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The World is Watching: Rankings of Czech and Slovak Economics Departments

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The "publish or perish" threat is a driving force behind an explosion of economic research published through various channels. No working economist can establish a reputation or defend a position without a steady stream of publications. A publications resume is generally decisive toward employment and professional advancement. In academia, be it Czech, Slovak or English language, publishing is regarded as the single-most important factor on the professorial tenure-track.

However, it is difficult to evaluate the quality of professional publications, especially worldwide, as standards vary greatly. The best established method relies on a quantitative, statistical approach, whereby authors are ranked according to their citation measures in recognized "impact" journals. Publications are weighted by the "quality" of the journal, approximated by its "impact factor" – that is, by the average number of cited papers published in the journal in a particular period. While this method is open to certain critique, it is established as the most reliable one.

Several studies have analyzed the research productivity and potential of the international community of economists, but none has so far analyzed the research potential of economists in central Europe. As the *Finance a úvěr – Czech Journal of Economics and Finance* has the ambition to become the leading publication of quality research from the region, we are pleased to here present three papers dealing with different aspects of publishing activity. All three of the papers deal with Czech and Slovak data and are written in Czech or Slovak language, so as to better inspire domestic discussions. We believe, however, that a brief English-language summary of the main conclusions of the papers and of their underlying methodology is useful.

This short paper thus introduces the longer three papers and considers them in the face of international studies. We classify the papers with respect to their methodology, we discuss some peculiarities of research evaluation in transition countries, and we draw some general conclusions.

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Methodology

This issue of *Finance a úvěr – Czech Journal of Economics and Finance* contains three evaluations of the research capital available at Czech and Slovak economics institutions. For the Czech part, *František Turnovec* constructs comprehensive rankings of research institutions in his "Institutional Research Capital and Individual Performance in the Czech Economic Science". He also constructs individual rankings of Czech economists according to their publication and citation records. *Martin Macháček* and *Eva Kolcunová* analyze the publication habits of associated and full professors in "On the Importance of Publishing on the Economic Sciences Tenure-track in the Czech Republic". And *Pavel Ciaian*, *Ján Pokrivčák*, and *Miroslava Rajcaniová* investigate "The Quality of Economic Research in Slovakia."

The joint objective of the studies was to provide discriminating measures of research performance based on objective data and international methodology. The rankings demonstrate satisfactory variability and they allow for discrimination. All source data were collected from renowned bibliographic sources with weights used in an established way, namely by reflecting the impact factors or their minor modification. Other methodological aspects are more or less in line with recent international studies comparing economics departments on a national, European Union, and worldwide scale.

Even so, the methods applied deserve close examination. Since the scope of possible methods is vast, one may inquire about the impartiality of the methodologies. What if alternative methods lead to results wherein the positions of the institutions or of the authors changes? To challenge this legitimate presupposition, we make a short detour via different ranking methods. We consider twelve studies that evaluated economic research: worldwide (Coupe, 2003), (Hix, 2004); in the United States (Graves et al., 1982), (Conroy – Dusansky, 1995); in the EU (Kalaitzidakis et al., 2003), (Lubrano et al., 2003); in small European countries, such as Belgium (Bauwens, 1998), Spain (Dolado et al., 2003), and Portugal (Guimaraes, 2002); as well as in non-European countries with developing academic markets, such as Australia (Sinha – Mauri, 2002), New Zealand (King, 2002), and Brazil (Faria, 2000). We find that neither of the three studies presented here suffer from a home-institution bias. To demonstrate this, we examine the methodological issues in turn.

How to Measure Quality? Objective versus Subjective Methods

Since most scientific output in economics is consumed by economists, the evaluation of product quality is generally based on a subjective peer assessment. However, the difference between direct and indirect assessment (in standard terms, subjective vs. objective) is striking. An indirect (objective) assessment is related to the actual use of the product; research publications, for example. Journal quality is largely decided by editors, who tend to strive for novelty and uniqueness, while, on the author side, articles are kept pertinent by use of relevant and contemporaneous sources. The quali-

ty of an author's research can be easily approximated by aggregating his/her publication history, weighted by the measure of journal quality.

