and Explanation*, Washington, D.C.: Resources for the Future, 1988.

Coelli, Tim, D.S. Prasada Rao, and George E. Battese, *An Introduction to Efficiency and Productivity Analysis*, Norwell: Kluwer Academic Publishers, 1999.

Fulginiti, Lilyan E., and Richard K. Perrin, "LDC Agriculture: Nonparametric Malmquist Productivity Indexes," *Journal of Development Economics*, Vol. 53, 1997, pp. 373-90.

Fulginiti, Lilyan, and Richard Perrin. 1993. "Prices and Productivity in Agriculture," *The Review of Economics and Statistics* 75(3):471-82.

- Gerdin, Anders, "Productivity and Economic Growth in Kenyan Agriculture, 1964-96," *Agricultural Economics* 28, 2003, 7-13.
- Hayami, Yujiro, and Vernon W. Ruttan, *Agricultural Development: An International Perspective*, Baltimore: John Hopkins University Press, 1985.
- Journal of Productivity Analysis*, V. 7, N. 2/3, July 1996. Special Issue: Efficiency and Frontier Analysis: Proceedings of a Research Workshop on State-of-the-Art and Future Research in Efficiency Analysis.
- Kalijaran, K. P. 1990. "On Measuring Economic Efficiency," *Journal of Applied Economics*, 5:75-85.
- Kumbhakar, Subal C., and C.A. Knox Lovell, *Stochastic Frontier Analysis*, Cambridge: Cambridge University Press, 2000.
- Thiam, A., B.E. Bravo-Ureta, and T.E. Rivas, "Technical Efficiency in Developing Country Agriculture: A Meta Analysis," *Agricultural Economics*, V. 25, 2001, pp. 235-43.
- Wu, Shunxiang, David Walker, Stephen Devadoss, and Yao-chi Lu, "Productivity Growth and its Components in Chinese Agriculture after Reforms," *Review of Development Economics*, Vol. 5, No. 3, 2001, pp. 375-391.
- d) Tenancy, Contractual Structure, and Related Issues*
- Alston, Lee J., Samar K. Datta, and Jeffrey B. Nugent. 1984. "Tenancy Choice in a Competitive Framework with Transaction Costs," *Journal of Political Economy* 92(6):1121-33.
- Bardhan, P. 1980. "Interlocking Factor Markets and Agrarian Development: A Review of Issues," *Oxford Economic Papers* 32(1):82-98.
- Barrett, Christopher B. 1997. "How Credible are Estimates of Peasant Allocative, Scale, or Scope Efficiency? A Commentary" *Journal of International Development* 9(2): 221-29.
- Eswaran, Mukesh, and Ashok Kotwal. 1985. "A Theory of Contractual Structure in Agriculture," *American Economic Review* 75(3):352-67.
- Eswaran, Mukesh, and Ashok Kotwal. 1986. "Access to Capital and Agrarian Production Organisation," *Economic Journal* 96:482-98.
- Feder, G., R. Just, and D. Zilberman, 1985. "Adoption of Agricultural Innovations in Developing Countries: A Survey," *Economic Development and Cultural Change* 3: 255-298.
- Key, Nigel, and David Runsten. 1999. "Contract Farming, Smallholders, and Rural Development in Latin America: The Organization of Agroprocessing Firms and the Scale of Outgrower Production," *World Development*, 27(2), pp. 381-401.
- Otsuka, Keijiro, and Yujiro Hayami. 1988. "Theories of Share Tenancy: A Critical Survey," *Economic Development and Cultural Change* 57:31-68.
- Sah, R. K., and J. E. Stiglitz. 1984. "The Economics of Price Scissors," *American Economic Review* 74(1):125-138.
- Shaban, R. 1987. "Testing between Competing Models of Sharecropping," *Journal of Political Economy* 95(5):893-920.
- Singh, Nirvikar, "Theories of Share Cropping," in *The Economic Theory of Agrarian Institutions*, P. Bardhan (ed.), Oxford: Clarendon Press, 1989.

7. Rural Poverty, Income Diversification, and Land Reform

a) Measures of Poverty and Income Distribution

Fields, Gary S., *Distribution and Development: A New Look at the Developing World*, New York: Russell Sage Foundation, 2003.

