

## Consensus and Dissension Among Economists: An Empirical Inquiry

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Among its practitioners, there is a widespread feeling that modern economics has established itself as a science enjoying a high degree of consensus. Jürg Niehans for instance, states that "... there is, at any given time, a large amount of consensus. In fact, the economic doctrines taught in Nairobi, São Paulo, New Delhi, Tel Aviv, Geneva, Harvard, and Bowling Green State... have a large common core" (1981, p. 170). Other signs, however, indicate that there is much less unanimity in *practical economic policy*. The *Herald Tribune* for example, writes "Almost nobody has a good word for economists any more, including economists," and goes on to tell the story of President Truman, who after receiving so much advice in the form of "on the one hand... but on the other hand" expressed the wish for a "one-handed economist" (International Edition, Jan. 25, 1982).

What economists think, and whether there is consensus among economists, would not be a matter of concern if *beliefs* do not have a very strong effect on economic policy decisions and on the state of the economy. In an analysis of inflation, Martin Feldstein, for

example, states: "It was not events but *ideas* that propelled the increasing rate of inflation" (1982, p. 63), and "the upward drift of the inflation rate was the result of a fundamental set of beliefs about the economy and about macroeconomic policy that was shared by economists and policy officials during the past two decades" (pp. 63-64).

We seek to determine the degree to which certain beliefs are widely shared among economists in a given country and across different countries. The present study is based on extensive surveys made in the United States and in four European countries: France, the Federal Republic of Germany, Austria, and Switzerland.<sup>1</sup>

### I. The Survey

A stratified random sample of 2,072 economists with respect to country, position, and occupation was asked to respond to 27 propositions about economic problems. They could "generally agree," "agree with provisions," or "generally disagree," or they could, of course, refuse to answer any specific assertion or just not send back the questionnaire. The economists were (randomly) chosen from a list of the members of professional associations of the respective countries.<sup>2</sup> Complete

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<sup>1</sup>The country-specific results are published for the United States by James Kearl et al. (1979), for France by Bernard Bobe and Alain Etchegoyen (1981), for the Federal Republic of Germany by Schneider, Pommerehne, and Frey (1983), for Austria by Pommerehne, Schneider, and Frey (1983), and for Switzerland by Frey et al. (1982). (A survey of the opinions of British Members of Parliament based on a more restricted set of questions has been undertaken by Samuel Brittan, 1973.)

<sup>2</sup>In the United States, the American Economic Association; in France, the Association Nationale des Docteurs en Sciences Economiques, the Association Française de Science Economique, and the Centre Na-

replies were returned by 936, and were used for our study. The return rate of 45.2 percent is reasonably good for a study of this kind, particularly as the anonymity of the survey prevented the use of a reminder. The propositions and response categories are derived from the survey for the United States, the results of which are used in our study (as well as those for France).<sup>3</sup> The surveys for Austria, Germany (FRG), and Switzerland were conducted by us.

Section II analyzes the extent to which there exists a common core of economic doctrines among the whole group of economists, and in which areas there is disagreement. Section III considers the question of whether the views of economists differ significantly among the various countries. It turns out that the American, German, and Swiss economists tend to support the market economy and competition, and therewith typically neoclassical propositions, while the French and Austrian economists are more inclined to support government interventions into the economy.

## II. Where is the Consensus among Economists?

In order to establish how much consensus there is among the 936 economists whose replies were usable, two criteria were employed. The first criterion is the standardized relative entropy  $\rho$ ,<sup>4</sup> which condenses the information contained in the four response categories into one measure. This information-theoretic measure given in Table 1 for

the total sample equals zero if there is perfect consensus, and equals one if there is no consensus at all. A low  $\rho$  means that it would be redundant to ask many economists (as they have similar views), while a high  $\rho$  means that the economists' views are entropic, that is, their answers have little structure. The relative entropy measure is nonlinear, that is, a value of, for example, 0.5 should not be interpreted to lie in the "middle" between perfect consensus and complete dissension.

