

OBJECTIVES, TOPICS AND METHODS IN INDUSTRIAL ORGANIZATION DURING THE NINETIES - RESULTS FROM A SURVEY⁺)

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Abstract: We conducted a survey among 113 experts on industrial organization regarding their opinions on the way markets work, on the proper role of competition and industrial policy, and on the methods which should be used to analyse industrial markets. The experts assessed the importance of research topics and methods during the last year and their probable development in the future. The sample appears to provide a valid representation of European experts, the response pattern does not seem to depend on the personal characteristics of the respondents.

JEL: L0, L1, L4, L5, D4, B0

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1. The development of industrial organization and the plan of the paper

Industrial Organization (IO) is one of the fields in economics specifically subjected to repeated torrents of professional and methodological modes. Its origins were marked by the conflict between the inductive and deductive approach. Traditional industrial organization has been attacked as being too empirical or case study oriented; in recent years, industrial organization has become the promotional agency for sophisticated game theoretical models. During the period of the Structure-Conduct-Performance Paradigm, industrial organization was dominated by the cross section approach; in the late seventies it became the area in which the potential shortcomings of this approach were made explicit, and model based time series analyses were advertised as the solution to the problems of empirical research. The contentions and the results of IO research influenced economic policy, notably competition or antitrust policy.

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The relation between industrial organization and "conventional microeconomics" has changed over time. IO became a specific economic field primarily because economics could not handle economies of scale, the presence of large firms, and product differentiation.¹ The distance to microeconomics grew pronounced, as the empirical strand became dominant, while microeconomics increasingly emphasized optimization, mathematics and formal models.² In the eighties, IO accepted that the decision makers in firms start out with an optimization problem, and then took the lead in promoting the concept that in a world of few firms, strategic interactions are a crucial part of the story. The firms do not optimize in a given framework of exogenous variables, but in an environment in which other firms are, at the same time, practising the same exercise. IO modeled decisions as non-cooperative games, and exported this approach into other fields of economics. Concurrently, microeconomists intensified attempts to incorporate the phenomenon of market power into their models.

In this paper, we investigate the status of IO in the late nineties by building on evidence from a survey conducted among more than 100 experts on IO. The questionnaire consists of 44 propositions on IO issues and 19 propositions on macro- and microeconomic issues, we concentrate on the first group. The questions cluster around three themes in industrial organization: (a) how do industrial markets work, (b) whether or how the government should become involved in these markets and (c) which methods should be applied in analyzing industrial markets. After describing the survey and assessing the strengths and weaknesses of this technique in Section 2, (a) - (c) will be discussed in Sections 3, 4, and 5. Section 6 presents the views of industrial economists on the future of their field. The views on scientific industrial organization journals are investigated in Section 7, and Section 8 summarizes the results.

2. The survey and its statistical measures used

The survey was conducted during the course of organizing the EARIE Conference in 1996. The sample of researchers, to whom the questionnaire was sent, mainly included participants who had attended one of the last EARIE conferences. Two other smaller samples were added, namely EUNIP³ and the Global Forum on Competition & Trade

¹ Andrews (1952), p 74

² This is expressed very directly in the following quotation from Fisher (1991, p. 212): "The years of drought in industrial organization theory were the years in which the cross-section farmers went on planting".

³ EUNIP (European Network on Industrial Policy) is an EU sponsored network of researchers in Economic Policy. Its center is in Birmingham; Roger Sudgen is the promotor of the network. Most members have a background in macroeconomics or political science.

policy⁴. Both of these were good complements, insofar as the participants are more policy oriented than the participants in the EARIE conference. From the 550 questionnaires sent out (or handed out during the conference), we received a response of 112 questionnaires. The return of 20.4% is somewhat below that of comparable surveys (see e.g. Kearl et al. (1979), Frey et al, (1984) and Hermann et al. (1985)), which might be due to the large number of questions asked.

Concerning the reliability of the results, two questions arise. The first is whether the respondents made an honest effort to answer the questionnaire with diligence and care, or whether they made arbitrary choices. On the statistical side, we tested whether the answers could have been made by chance; this possibility was rejected for any individual question. Secondly, we added three questions at the end of the questionnaire in which the respondents were asked how they felt about (i) the aim of the questionnaire (ii) the appropriateness of the questionnaire in identifying the scope and development of IO and (iii) whether the statements in this survey are clear enough to fulfill this task. All three questions are supported.⁵ The second question is whether the respondents were representative of the population of industrial organization experts. Regressing the results in a probit analysis on the personal characteristics of the respondents hints indirectly at an answer to this question. If the questions are answered differently by younger and older researchers, or according to their country of origin, then the danger of attaining an incorrect sampling is large. We did not find a strong interdependence between the results and the personal characteristics about which we had asked (see Appendix 2). This is, of course, no proof that we do not have a non response error, and we indeed believe that the answers would have been different if we had asked participants at conferences on game theory, or on industrial policy, as it would be for the American Industrial Organization Society.⁶

⁴ This is an American Based Forum with a strong tradition in antitrust policy. The sample consists of participants in the 1996 conference of the Forum in Vienna, which was organized by EMPIRICA and the Austrian Institute of Economic Research.

⁵ The propositions and the responses were as follows:

Response	Proposition	AM	SD
1.)	Scientific analysis of the scope and development of IO, as well as the extent of consensus and dissension are interesting fields of research	1,84	0,86
2.)	Questionnaires are an appropriate tool for identifying the scope and development of IO	2,29	0,96
3.)	The statements in this survey are sufficiently differentiated to estimate the scope and development of IO	2,61	1,00

All three questions are supported on average, and in particular, the aim of the questionnaire is strongly supported.

⁶ Some initial evidence on the representativeness of the respondents for the broader population of economists can also be obtained by comparing our results with those of previous questionnaires asking identical questions to a

The majority of the respondents were from European countries (87%), with the largest group from the UK (16%), while 11% of the participants came from the USA. More than 80 % are currently affiliated with universities, among them 30% are full professors and 5% were students. One third was younger than 34, 60% between 34 and 54. The majority classified themselves as applied economists, 30 % as theoretical. Most of the respondents (80%) were trained in economic departments, 15% in business school. 75% are EARIE members, the rest is split between EUNIP, Global Forum and others. More details are given in Table A1 in the appendix.