Lipton, Michael, and Martin Ravallion, "Poverty and Policy," Chapter 41 in *Handbook of Development Economics Vol. IIIB*, edited by Behrman, Jere, and T.N. Srinivasan. Amsterdam: Elsevier, 1995.

b) Rural Poverty

de Janvry, Alain, and Elisabeth Sadoulet, "Rural Poverty in Latin America: Determinants and Exit Paths," *Food Policy*, Vol. 25, 2000, pp. 389-409.

Dorward, Andrew, Jonathan Kydd, Jamie Morrison and Ian Urey, "A Policy Agenda for Pro-Poor Agricultural Growth," *World Development*, Vol. 32, No. 1, 2003, pp. 73-89.

Thirtle, Colin, Lin Lin, and Jenifer Piesse, "The Impact of Research-Led Agricultural Productivity Growth on Poverty Reduction in Africa, Asia and Latin America," *World Development*, Vol. 32, No. 12, 2003, 1959-75.

Valdés, Alberto, and Tom Wiens, "Rural Poverty in Latin America and the Caribbean," pp. 107-124 in *Annual World Bank Conference on Development in Latin America and the Caribbean 1996: Poverty and Inequality*, edited by Burki et al., Washington D.C.: The World Bank, 1998.

c) Income Diversification

Ellis, Frank, *Rural Livelihoods and Diversity in Developing Countries*, New York: Oxford University Press, 2000.

Reardon, Thomas, Julio Berdegué, and German Escobar, "Rural Nonfarm Employment and Incomes in Latin America: Overview and Policy Implications," *World Development*, V. 29, N. 3, March 2001, pp. 395-409.

World Development, special issue on "Rural Nonfarm Employment and Incomes in Latin America: Overview and Policy Implications," V. 29, N. 3, March 2001. See articles on Brazil, Chile, Colombia, Ecuador, El Salvador, Honduras, Mexico, Nicaragua, and Peru.

d) Land Reform

de Janvry, Alain, Jean-Philippe Platteau, Gustavo Gordillo, and Elisabeth Sadoulet, "Access to Land and Land Policy Reforms," in *Access to Land, Rural Poverty, and Public Action*, New York: Oxford University Press, 2001.

de Janvry, Alain, Elisabeth Sadoulet, and Wendy Wolford, "The Changing Role of the State in Latin American Land Reforms," in *Access to Land, Rural Poverty, and Public Action*, New York: Oxford University Press, 2001.

Deininger, Klaus, and Hans Binswanger, "The Evolution of the World Bank's Land Policy: Principles, Experiences, and Future Challenges," *The World Bank Research Observer*, Vol. 14, No. 2, August 1999, pp. 247-76.

Deininger, Klaus, and Gershon Feder, "Land Institutions and Land Markets," Chapter 6 in *Handbook of Agricultural Economics*, edited by Rausser, Gordon, and Bruce Gardner, Amsterdam: Elsevier, 2001.

Griffin, Keith, Aziz Khan, and Amy Ickowitz, "Poverty and the Distribution of Land," mimeo, University of California, Riverside, 9/2000.

Kay, Cristóbal, "Agrarian Reform and Rural Development in Latin America: Lights and Shadows," paper presented at the International Conference on Agrarian Reform and Rural Development, Philippines, December 5-8, 2000.

8. Spatial Analysis of Agricultural Markets

Spatial Integration of Markets

Fackler, Paul L., and Barry K. Goodwin. 2000. "Spatial Price Analysis," Chapter 17 in *Handbook of Agricultural Economics*, edited by Rausser, Gordon, and Bruce Gardner, Amsterdam: Elsevier, 2001.

Alexander, Carol, and John Wyeth. 1994. "Cointegration and Market Integration: An Application to the Indonesian Rice Market," *The Journal of Dev. Studies*, 30(2):303-28.

Barrett, Christopher B., 1996. "Market Analysis Methods: Are Our Enriched Toolkits Well Suited to Enlivened Markets?" *American J. of Agricultural Economics*, 78, August, 825-29.

