



Do American and European Industrial Organization Economists Differ?

KARL AIGINGER

Austrian Institute of Economic Research, Vienna, Austria

MARK McCABE

School of Economics, Georgia Institute of Technology, Atlanta, Georgia, U.S.A.

DENNIS C. MUELLER*

Department of Economics, University of Vienna, Austria

CHRISTOPH WEISS

Department of Food Economics, University of Kiel, Germany

Abstract. This paper compares results from two surveys among American and European industrial organisation (IO) economists on various IO and broader economic issues. Although differences between the two groups are generally rather small, some systematic differences seem to exist. These differences are more pronounced when judgments about the efficacy of government policies and the workings of the market are concerned than when judgments about methodology and the present and future state of the IO field are concerned. American IO economists tend to exhibit more confidence in the market's capability to allocate resources than their European counterparts.

Key words: Europe and U.S.A., industrial organisation economists, survey.

JEL Classifications: L0, D0.

I. Introduction

One of the differences between Americans and Europeans that is most noticeable – at least to an economist – concerns attitudes toward government and government intervention in market processes. As a broad generalization, Europeans are more likely to favor state ownership of enterprise, subsidies for enterprise, government regulations of competition including price ceilings and floors, vertical restrictions on trade and even cartel agreements as ways for solving “market failures” and improving social welfare. These differences are evident in both the rhetoric and ideologies of Europeans and European politics, and in the policies in place. For example, rent controls have never been common in the United States and today have almost completely disappeared, while they are alive and well across the capitals of

* Corresponding author: Dennis C. Mueller, Department of Economics, BWZ, University of Vienna, Brünnerstr. 72, A-1210 Vienna. E-mail: dennis.mueller@univie.ac.at

Europe. The government sectors in European countries have been growing steadily over the last 40 years, and account today for between 50 and 70 percent of GDP in all EU countries. In contrast, the government sector in the United States has *declined* in recent years, and accounts today for only about 35 percent of GDP.¹

It is, of course, not surprising to find important ideological differences across countries and even groups of countries, and a variety of sociological hypotheses might be put forward to explain why these differences exist. These would probably rely on differences in the historical evolution of each country and their cultural heritages. On the other hand, science is often thought to be “value free”, and thus one might not expect to find significant differences in the way mathematics or physics is conducted in America and Europe. Although a certain amount of “path dependence” in research topics and questions might be anticipated, differences related to the prevailing ideologies on the two continents would seem to run directly counter to the very definitions of what science and scientific method are. With English now the dominant language in all scientific communities, even path dependent differences might be expected to disappear over time.

Is economics enough of a science so that it, like mathematics and physics, is much the same on both sides of the Atlantic, or does the fact that it deals with social issues result in its absorbing some of the ideological differences of the societies it studies. Put differently, are *economists* on the two sides of the Atlantic sufficiently influenced by the ideologies that surround them that these ideologies are reflected in their scientific attitudes and judgments?

In a previous survey, Frey et al. (1984) found significant differences between European and American economists in their views regarding the efficacy of market competition and government intervention. Frey et al. (1984) surveyed economists from all disciplines. Our study differs from theirs in that we focus upon economists who specialize in industrial organization. We asked them three sets of questions: the first dealt with industrial organization and microeconomic topics, the second with broader economic questions, and the third concerned the reading habits of our sample respondents and their views about the “state of industrial organization” and its future paths. Our study is a direct follow-up to a previous survey, which was mostly directed at industrial organization economists from Europe. In this paper we present the responses from a sample of American industrial organization economists, and contrast their responses to those of the Europeans.

Stated briefly, we find small but significant differences between American and European economists in their views about market efficiency, the effects of market power, mergers and the like. Smaller but still occasionally significant differences exist in their views regarding broader economic issues like rent control and free trade. Little difference exists in their views regarding the present state and future of the discipline. These findings are reviewed in Sections III and IV. Section V presents some information concerning the IO journals read by IO economists on the two sides of the Atlantic. We begin by discussing our survey procedures.

¹ For further discussion of differences between Americans and Europeans, see Mueller (1995).

II. The Survey

The data base consists of two separate surveys. The first (the “European Survey”) was conducted during the course of organizing an EARIE Conference in 1996. The “European Association for Research in Industrial Economics” (EARIE) is a professional society for academics and practitioners interested in Industrial Organization and holds a conference in Europe every year. In addition to the participants of the 1996 conference in Vienna, the questionnaire was also sent out to participants of previous EARIE conferences as well as to two, more policy oriented groups, the EUNIP and the “Global Forum on Competition and Trade policy”. EUNIP (European Network on Industrial Policy) is an EU sponsored network of researchers in Economic Policy, most of them having a background in macroeconomics or political science. The “Global Forum on Competition and Trade Policy”, finally, is an American Based Forum with a strong tradition in antitrust policy. The first survey includes participants of the 1996 conference of the Forum which was also held in Vienna. From the 550 questionnaires sent out (or handed out during the conferences) in the first survey, we received a response of 114 questionnaires. More details on the survey are available in Aiginger et al. (1998).

The second survey (the “U.S. survey”) was conducted during May and June of 1998 (surveys were mailed during the second week of May, 1998, and the vast majority of responses – 97.6% – were received by the end of June, 1998). 1270 surveys were distributed by mail; 425 responses were received. Individuals were selected from the AEA subscription database in the spring of 1998; AEA members that listed any of the following JEL field specializations received surveys: C7, D2, D4, all of L, G3, K2, or O3.

Combining the two surveys gives a total sample of 539 observations. However, since some participants (11%) from the “European survey” actually came from the U.S.A., we cannot rule out the possibility of double counting some of them. In order to avoid double counting and to focus on the difference between European and U.S.-industrial organisation economists, we had to eliminate all non-european respondents from the first survey. We thus end up with a total of 525 observations.

More than 63% of the respondents are currently affiliated with universities, among them 46% are full professors. About 20% was younger than 34, 58% between 34 and 54. The majority classified themselves as applied economists, 17% as theoretical. Most of the respondents (82%) were trained in economics departments, 16% in business schools. More details are given in Table A.I in Appendix A.