The response patterns on the various propositions are indicated on the so-called Likert scale (Likert, 1932), ranging in equal intervals from 1 (completely agree) to 5 (completely disagree). The mean (\bar{x}_i) is interpreted as a measure of the average view of industrial economists on issue i (with $i = 1, \dots, 60$). A mean $\bar{x}_i < 3$ signifies that the majority agrees to proposition i , $\bar{x}_i > 3$ signifies rejection. The absolute difference to 3 indicates the margin of approval and rejection, respectively. It is also instructive to compute the balance of those approving and those rejecting the hypothesis. The degree of consensus and disagreement among industrial economists is measured by the relative entropy measure ρ , which is standardized to range from 0 to 1.⁷ If all industrial economists reply in the same way, there is perfect consensus and $\rho = 0$. If all possibilities of response are equally represented, $\rho = 1$. The average ρ for all 44 propositions on industrial organization issues is 0,79. The overall results are reported in Table 1, the personal characteristics of the respondents in the annex table A1, the influence of the personal characteristics on the response pattern in A2.

Table 1

3. Analysis of market behavior

Taking off from Bain's seminal work, one of the key issues in the structure conduct performance paradigm is the relationship between market concentration and industrial profitability. Bain (1951) suggested - and presented evidence - that profits increase with

different group of people (Frey, et al. (1984), Herrman et al. (1985)). A comparison of these propositions is available from the authors upon request.

⁷ We define ρ as the actual entropy divided by the maximum possible entropy over the five response categories. 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. $\sum p_i \ln(p_i)$

concentration.⁸ The rationale for the Bain hypothesis was the presumption that in markets with only a few sellers firms tend to collude. This „market power explanation“ of profits provoked the antithesis that higher profits made by large firms are not due to market power, but instead reflect the superior efficiency of larger firms (Demsetz, 1973)⁹. The Bain versus Demsetz controversy was addressed in propositions [4], [7], [9], and [11] and indirectly in the questions concerning the objectives and rigorosity of antitrust policy. The majority of the respondents affirm that the higher margins of large firms are a consequence of market power (63.4 %, $\bar{x}_7 = 2.59$) and are not due to the higher efficiency of larger firms as claimed by Demsetz ($\bar{x}_4 = 3.87$). However, Bain's contention that in a market with only a few sellers, firms usually collude splits the sample nearly in half: 40.1% agree, 46.4% disagree ($\bar{x}_9 = 3.01$). Modern industrial organization offers many factors in addition to the number of firms determining the feasibility of collusion. Bertrand's results and the contestable market theory have shown that there can be tough competition even if there are only a few firms, non-cooperative game theory highlights the difficulty of sustaining collusion in finite horizon models. All these developments have limited the generality of collusion contention for markets with a few sellers. However, there is broad consensus among industrial economists that market power is not a short run phenomenon ($\bar{x}_{11} = 3.43$), so that antitrust policy cannot be downgraded. This will be underlined in Section 4 on policy issues.

The second issue investigated is the extent of economies of scale and, as a corollary, the profitability of mergers. Propositions [4], [5] and [6] collect information about whether economies of scale are still considered a constituent element of real world markets. A clear majority (78.4%) of the respondents rejected the notion that average costs are lower under monopoly ($\bar{x}_4 = 3.87$), which makes the productive vs. allocative efficiency trade-off a theoretical construct. The high level of consensus on this proposition is - from our standpoint - one of the most interesting and surprising results of our questionnaire. Industrial economists are also skeptical about mergers, the hypothesis that mergers do not increase profits was accepted (albeit by a low margin, 49.5% : 27.9%, $\bar{x}_5 = 2.70$). Small firms were clearly assessed as being more flexible in adapting to an exogenous shock ($\bar{x}_6 = 2.41$).

Closely related to the issue of flexibility is the controversy about the "nature of the competitive model". The standard textbook competitive model of small passive firms

⁸ The complete hypothesis was that profits depend on concentration and entry barriers, but the second part is not controversial.

⁹ Demsetz informed me personally that this textbook interpretation is too strong. In asking how to explain the profit differences (with size) in some industries, he maintains that collusion cannot explain them, while cost differences could. Therefore industries become concentrated because a few firms are more efficient than others. The lower costs of these larger firms explain the profit difference and the market power.

facing an exogenous market price and given costs, without room for entrepreneurial initiative was strongly rejected (by the highest margin of all questions; 88.5% of all respondents disagreed; $\bar{x}_1 = 4.18$). Superior flexibility, the importance of entrepreneurial initiative, and downplaying scale economies altogether fits into a surprisingly positive assessment of small firms by a discipline formerly emphasizing the power of scale economies.¹⁰ This way of thinking is reflected in more recent approaches to the analysis of market behavior (such as Geroski 1991 and Mueller 1986), which emphasize the dynamic nature of competition and the complex process of oligopolization. The argument that competition should not be modeled by simply equating prices to marginal costs, "...but is a process in which new products meet new demands..." found support among the majority of industrial economists (74.1% of all respondents support this proposition; $\bar{x}_{40} = 0.86$). Consequently, the respondents were not convinced that small deadweight triangles are the main welfare consequences of imperfect competition, as mainstream textbooks and Harberger estimates imply. Cowling and Mueller's (1978, 1981) assertion that the welfare loss of oligopoly could be assessed only if we additionally consider the strategic costs of obtaining or retaining oligopoly power, has become part of mainstream opinion ($\bar{x}_3 = 1.78$), in particular among researcher affiliated with universities (see Table A2).

Whether price wars occurred in peaks (Rotemberg and Saloner, 1986) or troughs (Porter, 1984) is still a controversial issue, both in theoretical as well as empirical industrial organization. The majority of the respondents (52.7%) seemed to favor Porter's view, whereas 25.0% disagreed with proposition 8 ($\bar{x}_8 = 2.71$). Despite the fact that game theoretical models downplay the importance of predation and of entry deterrent strategies, our results indicate that industrial economists are nevertheless skeptical about the proposition that predation and entry deterrence are not profitable strategies ($\bar{x}_{12} = 3.12$, $\bar{x}_{10} = 3.23$).

4. On policy issues

The second group of questions addressed the objectives, yardsticks and vigorousness of industrial and regulatory policy. How much can and shall theory be used for regulatory policy? Is antitrust legislation too permissive or is it an outdated policy in a world of integrating markets, in which concentration is declining due to the globalization of the relevant market?

¹⁰ According to Table A2, industrial economists from EU-countries are found to reject proposition [1] and [4] and to accept proposition [9] more clearly than their colleagues from the USA and from other non EU countries c.p., which suggests that the positive attitude towards small firms is a particularly European attitude.

