Towards a European Economics of Economics: Monitoring a Decade of Top Research and Providing Some Explanation

The EER European Economics Departmental Ranking Revisited

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ABSTRACT. This paper documents a decade of excellent mainstream research output by European economics institutions. In contrast to the precursory EER European economics departmental ranking from 1999, we investigate the changing pattern of the ranking over two subperiods and the total decade. Furthermore, we provide some explanation of the ranking based on regional factors and institutional features. As explanatory variables the time share of academic vita spent by a Nobel Laureate as staff of faculty, the national balance of in- and outflows of post-doctoral European research fellows, the number of further top research producing departments in the same city, and the editorial board participation of faculty are considered. Additionally, we take dummy variables (i) for non-educational units, (ii) for the existence of departmental PhD programs, and (iii) for institutions from natively English speaking countries, as well as a further infrastructural variable into account. Most significantly, we find evidence for the 'institutional oligopoly' of editors and authors hypothesis, as recently suggested in the literature. Nevertheless, this departmental concentration of author- and editorships does not reflect a 'closed shop', inasmuch we find several departments adventitiously entering the centre stage of economic mainstream research towards the current millennium.

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1. Introduction

For the year 2000 the, by far, most frequently requested paper published in the *European Economic Review* (*EER*) was the European economics departmental ranking based on publications in 10 economic core journals by Kalaitzidakis, Mamuneas and Stengos (1999).[1] To our knowledge this ranking also played a decisive role for one of our own departmental affiliations in attracting new faculty, retain ingratiated and productive existing staff and in particular during the bargaining process with regard to the filling of the head position of a prestigious chair of the department. Of course, though maybe not to the extent of the US case, it may have helped to attract ambitious graduate students, educational funds and private sponsors for highly ranked institutions. So there is no doubt that it has received and still receives a large amount of interest. The more it is surprising that studies on European economics departmental rankings remained somehow scattered and isolated. They include the pioneering analysis by Kirman and Dahl (1994) and the one by Elliot, Greenaway and Sapsford (1998) as well as the more recent studies by Kalaitzidakis, Mamuneas and Stengos (1999), Coupé (2000) and Kalaitzidakis, Mamuneas and Stengos (2001). To remedy this situation and due to the unbroken interest in ranking economics departments throughout Europe and comparing them with top US departments, the *European Economic Association* (*EEA*) invited bids to award financial support for an extensive evaluation project by the end of 2000.[2] Nevertheless, up to the present virtually no efforts have been made to undertake a step towards a real European "economics of economics." This implies to start to *explain* the outcome of European departmental rankings by means of econometric instruments like in the US tradition, see *inter alia* the studies by Graves, Marchand and Thompson (1982) and Thursby (2000), or by means of sophisticated network theoretic approaches like in the natural sciences, see for example Newman (2000 and 2001). In comparison to the existing studies the analysis of the present work therefore is innovative in at least the following aspects: First, it is unique, inasmuch it covers a whole decade of top mainstream research output over European academic institutions in disaggregated and aggregated annual observations. The study by Kalaitzidakis, Mamuneas and Stengos (1999) covered the period 1991 to 1996, while Coupé (2000) focuses on the period 1994 to 1998, Kalaitzidakis, Mamuneas and Stengos (2001) on 1995 to 1999 and Kocher and Sutter (2001) rely on a set of samples for the five years 1977, 1982, 1987, 1992 and 1997. As is the case for every quantitative analysis this might be due to the general lag induced by data mining. Second, the complementarity to the study by Kalaitzidakis, Mamuneas and Stengos (1999) allows us to discriminate departmental activity in re-

[1] According to the Top10 of most requested papers for the period from january to december 2000; EER webpage hosted by ECONbase, Elsevier, North-Holland.

[2] A recent study, not subsidized by the *EEA* and focussing on the comparison of European (on the national level) and US (on the departmental level) output in high quality publications in economics, is Kocher and Sutter (2001).

search excellence for two subperiods, i.e. from 1991 to 1996 and from 1997 to 1999, as well as the whole decade, i.e. from 1990 to 1999. Of course, these two subperiods are only snapshots of a continuously ongoing research process and, if at all, only partially reflect the dynamics of the process itself. Nevertheless, our strategy allows to shed some light on the tendency and development of research output for the respective department over these subperiods and especially towards the beginning of the current millennium. Third, and maybe most importantly, we try to explain the outcome of our ranking by means of a selection of explanatory variables reflecting institutional as well as regional characteristics of the departments. We find strong evidence for an 'institutional oligopoly' of editors and authors, cf. Hodgson and Rothman (1999). Furthermore, departments, where 'big brains' (i.e. winners of the Nobel Prize in economics) left their traces,[3] perform significantly better in core economic journal publications. Finally, there are indications in line with the study of Frey and Eichenberger (1997), who argue that non-Anglo-Saxon economics departments (with the exception of Israel) tend to publish relatively less on the international and relatively more on the less competitive national market of scientific publications. The contributions on the latter market particularly challenge national, or even local, economic topics. They imply no language barrier for authors, since they are, in general, called to be submitted in the respective national language. The remainder of the paper is structured as follows: Section 2 outlines our dataset and methodological strategy, section 3 presents our rankings, followed by some econometric explanation in section 4. Section 5 concludes.

2. Methodology, data and strategy

The first building block of our dataset, i.e. the data source for the period 1991 to 1996 (in the following denoted subperiod I), is made up of the figures reported in Kalaitzidakis, Mamuneas and Stengos (1999).[4] Therefore our rankings and the econometric analysis are partially restricted to their methodology. This concerns in particular two critical aspects: (i) the choice of scientific journals, regarded as 'top' or 'core' journals and (ii) the standardization or weighting scheme of published pages. Both of these practices are sometimes criticized to be rather arbitrarily determined by the ranking authors. In the present paper, we consider the following (adopted) selection of economics journals based on market share with respect to citations, inclusion in the Diamond list and several other qualitative arguments. For further detail see

[3] In the sense of establishing research centres (like the Tinbergen Institute, which merges resources of the Erasmus University, Rotterdam, i.e. the former Netherlands School of Economics, the University of Amsterdam, and the Free University of Amsterdam), advising PhD students and thereby establishing a kind of school with a certain sustain, as well as in the sense of attracting human and physical capital etc.

[4] Including some minor correction, inasmuch Kalaitzidakis, Mamuneas and Stengos (1999) double count the Italian University of Florence ('University of Florence, Italy' and 'University of Firenze, Italy' in their Table 1, p. 1161), which in fact represents one single institution.

Kalaitzidakis, Mamuneas and Stengos (1999), p. 1151-1152. Actually, the selected journals, widely agreed on to be highly prestigious and setting up the mainstream, are: *American Economic Review (AER), Econometrica (ECMCA), Journal of Political Economy (JPE), Quarterly Journal of Economics (QJE), Journal of Monetary Economics (JME), Journal of Economic Theory (JET), Review of Economic Studies (RES), Review of Economics and Statistics (REStat), The Economic Journal (EJ)*, and *European Economic Review (EER).* If we abstract from *EJ* and *EER*, nearly all of these journals (still) represent top 10 journals according to a recent ranking of economic journals by Kalaitzidakis, Mamuneas and Stengos (2001), covering the period 1994 to 1998 and adjusting for impact, age and self-citations. The only exception is *REStat* which makes rank 13. *EER* and *EJ* follow in this ranking on rank 16 and 19, respectively. Another justification for this selection is based on the classification of the journals according to the respective publishing institutions, cf. Coupé (2000). In general, it is possible to discriminate three types of journals: Journals are either managed by and edited for associations (*AER, ECMCA, EER* and *EJ*) or universities (*QJE, JPE* and *REStat*) or by commercial publishers (*JME, JET* and *RES*). The degree of market pressure, i.e. of the dependence on reader subscriptions, can be stated to also roughly increase in the above order. Given this argumentation and maybe also disregarding *EER* and/or *EJ* again, this selection (intended or not) represents a close to uniform distributed sample of journal types with respect to the market pressure they experience.

With regard to the critical aspect (ii) stated in the first paragraph of the present section, the central objection in the literature is twofold: First, some authors claim that the number of articles is preferable to the number of pages standardized on a reference journal's pages. This philosophy is followed for example by Kocher and Sutter (2001), but in our opinion such a strategy is clearly biased due to failure in discriminating between full articles and shorter papers like comments, replies, software reviews etc. Second, citation weighting applies weights that for most rankings stem from an earlier period than the period covered by the actual ranking. A summary of this recent weighting discussion is given in Kalaitzidakis, Mamuneas and Stengos (2001). Nevertheless, Coupé (2000), considering twelve different weighting schemes, finds that the resulting departmental rankings are quite robust, especially in comparison to rankings of individual authors. Similarly, Kocher and Sutter (2001) state that impact factors are "amazingly stable over the past two decades," p. F407. In the present paper, we actually adopt the following weighting scheme, known as the 'impact adjusted citations per character' index originally constructed by Laband and Piette (1994, Table A2) and based on 1990 citations, referring to articles published from 1985 to 1989. It adjusts for characters per page and standardizes the quality, measured in citations[5], to equivalent units. Kalaitzidakis, Mamuneas and Stengos

[5]See Laband and Piette (1994) for detail on the scientific community's assessment of citations.

(1999) refer to it as pages converted to *AER* standardized pages 'in terms of quality and size.' The actually applied conversion factors are: *AER*: 1.0, *ECMCA*: 0.89, *JPE*: 0.791, *QJE*: 0.645, *JME*: 0.593, *JET*: 0.511, *RES*: 0.476, *REStat*: 0.14, *EJ*: 0.128 and *EER*: 0.036.[6] Last but not least, the adoption of this standardization scheme ensures a certain degree of objectivity in preventing our study from more or less 'inventive weighting' with the aim to push one's own institution, see Feinberg (1998) and Grilliches and Einav (1998). A less critical aspect, but a rather widely agreed on practice, shared with the methodology of Kalaitzidakis, Mamuneas and Stengos (1999), is the treatment of attributing shares to multi-authored and/or multi-affiliated articles: Let n_i be the number of author and co-authors of article i, the weight assigned to each of them is simply $1/n_i$. Similarly, when m_i affiliations per author of article i are given, $1/m_i$ of the pages of article i are allocated to the respective institutional affiliation.