In contrast, direct assessment relies on expert evaluation. These may be contaminated by ideological, political, or personal issues, or by a host of other irrelevant factors, especially in small, closed markets. Moreover, the most popular subjective method, the Delphi survey, is costly, not to speak about the impossibility of making instant updates to a ranking. Although expert evaluation was a feature of academic economics until the 1970s, it is now used only – if ever – for journal-quality assessment (Mason et al., 1997), (Axarloglou – Theoharakis, 2003). Moreover, high correlations between objective and subjective rankings have been observed by Dusansky and Vernon (1998), Thursby (2000), and Bräuninger and Haucap (2003).

Who's Who?

When assessing the quality of economic research, units of observation are sometimes difficult to define. In the United States, for example, business schools are not included in economic rankings. Often only Ph.D.-program institutions are considered. The level of aggregation is also difficult to capture, since economics departments in central Europe are typically small, and the main autonomous units (i.e., faculties) quite large. Furthermore, in developing academic markets, non-economic departments (e.g., statistics) often supply output relevant for economics. *Ciaian et al*. reflect this "interdisciplinarity" by also including other-than-economics publications in their assessment.

Turnovec opts for as broad a selection of institutions as possible, given his focus on author rankings. Thus, Czech National Bank employees, economists affiliated with non-academic institutions, and private schools have been incorporated. *Macháček* and *Kolcunová*, conversely, look exclusively at the economic departments of Czech universities and, within that, at associated and full professors; that is, their focus is much narrower as they aim to illustrate the consistency of the promotion process at Czech schools of higher learning.

A most intriguing issue is how to control for authors who change institutional affiliations. There are two basic ways how to attribute past research results to institutions, regardless of migration. The first indicator measures the current stock of human capital (the stock approach) – each published work is considered the intellectual property of its author. The second indicator measures the flow of past results achieved at an institution (the flow approach) – published works, considered the intellectual property of the institution, remain "in house". In our sample of relevant international studies, there are four stock and eight flow studies. Of the flow studies, four are elite-based rankings (i.e., of eight to sixty-nine journals) and four are egalitarian rankings (i.e., of 156 to 800 journals). It has to be noted that while affiliations in elite-based rankings are not subject to significant errors (the Social Sciences Citation Index has always reported the authors' affiliations), affiliations in egalitarian rankings (i.e., EconLit) may be much distorted. Dusansky and Vernon (1998) realized that EconLit affiliations did not match actual affiliations in more than 50 percent of the cases in

their sample. This means that, for egalitarian rankings, the flow approach is risky. Also, with the stock approach, one may avoid errors of incomplete citation data in the Social Sciences Citation Index (SSCI) and promptly verify publication lists. Hence, the authors' preferences for the stock approach are well founded.

It is not, however, always easy to follow all the migration among economics departments. *Turnovec* requested a list of departmental members from each institution in his study, and thus his migration data may be slightly more reliable than *Ciaian et al*., who relied largely on Internet-available information. Of course, some institutions did not provide the requested information, and Web sites are often less than exact; but, in Turnovec's case, the dropout rate he reported was minor.

Another issue is to fix membership in the face of multiple affiliations. In six of the twelve sample studies, multiple affiliations are allowed, and publications are divided proportionally. On the other hand, Lubrano et al. (2003) and Faria (2000) introduce associated, "fictive authors". An article written by author A, with affiliations X and Y, is then ascribed as an article both to the institution X (thereby written by the author A-X) and the institution Y (thereby the author A-Y). This multiple counting gives a special premium to institutions which cooperate, rewards authors of collaborative papers, and penalizes big institutions where there are no fictive authors because of in-house cooperation. In three studies in our sample, the respective authors do not explicitly provide their ground rules for dealing with multiple affiliations, but the division of output to reflect more authors indicates the proportional approach. King (2002) is an exception, wherein he distinguishes between full and part time, weighting publications of part-time members by an arbitrary constant of 0.1.