The provocative hypothesis (proposition [37]), that international competition has made the regulation of monopolies an outdated policy was accepted by 21 % of the respondents, but is rejected by a clear majority of 72.3% ($\overline{x_{37}} = 3.59$). Measured according to the relative entropy index, this proposition is among those with the highest degree of consensus. Consistently, the majority (60.5%), and in particular respondents with an economics background (see Table A2), wanted antitrust laws to be used vigorously to reduce monopoly power from its current level ($\overline{x_{16}} = 2.52$). Both answers can be seen as a rejection by industrial economists of the increasing permissiveness of policy in the US and the historically timid competition policy in the European Union and Japan. The strong vote occurred in spite of the belief that effective concentration has decreased during the last decade, since many relevant markets have changed from national to global ($\overline{x_{38}} = 2.45$).

A number of questions investigated the respondents' ideas about regulation, specifically regarding (former) natural monopolies. Regulation was not considered to be an impediment to productive efficiency ($\overline{x_{19}} = 3.27$), and state owned television was thought to offer higher quality than private television ($\overline{x_{20}} = 2.75$). Both are intervention-friendly answers, although, there was substantial disagreement among researchers with respect to the latter proposition as indicated by the high relative entropy index. The respondents were split about whether new private monopolies or collusive oligopolies are now substitutes for formerly regulated or public owned telecom providers ($\overline{x_{21}} = 3.05$). Whereas the majority (73.5%) believed that rent control decreases the quantity and quality of housing ($\overline{x_{17}} = 2.10$), consumer protection laws, on the other hand, were not seen to be a cause of reduced economic efficiency by most respondents (59.3%, $\overline{x_{18}} = 3.45$). These differing assessments indicate that the answers are issue related and not dominated by a a-priori bias in the group.

Regarding the ultimate yardstick model for regulatory policy, industrial economists heavily leaned towards the view that the total surplus should be maximized, not the consumer surplus ($\overline{x_{34}} = 3.43$). This choice has been gaining popularity in the US during recent years, while the EU, at least theoretically, clings to the goal of consumer welfare¹¹. Competition policy should challenge tacit collusion as a legal offense (not only with explicit cooperation; $\overline{x_{35}} = 2.68$; the opposing view is held by 32 %); this again conforms to EU law. However, there was a rather large amount of disagreement with this proposition.

The proposition that the best industrial policy is no industrial policy was rejected by 67.8% of the researchers, while one fourth agreed ($\overline{x_{32}} = 3.61$). Opinions were exactly split on the issue whether industrial policy is subsidization in disguise, whereby this proposition was

¹¹ For an overview on the US discussion see Coate, Kleit 1996, for Europe see Martin 1994 p 326 "EC competition policy aims to promote consumer welfare, not consumer welfare plus producer welfare".

more clearly rejected by economists from the USA. The respondents agreed that the goal of industrial policy is the correction of market failure, a position implicitly dominating EU law ($\overline{x_{33}} = 2.46$). This is bad news for hard liners favoring a forward looking strategic industrial policy (targeting progressive sectors etc.). It should, however, be noted that this issue is highly controversial, as indicated by the high relative entropy index.

Propositions [36], [41] and [42] addressed the subtle differences between the recommendations for competition policy by traditional IO and those by game theoretic IO (Phlips 1995; Aiginger, 1997). The exchange of information was considered as per se evidence of collusion in antitrust, based on traditional industrial organization (this view also dominates in EU law, see Phlips 1995, p 9), while game theory offers models in which the exchange of information is also profitable in non-collusive equilibria. 50 % of the respondents favored the proposition that the exchange of information "should be considered as strong evidence of collusion" ($\overline{x_{36}} = 2.77$). Proposition 41 asked whether the first best solution - and if it does imply losses - the second best solution (prices equal average costs) should be the objective of antitrust policy. The question which immediately followed asked whether the outcome of a non-collusive game, such as a finite Cournot or Bertrand game, should be the yardstick of competition policy. The latter could imply that positive price cost margins or even positive profits would be innocuous, if, theoretically, they can occur in a non-collusive model (this is specifically stressed by Phlips 1995). Interestingly both hypotheses remain in the minority: the first was approved by only 33.0 % ($\overline{x_{41}} = 3.13$), the second by 31.0% ($\overline{x_{42}} = 3.22$). It is not easy to say why. One possibility is that the respondents wanted to avoid easy rules of thumb in favor of a case by case approach. Another is that respondents were not happy with any second best solution and considered the possibility of positive margins a lenient policy. A third possibility is that the questions were too difficult to be answered. We lean towards the second interpretation.

5. About methodology

Methodological questions concerned the role of theory in policy, the appropriate weight of theoretical and empirical research, and the merits of game theory. Industrial economists very strongly agreed that game theory has increased the understanding of real markets ($\overline{x_{22}} = 2.07$). As expected, researchers classifying themselves as „theoretical economists“ were particularly supportive of this proposition. On the other hand, the respondents also criticized the proposition that game theoretically founded IO concentrates on analytically interesting questions instead of "important ones for the study of real life industries", ($\overline{x_{44}} = 2.35$). Fisher's „second organising principle“ that „the principal result of theory is to show that nearly anything can happen“ (1991, p. 207) was rejected by most respondents (54.4%); 13.2% were indifferent ($\overline{x_{43}} = 3.26$). In both cases Table A2 suggests a highly

significant impact of the self evaluation of the respondents as „applied“ or „theoretical“ economists. Sutton’s strategy of screening theory for robust predictions and testing whether empirical data contradict these predictions, triumphed with a record margin of 78.8% agreement versus 12.4% disagreement ($\overline{x_{25}} = 2.10$).

Researchers desire more empirical research. That too much stress is laid on the use of mathematical models was accepted by a margin of 48 % : 39 % ($\overline{x_{28}} = 2.82$), the acceptance of this proposition being significantly lower for „theoretical economists“. This proposition is among those with the highest degree of disagreement, however. A great obstacle for empirical research has always been the Fisher critique that accounting data are unreliable and should not be used for empirical research. Fisher’s Philippica against the use of accounting data on profits was rejected ($\overline{x_{23}} = 3.36$), models of conjectural variation did not lose their popularity (or regained it is since it is known¹² that each CV model can be interpreted as solution to dynamic models, $\overline{x_{26}} = 3.54$). And 75 % of the researchers agreed that after a decades of considerable progress in theory, industrial organization would now benefit most from empirical studies (with only 9% undecided and 16% rejecting this proposition, $\overline{x_{24}} = 2.17$), theoretical economists being somewhat more skeptical about this statement, however.

6. On the Past and Future of Industrial Organization

Having experienced the battles between the forces of logical reasoning and ultra micro evidence, the development from the structure-conduct-performance paradigm to NEIO (new empirical industrial organization), and the shifts between empirical dominance, theoretical pureness and game theory, it is interesting to learn how researchers assess the developments of the past 10 years (propositions 45 to 52) and what they expect for the future (proposition 53 to 60). For these propositions, the response pattern ranges from 1 (the importance of this field has increased in the past or will increase in the future) to 3 (the importance has decreased or will decrease).