The second building block of our decade dataset, i.e. data for the year 1990 and the period from 1997 to 1999 (in the following denoted subperiod II), does not stem from electronic databases like EconLit. In general, studies based on electronic databases may suffer from several drawbacks. An obvious one is that for example EconLit states no more than three authors per publication. The resulting dataset is constructed by applying the adopted methodology outlined in the preceding paragraphs. It represents a unique, virginal dataset of top publications to the contemporary mainstream of economics by European academic, non-profit institutions that covers the last decade in disaggregated and aggregated annual observations for the year 1990 and subperiod II and in aggregated annual observations for subperiod I.

3. European departmental rankings for the 1990s

Table 1 and 2 below report our rankings. Table 1 displays the results for considering the complete selection of the ten core journals, outlined above, while Table 2 reports the results when *EER* and *EJ* are excluded. The latter journals have a strong European background, both with regard to the composition of the respective editorial board and to the departmental origin of the majority of contributions. In fact the managing headquarters of the *RES* are also located in Europe, i.e. at the University College London. Nevertheless, there are two justifications to treat it as a journal without a (strong) European background: First, it was founded by British as well as American scholars in the early 1930s. Second, the most contributing authors are throughout affiliated to US departments.[7]

[6] Of course, for reasons of transparency our extended dataset, i.e. our comprehensive decade dataset (in total decade and two subperiods), will be made available also in unadjusted pages on request and on the internet.

[7] For the period 1994 to 1998, 17% of all contributions in the *RES* stem from authors, affiliated to Harvard University, the MIT or the University of Pennsylvania. For the *EER* and *EJ* the top productive departmens make up a quite smaller share of contributions and are nearly throughout European; see Coupé (2000, Appendix 3).

It should be noted that with regard to the respective results for the whole decade, there are 22 departments that are included only in one of the two considered rankings, i.e. either in Table 1 or Table 2. This figure is symmetric, inasmuch eleven departments are included in Table 1 only and another eleven in Table 2 only. Top 200 departments, only in case when publications in *EER* and *EJ* are considered, are: Copenhagen Business School, University College Cork, University Laval (CRÉFA), University of Bamberg, University of Bath, University of Bradford, University of Catania, University of Cyprus, University of Saarland (Saarbrücken), University of Sheffield, and University of Stirling. The highest rank made by one of these economics departments is rank 148 by the University of Bath, while the lowest scores University of Catania, making rank 199 in Table 1. Top 200 departments, only in case when publications in *EER* and *EJ* are excluded, are: Polytechnic South West London, University of Augsburg, University of Bergamo, University of Bern, University of Fribourg, University of Kassel, University of Liege, University of Oldenburg, University of Porto, University of St. Gallen, and University of Trento. Analogously, the highest of these institutions scores University of Kassel (rank 182), the lowest University of Porto (rank 199).

The respective first column of Table 1 and 2 displays the top 200 academic institutions, where convenient abbreviations, subsumed colleges etc. are given in parentheses; for further detail see also the Appendix of the present paper. The second column reports the country, where the respective department is located. For traditional reasons and with regard to the fact that the rankings partially build on Kalaitzidakis, Mamuneas and Stengos (1999), we include institutions from Israel and Turkey, as well as four departments from four economies in transition, i.e. from Czech Republic, Poland, Russia and Slowenia. The third column displays the respective rank as resulting from *AER* standardized pages published in the 1990s (column 4). Each page represents a quartile of the presented top 200 departments. As outlined in the legend after the respective fourth quartile of ranks, '+' ('−') indicates an improvement (decline) of position in the ranking from subperiod I to II of at least 25 up to 50 ranks. Analogously, '++' ('−−') stands for an improvement (decline) of at least 50 ranks. As argued below, these trend signs are informative in assessing the crude up- or downward tendency of a department's activity in top research. An asterisk marks a new entry, which makes top 200 due to publications in subperiod II only. The final used symbol is '90' - it marks institutions that are part of the top 200 ranking due to one (or more) top publication(s) in the year 1990 only. The two rightmost columns report the number of *AER* standardized pages for subperiod I and II and the corresponding rank in parentheses, respectively. *Prima facie*, top economic research output in Europe is not a static phenomenon, though the first quartile of the rank positions, i.e. the top 50 departments, seems to be relatively stable.

Table 1.
Ranking for all 10 core journals (including *EER* and *EJ*), *AER* standardized pages

[a] ex Kalaitzidakis et al. (1999), corrected version [b] respective rank in parantheses	Country	Rank	Total dec.	Subper. I[a,b]	Subper. II[b]
			1990-99	1991-96	1997-99
Tel-Aviv University	Israel	1	664.27	355.30 (2)	200.55 (1)
LSE, London School of Economics (CEP)	U.K.	2	635.77	397.37 (1)	184.75 (4)
Oxford University, subsuming colleges	U.K.	3	423.76	260.67 (3)	145.33 (5)
Hebrew University Jerusalem	Israel	4	392.97	227.16 (4)	125.26 (8)
University College London (UCL), subsuming IFS	U.K.	5	371.01	173.77 (7)	194.16 (3)
University of Toulouse (IDEI/GREMAQ/LIRHE/ARQADE)	F	6	363.77	143.09 (9)	196.49 (2)
University of Cambridge, subsuming colleges	U.K.	7	307.91	152.58 (8)	128.21 (7)
U. Aut. de Barcelona and IAE-CSIC	Spain	8	263.86	188.68 (5)	69.75 (19)
Stockholm University	Sweden	9	247.50	140.48 (10)	104.02 (10)
Catholic University of Louvain and CORE	Belgium	10	245.92	96.16 (14)	79.16 (15)
DELTA (-ENS)	F	11 −	219.10	178.40 (6)	33.67 (36)
U. Pompeu Fabra (UPF), Barcelona	Spain	12	211.19	109.63 (12)	101.56 (12)
Free University of Brusseles	Belgium	13	207.75	96.37 (13)	109.76 (9)
University of Bonn	D	14	202.43	82.04 (18)	92.44 (14)
Tilburg University	NL	15	189.48	80.64 (19)	101.81 (11)
University of Southampton	U.K.	16	189.14	79.80 (20)	100.29 (13)
University of Vienna	Austria	17	178.76	110.11 (11)	68.11 (21)
Stockholm School of Economics	Sweden	18 +	162.65	26.14 (52)	136.51 (6)
University of Essex	U.K.	19	161.28	96.03 (15)	51.03 (26)
University of London, subsuming colleges	U.K.	20	158.56	94.93 (16)	53.78 (24)
University of Paris I (Panthéon-Sorbonne)	F	21	155.85	59.76 (28)	51.75 (25)
University of Warwick	U.K.	22	129.32	75.43 (21)	45.38 (28)
University of Amsterdam (UvA)	NL	23	129.05	86.42 (17)	41.80 (33)
U. Carlos III de Madrid	Spain	24	122.63	48.20 (31)	74.43 (16)
INSEE (Cedex-Paris)	F	25	113.84	48.90 (30)	32.04 (39)
University of York	U.K.	26	110.85	69.91 (23)	33.63 (37)
Technion - Israel Inst. of Technology	Israel	27	103.70	41.17 (34)	55.97 (22)
University d'Aix-Marseille II/III	F	28	100.70	62.27 (25)	29.33 (44)
CREST (-LEI, -ENSAE, -INSEE)	F	29 +	100.04	25.64 (54)	74.40 (17)
CEPREMAP	F	30 −	99.10	65.13 (24)	20.59 (55)
University of Bristol	U.K.	31	96.34	40.03 (36)	39.88 (34)
LBS, London Business School	U.K.	32	94.75	58.43 (29)	26.52 (49)
European University Institute (EUI), Florence	Italy	33 −−	91.83	74.04 (22)	10.52 (73)
University of East Anglia	U.K.	34	90.46	61.93 (26)	28.53 (45)
CNRS	F	35 ++	88.62	14.31 (88)	74.31 (18)
ENPC (CERAS)	F	36	86.31	36.87 (41)	49.44 (27)
University of Zurich	CH	37 ++	86.23	15.90 (80)	69.61 (20)
University of Geneva	CH	38 −−	81.33	60.06 (27)	7.16 (88)
Haifa University	Israel	39	69.58	42.37 (33)	20.06 (56)
University College Dublin	Ireland	40 ++	68.97	15.09 (84)	53.88 (23)
University of Alicante	Spain	41	67.48	36.18 (44)	31.30 (42)
University of Bologna	Italy	42 +	67.44	16.48 (78)	44.89 (29)
University of Torino	Italy	43	67.41	44.36 (32)	23.05 (52)
Free University of Amsterdam	NL	44 ++	65.24	7.65 (110)	43.35 (31)
Ben-Gurion University	Israel	45 −	63.99	40.89 (35)	16.27 (62)
Erasmus University, Rotterdam	NL	46	62.67	36.48 (42)	25.36 (50)
Groningen University	NL	47 −	61.67	25.21 (55)	8.18 (82)
University of Exeter	U.K.	48 ++	59.36	14.65 (86)	42.76 (32)
University of Venice (Ca'Foscari)	Italy	49	58.96	27.40 (51)	31.42 (40)
Catholic University of Portugal, Lisbon	Portugal	50	56.74	25.80 (53)	27.64 (47)

Table 1 (continued).