Turnovec avoids the problem of multiple affiliations by setting an exclusive approach – an author is allocated to a single institution, based on a permanent (full-time) job contract. *Ciaian et al*. accredit publications to all respective author affiliations. If an author has three affiliations, each institution gets one-third of the publication's impact. Moreover, *Ciaian et al.* weight part-time members at the only private institution in their sample, AINova, by 0.5, and concede that the weight was selectively applied for this institution, as all researchers at this private university are employed on a part-time basis. *Macháček* and *Kolcunová* do not need to worry about this issue, as they focus exclusively on authors and do not analyze institutions.

Journal Quality and Weighting of Research Output

Another crucial factor in any research assessment is the selection of sources. In our sample, six studies consider a subset of top SSCI journals. Another six studies used EconLit or subsets of EconLit. None of the studies consider items in SSCI and EconLit simultaneously. Therefore, we should interpret *Ciaian et al.* and especially *Turnovec* as quantitative-oriented rankings.

Studies also differ with respect to the period of time they take into ac-

count when deciding on the research output. The median length is 9.12 years in our sample. Typically, national rankings in developing countries require a longer period so as to include sufficient quantities; the three longest are Brazil (sixteen years), Portugal (fifteen years), and Australia (thirteen years). For the United States, we found only five-year rankings. From this perspective, the periods selected by *Turnovec* (ten years: 1994–2003) and *Ciaian et al*. (fifteen years: 1990–2004) are among the longer in the sample. *Macháček* and *Kolcunová* are extremely generous, as they do not apply any temporal limit. We should, however, note that pan-European rankings, soon applicable here, sometimes consider only five-year periods (Kalaitzidakis et al., 2003).

We have identified at least sixteen ways to assess journal quality. Despite the wealth of methods, journal rankings can be broadly categorized on an elite vs. egalitarian scale. From this perspective, *Turnovec* uses an extremely egalitarian approach. An article in a major national publication (*Politická ekonomie,* PE) receives a 1 + 0.235 weight, while an article in a top international publication (*American Economic Review*, AER) receives a 1 + 1.938 weight, which is only 2.38 times more. A publication in a non-impact title listed in EconLit receives 1, which is 2.94 times less than AER. (In elite rankings, journals beyond a limited group of top journals – twenty four is a typical size – typically have a zero weighting.) This is, of course, pronounced by working with a broad base of publications, as elaborated below.

Although *Ciaian et al.* work with the identical base of publications, they use a distinctly more elitist approach. Their method considers one article in the AER as equivalent to ten articles in PE, and to twenty-five articles in non-impact titles. Is this ranking elite also by international standards? In Nearly et al. (2003), who have had an important voice in ranking economics departments across Europe, this is not the case. A journal ranking with a 1:10 ratio between a major domestic outlet and AER is still looked on as an egalitarian ranking. We may thus conclude that *Turnovec* applies a highly egalitarian ranking, while *Ciaian et al*. work with a standard egalitarian ranking. In the latter case, the elite orientation is further mitigated by imposing weights to non-impacted sources.

Macháček and *Kolcunová* avoid the weighting problems altogether as they adopt an extremely egalitarian approach, whereby they sort publications into three distinct categories: any publication from the SSCI database, research papers as defined by the Thomson Institute for Scientific Information (ISI) (i.e., papers, but not data, literature overviews, etc.), and research papers published outside the Czech and Slovak republics.

Some of the international studies use more sophisticated weighting methods. Seven of the twelve sample studies used impact-factor-adjusted impact factors (IF-adjusted IFs) or their minor modifications. IF-adjusted IFs are calculated as eigenvectors of matrices of citations from one journal to another – (Laband – Piette, 1994), new weights in (Kalaitzidakis et al., 2003). They satisfy the property that each citation is weighted by the respective IF-adjusted IF of the citing journal, not by 1 as for the ordinary impact factor. This method reflects that a citation in AER should be worth more than a citation in PE exactly by the difference in their IF-adjusted IFs. Note that these scores exhibit extremely elitist properties. Consider the "blue-

ribbon journals" cited by Dusansky and Vernon (1998): by normalizing IF--adjusted IF of AER to 100, we get 89 for *Econometrica*, 79 for the *Journal of Political Economy*, 65 for The *Quarterly Journal of Economics* (QJE), 51 for the *Journal of Economic Theory*, 47 for the *Review of Economic Studies*, 17 for the *International Economics Review*, and 14 for The *Review of Economics and Statistics*. In this system, one QJE article has the same relative value to an AER article as one PE article does to an AER article in Turnovec's counts. And one JET article has the same relation to an AER article as any non-impact title in EconLit to AER article in Turnovec's counts.