Industrial economists agreed that the theoretical foundation of industrial organization has increased in importance over the last 10 years ($\overline{x_{45}} = 1.29$), specifically in the wake of the game theoretic revolution ($\overline{x_{47}} = 1.19$). Interestingly, this view is shared particularly by „applied“ researchers and significantly less by those who classify themselves as „theoretical economists“. The importance of experiments has increased too: empirical testing with real world data is said to have become slightly more important in the last ten years, and this also holds true for the application of IO to economic policy. Case studies lost slightly, the

¹² Dockner 1992 or Cabral 1995 or Pfaffermayr 1997.

Structure Conduct Performance Paradigm dramatically. Industrial organization was assessed to have increased its significance within economics ($\overline{x_{52}} = 1.37$).

More disagreement exists with respect to the future development of IO. The theoretical foundation remains important - with a majority of researchers expecting a continuing increase (31.2%) over those expecting a decline (14.0%, $\overline{x_{53}} = 1.83$). However, empirical testing clearly seems to be the most dynamic area within industrial economics, with 73.4% of the respondents expecting increasing importance, while only 3.2% expect a decline. Game theory is expected to lose popularity, the SCP paradigm will not revive. Experiments will continue increasing in popularity albeit less dynamically, while case studies are expected to experience a revival. The application of industrial organization to industrial policy is expected to increase, the importance of IO in economics also, however not at its present rate.

7. Reading frequency of journals

The importance of the industrial organization journals was investigated by asking whether the particular journal is read regularly (1), sporadically (2) „, or usually not“ (3). The rankings of the journals is reported in Table 2.

Table 2

As can be seen from Table 2, the "Journal of Industrial Economics" and the "International Journal of Industrial Organization" are the two most frequently read journals in the field,¹³ followed by the "RAND Journal" and, with some distance, the „Review of Industrial Organization", the "Journal of Economics and Management Strategy", the "Journal of Law and Economics" and the Journal of "Regulatory Economics". The ranking of these journals differed somewhat between respondents from the United States and Europe and in some cases was also influenced significantly by the personal characteristics of the respondents

¹³ Be reminded, however, that the experts attending EARIE conferences are in some way affiliated with the IJIO.

(see Table A2). The rankings would probably be shifted in favor of the Rand Journal, if the sample were enlarged in the USA.

8. Summary and caveats

Questionnaires are one way of obtaining information on the opinion of researchers regarding long lasting debates and methodologies. They have the advantage that questions on a broad range of issues can be posed, and that a specific topic can be approached from different angles. On the other hand, the questions may be worded imprecisely or with a bias, and the prejudices of those designing the survey may have a decisive influence.¹⁴ Furthermore, the group of respondents may be biased or respondents might try to get rid of the questionnaire by answering by chance. No direct commitment or economic reward is connected with the truthful and precise answer.¹⁵ Be aware of these problems and know that professional opinion studies on journal and department quality are, for example, often held at low esteem (but are widely read, enjoyed, and quoted). We are nevertheless confident that our results are valuable in increasing the knowledge about the way researchers in the field of industrial organization think. Some of the results confirmed our prejudices, some shifted our perception, very few were surprises. The largest surprise was the critical judgement on economies of scale, on the potential efficiency gain of mergers, and on monopolies. This result is interesting from the historical point of view, since the presumption of economies of scale was one of the reasons that IO became a specific discipline (Andrews 1937). The downplaying of economies of scale is also surprising in a world of globalization. It is consistent with the view that small firms are more flexible, that there are extra costs for bureaucracy and that oligopolies incur extra costs in the preservation of their market power.

The results shifted our perception insofar as researchers - at least our European based group - were far less in favor of soft policy approaches than appears from policy discussions in the media. Market power is not thought to be a short run phenomenon, antitrust policy should change actual concentration; it should not lose importance in a world of internationalization. The opinion that the best industrial policy is no industrial policy is a minority view, as is the view that a tough competition policy in Europe and in

¹⁴ We tried to cope with the problem of subjectivism by intensive pretesting of the questionnaire and received numerous valuable comments by some of the best known researchers in Industrial Organization.

¹⁵ However statistical tests show that no vector of answers to any question could be produced by a technique of choosing answers by chance. The judgement of the respondents on whether the survey technique was appropriate and the questions were sufficiently differentiated was tested and approved.

the US favors Japan. Views on the adequate amount and form of regulation are split, an industrial policy beyond the correction of market failure is not advocated.

The results concerning the impact of game theory paint a coherent, multi-layered picture. The role of game theory in understanding markets is highly appreciated, while the accusation that any prediction wanted can be supplied was rejected. Extremely sophisticated models of entry deterrence and predation have not changed robust suspicions about anti-competitive practices. The researchers acknowledged the importance of empirical research and advocated not being overcritical towards empirical work, which does not start from the latest refinement of a theoretical model and which yields parameters not representative of well-defined equilibria. The respondents did not share a „hands off“ recommendation with respect to the use of accounting data. Mathematical models are important but may be overused, empirical research is extremely necessary and is expected to increase its importance during the next decade.

These results should be evaluated with the caveats mentioned above. The questionnaires offered some insights and helped to increase our knowledge about what people in industrial organization currently think, at least the specific group represented at European IO Conferences. If there is a specific bias, it can be partly investigated by splitting the sample according to nationality, age, specialization etc. We did not find a strong interdependence between answers and personal characteristics. The ultimate way of testing whether the answers are representative of other groups of industrial organization experts would be to collect additional evidence in a new survey, a procedure highly welcome by the authors.