[a]ex Kalaitzidakis et al. (1999), corrected version [b]respective rank in parantheses	Country	Rank	Total dec.	Subper. I[a,b]	Subper. II[b]
			1990-99	1991-96	1997-99
University of Copenhagen	Denmark	51	55.80	21.34 (62)	32.87 (38)
University Newcastle-upon-Tyne	U.K.	52	54.47	19.76 (68)	17.78 (59)
University of Oslo	Norway	53 $^{-}$	52.93	36.25 (43)	11.59 (70)
INSEAD, Fontainbleau	F	54	52.31	20.17 (66)	21.52 (54)
University of Nottingham (Trent)	U.K.	55	51.75	23.47 (60)	26.66 (48)
Technical University of Vienna	Austria	56 $^{--}$	51.61	37.97 (40)	6.64 (96)
Free University (FU) of Berlin	D	57 $^{++}$	46.78	9.51 (99)	37.27 (35)
University of St. Andrews	U.K.	58 $^{+}$	46.11	15.33 (83)	30.78 (43)
University of Dortmund	D	59	45.55	21.10 (64)	10.55 (72)
University of Munich	D	60 $^{++}$	45.18	1.21 (164)	43.40 (30)
University de Cergy-Pontoise (THEMA)	F	61	45.18	20.54 (65)	24.64 (51)
Bocconi University, Milan (IGIER)	Italy	62	44.65	24.84 (57)	19.81 (57)
University of Mannheim	D	63 $^{++}$	44.27	11.27 (94)	31.41 (41)
University of Manchester	U.K.	64	44.04	31.48 (47)	12.16 (69)
University of Basel	CH	65 $^{--}$	40.91	31.99 (46)	6.02 (99)
INRA (Inst. Nat. de la Recherche Agronomique)	F	66 $^{--}$	40.65	38.27 (38)	2.38 (136)
Athens University of Econ. and Bus.	Greece	67 $^{--}$	40.34	38.09 (39)	2.25 (140)
University of Liverpool	U.K.	68	39.95	19.33 (70)	16.47 (61)
University of Rome, La Sapienza (ISTAT)	Italy	69 $^{+}$	39.47	14.42 (87)	17.61 (60)
University of Limburg	NL	70 $^{--}$	39.46	39.46 (37)	0.00
University of Paris X	F	71 $^{--}$	38.68	17.05 (77)	2.94 (130)
University of Leicester	U.K.	72	38.48	19.13 (71)	12.57 (68)
University of Birmingham	U.K.	73 $^{--}$	38.41	30.99 (48)	5.38 (103)
City University (Business School), London	U.K.	74	36.81	18.47 (72)	10.48 (74)
Trinity College, Dublin	Ireland	75 $^{++}$	35.57	1.51 (153)	12.66 (67)
University of Lund	Sweden	76	33.78	17.70 (73)	8.08 (83)
New University of Lisbon	Portugal	77 $^{--}$	32.95	32.95 (45)	0.00
University of Leiden	NL	78 $^{--}$	31.47	24.83 (58)	6.64 (95)
University of Padova	Italy	79 $^{--}$	31.40	28.62 (50)	2.08 (145)
CEMFI, Madrid	Spain	80 $^{-}$	30.78	24.10 (59)	6.68 (94)
Uppsala University	Sweden	81 $^{--}$	29.50	25.00 (56)	4.18 (113)
University of Reading	U.K.	82 $^{--}$	29.43	17.25 (76)	2.18 (143)
Inst. of Mathematical Statistics	Denmark	83 $^{--}$	29.13	29.13 (49)	0.00
University of Modena	Italy	84 $^{++}$	28.69	6.26 (115)	22.43 (53)
University of Helsinki	Finland	85	28.65	17.57 (74)	11.08 (71)
ENSAE	F	86 $^{+}$	28.64	9.06 (103)	19.58 (58)
University of Brescia	Italy	87 $^{-}$	28.32	21.34 (63)	5.58 (101)
Norwegian School of Econ. and B.A., Bergen-Sandv.	Norway	88	28.27	17.33 (75)	9.97 (76)
University of Bielefeld	D	89 *	27.95	0.00	27.95 (46)
Laborat. d'Econometrie, L'Ecole Poly., Paris	F	90 $^{-}$	27.19	12.75 (90)	3.83 (119)
University of Lausanne	CH	91 $^{+}$	26.88	10.97 (95)	15.43 (64)
Institute for Advanced Studies (IAS), Vienna	Austria	92 $^{--}$	24.94	22.61 (61)	2.33 (139)
Humboldt University (HU), Berlin	D	93 $^{+}$	23.96	10.02 (98)	13.94 (66)
University of Paris IX	F	94 $^{+}$	23.87	9.38 (100)	14.49 (65)
University of Edinburgh	U.K.	95 $^{--}$	21.89	19.33 (69)	1.79 (149)
Inst. Universitario Navale	Italy	96 $^{--}$	20.86	20.16 (67)	0.00
Wissen. Zentrum Berlin f. Sozial.	D	97 $^{--}$	19.82	16.27 (79)	0.00
University of Strathclyde	U.K.	98	18.36	11.39 (93)	6.97 (91)
University of Kent (incl. Keynes College)	U.K.	99 $^{--}$	16.84	14.75 (85)	2.09 (144)
University of Karlsruhe	D	100 $^{--}$	16.35	4.60 (125)	0.00

Table 1 (continued).

[a] ex Kalaitzidakis et al. (1999), corrected version [b] respective rank in parantheses	Country	Rank	Total dec.	Subper. I[a,b]	Subper. II[b]
			1990-99	1991-96	1997-99
University of Nijmegen	NL	101 −−	15.71	15.71 (81)	0.00
Maynooth College	Ireland	102 −−	15.68	15.68 (82)	0.00
Koc University, Istanbul	Turkey	103 *	15.63	0.00	15.63 (63)
University of Konstanz	D	104 +	15.63	1.72 (149)	4.14 (114)
Keele University	U.K.	105 +	15.09	7.42 (111)	7.67 (85)
University of Gothenburg	Sweden	106 −−	13.82	13.35 (89)	0.47 (170)
University of Naples (I.U.N.)	Italy	107 90	13.39	0.00	0.00
Bar-Ilan University	Israel	108 −−	12.87	10.79 (96)	1.31 (155)
University of Surrey	U.K.	109 ++	12.56	5.61 (120)	6.95 (93)
University of Antwerp	Belgium	110 −−	12.34	11.84 (92)	0.50 (169)
Fac. U. Notre-Dame de la Paix, Namur	Belgium	111 −−	12.08	9.20 (101)	0.00
OFCE, Paris	F	112 −−	11.99	11.99 (91)	0.00
Imperial College, London	U.K.	113 ++	11.41	3.18 (133)	8.23 (80)
University of Pavia	Italy	114 ++	11.35	3.13 (134)	8.22 (81)
University of Glasgow	U.K.	115 −−	11.18	8.59 (106)	2.59 (132)
University of Utrecht	NL	116 −−	10.48	10.48 (97)	0.00
University Louis Pasteur	F	117	10.45	5.00 (122)	5.45 (102)
University of Aarhus	Denmark	118 −	10.07	7.87 (109)	2.20 (142)
CNRS-GREQAM, Marseille	F	119 *	10.04	0.00	10.04 (75)
University of Tromso	Norway	120 +	10.00	3.00 (137)	7.00 (89)
Heriot-Watt University, Edinburgh	U.K.	121 *	9.71	0.00	7.57 (86)
Brunel University	U.K.	122	9.63	4.63 (124)	5.00 (108)
Charles University (CERGE-EI), Prague	Czech R.	123 *	9.63	0.00	5.18 (105)
Bogazici University, Istanbul	Turkey	124 −−	9.60	8.88 (106)	0.72 (163)
Université de Pau et des Pays de l'Adour	F	125 *	9.10	0.00	9.10 (77)
University of Cagliari	Italy	126 −−	9.10	9.10 (102)	0.00
University del Pais Vasco	Spain	127 −−	9.04	9.04 (104)	0.00
University of Orleans	F	128	8.99	6.53 (113)	2.46 (135)
University of Salerno	Italy	129 *	8.95	0.00	8.95 (78)
University of Hull	U.K.	130 −−	8.86	6.17 (117)	0.00
University of Madrid	Spain	131 90	8.46	0.00	0.00
University of Parma	Italy	132 −−	8.37	8.37 (107)	0.00
University of Ljubljana	Slowenia	133 −−	8.36	8.36 (108)	0.00
Bilkent University, Ankara	Turkey	134 *	8.36	0.00	8.36 (79)
Universidad de Salamanca	Spain	135 *	8.01	0.00	8.01 (84)
Fac. U. Cath. de Mons et de Lille	Belgium	136 +	7.85	3.10 (135)	4.75 (109)
Lancaster University	U.K.	137 +	7.81	2.04 (146)	5.13 (106)
Loughborough University	U.K.	138 −−	7.56	6.86 (112)	0.70 (164)
University of Durham	U.K.	139 *	7.28	0.00	7.28 (87)
University (College) of Swansea	U.K.	140 −	7.10	5.25 (121)	0.70 (165)
Sodertorn University College. Huddinge	Sweden	141 *	7.00	0.00	7.00 (90)
Hertford College (Univ. of Hertfordshire)	U.K.	142 *	6.96	0.00	6.96 (92)
Queen's University, Belfast	U.K.	143	6.62	1.92 (148)	0.90 (160)
HEC (Hautes Etudes Commerciales, Jouy-en-Josas)	F	144 *	6.57	0.00	6.57 (97)
Université de Caen (CREME)	F	145 *	6.39	0.00	6.39 (98)
Helsinki School of Economics	Finland	146 −−	6.33	6.33 (114)	0.00
Abo Akademi University	Finland	147 ++	6.29	0.98 (171)	5.31 (104)
University of Bath	U.K.	148 −−	6.27	3.63 (130)	0.00
Sheffield Hallam University	U.K.	149	6.23	3.07 (136)	3.16 (127)
University di Trieste	Italy	150 −−	6.13	6.13 (117)	0.00

Table 1 (continued).