The second criterion used compares the extreme answers along the support-rejection dimension, that is, those "generally agreeing" and those "generally disagreeing" with a proposition. The propositions and answers for all countries combined are presented in Table 1. Each of the 27 propositions shows the percentage distribution of the responses given by the economists who answered the survey.

Most of the propositions with the highest degree of consensus among the complete set of economists pertain to one issue: the price system is considered to be an effective and desirable social choice mechanism. Accordingly, interventions by the government in its functioning are generally rejected. Wage-price controls (Proposition 14), tariffs and import quotas (1), rent ceilings (15), and an employment guarantee (2) are viewed as harming the economy, while flexible exchange rates (5) are accepted as desirable. There is also agreement that it is not the big oil companies that have driven up the oil price (23). Among the propositions forming the common core among the economists, there is only one which does not fit this picture. Economists do not think that interfering with the price system through consumer protection reduces efficiency (26). Antitrust policy (11) is, of course, of quite a different nature. This type of government intervention is designed to protect the working of the competitive price system. Besides the support of the price system, it is possible to discern another (but much less visible) dimension of economists' views: that the budget should be balanced over the business cycle and not yearly (22) can be interpreted as supporting a Keynesian proposition. A

tional de la Recherche Scientifique; in Germany and Austria, the Gesellschaft fuer Wirtschafts- und Sozialwissenschaften, Verein fuer Socialpolitik, in Austria, furthermore, the Nationaloekonomische Gesellschaft; in Switzerland, the Schweizerische Gesellschaft fuer Statistik und Volkswirtschaft.

<sup>3</sup>We are grateful to the authors of the American and French studies for making the results of their surveys available to us.

<sup>4</sup>We define  $\rho$  as the actual entropy divided by the maximum possible entropy over the four response categories (including "no answer"). Entropy is the sum of the probability  $p_i$  of a particular response category  $i$  multiplied with the natural logarithm of the probability  $p_i$ , i.e.,  $\sum p_i \cdot \ln(p_i)$ .

TABLE 1—PROPOSITIONS AND RESPONSES, TOTAL SAMPLE OF NATIONS

| Propositions   | Responses<br>(percent) | Relative<br>Entropy<br>( $\rho$ ) |
|--|------------------------|-----------------------------------|
| 1. Tariffs and import quotas reduce general economic welfare   | A 57.0                 | 0.72                              |
|  | B 30.8                 |                                   |
|  | C 10.3                 |                                   |
| 2. The government should be an employer of last resort and initiate a guaranteed job program                           | A 18.8                 | 0.80                              |
|  | B 29.9                 |                                   |
|  | C 48.6                 |                                   |
| 3. The money supply is a more important target than interest rates for monetary policy                                 | A 45.5                 | 0.85                              |
|  | B 29.2                 |                                   |
|  | C 21.3                 |                                   |
| 4. Cash payments are superior to transfers-in-kind   | A 48.3                 | 0.87                              |
|  | B 27.0                 |                                   |
|  | C 17.4                 |                                   |
| 5. Flexible exchange rates offer an effective international monetary arrangement                                       | A 48.0                 | 0.78                              |
|  | B 36.0                 |                                   |
|  | C 13.5                 |                                   |
| 6. The "Corporate State" as depicted by Galbraith accurately describes the context and structure of advanced economies | A 28.7                 | 0.84                              |
|  | B 42.1                 |                                   |
|  | C 26.8                 |                                   |
| 7. A minimum wage increases unemployment among young and unskilled workers   | A 41.3                 | 0.83                              |
|  | B 25.5                 |                                   |
|  | C 31.5                 |                                   |
| 8. The government should index the income tax rate structure for inflation   | A 33.0                 | 0.84                              |
|  | B 25.2                 |                                   |
|  | C 39.6                 |                                   |
| 9. Fiscal policy has a significant stimulative impact on a less than fully employed economy                            | A 46.8                 | 0.78                              |
|  | B 39.6                 |                                   |
|  | C 9.2                  |                                   |
| 10. The distribution of income in the developed industrial nations should be more equal                                | A 33.8                 | 0.86                              |
|  | B 31.6                 |                                   |
|  | C 31.7                 |                                   |
| 11. Antitrust laws should be used vigorously to reduce monopoly power from its current level                           | A 48.9                 | 0.75                              |
|  | B 37.3                 |                                   |
|  | C 12.5                 |                                   |
| 12. Inflation is primarily a monetary phenomenon   | A 22.8                 | 0.83                              |
|  | B 28.8                 |                                   |
|  | C 45.9                 |                                   |
| 13. The government should restructure the welfare system along lines of a "negative income tax"                        | A 28.0                 | 0.89                              |
|  | B 28.9                 |                                   |
|  | C 38.1                 |                                   |
| 14. Wage-price controls should be used to control inflation  | A 9.8                  | 0.62                              |
|  | B 20.7                 |                                   |
|  | C 68.5                 |                                   |
| 15. A ceiling on rents reduces the quantity and quality of housing available   | A 56.1                 | 0.74                              |
|  | B 27.2                 |                                   |
|  | C 15.0                 |                                   |
| 16. The central bank should be instructed to increase the money supply at a fixed rate                                 | A 15.2                 | 0.79                              |
|  | B 28.7                 |                                   |
|  | C 52.6                 |                                   |
| 17. Effluent taxes represent a better approach to pollution control than imposition of pollution ceilings              | A 32.0                 | 0.87                              |
|  | B 29.3                 |                                   |
|  | C 35.3                 |                                   |
| 18. The government should issue an inflation indexed security  | A 23.3                 | 0.83                              |
|  | B 24.1                 |                                   |
|  | C 48.9                 |                                   |
| 19. The level of government spending should be reduced (disregarding expenditures for stabilization).                  | A 39.4                 | 0.85                              |
|  | B 27.8                 |                                   |
|  | C 30.3                 |                                   |