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Table 1: Results of 44 propositions on industrial organization issues

Propositions	Mean	Std. Dev.	Completely agree in %	agree with provisions in %	indifferent in %	disagree in %	completely disagree in %	Missings in %	relative Entropy index	Number of answers	χ^2 -test
1: When many small firms compete, entrepreneurial initiative becomes a secondary issue (maybe since firms equate marginal costs and prices, and inefficient firms exit)	4.18	0.83	0.0	8.0	3.5	51.3	37.2	0.9	0.64	113	118.19
2: Research joint ventures should not be prevented even if they extend to the production phase (maybe since insufficient innovation is a greater problem than some limited collusion in price or output)	2.79	1.14	9.8	43.8	8.9	33.0	4.5	1.8	0.81	112	67.29
3: The true welfare loss of oligopoly can be assessed only if we add up to the normal costs (i.e. cost in a competitive market), the strategic costs of obtaining and retaining oligopoly power	1.78	0.91	45.1	39.8	8.8	4.4	1.8	0.9	0.71	113	97.40
4: Average costs tend to be lower under monopoly than under competition, c. p.	3.87	0.88	0.9	9.9	10.8	57.7	20.7	2.6	0.72	111	109.32
5: Mergers usually do not increase accounting profit ratios (in the long run)	2.70	1.04	10.8	38.7	22.5	25.2	2.7	0.0	0.86	111	42.65
6: Small firms are more flexible (in adapting to exogenous shocks) than large firms	2.41	0.86	9.7	54.0	23.0	12.4	0.9	0.9	0.74	113	95.63
7: The higher margins of large firms typically are the consequence of market power	2.59	1.02	7.1	56.3	10.7	22.3	3.6	1.8	0.75	112	103.09
8: Price wars - if they occur at all - tend to happen in recessions	2.71	0.94	3.6	49.1	22.3	22.3	2.7	1.8	0.77	112	79.96

9: In a market with few sellers, firms usually collude	3.01	1.06	7.1	33.0	13.4	44.6	1.8	1.8	0.78	112	73.80
10: The importance of entry deterrence has been widely exaggerated. In most cases it is not a profitable strategy	3.23	1.02	4.4	26.5	14.2	51.3	3.5	0.9	0.76	113	88.81
11: Market power is essentially a short run phenomenon, if a government does not assist preventing entry.	3.43	1.04	3.5	24.6	4.4	60.5	7.0	0.0	0.68	114	133.81
12: The importance of predation has been widely exaggerated. In most cases it is not a profitable strategy	3.12	1.04	3.6	33.3	15.3	43.2	4.5	2.6	0.79	111	69.32
13: Market entry barriers are higher in Japan, than in the US	2.21	0.83	21.5	40.2	33.6	4.7	0.0	6.1	0.75	107	65.85
14: Market entry barriers are higher in Europe than in the US	2.47	0.84	10.1	45.0	33.9	10.1	0.9	4.4	0.77	109	75.08
15: The competitive process is different in the US, Japan, and Europe mainly due to cultural differences and consumer behavior	2.52	1.06	16.1	42.0	17.9	22.3	1.8	1.8	0.85	112	47.02
16: Antitrust laws should be used vigorously to reduce monopoly power from its current level	2.52	0.96	10.5	50.0	16.7	22.8	0.0	0.0	0.76	114	80.30
17: Rent control reduces the quantity and quality of housing available	2.10	0.90	25.7	47.8	19.5	5.3	1.8	0.9	0.78	113	76.42
18: 'Consumer protection' laws generally reduce economic efficiency	3.45	0.91	0.9	19.5	20.4	52.2	7.1	0.9	0.75	113	88.73
19: Reducing the influence of regulatory authorities would improve the efficiency of the economy	3.27	1.07	4.5	26.8	13.4	48.2	7.1	1.8	0.81	112	72.38
20: State-owned television supplies higher quality than private television	2.75	1.13	13.2	35.1	19.3	28.1	4.4	0.0	0.90	114	33.28
21: Deregulation of telecoms leads to new monopolies (or collusive oligopolies) with prices high in relation to the potential and actual costs in the industry.	3.05	1.06	4.4	34.5	18.6	36.3	6.2	0.9	0.84	113	51.47
22: Game theory has considerably increased our understanding of strategic behavior in real markets	2.07	0.94	27.2	50.0	13.2	7.9	1.8	0.0	0.77	114	84.25
23: Accounting data, e.g. on profits, are in most cases misleading and should	3.36	1.03	4.4	21.2	15.0	52.2	7.1	0.9	0.79	113	83.24

not be used for empirical research											
24: After decades of considerable progress in theory, industrial organization will now benefit most from empirical studies	2.17	1.02	25.4	50.0	8.8	14.0	1.8	0.0	0.78	114	81.18
25: Game-theoretical model can be given enough structure so that they yield empirically testable predictions. Specifically we should try to find robust predictions and test whether empirical data contradict to these predictions	2.10	0.93	24.8	54.0	8.8	11.5	0.9	0.9	0.74	113	98.28
26: Conjectural variation models should not be used in research, since they force dynamics into a static model and are therefore theoretically flawed	3.54	0.97	4.6	10.1	22.9	51.4	11.0	4.4	0.81	109	76.83
27: There should be no difference in methodology between industrial economics and microeconomics	2.78	1.19	17.0	28.6	18.8	31.3	4.5	1.8	0.92	112	25.32
28: Too much stress is laid on the use of mathematical models in teaching and research in the field of Industrial Organization.	2.82	1.24	16.1	32.1	12.5	32.1	7.1	1.8	0.91	112	29.79
29: Industrial policy, as it works in reality, is essentially subsidization in disguise	3.00	1.13	9.1	30.9	16.4	38.2	5.5	3.5	0.87	110	43.64
30: Recommendations of industrial economists have little impact on industrial policy	2.90	1.03	8.0	32.7	22.1	35.4	1.8	0.9	0.83	113	49.79
31: A tough competition policy could hinder US and European firms in the global competitive race against Japanese Keiretsus or against firms in the managed economies of the Tiger States.	3.36	1.04	2.8	22.0	23.9	39.4	11.9	4.4	0.87	109	41.41
32: The best industrial policy is no industrial policy	3.61	1.13	3.6	20.5	8.0	47.3	20.5	1.8	0.82	112	64.96
33: Successful industrial policy goes beyond the correction of market failure	2.46	1.03	11.6	58.0	6.3	21.4	2.7	1.8	0.73	112	112.46
34: Consumer surplus is the final yardstick for regulatory policy, not total surplus	3.43	1.05	3.6	22.5	10.8	53.2	9.9	2.6	0.78	111	86.61
35: Competition policy should address tacit collusion (reached through concerted practices) as a legal offense, not only explicit cooperation	2.68	1.11	15.5	34.5	18.2	30.0	1.8	3.5	0.87	110	36.64
36: Exchange of information between competitors on market conditions and	2.77	1.13	10.6	41.6	12.4	31.0	4.4	0.9	0.85	113	55.10

prices, firm specific production and exports, should be considered as strong evidence of collusion