To level the field, one might use the ordering set by IF-adjusted IFs, but instead of using individual journals' IFs, journals may be clustered and assessed arbitrary weights. For example, Dolado et al. (2002) define seven groups, each of 170 SSCI journals, that receive weightings of 30, 20, 15, 8, 4, 1, and 0.5 (the ratio of PE to AER would then be 1:30).

All three papers in this issue follow mainstream methods by dividing output proportionally to authors. (For alternative methods, see (Dolado et al., 2002) and (Lubrano et al,. 2003)). Since the papers used a broad publication base, page normalization by AER-equivalent pages would be virtually impossible unless all sources were checked manually. *Ciaian et al.* perform a slightly more advanced method by correcting at least for nominal pages. On the other hand, in five studies out of the twelve in our sample there was no correction at all.

Citations

Citations, that is, the number of references to a paper, are an alternative tool in the assessment of research productivity. Indeed, without citations, we wouldn't be able to the long-term reputation of an institution. In (Dusansky – Vernon, 1998), for instance, the University of Chicago scored seventeenth, although in the same period it also occupied two first and one third place in the subjective rankings of the National Research Council and the *U.S. News and World Report*. To solve the issue, Kalaitzidakis et al. (2003) argue that a citation is an interesting property of an individual researcher, but the institutional level should be rather derived from "the level of society" where the institution belongs, namely by the quality of the journals where its members publish. This is actually the norm in the literature, which is otherwise scarce in *ex post* citation counts (only *ex ante* citation scores are present in the form of impact factors). We find that citations were gathered in three of twelve studies – for the world, Spain, and Portugal.

We understand incorporation of citations as an additional way to enlarge the base to provide a quantitative ranking. There is a cost, however. *Turnovec* reports that his rankings are not sensitive to the elimination of citations (the "superstar" phenomenon); there is an institution which jumps from seventeenth position (out of twenty) to third because of the citations of a single researcher. A strict separation of publication and citation counts may be advisable. Citation counts may serve as a reliable indicator of individual reputation, but not of the level of research capital at institutions.

Note also that citations are troublesome since they largely depend on bibliographic sources. Besides SSCI, several alternatives emerged recently – Google Scholar, RePeC, and SSRN – yet these sources need to be further

TABLE 1 Ranking of Public Universities with Respect to the Total Score (publications and citations), 1994–2003

Rank	Institution	Number of researchers	Total number			Total score		Share in total output (%)
			Total	Foreign	Domestic	Absolute	Per researcher	
1	CERGE-EI	21	480	340	140	629,84	29.99	6.68
2	UK FSV IES	22	493	186	307	592,69	26.94	6.00
3	UTIA	10	172	117	55	233,73	23.37	5.21
4	Tomas Bata Univ.	57	612	609	3	859,20	15.07	6.34
5	CNB	54	663	192	471	667,84	12.37	2.76
	Total	1 230	4 582	2 146	2 436	5 520,95	4.49	

assessed on an international scale. Therefore, SSCI citation, used by *Turnovec* and *Ciaian et al.,* is still the only respectable source of citation counts in economics.

Summary of the Main Results

The three papers in this issue bear a same conclusion: economic research in the Czech and Slovak republics is highly concentrated in a relatively small number of institutions. While the Czech Republic has shed its previous centralized, academy-based system, and most research now occurs at universities, Slovak research productivity remains rather centralized. Further, the analysis of the tenure procedure confirms that wide discrepancies in research quality persist among Czech universities.

Turnovec reports that four institutions – CERGE-EI (a joint workplace of the Center for Economic Research and Graduate Education of Charles University, Prague, and the Economics Institute of the Czech Academy of Sciences), Charles University's Institute of Economic Studies (IES), Institute of Information Theory and Automation of the Czech Academy of Sciences (UTIA), and the Czech National Bank – account for more than 50 percent of the total publication output in the Czech Republic. The same four institutions dominate the citation ranking, with an exception whereby a single economist with a wide, albeit rather long-standing, citation record changes the ranking (see the discussion of the Tomas Bata University phenomena below and the detailed discussion in Turnovec). *Table 1* summarizes the main institution-based results.

