

UNIVERSITY OF CALIFORNIA
DAVIS
SEP 27 1985
Agricultural Economics Library

A CONFUSION OF AGRICULTURAL ECONOMISTS?-
A PROFESSIONAL INTEREST SURVEY AND ESSAY

BY

RULON D. POPE

ARNE HALLAM*

*ASSOCIATE AND ASSISTANT PROFESSORS OF ECONOMICS, BRIGHAM YOUNG UNIVERSITY AND
IOWA STATE UNIVERSITY, RESPECTIVELY

DRAFT: Not for quote without
permission of the authors. Comments
are welcome. December, 1984.
Revised June, 1985.

ARE A paper, 1985

Agricultural economists

1985-2

A CONFUSION OF AGRICULTURAL ECONOMISTS?-
A PROFESSIONAL INTEREST SURVEY AND ESSAY

One doesn't have to attend many AAEA meetings before it is apparent that there is considerable diversity of opinion regarding some fundamental propositions. This diversity applies to normative, positive, micro and macro economic propositions. Probably even more striking is the diversity of opinions on methods or items that might be labeled professional interest. Frequently, we label a person as a Marxist, an institutionalist, a programmer, an empiricist, and so on. Such labels may lead to efficient communication but run the danger of conveying in a simplistic way the complexity of beliefs which afflict agricultural economists. Further, there seems to be no documented evidence that any of these labels adequately describe agricultural economists, collectively, or as subspecies.

It is also clear that where one attends school might induce labels, such as the Chicago label (Reder). That is, economists trained at Chicago might forever after see both positive and normative economics from a more market oriented perspective than those from say Harvard. On the other hand, it may seem that most perceptions of economic issues are rooted deeply in general ideology. Party affiliation studies by political scientists suggest that parents' party affiliation is very important in explaining children's affiliation (Campbell et al., pp. 146-48). This may imply that ideologies or beliefs about economic issues are developed long before graduate training or employment. Barring that we self-select graduate training or employment based upon beliefs, the "schools of thought hypothesis" may be tenuous.

Indeed, the perception of the public seems to be that if there are schools of thought, then there must be a great many schools because diversity of opinions on issues and even basic economic facts seems to be the rule. After documenting these perceptions, a popular article several years ago in the American Economic Review reported results of a survey of U.S. economists (Kearl, Pope, Whiting, and Wimmer) hereafter called the KPWW study. The thrust of the paper was to argue that there was a considerable consensus among economists, especially for micro and positive economic propositions. Further, there was little evidence that the institution where employed affected perception of microeconomic questions.¹ Subsequently, European economists have conducted similar surveys of their colleagues with similar findings except that basic ideology of countries mattered some (Frey, Pomerehne, Schneider, and Gilbert). Thus, based upon these data, one should expect much consensus among agricultural economists and no systematic patterns of response due to a person's place of employment.

However, these studies did not examine the effects of background on philosophy. Might not school of graduate training be a significant factor in determining general economic philosophy? Further, might not other factors be systematically correlated with economic philosophy? Within agricultural economics, there may inherently be factors which lead to great diversity. For example, land grant institutions have a sectoral state service mission and many undergraduate programs have emphasized the micro-business component of agricultural economics. Might not these managerial interests lead to a strong consensus for or against interventionist policies for those employed at or graduated from these institutions?² Are there significant differences among those employed in academic, extension, industry, and other government jobs? How do fields of concentration affect these philosophies? Do those graduated from or employed at universities that are highly ranked differ from others in these views?

The purpose of this paper is to report the results of a survey of U.S. agricultural economists drawn from the 1982 AAEA Directory. The goal is to provide descriptive summary statistics and explore the hypotheses suggested above. In all cases, simple cross-tabulations will be the primary form of analysis in order to keep the discussion less cluttered by technical detail. Since a great many comparisons are involved, only the briefest summary can be presented.³

II. THE SURVEY--A DESCRIPTION

The project began with lengthy discussions regarding the appropriate questions to ask as linked to specific hypotheses. The set of questions employed by KPWW were not used because some of the questions were outdated or judged to be less informative for our purposes.⁴ Several of the questions used in our survey are similar to those in KPWW and can be used for comparison.

The earlier studies requested a response to very briefly stated and general propositions such as "tariffs and import quotas reduce general economic welfare." As such, the respondents are taking a sort of Rorschach (ink blot) test which seeks an initial or basic reaction to a complicated issue.