TABLE 1—CONTINUED

| Propositions  | Responses<br>(percent) | Relative<br>Entropy<br>( $\rho$ ) |
|---|------------------------|-----------------------------------|
| 20. The central bank has the capacity to achieve a constant rate of growth of the money supply if it is so desired          | A 23.8                 | 0.84                              |
|   | B 45.1                 |                                   |
|   | C 27.8                 |                                   |
| 21. Reducing the influence of regulatory authorities (e.g., in air traffic) would improve the efficiency of the economy     | A 29.9                 | 0.87                              |
|   | B 33.9                 |                                   |
|   | C 33.0                 |                                   |
| 22. The federal budget should be balanced over the business cycle rather than yearly  | A 54.5                 | 0.77                              |
|   | B 27.5                 |                                   |
|   | C 15.5                 |                                   |
| 23. The fundamental cause of the rise in oil prices of the past five years is the monopoly power of the large oil companies | A 9.3                  | 0.64                              |
|   | B 21.1                 |                                   |
|   | C 67.8                 |                                   |
| 24. The redistribution of income in the developed industrial nations is a legitimate task for the government                | A 46.9                 | 0.80                              |
|   | B 32.4                 |                                   |
|   | C 19.1                 |                                   |
| 25. In the short run, unemployment can be reduced by increasing the rate of inflation                                       | A 28.6                 | 0.86                              |
|   | B 34.0                 |                                   |
|   | C 34.8                 |                                   |
| 26. "Consumer protection" laws generally reduce economic efficiency   | A 13.6                 | 0.70                              |
|   | B 23.6                 |                                   |
|   | C 61.4                 |                                   |
| 27. The economic power of labor unions should be significantly curtailed  | A 22.0                 | 0.82                              |
|   | B 31.0                 |                                   |
|   | C 44.8                 |                                   |

Notes:  $N = 936$ . A = Generally Agree; B = Agree with Provisions; C = Generally Disagree. The responses do not sum to 100 percent as the "No Answer" category is not listed.

majority of economists thinks, however, that the supply of money (rather than interest rates) should be controlled (3) which many would regard as a monetarist proposition. Nevertheless, there is much less consensus (or even marked dissension) on other monetarist propositions such as Propositions 12, 16, or 20.