Baulch, Bob. 1997. "Transfer Costs, Spatial Arbitrage, and Testing for Food Market Integration," *American Journal of Agricultural Economics*, 79(2):477-487.

Baulch, Bob. 1997. "Testing for Food Market Integration Revisited," *Journal of Development Studies*, 33(4):512-534.

Breuer, Janice Boucher. 1994. "An Assessment of the Evidence on Purchasing Power Parity," chapter 7 in *Estimating Equilibrium Exchange Rates*, edited by John Williamson, Washington, D.C.: Institute for International Economics.

Froot, Keneth A., and Kenneth Rogoff. 1995. "Perspectives on PPP and Long-Run Real Exchange Rates," Chapter 32 in *Handbook of International Economics, Volume III*, Amsterdam, the Netherlands: Elsevier.

Goldberg, Pinelopi K., and Michael M. Knetter. 1997. "Goods Prices and Exchange Rates: What Have We Learned?" *Journal of Economic Literature*, XXXV(September):1243-1272.

Goletti, F., R. Ahmed, and N. Farid. 1995. "Structural Determinants of Market Integration: The Case of Rice Markets in Bangladesh," *The Developing Economies*, 33(2):185-202.

González-Rivera, Gloria and Steven M. Helfand, "The Extent, Pattern, and Degree of Market Integration: A Multivariate Approach for the Brazilian Rice Market," *American Journal of Agricultural Economics*, Vol. 83, No. 3, August 2001, pp. 576-592.

González-Rivera, Gloria and Steven M. Helfand, "Economic Development and the Determinants of Spatial Integration in Agricultural Markets," Working Paper 01-28, Department of Economics, University of California, Riverside, August, 2001.

Goodwin, Barry K., and Ted C. Schroeder. 1991. "Cointegration Tests and Spatial Price Linkages in Regional Cattle Markets," *American Journal of Agricultural Economics*, 73(2):452-64.

Officer, Lawrence H. 1990. "The Law of One Price: Two Levels of Aggregation," in *International Financial Markets and Agricultural Trade*, edited by Thomas Grennes, Boulder: Westview Press.

Ravallion, Martin. 1986. "Testing Market Integration," *American Journal of Agricultural Economics*, 68(1):102-109.

Rogoff, Kenneth. 1996. "The Purchasing Power Parity Puzzle," *Journal of Economic Literature*, Vol. XXXIV, June, pp. 647-68.

Spatial Econometrics

- Nelson, Gerald C., "Introduction to the Special Issue on Spatial Analysis for Agricultural Economists," *Agricultural Economics* 27, 2002: 197-200.
- Anselin, Luc, "Under the Hood: Issues in the Specification and Interpretation of Spatial Regression Models," *Agricultural Economics* 27, 2002: 247-267.
- Anselin, Luc, and Anil K. Bera, "Spatial Dependence in Linear Regression Models with an Introduction to Spatial Econometrics," in Ullah,-Aman and David E. A. Giles (eds.), *Handbook of Applied Economic Statistics*. Statistics, Textbooks and Monographs, Vol. 155. New York; Basel and Hong Kong: Dekker, 1998; 237-89.
- Bell, Kathleen P., and Elena G. Irwin, "Spatially Explicit Micro-Level Modeling of Land Use Change at the Rural-Urban Interface," *Agricultural Economics* 27, 2002: 217-232.
- Florax, Raymond J. G. M., Roelf L. Voortman, and Joost Brouwer, "Spatial Dimensions of Precision Agriculture: A Spatial Econometric Analysis of Millet Yield on Sahelian Coversands," *Agricultural Economics* 27, 2002: 425-443.
- Mertens, B., R. Pocard-Chapuis, M. G. Piketty, A. E. Lacques and A. Venturieri, "Crossing Spatial Analyses and Livestock Economics to Understand Deforestation Processes in the Brazilian Amazon: The Case of São Félix do Xingú in South Pará," *Agricultural Economics* 27, 2002: 269-294.
- Nelson, Gerald C., and Jacqueline Geoghegan, "Deforestation and Land Use Change: Sparse Data Environments," *Agricultural Economics* 27, 2002: 201-216.
- Swinton, Scott M., "Capturing Household-Level Spatial Influence in Agricultural Management Using Random Effects Regression," *Agricultural Economics* 27, 2002: 371-381.