III. Findings – Stylized Facts, Methodological and Policy Issues

Table I summarizes the answers to 45 questions, most of them dealing with industrial organization and microeconomic issues. Respondents were allowed to express their degree of agreement with a question on a scale of one to five. Substantial disagreement between the two groups might be expected to manifest itself as one

group's choosing a one or a two on the scale, while the other chose a four or a five. A mean score of 1.5 for one group and a mean score of 4.5 for the other would result in a difference in mean scores of 3.0. Thus, the hypothesis of there being *substantial* differences in the views of American and European economists on these questions might predict a difference between mean scores for the two samples on the order of three. Under this interpretation, there are *no substantial* differences in the answers from the two groups, since no difference is greater than 1.0 in absolute value (see column 3).

Although small, many of the differences between the mean scores for the two groups are statistically significant. This can be seen in columns (4) and (5). Column (4) reports the results from a Mann-Whitney U Test and column (5) indicates whether the response pattern of the two groups is still significantly different when controlling for personal characteristics of the respondents in a probit model (more details on the results of the probit models are reported in Tables A.I-A.IV in Appendix A). Moreover, the pattern of differences is consistent with the interpretation that American industrial organization economists have greater confidence in the market's ability to allocate resources optimally and control market power and less confidence in the government's capacity to achieve these goals than do European industrial organization economists.

For only six questions were the differences in the answers from the two groups at least 0.5 in absolute value (questions 1, 2, 3, 4, 5 and 18). Five of them (questions 1, 2, 3, 4, and 5) concern government policies where there have been significant differences between Europe and the United States. As already mentioned, rent controls have been and continue to be prevalent in the major cities of Europe, while they are almost nonexistent today in the United States. Our survey implies greater opposition to rent controls among American IO economists, because a significantly greater fraction of them believe that they reduce the quantity and quality of housing available.

For many years after World War II, state television channels were the *only* channels that viewers could watch in many European countries, and they still account for far larger fractions of European viewers than do the PBS channels of American viewers. Consistent with these differences, we see that a significantly higher fraction of European IO economists are of the opinion that state-owned television channels offer higher quality programming than private channels.

The United States has had an antitrust policy for over a century, while European countries began to implement their competition policies only after World War II, and even then in many cases only half heartedly. This situation has changed dramatically, however, in the last 20 years. Beginning in 1980, the Reagan Administration introduced a much weaker antitrust policy in the United States, particularly in the areas of vertical restraints, antimerger policy and antimonopoly policy (Section II cases). In contrast, competition policy at the level of the European Union has been gradually becoming more aggressive and effective. Consistent with these developments we find today that European industrial organization economists are more

Table I. Results of 37 propositions on IO issues (from 1 = completely agree to 5 = completely disagree)

Question	Mean (std.-dev.) USA-survey (1)	Mean (std.dev.) Europ.-survey (2)	Difference (1)-(2) = (3)	Mann-Whitney U Test model (4)	t-test from Probit (5)
<i>I. Government Policy Issues (questions 1-17)</i>					
(1) Antitrust laws should be used vigorously to reduce monopoly power from its current level.	3.160 (1.148)	2.518 (0.939)	0.642	***	***
(2) Rent control reduces the quantity and quality of housing availability.	1.511 (0.734)	2.071 (0.921)	-0.560	***	***
(3) State-owned television offers a higher quality than that of private television.	3.428 (1.132)	2.772 (1.160)	0.656	***	***
(4) The best industrial policy is no industrial policy.	3.120 (1.210)	3.646 (1.119)	-0.526	***	***
(5) The outcome of a non collusive game (like a finite Cournot or Bertrand game with free entry) is a good yardstick for competition policy. If such a model results in positive profits (or prices above marginal costs) there is no task for antitrust authority.	2.312 (0.887)	3.119 (1.096)	-0.807	***	***
(6) Research joint ventures should not be prevented even if they extend to the production phase.	2.339 (0.995)	2.661 (1.128)	-0.322	***	**
(7) Reducing the influence of regulatory authorities would improve the efficiency of the economy.	2.814 (1.073)	3.239 (1.075)	-0.425	***	**
(8) Consumer surplus is the final yardstick for regulatory policy, not total surplus.	3.590 (1.025)	3.414 (1.057)	0.175	*	**
(9) Competition policy should address tacit collusion (not only explicit cooperation) as a legal offense.	2.813 (1.161)	2.600 (1.107)	0.213	*	
(10) Exchange of information (if it happens on a more than casual basis) among competitors on market conditions, prices or firm specific production, should be considered as strong evidence of collusion.	2.924 (1.068)	2.832 (1.166)	0.092		

Table I. Continued

Question	Mean (std.-dev.) USA-survey (1)	Mean (std.dev.) Europ.-survey (2)	Difference (1)-(2) = (3)	Mann-Whitney U Test model (4)	t-test from Probit (5)
(11) Antitrust policy should induce firms to equate prices to marginal cost, or – if this implies losses – at least to equate prices to average costs.	3.395 (1.036)	3.143 (1.071)	0.257	**	**
(12) The level of government spending should be reduced (disregarding expenditures for stabilization).	2.614 (1.200)	2.648 (1.083)	-0.034		
(13) The “flexible wage strategy” applied in the U.S. should also be applied in Europe to solve the unemployment problems.	2.320 (0.869)	2.738 (0.996)	-0.419	***	
(14) To prevent unemployment it makes sense to prevent the exit of firms from specific sectors at least for some time.	4.194 (0.765)	3.679 (0.977)	0.515	***	***
(15) The true welfare loss of oligopoly can be assessed only if we additionally consider the strategic costs of obtaining and retaining oligopoly power.	2.005 (0.960)	1.743 (0.921)	0.262	*	
(16) Recommendations of industrial economists have little impact on industrial policy.	3.297 (1.005)	2.912 (1.005)	0.386	***	***
(17) The goal of industrial policy is the correction of market failure.	2.333 (1.027)	2.348 (1.037)	-0.016		
<i>II. Stylized Facts (questions 18–33)</i>					
(18) Price wars – if they occur at all – tend to happen during recessions.	3.268 (0.898)	2.757 (0.972)	0.511	***	***
(19) In the long run mergers usually do not increase the profitability of firms.	2.926 (0.999)	2.694 (1.054)	0.233	**	**
(20) The higher margins of large firms are typically the consequence of market power.	3.003 (1.068)	2.598 (1.039)	0.404	***	***
(21) In a market with only a few sellers, firms usually collude.	3.133 (0.985)	2.964 (1.080)	0.168		*