Turnovec also calculates the individual rankings of Czech economists (*Table 2*), which tend to be dominated by Milan Zeleny who towers above all Czech economists, as he is widely cited for his work in operational research that dates back to the 1960s. As Professor Zeleny is formally affiliated with the Tomas Bata University in Zlin, this institution appears high in the ranking.

While *Ciaian et al*. use a different methodology, their conclusions are strikingly similar to Turnovec's. Like in the Czech Republic, but even more concentrated, economic research in Slovakia is dominated by a handful of in-

TABLE 2 The "Top Ten" of Czech Economists (combined publication and citation scores)

Rank	Surname	Name	Institution	Total records			Total score
				Total	Foreign	Domestic	
1	Zeleny	Milan	UTB FME	607	607	0	855,848
2	Vecernik	Jiri	NA	233	106	127	296,449
3	Klaus	Vaclav	NA	193	110	83	271,779
4	Mares	Milan	UTIA	93	72	21	129,548
5	Mejstrik	Michal	UK FSV IES	83	62	21	116,619
6	Ortmann	Andreas	CERGE-EI	83	82	1	108,308
7	Hrncir	Miroslav	CNB	80	54	26	100,211
8	Mlcoch	Lubomir	UK FSV IES	76	21	55	93,182
9	Benacek	Vladimir	NA	70	42	28	90,307
10	Turnovec	Frantisek	UK FSV IES	62	42	20	82,789

TABLE 3 Ranking of Slovak Universities with Respect to the Publication Score, 1990–2003

Rank	Institution	Publications total	Publications per researcher
1	AINova	35,08	0.74
2	UK FSEV	27,86	0.94
3	SAV	22,79	1.04
4	UK FMFI	12,55	0.33

stitutions (four), the rest being almost completely absent in the rankings – see *Table 3*.

Ciaian et al. construct a "top ten" of Slovak economists as well. The ranking summarized in *Table 4* does not suffer from the irregularities observed in the Czech case. But it underlines the dominant position of a single institution, the Slovak Academy of Sciences, which, by affiliations, accounts for seven positions among the top ten.

Macháček and *Kolcunová* complement this picture by analyzing the publication pattern of associate and full professors at all Czech economics departments. Their findings are arresting: from 1999 to mid-2005, professorships were granted regardless that 63 percent of associate and 50 percent of full professorial candidates did not have a single publication in the SSCI database! Almost 70 percent of full professors at the Technical University of Ostrava, for example, received the distinguished title of "professor of economics" without publishing a single paper, and 90 percent had no international publication to their credit. There are, again, discrepancies among the universities, where the most lax awarded 85 percent of associate professorships in the sample period without a single publication. At the same university, Technical University of Ostrava, 70 percent of full professors did not have a single SSCI-cited publication. The only institution where all professorships went to economists with at least one paper in the SSCI database was Charles University.

TABLE 4 The "Top Ten" of Slovak Economists (publication score only)

Rank	Name	Institution	Number of publications
1	Balaz Vladimir	SAV	19,4082
2	Fidrmuc Jarko	UK	10,7759
3	Lubyova Martina	SAV	7,6437
4	Okali Ivan	SAV	6,7436
5	Outrata Richard	SAV	6,3943
6	Brzica Danes	SAV	6,2942
7	Gabrielova Herta	SAV	5,8145
8	Zajac Jaroslav	STU	5,7507
9	Sujan Ivan	SAV	5,6027
10	Balaz Peter	EU	5,5508

Conclusion

Any ranking of such heterogeneous "production" as economic research is bound to be problematic and subject to many qualifications. Nevertheless, even an imperfect ranking provides insights into the assessment of economic research. We believe that the three papers published in this issue of the *Czech Journal of Economics and Finance* constitute an initial attempt at introducing an objective measurement of the research output of Czech and Slovak economists.