9. Multimarket and Multisector Models

- Sadoulet Elisabeth, and Alain de Janvry. 1995. *Quantitative Development Policy Analysis*, Baltimore: Johns Hopkins University Press. Read chapters 10-12.
- Adelman, I. and S. Robinson. 1988. "Macroeconomic Adjustment and Income Distribution: Alternative Models Applied to Two Economies," *Journal of Development Economics* 29:1-22.
- Adelman, I. and J. Edward Taylor. 1991. "Multisector Models and Structural Adjustment: New Evidence From Mexico," *Journal of Development Studies* 28(1):154-163.
- Bell, Clive, and T. N. Srinivasan. 1984. "On the Uses and Abuses of Economywide Models in Development Policy Analysis," chapter 22 in *Economic Structure and Performance: Essays in Honor of Hollis B. Chenery*, edited by Moshe Syrquin, Lance Taylor, and Larry E. Westphal. Orlando: Academic Press.
- Braverman, Avishay, and Jeffrey Hammer. 1986. "Multimarket Analysis of Agricultural Pricing Policies in Senegal," in *Agricultural Household Models: Extensions, Applications, and Policy*, edited by I. Singh et al., Baltimore: Johns Hopkins University Press.
- Braverman, Avishay, and Jeffrey Hammer and Antonio Salazar Brandao. 1986. *Economic Analysis of Agricultural Pricing Policies in Brazil: The Wheat and Soybean Case*. Discussion paper, Washington, D.C: World Bank, Agricultural and Rural Development Department.

- Braverman, Avishay, and Jeffrey Hammer and Choong Yong Ahn. 1986. "Multimarket Analysis of Agricultural Pricing Policies in Korea," in *The Theory of Taxation for Developing Countries*, edited by D. Newbery and N. Stern, New York: Oxford University Press for the World Bank.
- de Janvry, Alain, and Elisabeth Sadoulet. 1987. "Agricultural Price Policies in General Equilibrium Models: Results and Comparisons," *American Journal of Agricultural Economics* 69(2):230-246.
- Dervis, Kamal, Jaime de Melo, and Sherman Robinson. 1982. *General Equilibrium Models for Development Policy*, Washington D. C.: The World Bank.
- Devarajan, Shantayanan, Jeffrey Lewis, and Sherman Robinson. 1990. "Policy Lessons from Trade Focused, Two-Sector Models," *Journal of Policy Modeling* 12(4):625-57.
- Gunning, Jan Willem, and Michiel Keyser. 1983. "Applied General Equilibrium Models for Policy Analysis," In *Handbook of Development Economics*, vol. 3, edited by T. N Srinivasan and J. Behrman, Amsterdam: Elsevier Science Publishers.
- Melo, Jaime de. 1988. "Computable General Equilibrium Models for Trade Policy Analysis in Developing Countries: A Survey," *Journal of Policy Modeling* 10(4):469-503.
- Parikh, Alka, and Erik Thorbecke. 1996. "The Impact of Industrialization on Village Life and Economy: A Social Accounting Matrix Approach," *Economic Development and Cultural Change* 44(2):351-377.
- Pyatt, G. and Jeffrey Round. 1985. *Social Accounting Matrices: A Basis for Planning*, World Bank.
- Quizon, Jaime, and Hans Binswanger. 1986. "Modeling the Impact of Agricultural Growth and Government Policy on Income Distribution in India," *World Bank Economic Review* 1(1):103-48.
- Robinson, Sherman, Mary Burfisher, Raul Hinojosa-Oeda, and Karen Thierfelder. 1993. "Agricultural Policies and Migration in a United States-Mexico Free Trade Area: A Computable General Equilibrium Analysis," *Journal of Policy Modeling*, 15(5&6):673-701.
- Robinson, Sherman. 1989. "Multisectoral Models," in *Handbook of Development Economics Volume 2*, edited by H. Chenery and T. N. Srinivasan. Amsterdam: Elsevier.
- Taylor, J. Edward, and Irma Adelman. 1996. *Village Economies*, New York: Cambridge University Press.
- Taylor, Lance. 1990. "Structuralist CGE Models," in *Socially Relevant Policy Analysis*, edited by Lance Taylor, Cambridge: MIT press.