Table I. Continued

Question	Mean (std.-dev.) USA-survey (1)	Mean (std.dev.) Europ.-survey (2)	Difference (1)-(2) = (3)	Mann-Whitney U Test model (4)	t-test from Probit (5)
(22) Market power is essentially a short run phenomenon, if a government does not assist to prevent entry.	3.027 (1.198)	3.386 (1.031)	-0.359	***	**
(23) The importance of predation has been widely exaggerated, in most cases, it is not a profitable strategy.	2.658 (1.168)	3.108 (1.005)	-0.450	***	**
(24) Consumer protection laws generally reduce economic efficiency.	3.178 (1.047)	3.451 (0.935)	-0.274	**	**
(25) Deregulation of telecoms has lead to new monopolies (or collusive oligopolies).	3.145 (1.054)	3.036 (1.064)	0.109		
(26) International competition has made regulation of monopolies an outdated policy.	3.434 (1.041)	3.554 (1.032)	-0.120		
(27) Effective concentration has decreased in the last two decades since many "relevant markets" changed from national to global.	2.397 (1.023)	2.509 (0.970)	-0.112		
(28) The importance of entry deterrence has been widely exaggerated. In most cases, it is not a profitable strategy.	3.240 (1.061)	3.292 (0.964)	-0.052		
(29) The U.S. economy has recovered considerably since the mid eighties and regained a large technological lead in many high tech industries.	1.916 (0.694)	2.402 (0.870)	-0.486	***	***
(30) In general public enterprises are less efficient than private enterprises.	2.047 (0.978)	2.279 (1.209)	-0.232	**	***
(31) When many small firms compete, entrepreneurial initiative becomes impossible.	4.387 (0.726)	4.168 (0.824)	0.219	***	
(32) Average costs tend to be lower under monopoly than under competition, when everything else is equal.	3.674 (0.987)	3.820 (0.877)	-0.146		
(33) Small firms are more flexible in adapting to exogenous shocks than large firms.	2.681 (0.961)	2.451 (0.857)	0.230	***	**

Table I. Continued

Question	Mean (std.-dev.) USA-survey (1)	Mean (std.dev.) Europ.-survey (2)	Difference (1)-(2) = (3)	Mann-Whitney U Test model (4)	t-test from Probit (5)
<i>III. Methodological Issues (questions 34-45)</i>					
(34) After decades of considerable progress in theory, industrial organization will now benefit most from empirical studies.	2.166 (0.933)	2.184 (1.047)	-0.018		*
(35) In the field of industrial organization too much stress is laid on the use of mathematical models.	2.875 (1.100)	2.938 (1.247)	-0.062		
(36) Game theory is not of very much practical use, since we can get any prediction we want.	3.243 (1.101)	3.281 (1.223)	-0.038		
(37) There is a strong tendency in industrial organization in general (and in game theoretical model specific) to concentrate on the analytically interesting questions rather than on the ones that are really important for the study of real-life industries.	2.375 (0.958)	2.354 (1.051)	0.021		
(38) The new trade theory gave us useful tools for analyzing trade under imperfect competition but it does not provide the basis for protectionism.	2.321 (0.918)	2.278 (0.866)	0.044		**
(39) Competitiveness is a meaningless word when applied to national economies. And the obsession of economic policy with competitiveness is both wrong and dangerous.	2.998 (1.278)	3.055 (1.203)	-0.057		
(40) Neoclassical theory is the only sensible basis for microeconomics.	3.107 (1.191)	3.405 (1.229)	-0.298	*	*
(41) Game theory has considerably increased our understanding of strategic behavior in real markets.	2.400 (1.108)	2.079 (0.969)	0.321	***	
(42) Accounting data on profits, are in most cases misleading and should not be used for empirical research.	3.034 (1.047)	3.336 (1.080)	-0.302	***	**

Table I. Continued

Question	Mean (std.-dev.) USA-survey (1)	Mean (std.-dev.) Europ.-survey (2)	Difference (1)-(2) = (3)	Mann-Whitney U Test model (4)	t-test from Probit (5)
(43) Game-theoretical models can be given enough structure so that they yield empirically testable predictions. Specifically we should try to find robust predictions (i.e., predictions given in a large set of circumstances), and test whether empirical data contradict to these predictions.	2.277 (0.963)	2.124 (0.943)	0.153	*	
(44) Conjectural variation models should not be used in research.	3.377 (0.804)	3.477 (0.982)	-0.101	*	
(45) Competition should not be modeled as equating prices and marginal costs. It is a process in which new products meet new demands and temporary rents are accrued and dissipated by imitation.	2.376 (0.952)	2.116 (0.938)	0.260	***	*

Remarks: The response patterns on the various propositions are indicated on the so-called Likert scale, ranging in equal intervals from 1 (completely agree) to 5 (completely disagree), ***, **, and * indicate that the parameter estimates are significantly different from zero at the 99%, 95%, and 90% level respectively. The dependent variables in the probit models for each of the individual questions are set equal to 1 if the respondent answered with "completely agree" or "agree with provisions" and are set equal to zero otherwise.

in favor of the vigorous use of the antitrust laws to reduce monopoly power than are the Americans. Even in the area of the protection of market competition, the American IO economists are more skeptical of the government's ability to do an effective job than are the Europeans.

A partial explanation for this difference is revealed in the answers to question 5. American IO economists are significantly more likely than their European counterparts to see oligopolistic interactions as reflecting Bertrand or Cournot behavior, and to believe that any resulting profits from this noncooperative behavior should not be cause for antitrust intervention.