[a] ex Kalaitzidakis et al. (1999), corrected version [b] respective rank in parantheses	Country	Rank	Total dec.	Subper. I[a,b]		Subper. II[b]	
			1990-99	1991-96		1997-99	
University of Linz (Joh. Keppler U.)	Austria	151 ++	6.11	0.86	(172)	5.04	(107)
University of Zaragoza	Spain	152 −	6.00	4.47	(126)	1.53	(152)
University of Bergen	Norway	153	5.98	2.48	(141)	3.50	(123)
University of Palermo	Italy	154 −−	5.88	5.88	(118)	0.00	
University Bordeaux IV (Montesquieu), IERSO	F	155 −−	5.80	5.62	(119)	0.18	(181)
Universidade de Vigo, Vigo	Spain	156 *	5.62	0.00		5.62	(100)
BETA, Strassbourg	F	157 90	5.35	0.00		0.00	
University of Valencia (IVIE)	Spain	158	5.24	0.53	(179)	4.71	(111)
University of Sussex	U.K.	159 +	5.11	1.40	(158)	3.71	(122)
Universidad Complutense, Madrid	Spain	160 90	5.11	0.00		0.00	
City of London Polytechnic	U.K.	161 −−	4.90	4.90	(123)	0.00	
University of Stirling	U.K.	162 −	4.73	4.35	(129)	0.38	(174)
University of Freiburg	D	163 *	4.72	0.00		4.72	(110)
University of Siena	Italy	164 ++	4.72	0.63	(175)	4.09	(115)
University of Urbino	Italy	165 ++	4.58	0.83	(173)	3.75	(121)
University Pierre et Marie Curie	F	166 −−	4.45	4.45	(127)	0.00	
Study Center Gerzensee	CH	167 *	4.45	0.00		4.45	(112)
Vienna University of Econ. and Business	Austria	168 −−	4.38	4.38	(128)	0.00	
Catholic University Leuven	Belgium	169	4.19	2.27	(143)	1.92	(147)
Instit. for the Econ. i. Transition, Moscow State U.	Russia	170 *	4.00	0.00		4.00	(116)
University of Paris II (ERMES)	F	171 *	3.99	0.00		3.99	(117)
University of Pourtsmouth	U.K.	172 *	3.96	0.00		3.96	(118)
University of Wales, Bangor	U.K.	173	3.91	1.41	(157)	2.50	(133)
Swiss Federal Institute of Technology, ETH Zurich	CH	174 *	3.75	0.00		3.75	(120)
University of Cyprus	Cyprus	175 −	3.72	3.26	(132)	0.46	(171)
University of Verona	Italy	176 −−	3.55	3.55	(131)	0.00	
Universita di Lecce, Lecce	Italy	177 *	3.45	0.00		3.45	(124)
University of Leeds	U.K.	178 −	3.34	2.70	(138)	0.64	(167)
Institut Universitaire de France	F	179 *	3.32	0.00		3.32	(125)
University of Malaga	Spain	180 *	3.25	0.00		3.25	(126)
Universidad Publica de Navarra, Pamplona	Spain	181 *	3.07	0.00		3.07	(128)
University of Kiel	D	182 −−	3.06	1.66	(150)	0.00	
University of Dundee	U.K.	183	2.98	1.44	(155)	1.02	(158)
Copenhagen Business School (CBS)	Denmark	184 *	2.95	0.00		2.95	(129)
University Laval, CRÉFA	F	185 *	2.82	0.00		2.82	(131)
University of Bradford	U.K.	186 −−	2.81	2.43	(143)	0.00	
University of Umea	Sweden	187	2.78	1.13	(167)	1.65	(150)
Warsaw University	Poland	188 −−	2.68	2.68	(139)	0.00	
University of Tuebingen	D	189 ++	2.60	0.23	(190)	2.37	(137)
University College, Cork	Ireland	190 −−	2.56	2.56	(140)	0.00	
IUI (The Res. Inst. of Industr. Econ.), Stockholm	Sweden	191 *	2.49	0.00		2.49	(134)
University of Saarland, Saarbruecken	D	192	2.42	1.66	(151)	0.32	(175)
University of Rennes	F	193 90	2.38	0.00		0.00	
University of Duisburg	D	194 *	2.37	0.00		2.37	(138)
University of Namur	Belgium	195 ++	2.37	0.14	(195)	2.23	(141)
University of Bamberg	D	196 −	2.19	2.05	(144)	0.14	(184)
University of East London	U.K.	197 *	2.08	0.00		2.08	(146)
University of Sheffield	U.K.	198 −−	2.05	2.05	(145)	0.00	
University of Catania	Italy	199 −−	1.98	1.98	(147)	0.00	
Universita di Pisa	Italy	200 *	1.87	0.00		1.87	(148)

++ (- -) improved (declined) by more or equal to 50 ranks (single sign: 25 ranks) from I to II; * new entry; 90 top publ. in 1990

Table 2.
Ranking for core journals (excluding *EER* and *EJ*), *AER* standardized pages

[a] ex Kalaitzidakis et al. (1999), corrected version [b] respective rank in parantheses	Country	Rank	Total dec.	Subper. I[a,b]	Subper. II[b]
			1990-99	1991-96	1997-99
Tel-Aviv University	Israel	1	654.08	349.28 (2)	198.35 (1)
LSE, London School of Economics (CEP)	U.K.	2	568.57	356.72 (1)	164.98 (4)
Hebrew University Jerusalem	Israel	3	387.60	224.48 (4)	122.57 (7)
Oxford University, subsuming colleges	U.K.	4	366.22	229.09 (3)	132.29 (6)
University of Toulouse (IDEI/GREMAQ/LIRHE/ARQADE)	F	5	354.29	139.23 (8)	191.00 (2)
University College London (UCL), subsuming IFS	U.K.	6	339.14	159.71 (7)	179.43 (3)
U. Aut. de Barcelona and IAE-CSIC	Spain	7	258.01	186.93 (5)	65.97 (21)
University of Cambridge, subsuming colleges	U.K.	8	244.56	123.01 (10)	104.84 (8)
Catholic University of Louvain and CORE	Belgium	9	231.72	92.19 (13)	69.56 (18)
Stockholm University	Sweden	10	225.50	126.01 (9)	96.49 (10)
DELTA (-ENS)	F	11 $^{-}$	214.60	175.94 (6)	32.00 (36)
U. Pompeu Fabra (UPF), Barcelona	Spain	12	198.02	104.23 (12)	93.79 (13)
University of Bonn	D	13	196.53	81.53 (16)	88.16 (14)
Free University of Brusseles	Belgium	14	191.30	89.60 (14)	101.70 (9)
University of Vienna	Austria	15	174.71	107.01 (11)	67.70 (19)
University of Southampton	U.K.	16	174.20	71.62 (19)	95.44 (12)
Tilburg University	NL	17	173.77	70.91 (20)	96.27 (11)
Stockholm School of Economics	Sweden	18 $^{+}$	157.76	25.27 (51)	132.49 (5)
University of Paris I (Panthéon-Sorbonne)	F	19	148.62	56.08 (25)	48.19 (25)
University of Essex	U.K.	20	147.45	84.81 (15)	51.03 (24)
U. Carlos III de Madrid	Spain	21	121.37	47.95 (28)	73.42 (17)
University of Amsterdam (UvA)	NL	22	118.77	78.47 (17)	40.30 (28)
University of London, subsuming colleges	U.K.	23	112.83	68.96 (21)	39.61 (29)
INSEE (Cedex-Paris)	F	24	111.55	47.03 (29)	32.04 (35)
Technion - Israel Inst. of Technology	Israel	25	102.68	41.17 (34)	55.97 (22)
CREST (-LEI, -ENSAE, -INSEE)	F	26 $^{+}$	99.27	25.51 (50)	73.76 (16)
University d'Aix-Marseille II/III	F	27	95.86	60.05 (24)	26.71 (44)
CEPREMAP	F	28 $^{-}$	94.34	61.52 (22)	19.44 (56)
European University Institute (EUI), Florence	Italy	29 $^{--}$	88.59	72.64 (18)	8.83 (74)
CNRS	F	30 $^{++}$	88.39	14.31 (77)	74.08 (15)
ENPC (CERAS)	F	31	81.80	36.10 (40)	45.70 (26)
University of Geneva	CH	32 $^{--}$	81.33	60.06 (23)	7.16 (83)
University of Zurich	CH	33 $^{++}$	80.62	13.45 (80)	67.17 (20)
University of Warwick	U.K.	34	76.55	48.41 (27)	25.08 (45)
University of East Anglia	U.K.	35	75.99	52.71 (26)	23.28 (50)
University of York	U.K.	36	73.40	44.41 (30)	23.47 (48)
University of Bristol	U.K.	37	73.26	26.72 (48)	34.16 (34)
Haifa University	Israel	38	69.58	42.37 (32)	20.06 (54)
University of Alicante	Spain	39	67.48	36.18 (39)	31.30 (37)
University of Torino	Italy	40	65.72	44.36 (31)	21.36 (51)
LBS, London Business School	U.K.	41	65.31	41.55 (33)	23.76 (47)
University College Dublin	Ireland	42 $^{++}$	64.52	13.42 (81)	51.10 (23)
Ben-Gurion University	Israel	43 $^{-}$	60.53	39.52 (35)	14.18 (61)
University of Bologna	Italy	44 $^{++}$	57.19	12.32 (85)	38.94 (30)
Groningen University	NL	45	56.05	22.67 (56)	8.18 (78)
Catholic University of Portugal, Lisbon	Portugal	46	55.30	25.05 (52)	26.96 (43)
University of Venice (Ca'Foscari)	Italy	47	55.27	24.07 (54)	31.20 (38)
Free University of Amsterdam	NL	48 $^{++}$	54.04	4.00 (121)	35.80 (32)
Erasmus University, Rotterdam	NL	49	53.02	29.74 (45)	23.28 (49)
Technical University of Vienna	Austria	50 $^{-}$	50.38	36.74 (38)	6.64 (87)

Table 2 (continued).

