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Articles

On the Role of Data and Measurement in Agricultural
Economics Research

Terms of Trade and Factor Commitments in Agriculture

A Price Index for Deflating State Agricultural Experiment
Station Research Expenditures

A Framework for Examining Technical Change

Getting the Word Out at ERS

Book Reviews

Applied Production Analysis: A Dual Approach

Elasticities in International Agricultural Trade

Agricultural Stability and Farm Programs: Concepts, Evidence, and
Implications

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In This Issue

Agricultural economists have an abiding interest in data. That interest arises from a need for the facts to test theories and a need to better understand agriculture's part of the economic world. In this issue's invited essay, Jim Bonnen argues the importance of understanding the nature of facts in research. He insists that the data side of empirical research has not had as much disciplined attention as theory. Failure to devote adequate attention to data in the course of inquiry results in bad habits in research. He lists six

Because no single index can adequately reflect the effects of technology and structural change in agriculture's position in the economy, Fohlin, Robinson, and Schluter employ four indicators of the terms of trade. Two of the indicators are in terms of value added: one based on farm income and the other on GNP originating in the sector. The third is an output measure of agricultural prices received and deflated by non-agricultural GNP, and the fourth, similar to "parity," is a ratio of agricultural output prices to agricultural input and consumption prices. They show that disequilibria in the factor markets adjust slowly over time, and that capital is more responsive to terms of trade than labor. Productivity in agriculture grew more rapidly than in other sectors due to faster adoption of innovations. For this productivity, agriculture has been rewarded with declining value-added terms of trade and deteriorating relative prices for its output.

Bengston, too, addresses an indexing problem, research in State experiment stations. He examines research budgets to determine the real level of deterioration of nondefense investment in research. His alternative to the traditional GNP price deflator indicates a higher rate of inflation in experiment station research than the traditional measure. His second conclusion is that the U.S. Government, by using the GNP deflator, is understating the cost of research.

Knudson and Larson offer a framework for thinking about technical change. Their framework treats

technical change as internal to an economy rather than as an external force. They show how the interrelationship of research, adoption, and regulation affects the direction of technical change, and they illustrate their concepts with the development of glyphosate-tolerant tomatoes.

The results reported in the book on elasticities in international agricultural trade, edited by Carter and Gardiner, are "quite discouraging," according to reviewer Blakeslee. He notes the wide variation in empirical results of research and the lack of modeling principles, even for narrowly defined problems. While it earns a read by those involved in agricultural trade modeling, Blakeslee feels that the collection will not be required reading 10 years from now.

Larson reviews Chambers' book on applied production analysis and finds treatment of the dual approach to the theory of the firm useful as a reference in applied research. He compliments the author's simple straightforward style, and he is generally satisfied with the coverage of topics, even of technical change.

Anderson addresses the timeless topic of stability in agricultural markets. Her review of Sumner's book of readings on agricultural stability and farm programs is generally favorable. The essays in this small book, however, represent only partial coverage of the subject. She notes an absence of discussion of the connection between instability and uncertainty, volatility in other industries, and examples from a large number of specific markets.

To underscore the changing technology of information handling, Horsfield describes the data products now offered by USDA's Economic Research Service, and Reinsel summarizes the agency's policy on information dissemination. The importance of a well-informed exchange of data in research cannot be overemphasized. I urge you to read their brief notes.

Gene Wunderlich