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# THE JOURNAL OF Agricultural Economics Research



Economic Research Service

## Articles

General Equilibrium Analysis of U.S. Agriculture: What.Does It Contribute?

An Export-Side Armington Model and Trade Liberalization in the World Wheat Market

Partial Adoption of Divisible Technologies in Agriculture

Rural Retail Sales and Consumer Expenditure Functions

### Book Reviews

Benefit-Cost Analysis: A Political Economy Approach

Transformation of International Agricultural Research and Development

Frontiers of Input-output Analysis

Forestry Sector Intervention: The Impacts of Public Regulation on Social Welfare

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#### In This Issue

First, a word about the Journal's series of essays. The editors and editorial board of JAER thought a journal devoted largely to designing, building, and polishing the intellectual furniture of agricultural economics should give some attention to the effect of that furniture on the posture of the profession. So we began with an essay on the product of the profession, publishing. It was followed by six essays appraising agricultural economics and examining methodological and philosophical issues pertaining to research. The philosophical progression culminated in an essay on economics and ethics.

In this issue, we return from the sublime to the meticulous with Hertel's essay on computable general equilibrium. He argues that the problems of model specification, parameter choice, disaggregation, and policy representation in general equilibrium are similar to those of partial equilibrium analysis. He compares partial and general equilibrium with an extremely reduced-form analysis of a farm subsidy program. From this illustration, he argues that general equilibrium models can be practical, need not be complex, and are compatible with partial equilibrium solutions to specific problems. He concludes that widespread familiarity with general equilibrium models will enable the body of agricultural economists to focus disparate research findings on a single economic problem.

Kim and Lin examine the economic impacts of a trade liberalization policy in the world wheat market. They employ an export-side international trade model, Armington and spatial equilibrium, on 23 countries (some are country composites). As policy interventions, they extracted producer subsidy equivalents and consumer subsidy equivalents. Results of their analysis show European Community and Canadian exports declining, the American, Argentine, and Australian exports increasing. There are economic gains for all exporting countries.

Trade issues closer to home, specifically at the community level, are discussed in the Henderson article He examines 79 rural Minnesota communities to determine the relation between size of community and types of retail business. He bases his inquiry of different business functions on central place theory. Improved transportation, advanced marketing, and increased income tend to favor retailing in larger communities over smaller communities.

Szmedra, Wetzstein, and McClendon analyzed the use of integrated pest management technologies on soy-

beans and concluded that prior technologies, as well as risk response, influenced the adoption of the technology. They used several criteria that gave mixed results for total and partial adoption on diyland, but uniformly favored partial adoption on irrigated land. They conclude that riskiness is not the overriding factor in the adoption of IPM.

Book reviews include Letson's evaluation of Benefit-Cost Analysis A Political Economy Approach by Schmid Letson is generally complimentary of Schmid's efforts to combine standard benefit-cost techniques with budgetary politics. He feels, however, that Schmid is less successful in bridging analysis and political action than he is at identifying the need for the bridge. He nevertheless recommends Schmid's book, perhaps as a companion to Mishan's fourth edition on benefit-cost analysis.

Anderson reviews Transformation of International Agricultural Research and Development edited by Compton. Here is a good book to introduce agricultural research and technology transfer to readers not already thoroughly versed in the subject. The underlying theme of the book is the "seemingly obvious point" that for technology to be created and adopted, it should meet the needs of users

Lee critiques Frontiers of Input-output Analysis by Miller, Polenske, and Rose, one more volume in the evolution and extension of the basic I/O model Despite the brevity of many of the large number of articles in this compilation, hence the need to look elsewhere for details, Lee rates the volume as a significant addition to I/O literature

Percy endorses Boyd and Hyde's Forestry Sector Intervention The Impacts of Public Regulation on Social Welfare while injecting his own preference for including among the case studies the subject of welfare effects of trade barriers on forest products. Percy writes from Edmonton, not Tokyo. He compliments the authors on the quality of analysis and careful treatment of the seven case studies. The case studies support the central proposition of the book that policy interventions to correct market failures can make matters worse.

We receive many more books and announcements of books than we can ever hope to review within the space available in the Journal Selections are intended to call attention to useful publications across a wide spectrum of interests of social science in agriculture, rural/affairs, and natural resources Occasionally, but just occasionally, we will do a fringe piece if we think it might stoke the interest of Journal readers. We invite suggestions on our policy as well as on specific books you think might serve the readers. Books and

their reviews are an important dimension of the Journal, and we hope you will contribute to their selection and review

Gene Wunderlich