Although the differences in mean scores between American and European IO economists were not as large on the other questions, the pattern on these questions is consistent with that observed for the six questions just discussed. Compared to European IO economists, the Americans are less likely to want to restrict research joint ventures (question 6), more optimistic about the positive effects of mergers on

profitability (19), less likely to interpret the higher price-cost margins of large firms as a consequence of market power (20), somewhat less likely to expect collusion in markets with only a few firms (21), more likely to believe that market power is a short-run phenomenon (22), more likely to believe that the importance of predation has been widely exaggerated (23), more likely to believe that consumer protection laws generally reduce economic efficiency (24), more likely to favor reducing the influence of regulatory authorities (7), less likely to believe that the deregulation of telecoms has led to new monopolies (25), more willing to count producers' surplus in addition to consumer's surplus in regulatory policy (8), less willing to use competition policy to attack tacit collusion (9), less likely to condemn the exchange of information among competitors (10), more likely to believe that international competition has made the regulation of monopolies an outdated policy (26), more likely to believe that effective concentration has been reduced in the last two decades by globalization (27), and less likely to think of the goal of antitrust policy as inducing firms to equate price and marginal or average cost (11). The responses to all of these questions indicate a greater willingness on the part of American IO economists to allow markets and firms to operate free from government intervention either in the form of regulation or competition policy. In some of these questions (9, 10, 25, 26, and 27) the differences in mean scores are not significantly different from zero, however.

There were seven questions for which the differences in mean scores between American and European IO economists were less than 0.1 in absolute value. One of these questions (28) concerns a factual matter about the extent to which firms engage in entry deterrence. This question does not have a direct implication regarding the efficacy of market competition or government policy. The same can be said for four of the other seven questions for which there were very small differences in the mean scores. These four questions solicited the views of IO economists on methodological issues and methodological prognoses. American and European IO economists both tend to agree that the field would benefit from a shift away from theoretical research into empirical research (question 34). Both groups are evenly divided over whether too much stress in the field is placed on mathematical models (35), and over whether game theory is of much practical use in the field (36). American and European IO economists both tend to see a strong tendency in industrial organization in general (and in game theoretical models in particular) to concentrate on the analytically interesting questions rather than on the ones that are really important for the study of real-life industries (37).

One of the largest differences in the mean responses for the two groups on the eight macroeconomic/broad issue questions (12, 13, 14, 29, 30, 38, 39, and 40) is for question 29. The Americans are more convinced than European IO economists that the U.S. economy has recovered considerably since the 1980s, and regained a large technological lead in many industries.

Questions 12, 13, 14 and 30 all deal directly with the desirability and efficacy of government intervention. American IO economists tend on average to agree

with provisions that the U.S. policy of flexible wages should be applied to Europe, while the European IO economists are almost equally divided on the issue (question 13). American IO economists disagree more strongly than the Europeans in our sample with the statement that the exit of firms should be prevented to prevent unemployment (14). Both the American and the European IO economists tend to agree with the statement that public enterprises are more inefficient than private enterprises but, of course, the Americans agree more strongly than the Europeans (30).

Question 12 asks whether the level of government spending should be reduced. The answers given by the American IO economists had a mean score of 2.61, roughly half way between provisional agreement and indifference. The mean score for the Europeans was ever so slightly higher, 2.65. Thus, on this basic question of government efficacy, the two groups would appear to be in almost complete agreement, with the Europeans slightly more in favor of smaller government. But, when one factors in the fact that the government sectors in Europe are anywhere from 50 to 100 percent larger than in the United States, even this agreement on the desirability of reducing the size of the government sector translates into a preference for a much larger government sector among the European IO economists.

Questions 38, 39 and 40 concern broad methodological issues in economics. Once again we find more agreement between American and European IO economists on these methodological issues than on questions about the role of government. Both groups tend to agree about the usefulness of the new trade theory and its failure to justify protectionism (38). Both groups are on average equally divided regarding the meaningfulness of the word "competitiveness" and its relevance for economic policy (39). Both groups are also on average more or less equally divided regarding "whether neoclassical theory is the only sensible basis for microeconomics" (40). Not surprisingly, perhaps, the Europeans edge slightly more toward disagreement with this statement than the Americans.

An additional question asks whether surveys of the kind reported here serve any useful purpose. Luckily for us, both groups appear to think so, *with provisions*, with the Americans somewhat less convinced of the merits of survey findings than the Europeans.

IV. Findings – On the Present State and Future of Industrial Organization

Our respondents were asked to judge the importance of six methodological approaches within the field of industrial organization, and to evaluate the importance of applications of IO for economic policy and the importance of the field within economics. Our respondents were asked to judge whether the importance of each item had increased (score of 1), stayed the same (2) or decreased (3), and to make their evaluations with respect to both the past 10 years and the next 10 years. The responses are summarized in Table II.

Table II. Results of propositions on the present state and future of IO

<i>Question: How did the importance of the following fields develop over the past ten years and predict how they are going to develop in the future? Change over past ten years.</i> (1 = "increased"/2 = "about the same"/3 = "decreased").	Mean (std.-dev.) USA-survey (1)	Mean (std.-dev.) Europ.-survey (2)	Difference (1)-(2) = (3)	Mann-Whitney U Test (4)	t-test from Probit model (5)
Theoretical foundation	1.467	1.316	0.151	**	***
Empirical testing	1.619	1.727	-0.108		
Game theory	1.253	1.184	0.069		
Structure conduct performance paradigm	2.599	2.74	-0.140		
Application of IO for economic policy	1.729	1.856	-0.127	*	
Experiments	1.425	1.406	0.019		
Case studies	2.100	2.082	0.019		
IO within economics	1.680	1.365	0.315	***	***

<i>Question: How did the importance of the following fields develop over the past ten years and predict how they are going to develop in the future? Change in the next ten years.</i> (1 = "increased"/2 = "about the same"/3 = "decreased").	Mean (std.-dev.) USA-survey (1)	Mean (std.-dev.) Europ.-survey (2)	Difference (1)-(2) = (3)	Mann-Whitney U Test (4)	t-test from Probit model (5)
Theoretical foundation	1.888	1.872	0.015		
Empirical testing	1.330	1.309	0.022		
Game theory	2.059	2.221	-0.162	**	**
Structure conduct performance paradigm	2.314	2.560	-0.246	***	
Application of IO for economic policy	1.586	1.473	0.113	*	
Experiments	1.654	1.511	0.143	**	
Case studies	1.716	1.575	0.142	**	
IO within economics	1.705	1.648	0.056		

Remarks: ***, **, and * indicate that the parameter estimates are significantly different from zero at the 99%, 95%, and 90% level respectively. The dependent variables in the probit models for each of the individual questions are set equal to 1 if the respondent answered with "increased" and are set equal to zero otherwise.

