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Abstract: Using publication, citation and h-numbers from the Scopus and Web of Science databases, we find that research output and academic influence of economists in the Republic of Ireland are heavily skewed by researcher and by institution. A subset of the results is confirmed by similar analyses based on EconLit and IDEAS/REPEC. The analysis shows that while one university dominates in terms of numbers of economists, the more productive and most cited Irish research economists are spread across a range of institutions that are heavily concentrated in the Greater Dublin Area.

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Centres of Research Excellence in Economics in the Republic of Ireland

1. Introduction

One of the key outcomes of the Lisbon Strategy in 2000 was the increased emphasis on knowledge as a competitive factor in achieving greater growth and development in European economies. This message has been enthusiastically accepted in Ireland and is evident in the government's commitment both to increased funds for research, and to the promotion of fourth-level education in Irish universities.¹ A key part of current policy is to promote cooperation among researchers within and across disciplines, both in terms of research being undertaken and in the delivery of postgraduate programmes.² One driver of this approach is the desire to create critical mass in terms of centres of excellence, which can then begin to compete with larger centres across Europe and elsewhere.

In terms of international reputation and scale, it is difficult for any individual institution in the Republic of Ireland, hereafter referred to as Ireland, to have an internationally-competitive research profile that would be able to match the larger-scale international institutions. Furthermore, and equally important in terms of government strategy, and indeed for the future health of the profession, no single institution has the scale to mount a structured postgraduate programme that would be in the top ranks globally, and consequently to attract from the top rank of potential graduate students.³ To be credible, such a postgraduate programme or set of interrelated programmes would require a sizeable number of well-published researchers to deliver postgraduate courses and supervise PhD-level dissertations.

Who are the researchers who could deliver this ambitious agenda and where are they located? In the UK these questions are answered for the most part with reference to the

¹ See NDP and PRTL documents

² While economists may argue about the merits of competition versus cooperation in Irish academic communities, the thrust of government policy at present is to foster cooperation as a *modus operandi* and this institutional feature is taken as the starting point for this paper.

³ Lubrano *et al.* (2003) suggest that the ranking of research of Departments of Economics would impact on the choice of graduate students looking for a PhD programme in Europe: 'He [sic] will be looking first for a supervisor (a person) and second for a scientific environment (an institution)' (p. 1367).

Research Assessment Exercise (RAE), which has essentially identified centres of excellence in disciplines across the UK. In Ireland, no such exercise has been undertaken but the Higher Education Authority (HEA) has encouraged each institution in the university sector to prioritize areas of academic strength within its institutional strategy and to develop these, in cooperation with other institutions within Ireland. To this end, the HEA, under the 1999-2006 National Development Plan (NDP), has funded a significant number of research institutes across the university system under its *Programme for Research in Third Level Institutions* (PRTL). Economics as a discipline has featured in each of the first three rounds of the PRTL with the creation of multi-disciplinary institutes in different universities.⁴

Under consideration now in Ireland is the development of fourth-level education, which is intended to underpin with research. In particular, consideration is being given to the creation of graduate schools, which would seek to run more formal PhD programmes along North-American lines. Since the option of creating a graduate programme that would involve economists across a range of institutions in Ireland is now possible, it is timely to look at the research output of Irish economists in these institutions in more detail. The planned rapid expansion of government research funding in Ireland over the next decade allows for a strengthening of research across all institutions, and the intention of government policy seems to be the creation of collaborative centres that can be among the best centres in the world or at least in Europe.⁵

This paper looks at economists across institutions in Ireland in terms of their publications in peer-reviewed journals using a number of rank indicators.⁶ While some would see these publication metrics as a limited measure of output, in practice they are the main, if

⁴ The institutes with a social science dimension include: the Institute for International Integration Studies (IIS) at TCD; the Geary Institute (formerly the Institute for the Study of Social Change) at UCD; the Urban Institute at UCD; the National Institute for Regional and Spatial Analysis (NIRSA) at NUIM; and the Centre for Innovation and Structural Change (CISC) at NUIG. Each of these centres has a particular focus and its own modus operandi, with the result that the centres tend to be complementary in their coverage and quite different in how they develop their research agendas.