[a] ex Kalaitzidakis et al. (1999), corrected version [b] respective rank in parantheses	Country	Rank	Total dec.	Subper. I[a,b]		Subper. II[b]	
			1990-99	1991-96		1997-99	
University of Copenhagen	Denmark	51	50.37	21.13	(58)	28.35	(41)
INSEAD, Fontainbleau	F	52	47.52	16.23	(70)	20.67	(52)
University of Oslo	Norway	53 $^{-}$	47.06	32.38	(42)	9.59	(70)
University de Cergy-Pontoise (THEMA)	F	54	44.65	20.54	(61)	24.11	(46)
Free University (FU) of Berlin	D	55 $^{++}$	44.31	9.51	(89)	34.80	(33)
University of Exeter	U.K.	56 $^{++}$	43.88	7.91	(103)	35.97	(24)
University of Dortmund	D	57	43.50	21.10	(59)	8.51	(76)
University of St. Andrews	U.K.	58 $^{+}$	43.22	14.24	(78)	28.98	(40)
University of Munich	D	59 $^{++}$	42.85	0.46	(143)	42.39	(27)
University of Mannheim	D	60	42.02	11.27	(86)	30.75	(39)
INRA (Inst. Nat. de la Recherche Agronomique)	F	61 $^{--}$	39.26	37.99	(36)	1.27	(136)
University of Basel	CH	62 $^{--}$	39.20	30.77	(44)	5.54	(96)
University of Paris X	F	63 $^{--}$	37.52	15.89	(71)	2.94	(123)
University of Limburg	NL	64	37.28	37.28	(37)	0.00	
Athens University of Econ. and Bus.	Greece	65 $^{--}$	36.66	34.41	(41)	2.25	(128)
University of Rome, La Sapienza (ISTAT)	Italy	66	36.64	13.58	(79)	15.95	(57)
Trinity College, Dublin	Ireland	67 *	33.89	0.00		12.50	(63)
University Newcastle-upon-Tyne	U.K.	68 $^{+}$	33.64	8.18	(99)	9.15	(71)
Bocconi University, Milan (IGIER)	Italy	69	33.42	20.97	(60)	12.45	(57)
University of Liverpool	U.K.	70	32.33	12.81	(83)	15.37	(59)
University of Lund	Sweden	71	32.32	16.91	(66)	7.41	(82)
New University of Lisbon	Portugal	72 $^{--}$	32.07	32.07	(43)	0.00	
University of Leicester	U.K.	73	31.96	15.42	(74)	12.57	(62)
University of Leiden	NL	74 $^{-}$	31.47	24.83	(53)	6.64	(86)
City University (Business School), London	U.K.	75	31.10	15.53	(73)	9.64	(69)
University of Padova	Italy	76 $^{--}$	30.95	28.43	(46)	1.82	(134)
University of Manchester	U.K.	77	30.20	21.50	(57)	8.70	(75)
CEMFI, Madrid	Spain	78 $^{-}$	29.87	23.48	(55)	6.39	(89)
ENSAE	F	79 $^{+}$	28.02	8.44	(98)	19.58	(55)
University of Bielefeld	D	80 *	27.61	0.00		27.61	(42)
University of Helsinki	Finland	81	27.03	16.38	(67)	10.65	(67)
University of Birmingham	U.K.	82 $^{--}$	26.94	26.94	(47)	0.00	
Inst. of Mathematical Statistics	Denmark	83 $^{--}$	26.70	26.70	(49)	0.00	
University of Modena	Italy	84 $^{++}$	26.17	5.62	(112)	20.55	(53)
Laboratoire d'Econometrie. L'Ecole Poly., Paris	F	85 $^{-}$	26.07	12.75	(84)	3.83	(109)
University of Brescia	Italy	86 $^{-}$	24.32	18.07	(65)	4.85	(100)
University of Paris IX	F	87 $^{+}$	23.39	8.90	(96)	14.49	(60)
Norwegian School of Econ. and B.A., Bergen-Sandv.	Norway	88 $^{+}$	21.48	16.24	(69)	5.24	(98)
Inst. Universitario Navale	Italy	89 $^{--}$	20.54	19.84	(63)	0.00	
University of Lausanne	CH	90 $^{+}$	20.53	9.04	(93)	11.49	(65)
Humboldt University (HU), Berlin	D	91 $^{+}$	20.24	9.00	(95)	11.24	(66)
Institute for Advanced Studies (IAS), Vienna	Austria	92 $^{--}$	20.23	20.23	(62)	0.00	
Wissen. Zentrum Berlin f. Sozial.	D	93 $^{--}$	19.82	16.27	(68)	0.00	
Uppsala University	Sweden	94 $^{--}$	18.51	18.23	(64)	0.28	(147)
University of Reading	U.K.	95 $^{--}$	16.38	6.38	(106)	0.00	
University of Karlsruhe	D	96 $^{--}$	16.35	4.60	(117)	0.00	
University of Nijmegen	NL	97 $^{--}$	15.71	15.71	(72)	0.00	
Koc University, Istanbul	Turkey	98 *	15.63	0.00		15.63	(58)
University of Edinburgh	U.K.	99 $^{--}$	15.37	15.37	(75)	0.00	
Maynooth College	Ireland	100 $^{--}$	14.78	14.78	(76)	0.00	

Table 2 (continued).

[a] ex Kalaitzidakis et al. (1999), corrected version [b] respective rank in parantheses	Country	Rank	Total dec.	Subper. I[a,b]	Subper. II[b]
			1990-99	1991-96	1997-99
University of Konstanz	D	101	14.28	1.50 (132)	3.58 (113)
University of Nottingham (Trent)	U.K.	102	13.78	7.99 (102)	5.79 (93)
University of Gothenburg	Sweden	103	13.35	13.35 (82)	0.00
University of Kent (Keynes College)	U.K.	104 −−	11.09	10.72 (87)	0.37 (145)
University of Utrecht	NL	105 −−	10.48	10.48 (88)	0.00
University Louis Pasteur	F	106	10.45	5.00 (114)	5.45 (97)
University of Naples (I.U.N.)	Italy	107 [90]	10.32	0.00	0.00
University of Pavia	Italy	108 ++	10.26	2.04 (128)	8.22 (77)
University of Tromso	Norway	109 +	10.00	3.00 (125)	7.00 (84)
CNRS-GREQAM, Marseille	F	110 *	9.71	0.00	9.71 (68)
OFCE, Paris	F	111 −−	9.43	9.43 (90)	0.00
Fac. U. Notre-Dame de la Paix, Namur	Belgium	112 −−	9.20	9.20 (91)	0.00
University of Cagliari	Italy	113 −−	9.10	9.10 (92)	0.00
Université de Pau et des Pays de l'Adour	F	114 *	9.04	0.00	9.04 (72)
University del Pais Vasco	Spain	115 −−	9.04	9.04 (94)	0.00
University of Orleans	F	116	8.99	6.53 (105)	2.46 (125)
University of Salerno	Italy	117 *	8.95	0.00	8.95 (73)
University of Surrey	U.K.	118 −	8.90	2.97 (126)	5.93 (91)
Bogazici University, Istanbul	Turkey	119 −−	8.88	8.88 (97)	0.00
Charles University (CERGE-EI), Prague	Czech R.	120 *	8.78	0.00	4.33 (104)
University of Madrid	Spain	121 [90]	8.46	0.00	0.00
University of Aarhus	Denmark	122	8.27	6.27 (108)	2.00 (131)
Bilkent University, Ankara	Turkey	123 *	8.18	0.00	8.18 (79)
University of Parma	Italy	124 −−	8.15	8.15 (100)	0.00
University of Ljubljana	Slowenia	125 −−	8.11	8.11 (101)	0.00
Universidad de Salamanca	Spain	126 *	8.01	0.00	8.01 (80)
Keele University	U.K.	127	7.97	4.50 (118)	3.47 (117)
University of Strathclyde	U.K.	128	7.93	5.76 (111)	2.17 (130)
Fac. U. Cath. de Mons et de Lille	Belgium	129	7.85	3.10 (124)	4.75 (101)
Heriot-Watt University, Edinburgh	U.K.	130 *	7.51	0.00	7.51 (81)
University of Antwerp	Belgium	131 −−	7.10	7.10 (104)	0.00
Sodertorn University College, Huddinge	Sweden	132 *	7.00	0.00	7.00 (85)
HEC (Hautes Etudes Commerciales, Jouy-en-Josas)	F	133 *	6.57	0.00	6.57 (88)
Université de Caen (CREME)	F	134 *	6.39	0.00	6.39 (90)
Helsinki School of Economics	Finland	135 −−	6.33	6.33 (107)	0.00
University di Trieste	Italy	136 −−	6.13	6.13 (109)	0.00
University of Zaragoza	Spain	137	6.00	4.47 (119)	1.53 (135)
Abo Akademi University	Finland	138 +	5.98	0.98 (138)	5.00 (99)
University of Palermo	Italy	139 −−	5.88	5.88 (110)	0.00
University of Durham	U.K.	140 *	5.88	0.00	5.88 (92)
Universidade de Vigo, Vigo	Spain	141 *	5.62	0.00	5.62 (94)
Bar-Ilan University	Israel	142 −−	5.62	4.92 (115)	0.70
University Bordeaux IV (Montesquieu), IERSO	F	143 −−	5.62	5.62 (113)	0.00
Hertford College (Univ. of Hertfordshire)	U.K.	144 *	5.55	0.00	5.55 (141)
BETA. Strassbourg	F	145 [90]	5.35	0.00	0.00
Universidad Complutense, Madrid	Spain	146 [90]	5.11	0.00	0.00
City of London Polytechnic	U.K.	147 −−	4.90	4.90 (116)	0.00
Brunel University	U.K.	148 *	4.68	0.00	4.68 (112)
University Pierre et Marie Curie	F	149	4.45	4.45 (120)	0.00
Study Center Gerzensee	CH	150 *	4.45	0.00	4.45 (103)

Table 2 (continued).

