I am not surprised at my critic's reaction. He is a gentleman and a scholar in the way he made his comments, but I see clearly that a great philosophical chasm separates us.

Any definition of agricultural economics has to be subjective, personal, and arbitrary to a large extent. It is usually the author's prerogative, or even responsibility, to define his terms. In some instances conventions lie behind definitions, but I know of none governing agricultural economics. If one consults the dictionary as to the meaning of "agricultural," he might conclude my definition is too broad, not too narrow.

The real question is what purpose is a definition to serve. My critic apparently wants the definition of agricultural economics to be broad enough to cover about anything he wants to research. I have some very special reasons for wanting it narrow.

I do not want to stop research in natural resources development and human and community development. I just do not want to see such research "flying the flag" of agricultural economics because this flag has a special meaning to most important clientele and supporters of agricultural colleges. Research in natural resources and human and community resources should gain its own clientele, its own supporters and its own budget share. This will become increasingly important as rural America becomes increasingly industrial and commercial.

In my opinion, agricultural economics is an empirical science and an applied science. If someone just knows quantitative methods and economic theory, he is still a long way from being an agricultural economist. An agricultural economist, as an empirical scientist, must know not only theory and quantitative methods, but also a great deal about (1) the technology of agriculture, (2) the structure and organization of agricultural production and marketing, (3) the agricultural community and its institutions and (4) the goals, values and aspirations of agricultural people. I even go so far as to say that an agricultural economist, a "full blooded" one, relates to agricultural people. He feels like a member of the fraternity. He should have a desire to look after the economic welfare of agricultural people in our imperfect economy. The most important decision any scientist makes is subjective: choosing a problem for research and even conceptualizing a problem is largely subjective.

An organizational unit that takes a comprehensive and systematic approach to research needs of commercial agriculture, rather than ad hoc approach, is badly needed right now. An organizational unit is needed that feels a sense of responsibility to the entire agricultural industry and, in my opinion, a strict definition of agricultural economics will work in that direction.

My critic appears to condemn research geared to giving producers a "handle on imperfection" whether by federal programs or by cooperatives. This attacks the profession rather than one paper. He even points out that for the past 25-30 years the JFE and the AJEA have had many articles on how better to take advantage of a market situation in anything but a perfectly competitive way. Instead of repenting for these accomplishments, I am proud of them; perhaps that bothers him. Cherished institutions might not survive without such help.
Does my critic believe the real economic world of today fits the pure competitive model? Would he have farmers wait until he and his colleagues can make it perfectly competitive? Has he ever heard of countervailing power and that farmers need it? Does he realize that society seems to be as concerned with equitable income distribution as with efficiency of resource use (or GNP enhancements)? Could it be that my critic "worships" at the throne of pure or perfect competition and that one of his tenets is that one should lead his life as if it really exists even if it does not and even if others "sin" and profit thereby? Is "sainthood" worthwhile even if one loses house and home?

Agricultural price and income programs do result in income transfer to farmers but such programs must never be thought of as being even distantly related to welfare programs. When farm people work hard and efficiently from sunup to sundown and produce abundantly, but still do not share correspondingly in the American level of living, or face loss of their homes, it is the economy that is failing, not farmers.

This is not to deny that maybe there are better ways than supply control and market power for helping farmers achieve equal pay for equal work and investment, but we are still awaiting them. Maybe my critic can produce them as needed, when needed. This is not to say monopoly is good: war is not good but we engage in it.

Anyone who would advise farmers to accept the slings and arrows of outrageous economic fortunes, or even conspiracies against him, rather than advising him on accepted means of economic defense, is not an agricultural economist in my definition. He might be a quantitative economic analyst or some kind of a cultist.

My view on the place of normative and positivistic research must be viewed in a broad social context. All economic research findings should be relevant to decision making, and decision making is the normative area. Before we can do our research well, we need to know not only what kind of important decisions people are making, but also just what the decision maker is trying to optimize. Secondly, we need to take a good look at the decision maker's calculus or his optimization strategy. We may be able to help him improve it. This is all in the normative area. After the normative model has been developed, then is the time for positivistic research. Sometimes positivistic coefficients are needed in the optimizing equation.

The quality factor in normative research is not just a matter of mathematical sophistication. If it is to be of this world, knowing what the clientele are trying to maximize should be the first concern. The econometrician is not an agricultural economist until he has good knowledge of the objective functions of decision makers in agriculture.

If econometrics is more than sets of empty equations, its advance was surely aided greatly by computers. It would hardly be practical to pursue large empirical models with hand calculators.

It is a mistake not to distinguish between clients and beneficiaries. Our clientele are those who use the knowledge we produce in their decision making—farmers, agribusiness firms, farm leaders, politicians, public officials, voters, etc. Consumers are largely innocent beneficiaries of agricultural research. However, we need to make the blessings of agricultural research available to consumers in an orderly fashion so that farmers are not crushed by surpluses.

A quantitative economic analyst becomes an agricultural economist only upon gaining considerable empirical knowledge of the socioeconomic systems of agriculture and this he gains as much by observation and participation as by research. Social science is the only science where researchers can talk with the subjects of their research or the actors in the systems and, even at times, become agents in the reaction.

A quantitative economic analyst tends to be an ad hoc researcher. A good mathematician can be useful in many disciplines, that is, if someone gives him the problem. Jumping from one empirical area to another is inconsistent with achieving excellence in research and is called for only when some empirical system ceases to be important to society. We need more specialization by empirical areas within stations and among stations. The services of a pure quantitative economic analyst should be provided to agricultural economists as are the services of a station statistician.