⁵ Given the scale and teaching commitments in economics departments in Irish universities, the expected research outputs of such departments might be more appropriately compared with those of Liberal Arts Colleges in the US rather than with the large Research Universities. In Ireland as in the rest of Europe, some universities emphasize education and others research, even if all go by the same name and have the right to grant advanced degrees. See Bodenhorn (2003).

⁶ Research work that has been published in peer-reviewed books, other books and non-reviewed journals are not included in this analysis.

not the only, basis on which it possible to compare published outputs across large numbers of researchers. Furthermore, these metrics are typically those on which centres of excellence are internationally evaluated and compared. This paper *complements* earlier work, using *EconLit*, on the publication record of economists based in Ireland reported by Barrett and Lucey (2003) and Coupe and Walsh (2003), and we encourage readers to view it in this context.⁷ In particular, it gives greater coverage to younger economists and to economists who also publish outside economics, and it includes citations as well as publications.⁸

The present paper differs in three respects from the earlier studies. Firstly, it uses the well-established *Web of Science* and a new but increasingly popular database, *Scopus*,⁹ which is gaining credibility in measuring research output in disciplines that predominantly use peer-reviewed journals as a method of dissemination. Unlike the narrow subject base of *EconLit* used in the previous studies, *Scopus* and *Web of Science* cover papers from all disciplines. Secondly, we assess quality by the actual number of citations of an author's papers, rather than by the average citations of the journal in which the paper is published. *EconLit* does not contain information on citations. Thirdly, it takes note of the considerable mobility of researchers across Irish institutions in recent years, by showing where they have been previously based, as well as where they are currently or soon to be based. It seeks to include all economists who are based in Ireland on a full-time basis, and their particular institutional affiliation is determined by their strongest

⁷ Since we are interested in centres of excellence in the Republic of Ireland, we do not include high-publishing Irish economists at institutions outside Ireland, with the exception of Peter Neary who is currently on leave from UCD at the University of Oxford. Neary is also used to highlight the impact of mobility. Tony Murphy would be an earlier example; he would have ranked 8th in *Scopus* and 19th in *Web of Science*. Although two would-be Top 10 economists left Ireland, two economists in the actual Top 10 are recent arrivals. Note also that this paper excludes Northern Ireland.

⁸ One feature of this paper is that it is looking at the economists in terms of where they are currently located – as of mid-2007. As will be apparent, many economists in Ireland have moved between institutions (see Table 1), so a study which used the affiliation at the time of publication (as, for example, in Kaizidakis *et al.*, 2003) would give a quite different ranking by institution.

⁹ *Scopus* is the largest abstract and citation database of research literature and quality web sources. It is designed to find the information scientists need to evaluate research institutions and researchers. Updated daily, *Scopus* covers over 15,000 peer-reviewed titles from more than 4,000 publishers, including over 12,850 academic journals.

professional link.¹⁰ It does not include several researchers who are currently linked to Irish institutions on a part-time basis, but who are not located in Ireland full-time.¹¹ The majority of economists included in our analysis are based in Departments of Economics, but we include a significant number of economists from outside economics departments (e.g., business schools) and from cross-disciplinary centres, as well as from the Economic and Social Research Institute and the Central Bank of Ireland.¹²

Before proceeding further, it is important to note that, *a priori*, we would expect to find skewness rather than symmetry in the distribution of peer-reviewed journal publications across academics. Such differences arise naturally as academics are at very different stages of their careers. They can also be expected because of different publication patterns. For example, to the extent that some individuals have focused on the Irish economy, they have published extensively in the *Economic and Social Review*, which has a modest readership outside Ireland and is consequently not widely cited.¹³ Because of the nature of their research, other researchers have published mostly in the form of books, some of which have been subject to peer review while others have little or no refereeing. Furthermore, a large proportion of the research undertaken by some economists, particularly in the policy area, has been in the form of “grey publications”.

It is also to be expected that the distribution will be skewed by institution. Such skewness will reflect differences in the scale of economics within the different institutions and the age profile of academics. It will also reflect the other responsibilities of economists in their institutions. In the case of university departments, for example, there are differences in the relative emphasis placed on research and the demands of undergraduate teaching and postgraduate supervision.¹⁴ In the case of economists in the ESRI, the production of

¹⁰ For example, while Margaret Hurley is a research associate at the IIS, she is included as an NUIM economist since this is her main academic affiliation. Similarly, Karl Whelan is a part-time lecturer in the Dept. of Economics at TCD but his main affiliation is the Central Bank of Ireland.