The set of questions were classified (sometimes with difficulty) into: (1) normative, (2) positive, and (3) method oriented or professional interest categories. In all cases, the questions surely reflect our own histories and biases. If one identified an overall theme, it is: "How well do agricultural markets work? What if any impediments exist to achieving market efficiency? How should the government become involved in these markets?"

After choosing a set of questions, the survey was pretested among a non-random sample of 30 prominent agricultural economists.⁵ Some resented the questions which were broad and lacking detail and felt that the ambiguities diminished the worth of the study. This input improved many questions but it seems that relatively short questions required by such a survey unavoidably contain ambiguities. Inevitably questions of greater detail lead to greater confusion and incidence of "don't knows."

At the end of the pretest, respondents were asked for their perception of the worth of the study leaving hypotheses and methods of analyses largely up to their imagination. Though some felt the social value of such a study was negative, others gave encouragement. After much soul searching and knowing full well that professional opinion studies (e.g., those on journal or departmental quality) are often held in low esteem, but widely read, enjoyed and quoted (like the "National Enquirer"), we carried on.

A stratified proportional sample was drawn from the 1982 Directory of the AAFA.⁶ The stratification ensures that the sample roughly resembles the population in terms of employment.⁷ In all, 509 questionnaires were mailed and 245 usable returns were received (about 40 of the 509 were returned due to death or moving and 10 were not in usable form). This seems to be an unusually good response rate and we wish to thank all of those who assisted in the study.

The survey questions are found in Table 1 and biographical data was obtained as indicated in Appendix A. Some 72 questions were asked with 5 possible responses listed, one of which was to be circled: strongly agree(SA), agree(A), disagree(D), strongly disagree(SD), and don't know(DK).⁸

An examination of the questions shows that many areas of concern were examined. For example, #19 is clearly a normative question: "larger farms should receive proportionately lower subsidies than smaller farms," while #69 is positive: "agricultural land values are determined primarily by agricultural use." A method question (though positive) is #16: "Economic predictions of mathematical programming models are generally superior to those of econometric methods." Following this taxonomy, our judgment gave the classifications in the first three lines of Table 2. There are 35 normative, 23 positive, and 14 professional interest questions.

Factor analysis was used to attempt to delineate latent structures but no clear pattern emerged conforming either to the three groups in Table 2 or any other grouping of the questions.⁹ This is in marked contrast to the KPWW study which was quite successful in isolating at least 2 broad philosophical variables. However, it seemed useful to isolate, a priori, additional aggregations. Three such possible groupings are listed in the last three lines of Table 2. A

TABLE 1
QUESTIONS AND FREQUENCY DISTRIBUTION OF RESPONSES

<u>Question</u>	<u>SA</u>	<u>A</u>	<u>D</u>	<u>SD</u>	<u>DK</u>
1. Characterizing farms as small businesses, the markets they face are more concentrated than those faced by other small businesses.	7.8	42.0	29.4	10.2	10.6*
2. Marketing orders which facilitate price bargaining improve social welfare.	5.3	39.6	31.8	11.4	11.8
3. Social welfare would be improved if all marketing orders were abandoned.	6.9	26.1	34.3	17.1	15.5
4. Disaster and crop insurance programs, which are funded (partially or completely) by the government, raise social welfare as compared to a laissez-faire policy.	9.0	61.6	14.3	4.1	11.0
5. The primary justification for government intervention in agriculture is to _____.**	11.8	18.4	4.1	54.7	11.0
6. Marketing orders, which facilitate assembly, grading, and packaging, lead through standardization to a net welfare gain to society through improved operational efficiency and consumer information.	12.7	52.7	22.0	2.9	9.8
7. Agricultural economics should be primarily a social, rather than a managerial, science.	9.4	26.1	35.9	24.5	4.1
8. The representation of the real world in agricultural economics research (as indicated by the journals) by emphasizing technical elegance is not very useful for understanding agricultural economic behavior.	21.6	42.9	25.3	7.8	2.4
9. Generally, externalities associated with agricultural production do not lead to distortions which are of sufficient magnitude to warrant government intervention.	1.6	30.2	41.2	20.8	6.1
10. Time series analysis (ARIMA) is generally more accurate than econometric analysis when predicting economic variables.	2.4	20.0	31.0	10.2	36.3

TABLE 1 (continued)