[a] ex Kalaitzidakis et al. (1999), corrected version [b] respective rank in parantheses	Country	Rank	Total dec.	Subper. I[a,b]		Subper. II[b]	
			1990-99	1991-96		1997-99	
University of Valencia (IVIE)	Spain	151 *	4.26	0.00		4.26	(105)
University of Siena	Italy	152 *	4.09	0.00		4.09	(106)
Institute for the Econ. I. Transition, Moscow State U.	Russia	153 *	4.00	0.00		4.00	(107)
Vienna University of Econ. and Bus.	Austria	154 −−	4.00	4.00	(122)	0.00	
University of Pourtsmouth	U.K.	155 *	3.96	0.00		3.96	(108)
University of Paris II (ERMES)	F	156 *	3.83	0.00		3.83	(110)
Swiss Federal Institute of Technology, ETH Zurich	CH	157 *	3.75	0.00		3.75	(111)
University of Urbino	Italy	158 *	3.75	0.00		3.75	(112)
Lancaster University	U.K.	159 *	3.58	0.00		3.58	(114)
University of Verona	Italy	160 −−	3.55	3.55	(123)	0.00	
Queen's University, Belfast	U.K.	161 90	3.55	0.00		0.00	
University of Bergen	Norway	162 *	3.50	0.00		3.50	(115)
University of Freiburg	D	163 *	3.50	0.00		3.50	(116)
Universita di Lecce, Lecce	Italy	164 *	3.45	0.00		3.45	(118)
Institut Universitaire de France	F	165 *	3.32	0.00		3.32	(119)
University of Malaga	Spain	166 *	3.25	0.00		3.25	(120)
Sheffield Hallam University	U.K.	167 *	3.16	0.00		3.16	(121)
Universidad Publica de Navarra, Pamplona	Spain	168 *	3.07	0.00		3.07	(122)
University of Kiel	D	169 *	3.06	1.66	(130)	0.00	
Warsaw University	Poland	170 −−	2.68	2.68	(127)	0.00	
University of Linz (Joh. Keppler U.)	Austria	171 *	2.50	0.00		2.50	(124)
University of Rennes	F	172 90	2.38	0.00		0.00	
University of Tuebingen	D	173 *	2.37	0.00		2.37	(126)
University of Duisburg	D	174 *	2.37	0.00		2.37	(127)
University of Namur	Belgium	175 *	2.23	0.00		2.23	(129)
IUI (The Res. Inst. of Industr. Econ.), Stockholm	Sweden	176 *	2.00	0.00		2.00	(132)
Universita di Pisa	Italy	177 *	1.87	0.00		1.87	(133)
University of Leeds	U.K.	178 −−	1.68	1.68	(129)	0.00	
University of Hull	U.K.	179 −−	1.54	1.54	(131)	0.00	
Catholic University Leuven	Belgium	180	1.51	0.74	(140)	0.77	(140)
University of Glasgow	U.K.	181 −−	1.26	1.26	(133)	0.00	
University of Kassel	D	182 −−	1.26	1.26	(134)	0.00	
University of Trento	Italy	183 *	1.25	0.00		1.25	(137)
University of Fribourg	CH	184 *	1.25	0.00		1.25	(138)
University of Liege	Belgium	185 −−	1.21	1.21	(135)	0.00	
Polytechnic South West	U.K.	186 −−	1.02	1.02	(136)	0.00	
Imperial College, London	U.K.	187 −−	1.00	1.00	(137)	0.00	
University of Umea	Sweden	188	0.98	0.70	(141)	0.28	(148)
University of Bergamo	Italy	189 −−	0.98	0.98	(139)	0.00	
University of Wales, Bangor	U.K.	190 *	0.84	0.00		0.84	(139)
Loughborough University	U.K.	191 *	0.70	0.00		0.70	(142)
University (College) of Swansea	U.K.	192 *	0.70	0.00		0.70	(143)
University of Bern	CH	193 *	0.63	0.00		0.63	(144)
University of Augsburg	D	194 −−	0.63	0.63	(143)	0.00	
University of Dundee	U.K.	195 −−	0.42	0.42	(144)	0.00	
University of St. Gallen	CH	196 −−	0.42	0.42	(145)	0.00	
University of East London	U.K.	197 *	0.35	0.00		0.35	(146)
University of Oldenburg	D	198 −−	0.35	0.35	(146)	0.00	
University of Porto	Portugal	199 −−	0.35	0.35	(147)	0.00	
University of Sussex	U.K.	200 −−	0.25	0.25	(148)	0.00	

++ (- -) improved (declined) by more or equal to 50 ranks (single sign: 25 ranks) from I to II; * new entry; 90 top publ. in 1990

3.1 Tendencies towards the end of the 1990s. In our opinion, the tendencies or trend signs, reported in Table 1 and 2 above, are straightforward in assessing the *quo vadis* of active departmental environments for high quality research in Europe. This is due to the fact that they capture raising, stagnating or decreasing efforts in research excellence towards the end of the last decade and thereby may be helpful for young scholars, ambitious graduate students, etc. in deciding for potential future affiliations. Several departments seem to be on the edge of top 10 and top 50 European institutions and very good addresses for high quality research in economics nowadays.[8] Generally speaking, these tendencies should be seen *cum grano salis*, inasmuch they hardly represent more than two snapshots of a continuously ongoing research process that may be quite heterogeneous for different departments. For example, in some cases it may show spikes, i.e. it may be predominated by outstanding high episodes of intense research, or be biased due to generational changes of scholarly staff in the spirit of structural breaks.

For the ranking including all ten considered journals, we find 14 departments among the top 50 institutions that change their position by at least 25 ranks from subperiod I to subperiod II. Seven of these even change position by more or equal than 50 ranks. For this first quarter of the ranking the rank improving departments clearly predominate: Eight + vs. six − and five ++ vs. two −− indicated institutes. We find a similar picture for the results excluding *EER* and *EJ*, as given in Table 2. For both tables, the last quartile is characterized by a large number of new entries (17 and 29, respectively).[9] In both rankings the improving departments (including new entries) dominate this part of the ranking. With regard to the stability of ranks, we find that while for the case of including *EER* and *EJ* relatively more departments change their ranks by at least 50 positions from subperiod I to II in the third in comparison to the fourth quartile (36 vs. 34), relatively less do so when *EER* and *EJ* are excluded (32 vs. 46). About 2.5 to 3% of the departments make top 200 due to one (or more) top publication(s) in the year 1990 only. They are found in the last two quartiles of the ranking, respectively. In both tables, the number of improving and declining positions is close to balanced in the third quartile of the ranking, i.e. for positions 101 to 150. Finally, the second quartile of the two rankings is characterized by the outnumbering of institutions which decline in rank position, in comparison to improving institutions.

In summary, this suggests the interpretation that the ranking pattern is more stable, especially in the last quartile of ranks, when *EER* and *EJ* are included in the selection of considered core journals. In other words, there is relatively more fluctuation in institutional affiliations of European authors if one focuses on top

[8] Of course, this may be due to a drastic widening of research staff from early and mid to late 1990s. A fact that is, if at all, only partially controllable for us due to a lack of information, cf. section 4, and calls for detailed case studies.

[9] In total there are 31 new entries including *EER* and *EJ* vs. 47 excluding *EER* and *EJ*.

journals with a non-European background. Any further interpretation of these results is left to the reader.

3.2 Concentrations towards the end of the 1990s. To assess the institutional concentration both for top publishing activity and editorial board participation of the departments (both also *AER* standardized), we first calculate shares of the top 10 institutions: This concentration of top publications takes on values of 38.94% (38.88% excluding *EER* and *EJ*) for subperiod I, 35.34% (36.42% excluding *EER* and *EJ*) for subperiod II and 35.95% (37.05% excluding *EER* and *EJ*) for the total decade. For the latter figure, the corresponding concentration of the most present institutes in the core journals' editorial boards is 58.56% (60.81% excluding *EER* and *EJ*).[10] Obviously, the share of the top 5% publishing institutes represents about 60% the share of the top 5% departments in editorial board participation. To investigate the matter of concentration further, we calculate the following standard Herfindahl-Indeces

$$H_q = \sum_j (q_j/Q)^2 \text{ and } H_b = \sum_j (b_j/B)^2 , \tag{3.1}$$

where (i) H_q, H_b represent the index for published pages and editorial board participation (both *AER* standardized), respectively, (ii) q_j and b_j are the weighted scores and participation rates of institution j, respectively, and (iii) Q and B are the total weighted score and participation rate of all affiliations, respectively. The value of H_q is quite stable over the two considered subperiods and the total decade equalling approximately 0.02. The Herfindahl-Index for the institutional editorial board participation H_b takes on a value of 0.06 for the 1990s, indicating a three times higher institutional concentration of editorial board membership.

4. How come? Some econometric explanation of results

This section tackles the explanation of the results reported in Table 1 and 2 by means of several statistical methods and econometric approaches. We consider basic regional and institutional features as explanatory variables. The first regional variable, we selected, is the number of inhabitants of the city, where the respective department is located (*INH*). As commonly agreed on, for the period of one decade the number of inhabitants of a city is relatively time-invariant, which makes us confident to rely on figures from sample years. It includes the number of potential high-qualified personnel for a top economics department which implies, due to regional proximity, low searching costs (for department as well as applicant). With regard to an approximation of actual staff of the respective economics department during the 1990s, it is, of course and at best, only partially suited. As second variable with a regional character, we consider the number of further top research output producing departments (i.e.

[10] For a detailed description of the construction of the editorial boards' participation variable as well as for the explanatory variables considered in the following section 4, cf. the Appendix.

top 200, as displayed in Table 1 and 2 above) in the same city (*AGGL*). This variable should reflect potential agglomeration effects due to sharing of infrastructural features (consider for example libraries), spillovers through cooperations etc. or positive externalities from a competitive environment of departments in the same city. Finally, we consider a dummy variable for institutions from natively English speaking countries (*NATLA*). There is an interesting strand of literature in sociolinguistics that claims[11] that it takes an average non-natively English speaking person approximately between nine and twelve thousand hours of "language exposure" to attain the maturity of participating in a scientific conference held in "scientific" English, see Piron (1993 and 1994). If this education is only partially covered by pre-professional (academic) career institutions for the average non-English mother tongue economist, there might be a comparative disadvantage for the latter in producing research output for the core journals. Furthermore, Frey and Eichenberger (1997) argue that non-Anglo-Saxon economics departments (with the exception of Israel) tend to publish relatively less on the international and relatively more on the less competitive national market of scientific publications. Contributions on these national markets particularly challenge national, or even local, economic topics. They imply no language barrier for authors, since they are, in general, called to be submitted in the respective national language. If these argumentations hold, *NATLA* should be positively correlated with our data on high quality international research output, as measured by the weighted published pages in the core journals at stake.

The central institutional features that we consider as explanatory variables are: First, a dummy variable for institutions like the European University Institute (EUI) in Florence that do not teach undergraduate students, but focus on the advanced academic training to PhD students and research (*RES*). The second institutional dummy variable, we consider, captures the existence of a departmental PhD program (*PhD*). In general, PhD programs might be quite heterogeneous on a national level. For example the PhD program of the University of Munich includes the attending of lectures and passing exams, while for most other German economics departments this is not the case. Due to a lack of information, our *PhD* variable does not reflect these kind of differences, but captures the mere possibility to award a PhD from the respective institution. As a further institutional feature we consider the time share of academic vita spent by a Nobel Laureat as staff of faculty (*NOBEL*). The idea behind this variable is that these exceptional researchers in economics have a long lasting impact on the respective departmental research environment: They may advise PhD students and thereby establish a kind of "school," initialize (though maybe not *in personam* and potentially also *post mortem*) the foundation of research centres, attract human and physical capital etc. Finally, we consider the national balance of in- and outflows of post-doctoral European research fellows, i.e. in particular, fellows

[11] Based on empirical studies, mainly constituted from interviews with white-collar employees.

of the Training and Mobility of Researchers (TMR) Network headed by the CEPR within the European Commission's fourth framework program[12] (*TMRBAL*). A positive *TMRBAL* may function as an indicator for the perception of the quality of a national research environment. Furthermore, it reflects a net number of potential publishers in the core journals. As a final institutional characteristics, we choose the editorial board participation of faculty (*EB*), which is constructed analogously to the *AER* standardized pages with regard to journals' weights and multi-affiliations.