What stands out most dramatically in Table II is how little disagreement there is between the two groups regarding the importance of the different methodological tools in industrial organization, and of the importance of the field itself. Given that there tend to be small differences between the means for the two samples, our interest is more in the means themselves. The lowest score in Table II is 1.18. Both European and American IO economists recognise an increase in the importance of game theory in IO in the last 10 years. The American IO economists predict that

the importance of game theory will stay the same over the next 10 years, however, while the European economists tend to see a decrease.

The second lowest score in Table II is 1.31. European IO economists think that the importance of empirical testing in IO has increased in the last 10 years, Americans are somewhat less convinced. Both European and American economists are convinced that the importance of empirical testing in IO will increase in the next 10 years (mean score 1.31).

The largest mean value in the table is 2.74 for Structure, Conduct, Performance in the recent past, and the second largest mean value is 2.56 for Structure, Conduct, Performance in the future. Both American and European IO economists see a decline in importance of the classic Bain paradigm in IO over the last 10 years, and predict a similar decline over the next decade. The Europeans see and predict slightly greater declines than the Americans.

The biggest difference between the means in Table II is 0.32 regarding the role of IO in economics in the recent past. Whereas Europeans perceived an increase in the importance of IO in economics in the last decade, the Americans are significantly less convinced. Both groups of economists however expect to see IO gain further importance in economics in the decade to come.

V. Journals Readership

Table III summarizes the responses to the questions on journal readership. Despite the fact that the answers are only scaled from one to three, it contains the biggest differences in mean scores throughout the study. European IO economists tend, on average, to read the two European IO journals – the *Journal of Industrial Economics* and the *International Journal of Industrial Organization* – regularly (mean scores 1.32 and 1.40). In contrast, American IO economists read these two journals only sometimes (mean scores 2.13 and 2.40). The second most interesting finding in the table is, perhaps, that the Europeans appear to read much more than the Americans. The difference between the means of the two samples is positive for five of the seven journals included in the two surveys. The mean score for the Americans was 2.66, closer to “the journal is usually not read” than to it is “sometimes read”. The mean score for the Europeans is 2.36, closer to the journal is “sometimes read”. Economists in neither group appear, on average, to be avid readers of the leading IO journals, but the Europeans appear – or claim – to be slightly more diligent in this respect.

VI. Conclusions

The results of our surveys lend themselves to a “glass is half full, glass is half empty” interpretation. On the one hand, one might emphasize that the differences between the views of American and European IO economists on various IO and broader economic issues are quite small. The biggest differences between the two

Table III. Results of propositions on journal readership

Question: Which of the following IO-journals do you read regularly (from 1 = regularly to 3 = usually not)	Mean (std.-dev.) USA-survey (1)	Mean (std.-dev.) Europ.-survey (2)	Difference (1)-(2) = (3)	Mann-Whitney U Test (4)	t-test from Probit model (5)
Journal of Law and Economics	2.011	2.318	-0.307	***	***
Journal of Regulatory Economics	2.550	2.729	-0.179	**	
Journal of Industrial Economics	2.132	1.321	0.811	***	***
Journal of Economics and Management Strategy	2.562	2.365	0.197	**	
International Journal of Industrial Organization	2.405	1.400	1.005	***	***
Rand Journal	1.836	1.630	0.206	***	
Review of Industrial Organization	2.308	2.234	0.075		

Remarks: ***, **, and * indicate that the parameter estimates are significantly different from zero at the 99%, 95%, and 90% level respectively. The dependent variables in the probit models for each of the individual questions are set equal to 1 if the respondent answered with "regularly" and are set equal to zero otherwise.

groups revealed by our survey was in their reading habits. On the other hand, we have noted systematic differences between them. Moreover, these differences are more pronounced when judgments about the efficacy of government policies and the workings of the market are concerned than when judgments about methodology and the present and future state of the IO field are concerned. American IO economists exhibit more confidence in the market's capability to allocate resources and less trust in government interventions in the market than their European counterparts. In closing we offer a few thoughts concerning why this might be so.

Two possible explanations come to mind. First, the economic environments in which the two groups of economists live may be substantially the same, but each economist views the economy in which s/he lives through glasses that are colored by the culture and ideology in which s/he lives. The differences we have reported lie in the eyes of the beholders and not in that which they behold. This interpretation resonates with the great emphasis placed upon "social solidarity" and similar notions in Europe, and the emphasis placed on individual freedom and responsibility in the United States.

The second possible explanation for the differences we have reported is that IO economists on both sides of the Atlantic have substantially similar views about how markets work and the effects of government intervention, but that the economic realities that they observe around them are substantially different, and that these differences explain the differences in the answers to our questions. Consider, for example, question 21 – In a market with only a few sellers, firms usually collude. The Europeans tended to agree with this statement a bit more than the Americans. This could reflect the weaker history of anticartel policies in Europe and the fact

that in Europe firms *do* collude more often than they do in the United States, when their numbers are small enough to do so successfully. This same difference might also explain the stronger beliefs of Americans in the relevance of Bertrand and Cournot models for characterizing oligopolistic behavior (question 5).