37: International competition has made the regulation of monopolies an outdated policy	3.59	0.98	2.7	17.9	7.1	62.5	9.8	1.8	0.69	112	133.27
38: Effective concentration has decreased in the last two decades, since many "relevant markets" changed from national to global	2.45	0.95	8.8	59.3	11.5	18.6	1.8	0.9	0.72	113	117.22
39: Open markets allow small firms to reach the minimum efficient scale, so that small firms benefit more than large firms from internationalization	3.12	0.84	2.9	19.2	43.3	32.7	1.9	8.8	0.76	104	68.79
40: 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	2.14	0.95	24.1	50.0	16.1	7.1	2.7	1.8	0.79	112	78.27
41: Antitrust policy should induce firms to equate prices to marginal cost, or - if this implies losses - at least to equate prices to average costs	3.13	1.04	4.5	29.5	19.6	41.1	5.4	1.8	0.83	112	55.41
42: The result of a non collusive game (e.g. a finite Cournot/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 authorities	3.22	1.10	5.5	25.5	20.9	38.2	10.0	3.5	0.89	110	37.00
43: Game theory is not of much practical use, since by changing the strategy, the horizon, the time structure (facts about which we do not have much information in the real world) we can get any result we want	3.26	1.19	7.9	24.6	13.2	42.1	12.3	0.0	0.89	114	43.46
44: There is a strong tendency in industrial organization in general (and in game theoretical models specifically) to concentrate on the analytically interesting questions rather than on the ones that really matter for the study of real- life industries	2.35	1.05	21.2	43.4	15.0	19.5	0.9	0.9	0.83	113	52.97
45: Scientific analysis of the scope and development of IO, as well as the extent of consensus and dissension are an interesting field of research.	1.71	0.95	37.7	36.8	14.9	2.6	0.8				

46: Questionnaires are an appropriate tool for identifying the scope and development of IO.	2.16	1.07	12.3	61.4	6.1	11.4	3.5
45: The statements in this survey are sufficiently differentiated for an estimation of the scope and development of IO.	2.47	1.14	8.7	42.1	25.4	14.0	4.4

Table 2: Appraisal of industrial organization periodicals

Rank	Journal	Mean
1	Journal of Industrial Economics	1,29
2	International Journal of Industrial Organization	1,31
3	RAND Journal	1,59
4	Review of Industrial Organization	2,22
5	Journal of Law and Economics	2,31
6	Journal of Economics and Management Strategy	2,37
7	Journal of Regulatory Economics	2,73

Table A1: Descriptive statistics on the personal characteristics of respondents and the definition of variables

Characteristics	Categories	Number of resp.	(in %)	Variable Definition
Age	below 34 years	34	(29.8%)	AGE < 34 = 1
	between 35 and 55 years	66	(57.8%)	
	above 55 years	12	(10.5%)	AGE > 55 = 1
Sex	no answer	2	(1.7%)	
	female	7	(6.1%)	FEMALE = 1
	male	107	(93.8%)	
Occupation	no answer	0	(0%)	
	student	8	(7.0%)	
	assistant professor	23	(20.2%)	
	associate professor	15	(13.1%)	
	full professor	36	(31.6%)	PROFESSOR = 1
	non university researcher	16	(14.0%)	NON-UNIV = 1
	business	2	(1.7%)	
Self evaluation as	other	14	(12.3%)	
	no answer	0	(0%)	
	applied economist	79	(61.4%)	
	theoretical economist	37	(32.5%)	THEORY = 1
Background	other	7	(6.1%)	
	no answer	0	(0%)	
	economics	91	(79.8%)	ECONOMIST = 1
	business	20	(17.5%)	
Country of residence	other	2	(1.7%)	
	no answer	0	(0%)	
	Austria	13	(11.4%)	EC = 1
	Belgium	5	(4.4%)	EC = 1
	Switzerland	2	(1.7%)	
	Czech Republic	1	(0.8%)	
	Germany	9	(7.9%)	EC = 1
	Denmark	6	(5.3%)	EC = 1
	Spain	2	(1.7%)	EC = 1
	Finland	4	(3.5%)	
	France	5	(4.4%)	EC = 1
	Great Britain	17	(14.9%)	EC = 1
	Greece	1	(0.8%)	EC = 1
	Hong Kong	1	(0.8%)	
	Hungary	3	(2.6%)	
	Italy	12	(10.5%)	EC = 1
	Japan	1	(0.8%)	
	Luxembourg	1	(0.8%)	EC = 1
	Netherlands	6	(5.3%)	EC = 1
	Norway	1	(0.8%)	
Portugal	3	(2.6%)	EC = 1	
Turkey	1	(0.8%)		
Membership	USA	12	(10.5%)	USA = 1
	EARIE	80	(70.2%)	EARIE = 1
	EUNIP	8	(7.0%)	
	Global Forum	2	(1.8%)	

Table A2: Determinants of responses: probit estimates of personal characteristics

No.	Proposition	Significant Impact		Test statistics		
		Positive	Negative	LRT	% of correct predict.	N
1	When many small firms compete, entrepreneurial initiative becomes impossible.	THEORY*	EC**	12.45	0.92	113
2	Research joint ventures should not be prevented if they extend to the production phase.	EARIE*	THEORY*** ECONOMIST***	21.76	0.64	112
3	The true welfare loss of oligopoly can be assessed only if we additionally consider the strategic costs of obtaining and retaining oligopoly power.	-	NON-UNIV**	8.94	0.85	113
4	Average costs tend to be lower under monopoly than under competition, c.p.	-	THEORY** EC**	19.92	0.90	111
5	In the long run, mergers usually do not increase the profitability of firms.	AGE>55**	THEORY*** NON-UNIV*** USA**	36.60	0.75	111
6	Small firms are more flexible in adapting to exogenous shocks than large firms.	-	-	6.97	0.65	113
7	The higher margins of large firms are typically the consequence of market power.	ECONOMIST** AGE>55*	-	17.42	0.67	112
8	Price wars - if they occur at all - tend to happen during recessions.	-	-	4.57	0.60	112
9	In a market with only a few sellers, firms usually collude.	EC**		14.69	0.68	112
10	The importance of entry deterrence has been widely exaggerated: In most cases, it is not a profitable strategy.	PROFESSOR*	-	7.91	0.73	113
11	Market power is essentially a short run phenomenon if a government does not assist in the prevention of entry.	-	-	5.26	0.72	114
12	The importance of predation has been widely exaggerated, in most cases it is not a profitable strategy.		ECONOMIST** AGE<34**	11.73	0.67	111
13	Market entry barriers are higher in Japan than in the U.S.	USA** EARIE**	-	13.77	0.69	107
14	Market entry barriers are higher in Europe than in the U.S.	AGE>55*	-	8.92	0.59	109
15	The competitive process is different in the US, Japan and Europe. This is mainly due to cultural differences and consumer behavior.	AGE>55* EARIE*	-	9.20	0.61	112
16	Antitrust laws should be used vigorously to reduce monopoly power from its current level.	ECONOMIST***		19.35	0.69	114
17	Rent control reduces the quantity and quality of housing availability.	-	NON-UNIV**	17.78	0.75	113
18	Consumer protection laws generally reduce economic efficiency.	-	-	6.96	0.80	113