10. Political Economy, Interest Groups, and Development

- Appelbaum, Elie, and Eliakim Katz. 1987. "Seeking Rents By Setting Rents: The Political Economy of Rent Seeking," *Economic Journal*, 97(3):685-699.
- Bates, Robert H. (ed.). 1988. *Toward a Political Economy of Economic Development: A Rational Choice Perspective*, Berkeley and Los Angeles: University of California Press.
- Becker, G. 1983. "A Theory of Competition Among Pressure Groups for Political Influence," *Quarterly Journal of Economics*, 98:371-400.
- de Janvry, Alain, and Shankar Subramanian. 1993. "The Politics and Economics of Food and Nutrition Policies and Programs: An Interpretation," in *The Political Economy of Food and Nutrition Policies*, edited by Per Pinstруп-Anderson, Baltimore: The Johns Hopkins University Press for the International Food Policy Research Institute.

- de Janvry, Alain, and Elisabeth Sadoulet. 1989. "A Study in Resistance to Institutional Change: The Lost Game of Latin American Land Reform," *World Development* 17(9):1397-1407.
- de Janvry, Alain, E. Sadoulet, and M. Fafchamps. 1989. "Agrarian Structure, Technological Innovations and the State," chapter 18 in P. Bardhan (ed.), *The Economic Theory of Agrarian Institutions*, Oxford: Clarendon Press.
- Eggertssons, Thráinn. 1990. Read chapter 10 in *Economic Behavior and Institutions*, New York: Cambridge University Press.
- Fafchamps, Marcel, Elisabeth Sadoulet, and Alain de Janvry. 1991. "Optimal Lobbying Behavior and Government Response: Implications for Agriculture," paper presented at the American Agricultural Economics Association meetings, Manhattan Kansas, August 4-7.
- Findlay, Ronald. 1991. "The New Political Economy: Its Explanatory Power for LDCs," chapter 2 in G. M. Meier (ed.), *Politics and Policy Making in Developing Countries*, San Francisco: ICEG Press.
- Grindle, M. S. 1991. "The New Political Economy: Positive Economics and Negative Politics," chapter 3 in G. M. Meier (ed.), *Politics and Policy Making in Developing Countries*, San Francisco: ICEG Press.
- Grossman, M. Gene and E. Helpman. 1995. "Trade Wars and Trade Talks," *Journal of Political Economy* 103(4):675-708.
- Haggard, Stephan, and Steven B. Webb. 1993. "What do we Know About the Political Economy of Economic Policy Reform," *The World Bank Research Observer*, 8(2):143-68.
- Hayami, Yujiro. 1991. "Land Reform," chapter 6 in G. M. Meier (ed.), *Politics and Policy Making in Developing Countries*, San Francisco: ICEG Press.
- Helfand, Steven M., "The Distribution of Subsidized Agricultural Credit in Brazil: Do Interest Groups Matter?" *Development and Change*, Vol. 32, No. 3, June 2001, pp. 465-490.
- Krueger, Anne O. 1974. "The Political Economy of Rent Seeking Society," *American Economic Review* 64(3):291-303.
- Olson, Mancur. 1965. *The Logic of Collective Action*, Cambridge: Harvard University Press.
- Olson, Mancur. 1985. "The Exploitation and Subsidization of Agriculture in Developing and Developed Countries," in *Agriculture in a Turbulent World Economy*, edited by A. Maunder and U. Renborg, England: Gower Publishing Company Ltd., pp. 49-59.
- Srinivasan, T. N. 1985. "Neoclassical Political Economy, the State and Economic Development," *Asian Development Review* 3(2):38-58.
- World Bank. 1997. *World Development Report 1997: The State in a Changing World*, New York: Oxford University Press.
- Zusman, Pinhas. 1976. "The Incorporation and Measurement of Social Power in Economic Models," *International Economic Review* 17(2):447-462.