¹¹ For example, James Heckman, James Markusen, and Ann Carlos.

¹² As noted above, the authors would appreciate any information regarding researchers inadvertently excluded from the list.

¹³ That said, many authors have published applied work on Ireland in international journals.

¹⁴ If one supposes that all university departments place equal emphasis on teaching and research then homogeneity across university departments must be expected. Given how the Irish system has developed and the importance of geographic spread in terms of educational opportunities, such an expectation would be totally unrealistic.

reports for government agencies is central to their work, while economists at the CBI are engaged in producing analysis to input into the national and EU policy-making process.

In Section 2, we set out the methodology used to measure research output and describe how the economists were identified. In Section 3, the results of the analysis using the *Scopus* and the *Web of Science* data are presented, and differences between them are discussed. Placing the new results in their context, Section 4 compares the findings from *Scopus* and *Web of Science* with results obtained using data from *EconLit*, *IDEAS/REPEC* and the two previous studies (Barrett and Lucey, 2003; Coupe and Walsh, 2003). In Section 5, we make some concluding comments.

2. Data and Methods

Our main data sources are Elsevier's *Scopus* (www.scopus.com) and Thomson Scientific's *Web of Science* (www.isiknowledge.com). Compared to the *Web of Science* and *EconLit*, *Scopus* is well-recognized as having a better coverage of journals after 1996. However, for the period before 1996 *Scopus* has relatively poor coverage, which is essentially limited to Elsevier journals. Compared to *IDEAS/REPEC*, *Scopus* and *Web of Science* have a much better coverage of journals,¹⁵ but working papers are not included, whereas *IDEAS/REPEC* covers working papers. Furthermore, *EconLit* does not provide information on citations, but *IDEAS/REPEC*, *Scopus* and *Web of Science* do; obviously, only citations in listed journals to papers in listed journals are included. Section 3 presents the *Scopus* results, and Section 4 the *Web of Science* results. Section 5 compares these results with the results for the other databases.¹⁶

We begin by recognizing that all rankings are somewhat arbitrary and suggest that we may need several different indices to ensure that we have a balanced overall picture.

¹⁵ For example, the *Economic and Social Review* is listed in *Scopus* and *Web of Science*, but not in *IDEAS/REPEC*.

¹⁶ We omitted <http://scholar.google.com>. Although it is working towards offering the same services, querying the database is laborious and data quality is an issue. For instance, *Google Scholar* counts term papers written by students for a class by Richard Tol as written Tol himself. Once these issues are solved, *Google Scholar* may become the database of choice for assessing grey publications and citations in policy documents.

From *Scopus* and *Web of Science*, we can generate four ranking indices. In the first three indices, economists are ranked by their number of publications, the number of citations of those papers, and the number of citations of their most influential paper, respectively. The fourth index, referred to as their *h*-index, is a relatively new metric (Hirsch, 2005), which is gaining increased recognition as an important measure of productivity, impact and influence.¹⁷ An author's *h*-index equals *h* if one has written *h* papers that were cited at least *h* times. See Jolink (2006) for an application to Dutch economists.

In the analysis, the number of publications is not corrected for the quality of impact of the journal itself. The quality of a journal is difficult to assess. Recently, subjective rankings have been replaced with objective rankings, the *Journal Impact Factor* being the most prominent. The 2006 impact factor of a journal equals the number of citations in 2006 to papers published in 2004 and 2005, divided by the number of papers published in those years. The impact factor of a journal is therefore highly variable, as it is based on citations over a short period of time only. Indeed, impact factors are subject to fashion (e.g., the impact factor of all energy journals is rising rapidly) and journals with a short review time and publication lag – sometimes a sign of lack of quality in some disciplines – can have a high impact factor.¹⁸ Furthermore, a journal's impact factor is often determined by a small number of papers only. Indeed, many papers in high impact journals are never cited (e.g., 15 percent in the *American Economic Review*). As a measure of quality, therefore, the number of citations of an author's paper is counted rather than the journals' impact factors. Put differently, quality is measured on the basis of the paper rather than on the basis of the journal as measured by its overall impact.