The propositions about which there is most dissension among the 936 economists, according to the entropy measure, may be arranged along four dimensions. As may be expected, there is a considerable spectrum of opinions about propositions dealing with issues which are in the center of recent political debate: regulation (21), Phillips curve (25), government spending (19). The same applies to "classical" areas of disagreement between the political "right" and "left": distribution of income (10), and corporate state (6). Surprisingly, there is relatively little consensus about basic neoclassical propositions

found in most textbooks: cash vs. in-kind transfers (4), effluent taxes (17), and negative income tax (13). As already mentioned, monetarism (in particular, Propositions 3 and 20) is another area of dispute among economists.

Are economists more likely to agree on positive ("can") questions than on normative ("should") questions? Are they more likely to agree on microeconomic than on macroeconomic propositions? To answer these questions, James Kearl et al. (1979, p. 33) classified the propositions in the following way (our proposition numbers follow in parentheses):

Micro "Can": Tariffs (1), cash vs. in-kind transfers (4), flexible exchange rate (5), minimum wage (7), rent ceiling (15), effluent taxes (17);

Micro "Should": Antitrust laws (11), regulation and efficiency (21), consumer protection (26), union power (27);

Macro "Can": Money vs. interest-rate target (3), fiscal policy stimulus (9), inflation as monetary phenomenon (12), money rule is achievable (20), Phillips curve (25);

Macro "Should": Employer of last resort (2), indexed taxes (8), negative income tax (13), pursue money rule (16), indexed securities (18), budget balance (22).

On the basis of a  $2 \times 2$  analysis of variance of the relative entropy measures, Kearn et al. found for the American economists that there is a significantly higher degree of consensus on positive than on normative questions, and on micro than on macro propositions. These questions are now addressed on the views of the more than 900 economists of the countries included in our study. The average value of the relative entropy  $\rho$  is 0.80 for micro and 0.83 for macro questions, and 0.82 for positive and 0.81 for normative propositions, respectively. Undertaking a  $2 \times 2$  analysis of variance we find for these hypotheses no statistically significant difference in the degree of consensus among the propositions listed above ( $F$ -values of 2.61 and 0.74, each with 1 and 19 degrees of freedom). The result for the United States does not apply to our international study, neither does it apply to any of the European countries on its own.

### III. National Particularities

The preceding section has shown that whereas economists in all countries surveyed, on the whole, tend to support the price system as an effective social decision-making mechanism, there is disagreement concerning other topics, even those involving positive and microeconomic aspects of economics. One cause for this disagreement may be that economists living in the various countries have experienced different historical developments and the traditions are based on different cultural backgrounds.<sup>5</sup> Therefore, in Table 2, the propositions and answers for each individual country are presented.

A striking example of disagreement is provided by Proposition 13 which suggests that

a "negative income tax" should be introduced. While 56 percent of the American economists "generally agree" with this proposition, it is supported by less than one-fifth of the respondents in the European countries. The main reason for this large difference may be attributed to the fact that the term "negative income tax" is seldomly used in Europe and that the problems of the welfare system and the attempts to reform it are seen in a quite different light. The distinction, however, does not always lie between American and European economists. Of the French economists, for example, 27 percent "generally disagree" with the proposition that tariffs reduce economic welfare (1), a view which is shared by only between 3 and 13 percent of the economists of the four other countries. The French economists provide several other examples of a position quite different from those of their colleagues in the other countries (for example, Propositions 16, 21, 25).

The national differences in the responses to the propositions are analyzed with the likelihood-ratio test ( $\chi^2$ , also shown in Table 2) over the frequencies of the four response categories between the countries for each of the 27 propositions. This allows us to answer the question of whether the set of economists in the five countries who answered the surveys may be considered as belonging to one common sample. The high values of the  $\chi^2$ -statistics for each proposition suggest that the opinions of economists about economic theory and policy do differ between the countries surveyed. This does not, of course, mean that there may not exist groups of countries within which there is a high similarity of opinions. It is interesting to inquire what these national particularities may be, and between which groups of countries they exist. For this purpose, propositions are selected for which the answers of a group of countries deviate most strongly from those of another group of countries (or of one single country), according to the  $\chi^2$  test.<sup>6</sup> The analysis will

<sup>5</sup>This also includes contrasting ways of expressing the same topic, leading to different responses to the same sort of proposition.