4.1 A non-parametric assessment of determinants. The following Table 3 assesses the central basic variables sketched above with regard to their correlation with our ranking results, i.e. with ranks as well as *AER* standardized pages reported in Table 1 and 2 above. We consider standard Pearson's product moment correlations and Spearman rank correlations between each pair of variables, consisting of explanatory, non-dummy variable and rank (number of pages), respectively. Both correlation coefficients range between -1 and $+1$ and measure the strength of association between the variables. In contrast to the Pearson correlations, the Spearman coefficients are computed from the ranks of the data values rather than from the values themselves. In general, they are less sensitive to outliers than the Pearson coefficients.

Table 3a. Associations with resulting ranks

A. Ranks including *EER* and *EJ*

Spearman rank		Pearson's	
INH	- 0.024***	*INH*	- 0.101
AGGL	- 0.200***	*AGGL*	- 0.173**
NOBEL	- 0.248***	*NOBEL*	- 0.236***
TMRBAL	- 0.085	*TMRBAL*	- 0.082
EB	- 0.642***	*EB*	- 0.427***

B. Ranks excluding *EER* and *EJ*

Spearman rank		Pearson's	
INH	- 0.253***	*INH*	- 0.067
AGGL	- 0.220***	*AGGL*	- 0.179**
NOBEL	- 0.257***	*NOBEL*	- 0.239***
TMRBAL	- 0.003	*TMRBAL*	- 0.007
EB	- 0.554***	*EB*	- 0.417***

[12]Covering the period from 1994 to 1998. The fifth framework is still ongoing. There is no final report containing corresponding figures for the period beyond 1998.

Table 3b. Associations with *AER* adjusted pages

A. Pages including *EER* and *EJ*

Spearman rank		Pearson's	
INH	0.275***	*INH*	0.136**
AGGL	0.229***	*AGGL*	0.125*
NOBEL	0.253***	*NOBEL*	0.363***
TMRBAL	0.131*	*TMRBAL*	0.145**
EB	0.642***	*EB*	0.760***

B. Pages excluding *EER* and *EJ*

Spearman rank		Pearson's	
INH	0.282***	*INH*	0.126*
AGGL	0.238**	*AGGL*	0.130**
NOBEL	0.262***	*NOBEL*	0.330***
TMRBAL	0.023	*TMRBAL*	0.105
EB	0.551***	*EB*	0.736***

Note: *, **, *** significant on 10%, 5% , 1% significance level.

As can be seen from Table 3 above, all considered variables show the expected signs of correlations with ranks and numbers of pages. The correlation coefficients for every suggested regional or institutional variable are significant, at least for one of the considered association measures and traditional significance levels.

4.2 Linear regressions. In a first step, we estimate the most simple linear relationship between the weighted scores of the departments (in *AER* adjusted pages) and the explanatory variables outlined above by a simple OLS regression model. The results are presented in the first two columns of estimated coefficients in Table 4 below. The results are presented in the first two columns of Table 4 below.

Obviously, our regressions explain about 60% of the variance in *AER* standardized pages published by the top 200 departments during the last decade. The results for the exclusion of *EER* and *EJ* differ only marginally from the ones obtained when including *EER* and *EJ*. In both cases, the most contributing and significant variable is the departmental editorial board participation (*EB*), followed by the time share of academic vita spent by a Nobel Laureat as staff of faculty (*NOBEL*). Finally, the English language barrier, as captured by *NATLA*, has a significant (on the 5% level of significance) impact on the pages contributed to economic core journals by the top productive European departments. There is no significant evidence for positive clustering effects, in the form of spillovers or positive externalities due to local competition, for urban agglomerations of top European economics department (*AGGL*). Teaching duties (*RES*), departmental PhD programs (*PHD*) as well as the national balance of European post-doctoral fellows (*TMRBAL*) show not significantly estimated coefficients.

It should be noted that results change only marginally, in terms of quality and

significance, both, if one considers a censored regression framework (Tobit regression model)[13] or weighted departmental scores per inhabitant of city as endogenous variable.[14] Since *INH* can be seen as highly collinear with, at least, one of the other explanatory variables (i.e. *AGGL*), we apply it as left hand side variable only, cf. also the following section.

4.3 Considering a simple log-linear production function framework. This section treats the results reported in Table 1 and 2 in the spirit of the outcome of a quite general production function and assesses this hypothesis econometrically. Consider the following standard production function for department j to produce a certain number of *AER* adjusted pages in the selected core journals

$$Y_j = A_j N_j^{\alpha} \left(HK_j\right)^{\gamma}, \tag{4.1}$$

where A_j represents the respective productive high-quality research potential. By N_j the number of high-qualified personnel for the European top economics department j (as approximated by *INH*) is denoted. Finally, HK_j represents input factors supporting the efficiency of human capital like infrastructural determinants, i.e. inputs interpreted in a quite wide sense. Log-linearizing (4.1) renders

$$\ln Y_j = \ln A_j + \alpha \ln N_j + \gamma \ln \left(HK_j\right). \tag{4.2}$$

In the following, we restrict α to take on a value of one. This assumption allows an expression of (4.1) in weighted departmental output per capita, i.e. per inhabitant of respective city

$$\ln Y_j - \ln N_j = \ln A_j + \gamma \ln \left(HK_j\right) + e_j, \tag{4.3}$$

where e_j represents i.i.d. disturbance terms. Furthermore, we assume for the productive research potentials in natural logs

$$\ln A_j = \overline{c} + \beta \widetilde{X}_j + \xi_j, \tag{4.4}$$

where $\overline{c}$ represents a constant and ξ_j is assumed to follow white noise. By (4.4) we suppose that $\ln A_j$ stands in a linear relationship to specific "soft factors" $\widetilde{X}_j$. These include *inter alia* control variables in the form of dummies that represent not necessarily genuine input factors. From equations (4.3) and (4.4) our regression specification amounts to

$$\ln Y_j - \ln N_j = \overline{c} + \beta \widetilde{X}_j + \gamma \ln \left(HK_j\right) + \varepsilon_j, \tag{4.5}$$

where ε_j equals $\xi_j + e_j$ and is by assumption white noise. Since most of our explanatory variables may take on zero or even negative values, only *AGGL* can be

[13] Since there is an amount of weighted pages > 0 for a department to get included in the top 200 ranking, there exists an implicit censoring value.

[14] The respective regression results are available on request from the authors.

accounted for HK_j in natural log expression. By nature of data *NATLA*, *RES*, *PHD*, *NOBEL, TMRBAL* and *EB* are classified $\widetilde{X}_j$. The estimation results of model (4.5) are presented in the two middle columns of Table 4 below.

The overall fit of our regressions for model (4.5) is worse in comparison to the linear specifications, as measured by the respective adjusted R^2 (although the logL value is closer to zero). Actually, the results are quite similar to the linear specifications with regard to the explanatory power of the *NOBEL* and *EB* variables. The central difference is that the influence of the English language barrier variable (*NATLA*) is no longer significantly estimated. Furthermore, the coefficient of the urban clusters of economics departments variable (*AGGL*) is now significant on the 1% level and shows a negative sign.[15] This result should be interpreted cautiously and is not surprising, inasmuch a high degree of economics departmental concentration plausibly reduces, at least in the extreme, the number of weighted pages by departments in per capita terms. This is, of course, partly due to the very simple structure of our supposed production function.

To check this suspicion, we consider as final specification a semi-log-linear model, where we transform only the *AER* adjusted number of pages, i.e. we take the natural logs of the left hand side (lhs) variable. This ensures a certain degree of homogeneity in the dimensionality of the variables, cf. also the descriptive statistics of the variables presented in the Appendix. As expected the estimated coefficient for *AGGL* turns out positive and, only in case when *EER* and *EJ* are included, significant on the relatively weak 10% level of significance.

In summary, our regression exercise reveals rather strong evidence for the variables *NOBEL* and *EB*, weak evidence for the *NATLA* variable, and quite weak evidence for the variables *PHD* and *AGGL* to matter in the "production" of departmental contributions to economic core journals. A discussion of the results in the light of the literature follows in the proceeding section.

[15] Another obvious difference is that the coefficient for the *PHD* variable is now estimated significantly but on the rather weak 10% level of significance.

Table 4. Regression results: linear, log-linear and log of left hand side variable (pages)

	Linear	Linear	Log-lin.	Log-lin.	Log lhs	Log lhs
coefficients	A.	B.	A.	B.	A.	B.
CONST	-30.0 (-1.19)	-35.8 (-1.45)	-10.4*** (-15.5)	-10.9*** (-14.8)	2.12*** (3.753)	1.72*** (2.658)
AGGL	1.268 (1.162)	1.318 (1.237)	-0.93*** (-6.62)	-0.90*** (-5.82)	0.041* (1.693)	0.051 (1.623)
NATLA	34.39** (2.099)	39.11** (2.444)	0.462 (1.056)	0.790 (1.598)	0.311 (0.841)	0.559 (1.289)
RES	28.22 (1.416)	27.79 (1.427)	0.135 (0.253)	0.215 (0.371)	0.064 (0.142)	0.131 (0.263)
PHD	1.808 (0.065)	3.302 (0.121)	1.315* (1.860)	1.402* (1.830)	0.147 (0.234)	0.188 (0.265)
NOBEL	51.4*** (3.842)	44.3*** (3.406)	0.883** (2.470)	0.988** (2.564)	0.735** (2.431)	0.823** (2.449)
TMRBAL	0.206 (1.555)	0.189 (1.466)	0.004 (1.301)	0.002 (0.592)	0.002 (0.879)	0.001 (0.708)
$EB^{A.}$	53.0*** (15.72)		0.44*** (4.987)		0.51*** (6.872)	
$EB^{B.}$		51.9*** (14.90)		0.52*** (5.107)		0.59*** (6.606)
goodness of fit						
adj. R^2	0.608	0.573	0.260	0.247	0.252	0.235
log L	-1155	-1150	-390.	-385.	-355.	-357.