Although the Europeans generally agreed on average that rent controls reduced the quantity and quality of housing, the Americans exhibited significantly more agreement with this textbook prediction of the effects of rent controls. Here again the differences between the two groups may not reflect differences in their understandings of the microeconomics of rent controls, but differences in the ways rent controls actually are implemented in Europe and the United States. Rent controls in Europe are often combined with regulations that force owners to maintain the outside quality of their buildings, and shift responsibility for the quality of the insides of apartments to their occupants.

If ideology explains the differences in the answers of our two groups, one might reasonably expect that the differences in the answers given by the two groups would be greater, the further away a question is from their area of expertise. In this case, we should expect bigger differences between the two groups in their answers to questions 13 and 14 that concern unemployment policies than to questions 1 and 3 dealing with antitrust policy and state-owned television, but this was not what we observed. The differences between European and American IO economists were on average greater when microeconomic and IO issues were concerned than for macroeconomic issues, which supports the conjecture that the different answers from the two groups are more a reflection of the environments they observe than of their ideologies.

Acknowledgements

The authors thank Bruce Lyons, Keith Cowling, Harold Demsetz, Pat Devine, Ted Frech, Paul A. Geroski, Clemenz Krouse, Stephen Martin, Peter Mooslechner, Michael Pfaffermayr, Robert A. Porter, Frederic M. Scherer, John Sutton, Gunther Tichy, and Michael Waterson for suggestions on the formulations of the questions and for pretesting earlier versions of the survey. We acknowledge the research assistance of Thomas Herzfeld, Sonja Patzios and Claudia Schröder. Funding for this research was provided by the Ludwig Boltzmann Institute.

Appendix A

Table A.I. Descriptive statistics on the personal characteristics of respondents and the definition of variables

Characteristics	Categories	Number of respondents	(in %)	Variable definition
Age	Below 34 years	104	19.8	AGE <34 = 1
	Between 35 and 55 years	307	58.5	
	Above 55 years	98	18.7	AGE >55 = 1
	No answer	16	3.1	
Sex	Male	397	75.6	FEMALE = 1
	Female	45	8.6	
	No answer	83	15.8	
Occupation	Student	42	8	PROF = 1 NONUNI = 1
	Assistant professor	126	24	
	Associate professor	12	2.3	
	Full professor	62	11.8	
	Non university researcher	151	28.8	
	Business	65	12.4	
	Other	64	12.2	
	No answer	3	0.6	
Self evaluation as	Applied economist	404	77.0	THEORY = 1
	Theoretical economist	91	17.3	
	Other	30	5.7	
	No answer	0	0	
Background	Economics	433	82.5	ECONOM = 1
	Business	83	15.8	
	Other	9	1.8	
	No answer	0	0	
Country of residence	Austria	13	2.5	U.S.A. = 1
	Belgium	5	1	
	Switzerland	2	0.4	
	Czech Republic	1	0.2	
	Germany	9	1.7	
	Denmark	6	1.1	
	Spain	2	0.4	
	Finland	4	0.8	
	France	5	1	
	Great Britain	16	3	
	Greece	1	0.2	
	Hungary	3	0.6	
	Italy	12	2.9	
	Liechtenstein	1	0.2	
	Luxembourg	1	0.2	
	Netherlands	6	1.1	
	Norway	1	0.2	
	Portugal	3	0.6	
	Turkey	1	0.2	
	U.S.A. (incl. CAN)	423	80.6	
No answer	9	1.7		

Table A.II. Results of probit estimates on IO and macroeconomic issues

Question	Significant Positive	Impact Negative	Test statistics		
			LRT	% of correct prediction	N
<i>I. Government Policy Issues (questions 1-17)</i>					
(1) Antitrust laws should be used vigorously to reduce monopoly power from its current level.	A55*** NONUNI**	U.S.A.***	41.11	0.65	521
(2) Rent control reduces the quantity and quality of housing availability.	U.S.A.*** Prof**		40.43	0.88	522
(3) State-owned television offers a higher quality than that of private television.	A55*** NONUNI**	U.S.A.***	34.75	0.71	518
(4) The best industrial policy is no industrial policy	U.S.A.***	NONUNI*	22.74	0.64	520
(5) The outcome of a non collusive game (like a finite Cournot or Bertrand game with free entry) is a good yardstick for competition policy. If such a model results in positive profits (or prices above marginal costs) there is no task for antitrust authority.	U.S.A.*** Econom*	A55**	41.62	0.65	497
(6) Research joint ventures should not be prevented even if they extend to the production phase.	U.S.A.**		11.41	0.69	516
(7) Reducing the influence of regulatory authorities would improve the efficiency of the economy.	U.S.A.**	NONUNI**	19.08	0.61	521
(8) Consumer surplus is the final yardstick for regulatory policy, not total surplus	A55**	U.S.A.**	11.89	0.78	518
(9) Competition policy should address tacit collusion (not only explicit cooperation) as a legal offense.	A55** Theory**		14.84	0.56	517
(10) Exchange of information (if it happens on a more than casual basis) among competitors on market conditions, prices or firm specific production, should be considered as strong evidence of collusion.	A55* Theory*		12.38	0.57	520
(11) Antitrust policy should induce firms to equate prices to marginal cost, or - if this implies losses - at least to equate prices to average costs.	A55*** A34*	U.S.A.** Theory*	30.29	0.72	517
(12) The level of government spending should be reduced (disregarding expenditures for stabilization)		Prof*** NONUNI*	13.66	0.58	530