<sup>6</sup>An alternative approach is to undertake probit analysis taking other influences besides nationality explicitly into account. This has been done in the country studies for Germany, Austria, and Switzerland.

TABLE 2—RESPONSES TO THE PROPOSITIONS, INDIVIDUAL COUNTRIES

| Propositions |   | United States<br>(N = 211) | Austria<br>(N = 91) | France<br>(N = 162) | Germany<br>(N = 273) | Switzerland<br>(N = 199) | $\chi^2$ |
|--------------|---|----------------------------|---------------------|---------------------|----------------------|--------------------------|----------|
| 1            | A | 79.2                       | 43.9                | 26.5                | 69.6                 | 47.2                     | 160.8    |
|              | B | 15.6                       | 41.8                | 43.9                | 24.2                 | 40.2                     |          |
|              | C | 2.8                        | 13.2                | 26.5                | 5.5                  | 10.1                     |          |
| 2            | A | 25.1                       | 30.8                | 27.2                | 8.1                  | 14.6                     | 77.3     |
|              | B | 26.1                       | 35.1                | 27.8                | 27.1                 | 37.2                     |          |
|              | C | 45.5                       | 33.0                | 38.2                | 63.7                 | 47.2                     |          |
| 3            | A | 45.0                       | 27.5                | 42.6                | 41.0                 | 62.9                     | 62.2     |
|              | B | 21.8                       | 39.5                | 26.5                | 35.2                 | 26.1                     |          |
|              | C | 27.5                       | 29.7                | 23.5                | 20.9                 | 9.5                      |          |
| 4            | A | 65.4                       | 42.8                | 46.9                | 46.2                 | 36.6                     | 56.7     |
|              | B | 23.2                       | 35.2                | 23.5                | 26.0                 | 31.7                     |          |
|              | C | 7.6                        | 18.7                | 19.1                | 20.5                 | 21.6                     |          |
| 5            | A | 60.3                       | 34.1                | 11.1                | 62.0                 | 52.3                     | 66.5     |
|              | B | 33.6                       | 49.4                | 38.3                | 30.0                 | 38.7                     |          |
|              | C | 4.7                        | 16.5                | 44.4                | 5.1                  | 7.5                      |          |
| 6            | A | 17.1                       | 36.3                | 32.1                | 33.7                 | 28.1                     | 149.5    |
|              | B | 31.7                       | 38.4                | 43.8                | 42.5                 | 52.8                     |          |
|              | C | 45.0                       | 24.2                | 22.2                | 23.1                 | 17.6                     |          |
| 7            | A | 66.4                       | 29.7                | 16.7                | 44.3                 | 35.6                     | 73.2     |
|              | B | 21.3                       | 34.1                | 21.0                | 24.9                 | 30.7                     |          |
|              | C | 10.0                       | 35.1                | 59.8                | 29.7                 | 32.2                     |          |
| 8            | A | 38.9                       | 24.2                | 50.0                | 23.1                 | 30.7                     | 68.4     |
|              | B | 25.6                       | 26.4                | 29.0                | 21.2                 | 26.6                     |          |
|              | C | 30.8                       | 47.2                | 19.1                | 53.9                 | 42.2                     |          |
| 9            | A | 63.5                       | 51.6                | 54.3                | 31.1                 | 42.2                     | 46.7     |
|              | B | 26.5                       | 36.3                | 37.7                | 51.3                 | 40.7                     |          |
|              | C | 7.6                        | 6.6                 | 4.9                 | 11.7                 | 12.1                     |          |
| 10           | A | 38.4                       | 46.1                | 46.3                | 24.9                 | 25.1                     | 35.2     |