<u>Question</u>	<u>SA</u>	<u>A</u>	<u>D</u>	<u>SD</u>	<u>DK</u>
11. Special public policies regarding the financing of agricultural investment are necessary because wholly private financial markets are imperfect.	4.5	33.9	38.4	11.8	11.4
12. Price supports have led to more stability in agricultural income as compared to a laissez-faire policy.	17.6	61.2	11.4	3.3	6.5
13. Current government policies, which are aimed at a particular distribution of income, are implemented at least cost.	0.0	1.6	49.8	35.1	13.5
14. Elimination of the farmer-owned reserve program would increase income variability.	5.7	59.2	12.2	12.0	20.8
15. Given current information, the futures market is not a good indicator of expected supply and demand conditions.	4.1	19.6	49.0	15.5	11.8
16. Economic predictions of mathematical programming models are generally superior to those of econometric methods.	0.8	9.4	38.0	11.8	40.0
17. Current public policy regarding tobacco production is socially preferred to a laissez-faire policy.	1.6	12.2	31.8	40.0	14.3
18. Governmental policies should not attempt to redistribute income and wealth from other sectors of the economy to factors of production in agriculture.	7.3	43.3	35.9	6.5	6.9
19. Larger farms should receive proportionately lower subsidies than small farms.	10.2	42.9	29.8	4.5	12.7
20. Price instability at the producer level is caused mainly by randomness of production rather than market power or random demand.	8.2	48.6	25.7	10.2	7.3
21. Marketing, more than production skills, increases net farm income.	9.8	41.2	32.2	4.5	12.2

TABLE 1 (continued)

<u>Question</u>	<u>SA</u>	<u>A</u>	<u>D</u>	<u>SD</u>	<u>DK</u>
22. Barriers to entry and exit in agricultural industries are sufficiently low that the markets can be characterized by what some economists have called contestable (approaching a competitive allocation of resources).	3.7	43.7	34.7	9.0	9.0
23. Research problems and results that do not have immediate or direct policy implications are of little value.	1.2	9.0	51.4	38.0	0.4
24. Government data collection and analysis leads to an increase in market efficiency.	29.0	61.6	4.9	1.2	3.3
25. Models of agricultural economic response based upon risk averse behavior are useful in positive economic analysis.	9.8	69.4	5.7	0.4	14.7
26. Acreage reduction programs are effective in reducing aggregate production.	4.9	56.7	27.8	4.1	6.5
27. Because of market failure in the provision of information, agricultural economic extension efforts are socially productive (i.e., social costs are less than social benefits) and should be funded.	22.4	58.0	9.8	2.0	7.8
28. Agricultural policy for third-world countries should stress food self-sufficiency rather than free trade.	8.6	28.2	36.3	14.7	12.2
29. Greater resources should be devoted to deriving and analyzing data obtained by experimental methods.	10.6	44.1	18.0	1.6	25.7
30. Flexible international exchange rates are superior to pegged or fixed rates.	15.9	58.8	6.1	0.8	18.4
31. Supply controls are socially preferred to price supports.	2.4	40.4	30.6	4.5	22.0
32. Market incentives do not lead to efficient conservation (use) of agricultural resources.	6.9	37.6	36.7	11.4	7.3
33. Social welfare is improved through the provision and enforcement of anti-trust laws.	15.9	67.8	9.4	1.6	5.3

TABLE 1 (continued)

<u>Question</u>	<u>SA</u>	<u>A</u>	<u>D</u>	<u>SD</u>	<u>DK</u>
34. Government-supported activities such as the Extension Service should be more fully directed towards smaller scale agriculture.	7.3	36.3	43.7	6.1	6.5
35. Changes in the prices of agricultural outputs lead input price changes.	2.0	35.9	33.1	8.2	20.8
36. Agricultural economics is primarily a social, rather than a managerial, science.	4.9	37.6	40.0	11.0	6.5
37. Mean square prediction (forecast) error is a more important diagnostic aid in evaluating econometric models than is the precision, sign, and size of the estimated coefficients.	1.6	17.6	40.8	7.3	32.7
38. Funding for demand expansion programs, such as the Food Stamp and P.L. 480 programs, should be increased.	3.3	28.2	51.8	8.6	8.2
39. Farm management issues and skills are central to agricultural economic analysis.	10.2	50.6	32.2	4.1	2.9
40. More extension resources should be devoted to the convincing of farmers that use of the futures market will improve farmers' welfare.	3.3	29.0	38.0	10.2	19.6
41. Government programs which intend to promote greater stability in price or output (such as the farmer-owned reserve or price support programs) have generally also increased average aggregate farm income.	2.9	56.3	20.8	2.0	18.0
42. The government should pursue policies aimed at equalizing the distribution of income and wealth within the agricultural sector.	1.2	21.2	53.5	20.0	4.1
43. Free trade policies should be pursued by the federal government.	19.2	66.5	9.8	0.4	4.1
44. Government expenditures on information generation, such as the Crop Reporting Board, should increase.	19.2	55.1	11.0	1.6	13.1
45. Credit rationing by private lenders has reduced farm investment from the social optimum.	1.6	15.1	49.0	10.6	23.7