Table A.II. Continued

Question	Significant Positive	Impact Negative	Test statistics		
			LRT	% of correct prediction	N
(13) The "flexible wage strategy" applied in the U.S. should also be applied in Europe to solve the unemployment problems.			9.70	0.61	522
(14) To prevent unemployment it makes sense to prevent the exit of firms from specific sectors at least for some time.		U.S.A.***	22.17	0.92	533
(15) The true welfare loss of oligopoly can be assessed only if we additionally consider the strategic costs of obtaining and retaining oligopoly power	Prof** Sex*		15.06	0.81	514
(16) Recommendations of industrial economists have little impact on industrial policy	Econom**	U.S.A.***	14.56	0.70	520
(17) The goal of industrial policy is the correction of market failure		Sex*	6.88	0.75	515
<i>II. Stylized Facts (questions 18–33)</i>					
(18) Price wars – if they occur at all – tend to happen during recessions.	A55*	U.S.A.***	32.29	0.71	518
(19) In the long run mergers usually do not increase the profitability of firms	A55**	Theory*** U.S.A.**	28.96	0.60	518
(20) The higher margins of large firms are typically the consequence of market power.	A55*** NONUNI*	U.S.A.***	28.22	0.59	515
(21) In a market with only a few sellers, firms usually collude.	A55**	U.S.A.*	9.31	0.65	519
(22) Market power is essentially a short run phenomenon, if a government does not assist to prevent entry.	U.S.A.**		14.65	0.59	521
(23) The importance of predation has been widely exaggerated, in most cases, it is not a profitable strategy	U.S.A.**	A34*** NONUNI* Theory*	28.99	0.59	515
(24) Consumer protection laws generally reduce economic efficiency.	U.S.A.**		12.27	0.69	518
(25) Deregulation of telecoms has lead to new monopolies (or collusive oligopolies).	A55***		12.97	0.66	512
(26) International competition has made regulation of monopolies an outdated policy.		Theory* NONUNI*	11.27	0.73	520
(27) Effective concentration has decreased in the last two decades since many "relevant markets" changed from national to global.		Sex*	13.10	0.68	520

Table A.II. Continued

Question	Significant Positive	Impact Negative	Test statistics		
			LRT	% of correct prediction	N
(28) The importance of entry deterrence has been widely exaggerated. In most cases, it is not a profitable strategy		Theory***	8.50	0.69	521
(29) The U.S. economy has recovered considerably since the mid eighties and regained a large technological lead in many high tech industries.	A55** U.S.A.***		43.08	0.82	525
(30) In general public enterprises are less efficient than private enterprises.	U.S.A.***	NONUNI*	12.27	0.79	535
(31) When many small firms compete, entrepreneurial initiative becomes impossible.	Theory**		12.88	0.95	521
(32) Average costs tend to be lower under monopoly than under competition, when everything else is equal	A34*	Prof** Sex*	13.92	0.84	513
(33) Small firms are more flexible in adapting to exogenous shocks than large firms.		U.S.A.**	8.91	0.56	521
<i>III. Methodological Issues (questions 34-45)</i>					
(34) After decades of considerable progress in theory, industrial organization will now benefit most from empirical studies.	A55*** Econom**	Theory*** NONUNI* U.S.A.*	32.21	0.71	523
(35) In the field of Industrial Organization too much stress is laid on the use of mathematical models.		Theory***	29.55	0.60	521
(36) Game theory is not of very much practical use, since we can get any prediction we want		Theory*** A34***	44.07	0.69	518
(37) There is a strong tendency in industrial organization in general (and in game theoretical model specific) to concentrate on the analytically interesting questions rather than on the ones that are really important for the study of real-life industries		Theory**	10.93	0.64	518
(38) The new trade theory gave us useful tools for analyzing trade under imperfect competition but it does not provide the basis for protectionism		NONUNI*** U.S.A.**	21.95	0.59	524
(39) Competitiveness is a meaningless word when applied to national economies. And the obsession of economic policy with competitiveness is both wrong and dangerous			11.25	0.60	532

Table A.II. Continued

Question	Significant Positive	Impact Negative	Test statistics		
			LRT	% of correct prediction	N
(40) Neoclassical theory is the only sensible basis for microeconomics.	Econom** U.S.A.* Prof*		15.35	0.62	533
(41) Game theory has considerably increased our understanding of strategic behavior in real markets.	Theory*** A34**		64.07	0.67	522
(42) Accounting data on profits, are in most cases misleading and should not be used for empirical research.	U.S.A.**		8.19	0.64	521
(43) Game-theoretical models can be given enough structure so that they yield empirically testable predictions. Specifically we should try to find robust predictions (i.e. predictions given in a large set of circumstances), and test whether empirical data contradict to these predictions	A34*		13.99	0.70	517
(44) Conjectural variation models should not be used in research.	Theory***		18.55	0.88	510
(45) Competition should not be modeled as equating prices and marginal costs. It is a process in which new products meet new demands and temporary rents are accrued and dissipated by imitation.		Econom** U.S.A.*	10.03	0.68	519

Remarks: ***, **, and * indicate that the parameter estimates are significantly different from zero at the 99%, 95%, and 90% level respectively. The dependent variables in the probit models are set equal to 1 if the respondent answered with "completely agree" or "agree with provisions" and are set equal to zero otherwise. The definition of the explanatory variables is given in Table A.I. LRT refers to the likelihood ratio test and N is the number of observations.

Table A.III. Results of probit estimates on the present state and future of IO

<i>Question: How did the importance of the following fields develop over the past ten years and predict how they are going to develop in the future? Change over past ten years:</i>	Significant Positive	Impact Negative	Test statistics		
			LRT	% of correct prediction	N
Theoretical foundation	Prof ^{***}	U.S.A. ^{***}	21.63	0.64	449
Empirical testing	A34 ^{***}		18.59	0.59	451
Game theory	Theory ^{**}		22.04	0.80	454
	Prof ^{***}	A55 ^{***}			
Structure conduct performance paradigm	Sex ^{**}	Econom ^{***}	20.78	0.94	438
Application of IO for economic policy	Theory [*]		10.00	0.62	447
Experiments	Prof ^{***}	A55 ^{**}	25.95	0.66	444
	Econom [*]	Sex [*]			
Case studies		NONUNI [*]	5.16	0.76	447
IO within economics		U.S.A. ^{***}	30.54	0.60	446
		A55 [*]			