19	Reducing the influence of regulatory authorities would improve the efficiency of the economy.	-	-	4.99	0.67	112
20	State-owned television offers higher quality than that of private television.	EARIE**	-	11.65	0.61	114
21	Deregulation of telecoms has lead to new monopolies (or collusive oligopolies).	ECONOMIST***	-	11.95	0.60	113
22	Game theory has considerably increased our understanding of strategic behavior in real markets.	THEORY***	-	23.33	0.79	114
23	Accounting data on profits are in most cases misleading and should not be used for empirical research.	AGE<34*	-	12.33	0.78	113
24	After decades of considerable progress in theory, industrial organization will now benefit most from empirical studies.	-	THEORY**	10.99	0.74	114
25	Game-theoretical models can be given enough structure so that they yield empirically testable predictions. Specifically we should try finding robust predictions (i.e. predictions given in a large set of circumstances), and test whether empirical data contradict to these predictions.	-	-	5.67	0.79	113
26	Conjectural variation models should not be used in research.	ECONOMIST*	-	13.76	0.86	109
27	There should be no difference in the methodology between industrial economics and microeconomics.	THEORY**	-	9.27	0.65	112
28	In the field of Industrial Organization, too much stress is laid on the use of mathematical models.	-	THEORY**	13.29	0.63	112
29	Industrial policy, as it works in reality, is essentially subsidization in disguise.	-	USA**	10.05	0.66	110
30	Recommendations of industrial economists have little impact on industrial policy.	ECONOMIST*** AGE<34**	USA** EU**	20.17	0.65	113
31	A tough competition policy could hinder US and European firms in the global competitive race against Japanese Keiretsus or against firms in the managed economies of the Tiger States.	-	PROFESSOR**	17.32	0.75	109
32	The best industrial policy is no industrial policy.	-	-	6.55	0.76	112
33	The goal of industrial policy is the correction of market failure.	AGE<34*	USA*	19.02	0.75	112
34	Consumer surplus is the final yardstick for regulatory policy, not total surplus.	-	-	15.16	0.74	111
35	Competition policy should address tacit collusion (not only explicit cooperation) as a legal offense.	AGE>55**	NON-UNIV*	14.62	0.70	110
36	The exchange of information (if it happens on a more than casual basis) among competitors under market conditions, prices or firm specific production, should be considered as strong evidence of collusion.	-	-	11.90	0.60	113
37	International competition has made regulation of monopolies an outdated policy.	-	-	7.00	0.79	112
38	Effective concentration has decreased in the last two decades since many "relevant markets" changed from national to global.	-	-	7.03	0.67	113
39	Open markets allow small firms to reach the	AGE<34*	-	10.62	0.77	104

minimum efficiency scale, whereas smaller firms benefit more than larger firms from internationalization.	AGE>55*				
40 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.	-	THEORY*	16.15	0.70	112
41 Antitrust policy should induce firms to equate prices with marginal cost, or - if this implies losses - at least to equate prices with average costs.		NON-UNIV* PROFESSOR*	21.16	0.69	112
42 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 an antitrust authority.	-	-	2.80	0.69	110
43 Game theory is not of very much practical use, since we can realize any prediction we want.	-	THEORY***	24.27	0.73	114
44 There is a strong tendency in industrial organization in general (and in game theoretical models specifically), to concentrate on the analytically interesting questions rather than on the ones that are really important to the study of real- life industries.		THEORY***	9.64	0.68	113
45 The importance of „theoretical foundation“ has increased over the last ten years.	-	THEORY* AGE>55* ECONOMIST*	11.24	0.75	96
46 The importance of „empirical testing“ has increased over the last ten years.	-	-	3.71	0.54	98
47 The importance of „game theory“ has increased over the last ten years.	-	THEORY***	18.29	0.86	97
48 The importance of the Structure Conduct Performance Paradigm“ has increased over the last ten years.	-	-	11.14	0.97	95
49 The importance of „application of IO for economic policy“ has increased over the last ten years.	-	PROFESSOR**	13.26	0.76	97
50 The importance of „experiments“ has increased over the last ten years.	THEORY*	-	14.88	0.69	95
51 The importance of „case studies“ has increased over the last ten years.	-	-	8.37	0.70	97
52 The importance of „IO within economics“ has increased over the last ten years.	-	AGE>55*	13.66	0.74	95
53 The importance of „theoretical foundation“ will increase in the next ten years.		-	2.97	0.67	93
54 The importance of „empirical testing“ will increase in the next ten years.	-	-	3.87	0.76	94
55 The importance of „game theory“ will increase in the next ten years.	-	-	6.17	0.84	95
56 The importance of the "Structure Conduct Performance Paradigm“ will increase in the next ten years.	-	-	14.85	0.95	91
57 The importance of „application of IO for economic policy“ will increase in the next ten years.	USA* EARIE**	-	16.51	0.72	92
58 The importance of „experiments“ will increase in the next ten years.	-	AGE<34**	8.14	0.62	90
59 The importance of „case studies“ will	-	-	3.19	0.62	94

	increase in the next ten years.					
60	The importance of „IO within economics“ will increase in the next ten years.		-		9.95	0.64 91
61	Regularly reading the „Journal of Law and Economics“	PROFESSOR**	-		11.11	0.80 107
62	Regularly reading the „Journal of Regulatory Economics“	-	ECONOMIST*		12.56	0.92 106
63	Regularly reading the „Journal of Industrial Economics“	ECONOMIST* EARIE**	-		14.20	0.84 110
64	Regularly reading the „Journal of Economics and Management Strategy“	THEORY**	-		14.37	0.75 106
65	Regularly reading the „International Journal of Industrial Organization“	EARIE**	-		15.70	0.79 109
66	Regularly reading the „RAND Journal“	THEORY***	AGE>55***		25.72	0.74 108
67	Regularly reading the „Review of Industrial Organization“	-	EARIE** THEORY*		21.61	0.81 107
68	Scientific analysis of the scope and development of IO, as well as, the extent of consensus and dissension is an interesting field of research	EU**	-		8.27	0.63 114
69	Questionnaires are an appropriate tool for identifying the scope and development of IO	-	-		19.45	0.88 114
70	The statements in this survey are sufficiently differentiated to estimate the scope and development of IO	-	-		12.90	0.92 114

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 1-44 and 68-70 are set equal to 1 if the respondent answered with „completely agree“ or „agree with provisions“ and are set equal to zero otherwise. In models 45-60, the dependent variable is set equal to 1, if the respondent answered with „increased“ and is set equal to zero otherwise. The definition of the explanatory variables is given in Table A2. LRT refers to the likelihood ratio test and N is the number of observations.