TABLE 1 (continued)

	<u>Question</u>	<u>SA</u>	<u>A</u>	<u>D</u>	<u>SD</u>	<u>DK</u>
46.	In commodity models, the benefits from attempting to "endogenize" or predict government behavior exceed the costs of doing so.	2.4	30.2	26.5	3.3	37.6
47.	Farm management issues and skills should be central to agricultural economic analysis.	6.5	43.7	38.4	6.9	4.5
48.	Economic research supported by the experiment station is socially productive (i.e., social costs are less than social benefits) and should be publicly funded.	31.0	60.0	2.9	0.8	5.3
49.	Marketing orders have succeeded in stabilizing and/or raising prices such that producers are better off.	7.8	67.3	11.0	0.4	13.5
50.	The deterioration in the terms of the trade is a significant factor in the impoverishment of the third-world population.	4.9	42.0	26.9	4.5	21.6
51.	Laissez faire is preferred to government intervention in agriculture.	6.9	26.5	49.4	9.0	8.2
52.	Dynamic optimization tools are primarily useful in normative, rather than positive, economic analysis.	2.4	33.1	27.8	4.9	31.8
53.	Because information is readily available and transmitted, market arbitrage opportunities over space and time dissipate rapidly.	4.1	50.6	25.3	0.8	19.2
54.	Because of market manipulation, the futures market does not yield prices which are reflective of expected supply and demand conditions.	0.8	11.8	55.5	18.8	13.1
55.	Recent export embargoes enacted for political reasons have had little or no economic effect on the world market or the importing countries.	7.8	35.1	35.1	16.7	5.3
56.	Agricultural decision makers process information in a simple way such that adaptive or static expectations, rather than rational expectations, best describe behavior.	2.9	29.4	33.1	4.9	29.8

TABLE 1 (continued)

<u>Question</u>	<u>SA</u>	<u>A</u>	<u>D</u>	<u>SD</u>	<u>DK</u>
57. All agricultural policies should be evaluated only in terms of their ultimate effects on aggregate consumer welfare.	2.4	8.6	64.5	23.3	1.2
58. Society should not discourage farm growth.	10.2	66.5	14.3	2.4	6.5
59. Considering the trade-offs between generality and costs, most agricultural problems can be adequately studied using static, rather than more complicated, dynamic models.	1.6	26.9	52.2	5.7	13.5
60. Agricultural market prices are close to a competitive market equilibrium.	2.4	51.8	31.8	2.4	11.4
61. Greater resources should be devoted to primary as opposed to secondary data collection and analysis.	6.5	52.7	15.1	0.4	25.3
62. As opposed to income transfers or stability, the primary justification for government intervention is that society desires a "cheap food" policy.	4.1	24.5	53.1	13.5	4.9
63. A laissez-faire policy regarding milk production is socially preferred to the current policy.	9.8	40.4	31.0	8.6	10.2
64. Because information changes with time, the price generated by the futures market is a poor predictor of the future cash price.	5.3	33.1	39.6	8.2	13.9
65. The profession does not rank highly research which attempts to test or "confirm" economic theories of behavior or models.	3.7	22.9	51.0	6.1	16.3
66. Resource adjustments in agriculture are "sticky" compared to other sectors of the economy due to asset fixity.	9.4	55.1	27.3	2.9	5.3
67. Voluntary organizations, such as cooperatives, raise net farm incomes.	4.5	57.6	16.3	0.8	20.8
68. Current public policy regarding grain and cotton production is socially preferred to a laissez-faire policy.	2.4	40.0	36.7	5.7	15.1
69. Agricultural land values are determined primarily by agricultural use.	3.7	31.0	45.7	15.1	4.5

TABLE 1 (continued)

<u>Question</u>	<u>SA</u>	<u>A</u>	<u>D</u>	<u>SD</u>	<u>DK</u>
70. If public-sponsored mechanization research displaces labor, government adjustment assistance to those displaced should be provided.	5.7	50.6	32.7	3.3	7.8
71. Fixed rule policies, such as a fixed formula price support, are preferred to policies where the discretion resides with the Secretary of Agriculture.	3.3	24.9	51.4	8.2	12.2
72. Commodity market promotion significantly raises demand such that net farm income from commodity sales increases.	0.8	34.7	35.9	9.0	19.6

*These numbers are the percentage of respondents who answered in each of the categories. The raw frequencies can be obtained by multiplying the proportions times 245. For example, .078 x 245 shows that 19 persons answered question 1 in the "strongly agree" category. The percentages may not add to 100 due to rounding error.