As with any set of metrics, there are particular features over which people may quite reasonably disagree. For example, the number of citations of publications is not corrected for the number of authors. This assumption is made for practical reasons and we recognize that collaborative practices are not uniform among economists in different fields and that, with international research consortia, variations in the degree of

¹⁷ The fact that almost the entire issue of a recent edition of the influential journal *Scientometrics* was devoted to the *h*-index is an indication of the growing importance and value of this metric.

¹⁸ Impact factors are also subject to manipulation. Some editors encourage authors to refer to their journal, or write survey articles on topics covered in their journal.

collaboration are growing.¹⁹ It is not possible to say what effect this will have on our results, but we note that a similar approach was taken by Barrett and Lucey (1993) and by Coupe and Walsh (1993). It is to be expected that names are not assigned to papers unless there is a contribution from each of the authors, and while the contribution of each might not be equal in terms of time effort, it may be the case that a person's relatively minor input in time is in fact highly valuable.²⁰ It also happens that a senior author could have written the same, or even a better paper, in a shorter time period, but prefers to co-author with less experienced researchers as part of their education and professional development. We recognize that this is a limitation in our analysis, while at the same time noting that any simple correction for author number may, arguably, be quite arbitrary.²¹

In this paper we do not correct for the number of pages, which is an assumption that some might dispute. We take the view that shorter papers do not necessarily involve less effort, and longer papers are not necessarily better or even more informative.²² The metric also includes self-citations, which clearly favours prolific researchers.²³ It also favours those whose research is concentrated in a single research area over those whose research spans a number of different areas.²⁴ It covers English language journals only,²⁵ which favours authors who publish solely in the English language and disadvantages those who publish in non-English language journals. While *Scopus*' inclusion of journals is extensive, it

¹⁹ Collaborations are relatively more common in empirical papers, for example.

²⁰ However, Neary *et al.* (2003) note that if rankings ignore co-authorships, 'authors would face incentives of "swap" co-authorship with colleagues in order to raise their total score' (p.1242). If rankings were corrected for co-authorship, there would be an incentive to deny authorship, presumably at the expense of junior researchers. We are not aware of empirical evidence on the strengths of these effects.

²¹ IDEAS/REPEC presents rankings for the number of publications and the number of publications corrected for author number. The rank correlation is 76.9%, for the top 5% of the world. Note that four Irish authors rank *higher* on the author number-corrected score (Patrick Honohan 391 rather than 488; Philip Lane 310 rather than 474; Kevin O'Rourke 392 rather than 474 (Lane and O'Rourke are tied); Peter Neary 86 rather than 95), and one *lower* (Richard Tol, 231 rather than 74). That is, Neary and Tol switch rank, and Honohan and O'Rourke switch rank. Still, the rank correlation is 65% for these five authors.

²² In a sense this assumption echoes the spirit of the famous quotation attributed to George Bernard Shaw (circa 1905): "Forgive me for the long letter. I don't have time to write a short one." The same idea is also linked, at a much earlier date (1657), to the French physicist Blaise Pascal: "I have made this [letter] longer, because I have not had the time to make it shorter".

²³ We recognize that there may be some distortion to the extent that authors differ in the degree to which they self-cite, *ceteris paribus*; see Section 4.

²⁴ Researchers who publish say, in the area of tax theory only, are more likely to have reason to cite their own research than researchers whose publications span several areas, e.g., tax theory, trade theory and industrial organization.

²⁵ Note that *Scopus* also has a good coverage of Chinese language journals. No economist in Ireland appears to have published in Chinese.

does not include all journals. Nevertheless, the coverage of *Scopus* is broader than that of its competitors. Furthermore, coverage of *Scopus* and *Web of Science* is not restricted to economics, which works to the advantage of applied economists and economists who also work in fields outside economics, an increasingly common occurrence as research becomes more multidisciplinary.