As these studies are first attempts, they use a lengthy assessment period; as such, they measure the medium-term impact more than recent productivity or potential. All three of the studies also use a large publication base and egalitarian journal rankings. Therefore, they can be classified as quantitative-oriented egalitarian rankings. Where the rankings show considerable differences among economics departments, we may interpret such as the differences mainly in the quantity of production.

Using a long assessment period and an extremely wide publication basis is appropriate when assessing developing academic markets, where, for example, not a single economist is in Coupé's (2003) worldwide ranking of 1000 top economists. This extensive approach taken herein yields reliable indicators of quantitative research productivity at Czech and Slovak economics departments. Note, however, that alternative methods will become more relevant when the market here begins to contribute to the international production on a greater scale. Then there will be need for more elite-oriented rankings, based on shorter periods, and with less quantitative criteria.

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APPENDIX: Summary of Main Papers Dealing with Publication Activity

Author(s)	Turnovec (2005)	Ciaian *et al.* (2005)	Graves *et al.* (1982)	Conroy, Dusansky (1995)	Lubrano *et al.* (2003)	Kalaitzidakis *et al.* (2003)	Coupé (2003)
Area	Czech Republic	Slovakia	USA	USA	EU-15	world/EU-15	world
Departments	20	24	240, incl. non-PhD	70 (50 from Graves et al. 1982 + 20 selected)	166 (only with 10 or more members)	200/120 (incl. business schools)	200 (up to 10800)
Individuals	331	top 10	–	–	–	–	top 200
Stock/flow	stock	stock	flow	stock	flow	flow	flow
Member list	requested + web	web	Guide to Higher Education + other	requested (only tenured, track-tenured)	EconLit; personal score > 7.07	SSCI	EconLit
Objective journal weights (citations)	SSCI: 1 + IF2003 EconLit: 1	SSCI Econ: 0.5 x IF SSCI non--Econ: 0.2 x IF EconLit: 0.3 x min IF (always average IF 2000–2004)	equality	AdjIF	2nd step in Delphi iteration (of 505 in EconLit) includes IF1996 x citations 1996	AdjIF1999; 5 iterations, no journal autocitations	Average IF1994 –2000/ AdjIF/ IF1996 x citations/ AdjIF 1999/ Scott, Mitias 1996/ equality
• citation period	citations 2003 to articles 2001–2002	citations 2000–2004 to articles 1998–2003	–	citations 1990 to articles 1985–1989	citations 1996 to articles 1994–1995	citations 1998 to articles 1994–1998	by method above
• corrected by	article	article	–	AER page	–	article/page/ AER page	by method above
Subjective journal weights (expertise)	–	–	–	–	1st and 3rd step in Delphi iteration	–	–
Publication size	>1000	>1000	24	Blue Ribbon/ 24/34	69	30	800
• selection	SSCI or EconLit	SSCI or EconLit	reputation	by AdjIF; SSCI	Delphi; EconLit	Top30 in AdjIF 1999; SSCI	EconLit
• publication period	10 (1994–2003)	15 (1990–2004)	5 (1974–1978)	5 (1987–1991)	10 (1991–2000)	5 (1995–1999)	32 (1969–2000)
• corrected by	–	page	AER page	AER page	–	AER page	article/page
• coauthorship *x* ($1/n^x$)	1	1	1	1	$^1/_2$	1	1
• affiliation *y* ($1/m^y$)	only first affiliation	1; 50% for part timers	1	1	0	1	1
Citations	1994–2000 citations to all publications	–	–	–	–	–	1969–2000 citations to 1969–2000 publ.
Total dept ranking	yes	yes	yes	yes	yes	yes	yes
Per capita dept ranking	yes	yes	yes	yes	–	–	yes
Average ranking	–	–	–	yes	–	–	yes
Individual ranking	3 rankings	2 rankings	–	–	–	–	14 rankings
Other features	publication and citation jointly as well as separately	ranking without local journals; international comparison	research constraints considered	–	stochastic dominance statistics	–	14 institutional rankings; home-bias, evolution; 3 citation counts

Notes:

—	No or irrelevant
SSCI	Social Sciences Citation Index of ISI-Thomson
IFx	Journal of Citation Reports impact factor of year *x*
AdjIF	Impact-factor-adjusted impact factors by Laband and Piette (1994)
Adj1999	AdjIF recalculated by Kalaitzidakis et al. (2003)
/	indicated alternative/parallel methods
N.A.	information not available
UK RAE	Research Assesment Exercise of the United Kingdom
Blue ribbon	AER, QJE, Econometrica (EMT), JPE, JET, RES, IER (International Economic Review), RSTA (Review of Economics and Statistics)
autocitation	Citation from the same journal, regardless of identity of the author
EconLit and/or SSCI	"or" – an item is counted if it appears in either of databases; "and" – the item is counted only if it appears in both databases

Author(s)	Bauwens (1999)	Guimaraes (2002)	Dolado *et al.* (2003)	Sinha, Macri (2002)	Faria (2000)	King (2002)	Hix (2004)
Area	Belgium	Portugal	Spain	Australia	Brasil	New Zealand	world (PolScience)
Departments	17	9	30	27 (only with 8 or more members)	20 (ANPEC selection)	7	200
Individuals	top 30	96	40	–	24	–	–
Stock/flow	flow	flow	flow	stock	stock	stock	flow
Member list	EconLit	EconLit	EconLit	web (min. lecturer)	EconLit	web, EconLit, incl. part-timers	UK RAE + web
Objective journal weights (citations)	IF1996 x citations; cardinalized to 5 groups	equality	cardinalized AdjIF/ IF1996 x citations/ Top 10 of AdjIF	AdjIF; when absent, min AdjIF	equality	AdjIF; when absent 0.001/ 0.01/0.1/1	IF score (IF corrected by non-linearity)
• citation period	citations 1996 to articles 1994–5	–	by method above	citations 1990 to articles 1985–1989	–	citations 1990 to articles 1985–1989	1993–2002 citations to 1993–2002 articles
• corrected by	–	–	by method above	AER page		AER page	–
Subjective journal weights (expertise)	–	–	–	Mason *et al.* 1997	–	–	–
Publication size	600	156/205	236	391	Blue Ribbon/120	5/8/9/505	63
• selection	EconLit; not domestic	EconLit and SSCI-Econ/ SCCI-all	EconLit	EconLit (AdjIF)	arbitrary (EconLit or national)	EconLit	SSCI or national/field journals
• publication period	8 (1992–1999)	15 (1986–2000)	10 (1990–1999); discount d = = 0.95	13 (1988–2000)	16 (1984–1999)	5 (1995–1999) /10 (1990–1999)	5 (1998–2002) /10 (1993–2002)
• corrected by	–	–	AER page or estimate	AER page	–	AER page	–
• coauthorship x ($1/n^x$)	1	1	1; 5/9	1	1	1 (et al.: n = 4)	1
• affiliation y ($1/m^y$)	1	1	1	N. A.	0	10% for part-timers	1
Citations	–	1986–1999 citations to all publications	1990–1999 citations to 1990–9/all publications	–	–	–	–
Total dept ranking	yes	yes	yes	yes	yes	yes	yes
Per capita dept ranking	–	yes	–	yes	yes	yes	yes
Average ranking	–	–	proposed	–	–	yes	yes
Individual ranking	yes	yes	yes	–	yes	–	–
Other features	rankings for more periods	evolution; publication drop-out; co-authorship with US-depts; online update	extended ranking (more sources); top--production indicator	subjective ranking; ranking for more periods	sequential ranking: blue--ribbon, 120, panamerican, national	32 rankings overall	unweighted ranking

SUMMARY

JEL classification: A11, P2
Keywords: impact factor – publication – ranking – research capital

The World is Watching: Rankings of Czech and Slovak Economics Departments

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This paper discusses the methodology of quantitative measures of research output. The authors illustrate various approaches to the contentious issue of to how to treat co-authored papers, how to best affiliate migrating authors, and how to quantify the quality of economic periodicals. The authors also summarize the main findings from the three papers published in this issue, which are devoted to the quantification of publishing activity of Czech and Slovak economists, and which reveal a high concentration of research activity in only a few institutions in the Czech and Slovak republics and the rather convoluted standards of promotion in Czech universities.