- 12) The importance of predation has been widely exaggerated, in most cases, it is not a profitable strategy
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 13) Market entry barriers are higher in Japan than in the US.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 14) Market entry barriers are higher in Europe than in the US.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 15) The competitive process is different in the US, Japan and Europe. This is mainly due to cultural differences and consumer behavior.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 16) Antitrust laws should be used vigorously to reduce monopoly power from its current level.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 17) Rent control reduces the quantity and quality of housing availability.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 18) Consumer protection laws generally reduce economic efficiency.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 19) Reducing the influence of regulatory authorities would improve the efficiency of the economy.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 20) State-owned television offers a higher quality than that of private television.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 21) Deregulation of telecoms has lead to new monopolies (or collusive oligopolies).
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 22) Game theory has considerably increased our understanding of strategic behavior in real markets.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 23) Accounting data on profits, are in most cases misleading and should not be used for empirical research.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 24) After decades of considerable progress in theory, industrial organization will now benefit most from empirical studies.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 25) 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 with these predictions
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 26) Conjectural variation models should not be used in research.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 27) There should be no difference in the methodology between industrial economics and microeconomics.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 28) In the field of Industrial Organization too much stress is laid on the use of mathematical models..
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 29) Industrial policy, as it works in reality, is essentially subsidization in disguise.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 30) Recommendations of industrial economists have little impact on industrial policy
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 31) A tough competition policy could hinder US and European firms in the global competitive race against Japanese Keiretsus or against firms in the managed economies of the Tiger States.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 32) The best industrial policy is no industrial policy
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 33) The goal of industrial policy is the correction of market failure
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 34) Consumer surplus is the final yardstick for regulatory policy, not total surplus
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 35) Competition policy should address tacit collusion (not only explicit cooperation) as a legal offense.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 36) The exchange of information (if it happens on a more than casual basis) among competitors under market conditions, prices or firm specific production, should be considered as strong evidence of collusion.
completely agree / agree with provisions / indifferent / disagree / completely disagree

- 37) International competition has made regulation of monopolies an outdated policy.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 38) Effective concentration has decreased in the last two decades since many "relevant markets" changed from national to global.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 39) Open markets allow small firms to reach the minimum efficiency scale, whereas smaller firms benefit more than larger firms from internationalization.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 40) 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.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 41) Antitrust policy should induce firms to equate prices with marginal cost, or - if this implies losses - at least to equate prices with average costs.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 42) 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 an antitrust authority.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 43) Game theory is not of very much practical use, since we can realize any prediction we want.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 44) There is a strong tendency in industrial organization in general (and in game theoretical models specifically) to concentrate on the analytically interesting questions rather than on the ones that are really important to the study of real-life industries.
completely agree / agree with provisions / indifferent / disagree / completely disagree

II) On macro-economic issues

- 1) The distribution of income in the developed industrial nations should be more equal.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 2) Tariffs and import quotas reduce general economic welfare.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 3) The government should be an employer of the last resort and initiate a guaranteed job program.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 4) The level of government spending should be reduced (disregarding expenditures for stabilization).
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 5) Politicians make efforts to undertake policies that maximize the social welfare.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 6) Unemployment should be included in the "Maastricht Criteria" (as a precondition to membership in the European Monetary Union).
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 7) The "Maastricht Criteria" constitute a useful target for economic policy in the EU-countries.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 8) There are considerable costs in maintaining individual currencies in the EU, compared to a common currency.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 9) The US economy has recovered considerably since the mid eighties and regained a large technological lead in many high tech industries.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 10) The US regained competitiveness by an implicit policy of keeping down median wages. Nevertheless, the US trade balance is still negative and the dollar is devaluating, which indicates that this "flexible wage strategy" had a limited success.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 11) The "flexible wage strategy" applied in the US should also be applied in Europe to solve the unemployment problems.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 12) The new trade theory gave us useful tools for analyzing trade under imperfect competition but it does not provide the basis for protectionism.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 13) To prevent unemployment it makes sense to prevent the exit of firms from specific sectors at least for some time.
completely agree / agree with provisions / indifferent / disagree / completely disagree

- 14) Competitiveness is a meaningless word when applied to national economies. And the obsession of economic policy with competitiveness is both wrong and dangerous.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 15) Eastern European countries should be encouraged to join the European Community as quickly as possible.
completely agree / agree with provisions / indifferent / disagree / completely disagree

III) On micro-economic issues

- 1) Neoclassical theory is the only sensible basis for microeconomics.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 2) The economic power of labor unions should be significantly curtailed.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 3) In general public enterprises are less efficient than private enterprises.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 4) A maximum emission level for pollutants should be prescribed for individual enterprises.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 5) Effluent taxes represent a better approach to pollution control than imposing pollution ceilings.
completely agree / agree with provisions / indifferent / disagree / completely disagree

IV) Open questions:

- 1) What are the three most exciting areas of research in IO today ?
 1. _____
 2. _____
 3. _____
- 2) What are the most important areas of IO that are not, currently, receiving enough research?
 1. _____
 2. _____
 3. _____
- 3) 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? (please use: 1 = "increased" / 2 = "about the same" / 3 = "decreased").

	Change over past ten years	In the next ten years
Theoretical Foundation	_____	_____
Empirical Testing	_____	_____
Game Theory	_____	_____
Structure Conduct Performance Paradigm	_____	_____
Application of IO to Economic Policy	_____	_____
Experiments	_____	_____
Case Studies	_____	_____
IO Within Economics	_____	_____

- 4) Which of the following IO- journals do you read regularly (from 1 = regularly, 3 = usually not)?

Journal of Law and Economics	_____
Journal of Regulatory Economics	_____
Journal of Industrial Economics	_____
Journal of Economics and Management Strategy	_____
International Journal of Industrial Organization	_____
Rand Journal	_____
Review of Industrial Organization	_____

Finally, would you please answer the following questions concerning the appropriateness of this questionnaire:

- 1) Scientific analysis of the scope and development of IO, as well as the extent of consensus and dissension are interesting fields of research.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 2) Questionnaires are an appropriate tool for identifying the scope and development of IO.
completely agree / agree with provisions / indifferent / disagree / completely disagree
- 3) The statements in this survey are sufficiently differentiated to estimate the scope and development of IO.
completely agree / agree with provisions / indifferent / disagree / completely disagree

Comments (please use an extra sheet or the back page, if needed):

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