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Does advertising
change demand
for oranges?
p.1

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The first step in economic analysis is to decide what problem is being considered and what end result is desired. For example, firm managers may wish to expand sales, area leaders may want economic growth, industry leaders may need commodity price forecasts.

As a second step, before an end result can be achieved, one must ask what factors might affect the result. What effect does advertising have on sales? What are the sources of economic growth? What effects do monopoly and economies of scale have on commodity prices?

The third step, before relationships between causal factors and end results can be ascertained, includes model building, gathering data, computer programming, statistical testing, and other interesting problems.

Two thousand years ago, Epictetus analyzed the process of truth seeking into three parts. My three steps apply his concepts to agricultural economics. Epictetus pointed out that the third part is necessary because of the second, and the second because of the first. While the first is most necessary, he said, and is where we ought to "remain," we do the reverse. He felt we squander our time in the third part to the utter neglect of the first.

Epictetus was right about the emphasis. Economic analysis does not make sense to me unless it seeks solutions to social problems. Even so, sometimes it is not what we are trying to do that counts, but the way we are doing it. The three articles in this issue address quite different problems, but each gives insight into the importance of method and of finding and using new ways of doing things in agricultural economics research.

Ward and Myers are concerned that our econometric models usually assume a fixed structure, such as a fixed demand relation for a farm commodity. Estimates of this structure are assumed to hold not only for the period studied, but into the forecasted future as well.

This assumption clearly is not the best one when studying, say, advertising, which aims to change the structure of the demand relation. The authors explain how to calculate variable parameter estimates and illustrate the utility of doing so when demand is presumed to change in response to advertising. I see no reason why the method would not apply in other situations as well, when the structure changes not through purposive action such as advertising, but through events which can be taken as random.

Kalbacher considers a method which has been used to identify sources of regional growth for more than three decades, and she examines an alternative formulation. The new version has some advantages over the traditional one, but to gain these advantages, the user has to pay a certain opportunity cost. The method, shift-share analysis, is not generally used in analysis of commercial agriculture, but, again, I see no reason why it could not be applied to, for example, production area shifts in cash receipts from farm commodities.

Lamm reviews some studies which examine economies of scale using the translog function and notes some desirable properties of this function. The translog function allows the relative change in total cost, with respect to a change in factor price, to depend on the scale of operation. He compares the results with less complex functional forms which do not allow this relation, and finds that the relation is significant. Acceptance of the relation affects our understanding of monopoly and economies of scale in the cottonseed processing industry. Thoughtless choice of a convenient functional form can bias the results of a study, and the Lamm article is another illustration of how a little more methodological effort can help us to avoid such bias.

CLARK EDWARDS

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