|              | B | 29.9                       | 30.8                | 30.9                | 30.8                 | 35.7                     |          |
|              | C | 27.5                       | 19.8                | 21.6                | 41.7                 | 36.2                     |          |
| 11           | A | 47.8                       | 49.4                | 55.6                | 54.9                 | 36.7                     | 63.7     |
|              | B | 35.1                       | 36.3                | 37.0                | 34.1                 | 44.7                     |          |
|              | C | 14.7                       | 11.0                | 6.2                 | 10.3                 | 18.6                     |          |
| 12           | A | 26.1                       | 13.2                | 10.5                | 24.5                 | 31.2                     | 171.3    |
|              | B | 28.9                       | 27.5                | 18.5                | 30.8                 | 35.1                     |          |
|              | C | 41.2                       | 56.0                | 67.9                | 42.9                 | 32.7                     |          |
| 13           | A | 56.4                       | 22.0                | 17.9                | 20.5                 | 19.1                     | 172.1    |
|              | B | 33.2                       | 27.5                | 33.3                | 26.4                 | 24.6                     |          |
|              | C | 7.6                        | 42.8                | 43.2                | 45.8                 | 53.8                     |          |
| 14           | A | 5.7                        | 17.6                | 25.3                | 2.2                  | 8.5                      | 227.2    |
|              | B | 21.8                       | 29.7                | 29.0                | 5.1                  | 30.2                     |          |
|              | C | 71.1                       | 51.6                | 43.2                | 92.3                 | 61.3                     |          |
| 15           | A | 76.8                       | 45.0                | 21.0                | 71.8                 | 46.2                     | 90.3     |
|              | B | 19.4                       | 44.0                | 30.9                | 21.2                 | 33.2                     |          |
|              | C | 1.9                        | 11.0                | 43.8                | 5.9                  | 19.6                     |          |
| 16           | A | 13.3                       | 5.5                 | 32.7                | 9.5                  | 15.1                     | 70.2     |
|              | B | 24.2                       | 24.2                | 32.7                | 26.7                 | 35.2                     |          |
|              | C | 58.3                       | 68.1                | 28.4                | 62.7                 | 44.7                     |          |
| 17           | A | 47.9                       | 20.9                | 27.2                | 34.4                 | 21.1                     | 41.1     |
|              | B | 29.4                       | 22.0                | 27.2                | 29.7                 | 34.2                     |          |
|              | C | 18.0                       | 54.9                | 40.7                | 33.0                 | 42.7                     |          |
| 18           | A | 30.8                       | 20.9                | 33.3                | 15.4                 | 19.1                     | 45.6     |
|              | B | 23.2                       | 24.2                | 25.3                | 22.7                 | 26.1                     |          |
|              | C | 39.4                       | 52.7                | 37.7                | 60.1                 | 50.8                     |          |
| 19           | A | 32.2                       | 42.8                | 32.1                | 48.8                 | 38.7                     | 69.0     |
|              | B | 21.8                       | 25.3                | 26.5                | 30.4                 | 32.7                     |          |
|              | C | 40.8                       | 30.8                | 37.1                | 20.1                 | 27.1                     |          |
| 20           | A | 33.2                       | 14.3                | 14.8                | 18.7                 | 32.7                     | 99.4     |
|              | B | 38.9                       | 40.6                | 41.4                | 49.8                 | 50.2                     |          |
|              | C | 22.7                       | 40.7                | 40.1                | 30.0                 | 14.1                     |          |