<i>Question: How did the importance of the following fields develop over the past ten years and predict how they are going to develop in the future? Change in the next ten years:</i>	Significant Positive	Impact Negative	Test statistics		
			LRT	% of correct prediction	N
Theoretical foundation	Theory ^{***}		10.56	0.74	432
Empirical testing			4.62	0.70	433
Game theory	U.S.A. ^{**}		12.10	0.79	436
Structure conduct performance paradigm			13.54	0.90	419
Application of IO for economic policy	NONUNI ^{**}		16.07	0.58	429
	Theory [*]				
Experiments		A55 ^{**}	11.64	0.56	425
Case studies			6.78	0.56	429
IO within economics	A34 ^{**}	Prof ^{**}	24.58	0.62	426
	NONUNI ^{**}				
	A55 [*]				

Remarks: ^{***}, ^{**}, and ^{*} indicate that the parameter estimates are significantly different from zero at the 99%, 95%, and 90% level respectively. The dependent variables in the probit models for each of the individual questions are set equal to 1 if the respondent answered with "increased" and are set equal to zero otherwise. The definition of the explanatory variables is given in Table A.I. LRT refers to the likelihood ratio test and N is the number of observations.

Table A.IV. Results of probit estimates on journal readership

Question: Which of the following IO-journals do you read regularly	Significant Positive	Impact Negative	Test statistics		
			LRT	% of correct prediction	N
Journal of Law and Economics	Prof ^{***} U.S.A. ^{***}	Theory ^{**} A34 [*]	43.15	0.70	485
Journal of Regulatory Economics		Econom [*] A34 [*]	11.96	0.88	487
Journal of Industrial Economics	Prof ^{***} Econom [*]	U.S.A. ^{***}	87.63	0.70	487
Journal of Economics and Management Strategy	Theory [*]		11.58	0.85	481
International Journal of Industrial Organization	Prof ^{***} A34 [*]	U.S.A. ^{***} A55 [*]	131.86	0.81	483
Rand Journal	Theory ^{***} A34 ^{***}	A55 ^{***}	36.51	0.61	491
Review of Industrial Organization	Prof [*]	A34 ^{**}	29.09	0.75	480

Remarks: ***, **, and * indicate that the parameter estimates are significantly different from zero at the 99%, 95%, and 90% level respectively. The dependent variables in the probit models for each of the individual questions are set equal to 1 if the respondent answered with "regularly" and are set equal to zero otherwise. The definition of the explanatory variables is given in Table A.I. LRT refers to the likelihood ratio test and N is the number of observations.

References

- Aiginger, K. (1999) 'The Use of Game Theoretical Models for Empirical Industrial Organization', in D. C. Mueller, A. Haid, and J. Weigand, eds., *Competition, Efficiency, and Welfare – Essays in Honor of Manfred Neumann*. Dordrecht: Kluwer Academic Publishers, pp. 253–277.
- Aiginger, K., D. Mueller, and C. Weiss (1998) 'Objectives, Topics, and Methods in Industrial Organization in the Nineties: Results from a Survey', *International Journal of Industrial Organization*, 799–830.
- Andrews, P. W. S. (1952) 'Industrial Economics as a Specialized Subject', *Journal of Industrial Economics*, 1, 72–79.
- Bain, J. S. (1951) 'Relation of Profit Rate to Industry Concentration', *Quarterly Journal of Economics*, 65, 293–324.
- Comanor, W. S., K. Georg, A. Jacquemin, F. Jenny, E. Kantzenbach, J. A. Ordovery, and L. Waverman (1990) *Competition Policy in Europe and North America, Economic Issues and Institutions*. Chur, Switzerland: Harwood Academic Publishers.
- Cowling, K., and M. Waterson (1976) 'Price-Cost Margins and Market Structure', *Economica*, 43, 267–274.
- Demsetz, H. (1973) 'Industry Structure, Market Rivalry, and Public Policy', *Journal of Law and Economics*, 16, 1–9.
- Fisher, F. M., and J. J. McGowan (1983) 'On the Misuse of Accounting Rates of Return to Infer Monopoly Profits', *The American Economic Review*, 73, 82–97.

- Frey, B. S., W. W. Pommerehne, F. Schneider, and G. Gilbert (1984) 'Consensus and Dissension Among Economists: An Empirical Inquiry', *The American Economic Review*, **74**, 986–994.
- Geroski, P. A. (1988) 'In Pursuit of Monopoly Power', *Journal of Applied Econometrics*, **3**, 107–123.
- Geroski, P. A. (1991) 'Competition Policy and the Structure-Performance Paradigm', in S. Davies, and B. Lyons, eds., *Economics of Industrial Organization*. London, New York: Longman, pp. 166–190.
- Martin, S. (1993) *Advanced Industrial Economics*. Oxford, U.K., Cambridge, MA: Blackwell.
- Mueller, D. C. (1986) *Profits in the Long Run*. Cambridge: Cambridge University Press.
- Mueller, D. C. (1995) 'American and European Economists', *Kyklos*, **48**, 251–55.
- Mueller, D. C. (1996) 'Lessons from United State's Antitrust History', *International Journal of Industrial Organization*, **14**, 415–445.
- Phlips, L. (1995) *Competition Policy: A Game Theoretic Perspective*. Cambridge: MIT Press.
- Porter, R. H. (1991), 'A Review on Handbook of Industrial Organization', *Journal of Economic Literature*, **29**, 553–572
- Schmalensee, P. (1989) 'Interindustry Studies of Structure and Performance', in R. Schmalensee, and R. D. Willig, eds., *Handbook of Industrial Organization*, Volume II, Chapter 16. Amsterdam: Elsevier, pp. 951–1010.
- Schwalbach, J. (1984) 'Strategisches Wettbewerbsverhalten in der Titandioxidindustrie', *Zeitschrift für Betriebswirtschaft*, **54**, 388–399.
- Schwalbach, J. (1994) 'Stand und Entwicklung der Industrieökonomik', in *Forschungsbericht der Humboldt Universität Berlin*, Universität Berlin.
- Scherer, F. M. (1980) *Industrial Market Structure and Economic Performance*. Boston: Houghton Mifflin.
- Sutton, J. (1992) *Sunk Costs and Market Structure*. Cambridge, London: MIT Press.