**Question 5 asks the respondent to check one of five specific answers. The following correspondence is required: (1) SA-market failure, (2) A-income transfer, (3) D-that society values the family farm, (4) SD-to reduce instability, and (5) DK-don't know.

TABLE 2
 CLASSIFICATIONS OF QUESTIONS INTO NORMATIVE, POSITIVE,
 AND PROFESSIONAL INTEREST

<u>Category</u>	<u>Questions Falling into Category</u>
Normative	2, 3, 4, 5, 6, 9, 11, 17, 18, 19, 23, 24, 27, 28, 29, 30, 31, 32, 33, 34, 38, 40, 42, 43, 44, 45, 48, 51, 57, 58, 61, 63, 68, 70, 71.
Positive	1, 10, 12, 13, 14, 15, 20, 22, 26, 35, 41, 49, 50, 53, 54, 55, 60, 62, 64, 66, 67, 69, 72.
Professional Interest	7, 8, 16, 21, 25, 36, 37, 39, 46, 47, 52, 56, 59, 65.
Pro-Intervention (PI)	2, <u>3^a</u> , 4, 6, 11, 17, 27, <u>30</u> , 33, <u>43</u> , <u>51</u> , <u>63</u> , 68, 70.
Market Characteristics	1, <u>9</u> , 11, 15, <u>22</u> , 27, 32, <u>53</u> , 54, <u>60</u> , 66.
Pro Income Redistribution (ID)	<u>18</u> , 19, 34, 38, 42, <u>58</u> , 70.

^aThe underlining implies that the sense of SA, A, D, and SD must be reversed in order to conform to the label and aggregation.

pro-intervention variable is labeled PI. Market characteristics (such as concentration) which might suggest intervention are labeled MC. Finally, ID is an income distribution variable. Generally, it reflects a willingness to redistribute income to agriculture and to the economically disadvantaged. Since factor analysis gives no basis for these or any other groups, we will continue probing in order to understand the relationship, if any, between the questions listed in Table 1, the groupings in Table 2 and various socioeconomic variables indicated in Appendix A.

III. PATTERNS OF CONSENSUS IN THE SAMPLE AT LARGE

An examination of Table 1 shows that questions 4, 12, 24, 25, 33, 43, 48, 49, 57, and 58 each have entries with at least 60 percent in a single response category. On this basis, crop insurance, price supports, government data collection, anti-trust, free trade, experiment station research, and marketing orders are seen as beneficial by a good share of the profession. A large number also feel that risk response models are useful. Further, 88 percent of the respondents did not feel that agricultural policy should be evaluated only in terms of aggregate consumer welfare. In general, there appears to be support for the hypothesis that government intervention is desirable. Indeed, most of these questions are normative propositions about the desirability of current interventionist policies (see Table 2, normative and PI).

Questions with the greatest diversity of response include 2, 18, 22, 32, 35, 47, 52, 56, and 68. There seems to be no clear pattern of response as with the high consensus questions discussed above.

The heuristic measures above suggest much consensus on some questions and diversity on others. A common quantitative measure of consensus is based upon relative entropy

$$(1) C = 1 - \left[\frac{\sum_i p_i \ln p_i}{\ln(1/N)} \right]$$

where p_i is relative frequency or proportion in the i th response category, \ln is the natural logarithm, and N is the number of categories. A value of C near 1 represents consensus as entropy $(\sum_i p_i \ln p_i)$ approaches its maximum $-\ln(1/N)$.

Values of C were calculated for both the five category case listed in Table 1 and for the case where A and SA are aggregated and D and SD are aggregated with DK's omitted. Due to space limitations these will not be presented. Suffice it to say in the five category case, C was lowest for question 3 ($C = .07$) and largest for question 25 ($C = .41$). In the two category case, C was smallest for questions 2, 18, 32, 35, 46, 47, 53, 56, and 68 where C was essentially zero. It was highest for question 48 ($C = .76$). These results indicate very little