(Continued)

TABLE 2—CONTINUED

| Propositions |   | United States<br>( <i>N</i> = 211) | Austria<br>( <i>N</i> = 91) | France<br>( <i>N</i> = 162) | Germany<br>( <i>N</i> = 273) | Switzerland<br>( <i>N</i> = 199) | $\chi^2$ |
|--------------|---|------------------------------------|-----------------------------|-----------------------------|------------------------------|----------------------------------|----------|
| 21           | A | 45.0                               | 22.0                        | 15.4                        | 30.8                         | 27.6                             | 48.2     |
|              | B | 29.9                               | 34.1                        | 21.6                        | 44.3                         | 34.2                             |          |
|              | C | 20.9                               | 42.8                        | 56.2                        | 23.1                         | 36.2                             |          |
| 22           | A | 50.7                               | 70.3                        | 44.4                        | 50.3                         | 65.4                             | 46.5     |
|              | B | 28.5                               | 18.7                        | 30.2                        | 28.9                         | 26.1                             |          |
|              | C | 16.1                               | 8.8                         | 19.8                        | 20.1                         | 8.0                              |          |
| 23           | A | 10.4                               | 16.5                        | 8.6                         | 5.5                          | 10.1                             | 37.6     |
|              | B | 13.3                               | 28.6                        | 15.4                        | 20.5                         | 31.7                             |          |
|              | C | 71.6                               | 53.8                        | 73.5                        | 73.3                         | 58.2                             |          |
| 24           | A | 50.2                               | 58.2                        | 56.8                        | 40.2                         | 39.2                             | 31.4     |
|              | B | 28.0                               | 29.7                        | 30.9                        | 38.5                         | 31.2                             |          |
|              | C | 18.5                               | 11.0                        | 11.1                        | 20.9                         | 27.6                             |          |
| 25           | A | 29.4                               | 36.3                        | 19.1                        | 27.8                         | 33.2                             | 62.8     |
|              | B | 31.3                               | 36.2                        | 34.0                        | 33.0                         | 37.2                             |          |
|              | C | 34.1                               | 25.3                        | 42.6                        | 38.8                         | 28.1                             |          |
| 26           | A | 23.2                               | 6.6                         | 4.9                         | 10.3                         | 18.1                             | 44.8     |
|              | B | 27.0                               | 22.0                        | 16.7                        | 24.2                         | 25.6                             |          |
|              | C | 46.0                               | 70.3                        | 77.2                        | 65.1                         | 55.8                             |          |
| 27           | A | 30.8                               | 17.6                        | 19.1                        | 20.9                         | 18.6                             | 42.7     |
|              | B | 37.0                               | 28.6                        | 22.2                        | 34.8                         | 28.1                             |          |
|              | C | 28.9                               | 52.7                        | 54.4                        | 43.6                         | 51.3                             |          |

Notes: See Table 1; Germany (FRG).

be confined to one issue/dimension of the propositions, namely, the attitude toward the market economy, competition, and government interventions.

In the United States, (mainstream) economists are commonly considered to be strong supporters of the price system and of competition. After World War II, (West) German economists followed suit (see Kurt Rothschild, 1964). In Switzerland, academic economists have been strongly influenced by both postwar American and German economists, and can therefore be counted as belonging to the same group. Accordingly, in all three countries, a tendency to support the market and competition, and to resist government interventions (except in order to maintain competition by antitrust laws) is to be expected.

The opposite is hypothesized for the views of Austrian and French economists. Austria has a long record of government interventions in economic affairs. The Keynesian doctrine is still applied in practical economic

policy and finds wide support in the writings of the Austrian economists.<sup>7</sup> France, too, has a long and pronounced record of government involvement into the economy. Economists in Austria and France are thus expected to be rather sceptical about the virtues of the price system and competition, and to tend to support government interventions.

The hypothesis of markedly different opinions between American, German, and Swiss economists on one side, and Austrian and French economists on the other, regarding the market, competition, and government interventions (Propositions 1, 2, 5, 7, 14, 15, 21, 24, 26), tend to be supported by the information contained in Table 3. According to the  $\chi^2$ -statistics in this table, there is a

<sup>7</sup>We leave it to the reader to compare the "Austrians" as referred to in this paper to the "Austrians" spoken of in a current movement in economic theory.

TABLE 3—LIKELIHOOD-RATIO TEST ON PROPOSITIONS CONCERNING THE MARKET ECONOMY, COMPETITION, AND GOVERNMENT INTERVENTIONS BETWEEN ECONOMISTS OF TWO COUNTRY GROUPS\*

| Propositions                                       | $\chi^2$ |
|--|----------|
| 1. Tariffs reduce economic welfare                 | 95.1     |
| 2. Government as employer of last resort           | 37.1     |
| 5. Flexible exchange rates are effective           | 173.9    |
| 7. Minimum wage increases unemployment             | 76.7     |
| 14. Wage-price controls to fight against inflation | 91.2     |
| 15. Rent ceiling hurts housing                     | 119.3    |
| 21. Reduce the influence of regulatory authorities | 60.9     |
| 24. Government should redistribute income          | 33.8     |
| 26. Consumer protection laws decrease efficiency   | 20.4     |

Note: Proposition text is abbreviated. For all 9 propositions, the  $p$ -value is smaller than 0.01, that is, the results for the two groups of countries differ significantly at the 99 percent level on a one-tailed-test.