Note: A. (B.) weighted scores incl. (excl.) *EER* and *EJ*; *, **, *** significant on 10, 5, 1% level of significance; t-values given in parentheses.

5. Discussion and Conclusion

Our top 200 departmental rankings, uniquely covering the partially disaggregated observation horizon of a whole decade, confirm our prior belief that high-quality research output by European departments is not a static phenomenon. Although the first quartile of our rankings, i.e. the top 50 departments, is relatively stable in rank positions, the temporal changes are considerable for the second and third, while the fourth quartile is clearly predominated by drop outs and new entries. Nevertheless, the reported tendencies may be helpful for young scholars, ambitious graduate students, etc. in deciding for potential future affiliations. In contrast to the recent findings by Kocher and Sutter (2001) on the reduction of concentration in contributions to core economic journals by authors affiliated to US departments, we find no similar tendency for European authors.

In summary, our explanatory estimation study reveals strong evidence in support of the hypothesis of an 'institutional oligopoly' of authors and editors, i.e. the fact that the European share of the most visible journals in economics is predominated by authors and editors originating, and located in, a few European academic institutions. Whether this result reflects an "unhealthy status for innovative research in

economics," as conjectured by Hodgson and Rothman (1999) is beyond the scope of our analysis. We rather want to stress that this finding of departmental concentration of editorships and authorships, does, according to our (dynamic) ranking results, obviously not reflect "conformism" in the sense of a 'closed shop' (cf. Hodgson and Rothman (1999), p. F180-181), inasmuch we find a relatively large number of departments adventitiously entering the centre stage of economic mainstream research towards the beginning of the current millennium. In our opinion, Kirman and Dahl (1994) hit the mark, when stating that, whilst it may be true that there is inertia and protectionism, the market for ideas seems relatively open. In addition, it should be noted that we use the term 'oligopoly' in the defintion of the word,[16] i.e. in the sense of specifying the empirical fact of few departments on the supply and many on the demand side of the market for top mainstream publications in economics. One may argue that the departmental concentration of European authors and editors in top mainstream journals stems from the fact that the dominating institutions simply employ the 'best' editors and authors. However, this argumentation "assumes what it has to prove. It simply assumes that the dominant criteria employed - whatever they are - in selecting top journal editors and articles are the best" and these criteria may not be fixed once and for all: "Clearly, within economics, standards and criteria have changed over the last 200 years;" see Hodgson and Rothman (1999), p. F182.

Furthermore, departments, where outstanding economists (notably, up to 1999, about one third of the Nobel prizes in economics were awarded to economists with at least one affiliation in Europe during their academic career) left their traces, perform significantly better in contributions to core economic journal. Finally, there are some indications in line with the argumentation of a national dependency of primary economic topics and publishing incentives on national subjects and journals that imply no language barrier for non-Anglo-Saxon European economists. This reasoning meets some arguments of the sociolinguistic literature and is originally suggested, in the context of scientific publications in economics, by Frey and Eichenberger (1997). In this context Kirman and Dahl (1994) note: "If Europe wishes to compete on the international level in terms of research and ideas, it cannot do so by only publishing in languages other than English, nor by avoiding those journals which currently, for good or ill, dominate the economics literature," p. 515.

We find no clear evidence for clustering effects, in the form of spillovers or positive externalities due to local competition, in European cities with more than one economics department that makes top 200 in high-quality journal publications. Teaching loads, the existence of a PhD program as well as the national net post-doctoral fellows' exchange with other European departments seem not to play a role in the explanation for departmental publications in the top economic journals.

[16] And definitely not in the normative sense of a social planner or the like.

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Appendix

Pragmatic problems and solutions
In section 2 we discriminate the selected top mainstream journals according to the institutional entities responsible for the editorial and production management behind the respective journal (associations, universities, private publishing houses). In fact, this classification is not clear cut from a legal definition of ownership, insofar as the *RES* is owned by the *RES* Ltd. society and only printed by Blackwell Publishers, while the *EER* is owned by Elsevier, North-Holland, and not by the *EEA*. Nevertheless, our argument of a representative sample of different degrees of dependence on reader subscriptions remains untouched.

With regard to the discrimination of departmental affiliations, we subsumed colleges (e.g., St.-John's College, University of Cambridge) following Kalaitzidakis, Mamuneas and Stengos (1999). This was especially the case for the University of Cambridge and Oxford University. Furthermore, we faced a specific problematic situation for French departmental affiliations: Contrary to the situations in the other European countries, in France many university-based researchers are directly employed by the national scientific council, i.e. the CNRS (corresponding to ESRC in the U.K., DFG in Germany, CNR in Italy, etc.). Additionally, in the French case, the CNRS or the INRA national research centre direct some research units which are located on university campuses and linked to the respective university's economics department. The linked research resources are named *UMR* (*Unité Multiple de Recherche*). For example, GREQAM (Marseille) represents such a CNRS-EHESS-University of Aix Marseille II centre. We therefore decided to treat CNRS and CNRS-GREQAM (Marseille), given as affiliations in the respective publications, separately in our rankings.

Construction and descriptive statistics of variables
The construction of *AER* standardized pages, the *INH*, *AGGL*, *NATLA*, *RES* and *PHD* variables is sufficiently outlined in the text.

NOBEL: Beginning with Ragnar Frisch and Jan Tinbergen, the first Nobel prize laureates in economics in 1969, up to the year 1999 fourteen economists with at least one affiliation in Europe during their academic career were awarded this prize. These are in alphabetical order: Maurice Allais (year: 1988, top 200 European affiliation(s): University Pierre et Marie Currie, Paris IV; University Paris X), Ragnar Frisch (year: 1969, top 200 European affiliation(s): University of Oslo), Trygve Haavelmo (year: 1989, top 200 European affiliation(s): University of Oslo), Friedrich A. von Hayek

(year: 1974, top 200 European affiliation(s): LSE; University of Freiburg), John R. Hicks (year: 1972, top 200 European affiliation(s): Oxford University), Leonid V. Kantorovich (year: 1975, top 200 European affiliation(s): −), James E. Meade (year 1988, top 200 European affiliation(s): LSE; University of Cambridge), James A. Mirrless (year: 1996, top 200 European affiliation(s): Oxford University; University of Cambridge), Gunnar Myrdal (year: 1974, top 200 European affiliation(s): University of Stockholm), Bertil Ohlin (year: 1977, top 200 European affiliation(s): Stockholm School of Economics), Reinhard Selten (year: 1994, top 200 European affiliation(s): Free University of Berlin; University of Bielefeld; University of Bonn), Amartya Sen (year: 1998, top 200 European affiliation(s): University of Cambridge), Richard Stone (year: 1984, top 200 European affiliation(s): University of Cambridge) and Jan Tinbergen (year: 1969, top 200 European affiliation(s): University of Rotterdam; University of Amsterdam; Free University of Amsterdam; cf. also footnote 3 in the text). In the construction of the variable, we normalized their academic carreer to unity and attributed the respective share of academic vita spent by the awarded economist as staff of faculty to the respective European institution. We did so, disregarding whether the respective economist spent the time before, during or after the winning of the Nobel prize in the respective department (cf. the arguments on the sustain of outstanding researchers in the text) and without adjustment for > 1 winner per year.

TMRBAL: Is intended to approximate the national, intra-European balance of in- and outflows of post-doctoral research fellows. In particular, we consider fellows of the Training and Mobility of Researchers (TMR) Network headed by the CEPR within the European Commission's fourth framework program. This program covers the period from 1994 to 1998. The fifth framework is still ongoing. Since there is no final report containing corresponding figures for the period beyond 1998 and since we are only considering a sample network of fellowships, this variable represents a rough proxy. A positive *TMRBAL* may function as an indicator for the perception of the quality of a national research environment. Furthermore, it reflects a net number of potential publishers in the core journals. The detailed figures are: Italy (leaving TMR fellows: 90; arriving TMR fellows: 6), Germany (35; 3), France (27; 37), Spain (19; 21), Greece (16; 5), Belgium (15; 37), Netherlands (15; 19), U.K. (14; 107), Ireland (7; 4), Portugal (3; 2), Finland (3; 0), Sweden (3; 3), Denmark (1; 3), Israel (1; 0), Norway (1; 0), Austria (0; 3).

EB: The departmental variable editorial board participation rate is based on three sample years, namely 1990, 1995 and 1999. During a period of about five years, we assumed the fluctuation of editors in the respective board of the considered top mainstream journals to be of negligible size. We attributed affiliations on the base of the directories and registers of members of the three associations *EEA*, Econometric Society and Royal Economic Society. We considered exclusively 'principal

present employment' or 'principal current position' for the respective sample year. For the remaining editors, not listed in one of the above directories, we found out the respective information via their personal CV.

Table 5. Descriptive statistics of non-dummy variables

	Mean	Std. dev.	Median	Skewness	Max	Min
$PAGES$ A.	51.68	94.02	13.81	3.727	664.2	1.870
$PAGES$ B.	46.42	87.96	10.45	3.820	654.0	0.250
$\ln(PAGES)$ A.	2.829	1.537	2.626	0.170	6.499	0.625
$\ln(PAGES)$ B.	2.536	1.750	2.347	-0.04	6.483	-1.38
INH (mio.)	1.209	1.924	0.365	2.677	9.307	0.007
$\ln(INH)$	13.00	1.440	12.80	0.161	16.04	8.949
$AGGL$	3.104	4.574	1.000	2.392	17.00	17.00
$\ln(AGGL)$	0.599	0.900	0.000	1.567	2.833	2.833
$NOBEL$	0.060	0.315	0.000	7.650	3.400	0.000
$TMRBAL$	11.86	54.47	2.000	0.062	93.00	-86.0
EB A.	0.384	1.274	0.000	6.843	13.92	0.000
EB B.	0.350	1.195	0.000	6.602	12.85	0.000

Note: A. (B.) *AER* weighted incl. (excl.) *EER* and *EJ*

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