\*First Group: United States, Federal Republic of Germany, and Switzerland; Second Group: Austria and France.

statistically significant difference between the opinions of the economists of these two groups of countries. Table 2 allows us to undertake a more detailed interpretation of this result.

Between 46 and 64 percent of the American, Swiss, and German as against 33 percent of Austrian and 38 percent of French economists "generally disagree" that "the government should be an employer of last resort" (2). Over 52 percent of U.S., German, and Swiss economists are in favor of flexible exchange rates (5), but only 34 percent of Austrian and 11 percent of French economists are so. Between 70 and 80 percent of the American and German economists generally agree that tariffs reduce economic welfare (Proposition 1); this opinion is shared by only between 27 and 47 percent of economists in the other three countries. The neoclassical "textbook" proposition that "minimum wage increases unemployment among young and unskilled workers" (7) is "generally agreed" to by between 36 and 66 percent of the economists in the United States, Germany, and Switzerland, but by only 30 and 17 percent in Austria and France, respectively.

The difference between the "pro-market" and the "pro-government" groups of countries is again conspicuous when it comes to wage-price controls (14). They are generally supported by less than 9 percent of American, German or Swiss economists, but by 18 and 25 percent in Austria and France, respectively. The neoclassical textbook proposition that rent ceilings reduce the stock of housing (15) is accepted by roughly 3 out of 4 American and German economists, but only by 45 percent Austrian and 21 percent French economists (Swiss economists here rather side with the Austrian/French group). The same applies for effluent charges (17) which are rejected by only one-fifth of American and one-third of German economists, but by 41 percent of the French and by more than one-half of the Austrian economists. Between 28 and 45 percent of American, German, and Swiss economists "generally agree" that regulations should be reduced (21); among Austrian or French economists this opinion is held by only 22 and 15 percent, respectively. Government intervention in the form of income redistribution (24) is resisted by 19 to 28 percent of economists in the first group (United States, FRG, Switzerland), compared to only 11 percent in the second group (Austria, France). Finally, less than two-thirds of the economists in Germany and considerably less than one-half in the United States "generally disagree" with statement (26) that "consumer protection laws reduce economic efficiency" whereas the degree of resistance is 70 percent in the case of Austria and 77 percent in the case of France. Overall, the discussion suggests that the American, German, and Swiss economists are clearly more in support of the price system, competition and therewith neoclassical economics, and that the Austrian and French economists are less convinced of the price system and therefore have a higher tendency to agree with interventions of the government into the economy.

#### IV. Concluding Remarks

The answers given to the 27 propositions by the over 900 economists in five countries



exhibit the highest degree of consensus in one central aspect; namely, that the price system or market is taken to be an effective and desirable social choice mechanism. The propositions about which there is most disagreement were (a) those in which there is an abnormally high frequency of "no answer" responses, which may be attributed to differences in economic policy traditions and unfamiliarity with the terms used; (b) outspokenly normative propositions about income distribution and government spending; and (c) propositions on at the present hotly debated issues such as monetarism or supply-side economics. In general, it could not be confirmed that positive and micro-propositions find a higher degree of consensus than normative and macro-propositions.

The analysis further shows that a major cause for dissension are the differences in views between the economists in the five countries surveyed, attributable to the differences in culture and history as well as to the current economic and political conditions. Economists have had varying experiences with respect to the economic policies practiced in their countries, and therefore have different points of reference. The American, German, and Swiss economists tend to support more strongly the market and competition than their Austrian and French colleagues, who rather tend to view government interventions into the economy more favorably.

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