The analysis is based on a total of 135 economic researchers who were identified across Irish institutions²⁶ – the full list, with people ranked rather than counted, is in Table A1 in the Appendix. As noted above, these researchers are primarily employed by Departments of Economics in Irish universities. However, there are increasing numbers of economists working in Business Schools,²⁷ multidisciplinary research centres, and other humanities and social science departments.²⁸ The list also includes, as did previous studies, the Economic and Social Research Institute (ESRI) and the Central Bank of Ireland (CBI). The names of individuals have been identified through the relevant institution's web site, supplemented with economists who scored well in previous rankings.²⁹ People without traceable publications were excluded.³⁰ The *Scopus* data relate to December 2006, the *Web of Science* data to April 2007.³¹ The data are available on request.³² We investigated every one using *Scopus* (which has chronological precedence in our research, is easier to use and access, and has superior author identification), while we restricted the *Web of Science* search to the top 65 of the *Scopus* analysis plus 14 senior people whose ranking is likely to be misrepresented by the shorter time span of *Scopus*.

²⁶ In addition, we counted 93 economists at post-doc level and higher without any publications recorded in *Scopus*.

²⁷ Dublin City University is the only university that does not have an economics department. We are grateful to David Jacobson for providing us with a list of its economists.

²⁸ This is particularly the case at UCD. We included the economists that we found, and apologize to anyone we inadvertently overlooked. We are grateful to Elaine Hutson for identifying the economists in the Smurfit School.

²⁹ The names of economists at the CBI were kindly supplied by the CBI.

³⁰ One effect of this approach is that, departments with staff who do not publish at all in peer-reviewed journals are advantaged over departments with staff who have a small number of publications.

³¹ Publication and citation data increase daily. In *Scopus*, the database is not only updated with new journal issues (as in *Web of Science*), but journals are also added retrospectively.

³² Note that there are inevitable errors in the data. Some are our mistakes, and hopefully limited to previous versions of this paper. Some are mistakes in the underlying databases; for example, some of Olive Sweetman's papers are recorded under S. Olive. Some people have problematic names, such as John D. Fitz Gerald and Cormac Ó Gráda. Some people have used several versions of their names on different publications, while people with double names or common names are also hard to trace.

In the next section we present the results of our analysis for *Scopus* and *Web of Science* respectively. We do not claim that this analysis is superior to other possible analyses of research output. As will be evident from the previous papers by Barrett and Lucey (2003) and Coupe and Walsh (2003), and from Section 5 below, the different data and methods produce largely the same results, though there are some exceptions.³³

3. Results from *Scopus* and *Web of Science*

We begin with the analysis using *Scopus*. Table 1 sets out the names and metrics for the Top 40³⁴ economists in Ireland, as measured by their performance in publishing peer-reviewed journal articles, generated from *Scopus*. In each case the four metrics are presented. It is apparent that these are in broad agreement with each other, particularly at the top of the list. Table 1 also contains an aggregate ranking, which is calculated as follows: the score of each economist under a particular metric is divided by the score of the highest-ranking economist on that metric, so that the score is normalized between 0 and 1. The aggregate ranking is then the sum of the normalized scores for the four individual metrics.³⁵ Not surprisingly, it corresponds reasonably well to the individual rankings. Rank correlations vary between 86.0% (publications) and 97.4% (citations). We also computed overall rankings based on the rankings for the individual scores, rather than the scores themselves, using average, highest and lowest ranks. Rank correlations vary between 95.5% (lowest rank) and 99.8% (harmonic mean rank) in this case.

The distribution of the aggregate score is very skewed, with, for example, those ranked in places 2-4 having between 56 and 69 percent of the value of the top ranked economist, while those ranked 5-11 have a value between 26 and 39 percent. Twenty-four percent of all publications are by the five most productive economists; and forty-eight percent of citations is to the work of the five most-cited individuals. To illustrate this, we show an

³³ The most notable exception is Frank Browne, who ranks joint 15th on the *EconLit* metric (and 23rd on the overall *Web of Science* score) but close to the bottom of the *Scopus* measure because his publication record is concentrated in the years before 1995 in journals with an erratic coverage in *Scopus*.

³⁴ The Top 40 covers just under 30 percent of the 135 publishing economists.

³⁵ If one economist was top of all of these metrics, the top mark would be 4.

Engel curve in Figure 1, based on all of the researchers listed in Table A1 in the Appendix. It has an associated Gini Coefficient of 61 percent.³⁶

Inspection of Table 1 shows the strong concentration of the Top 40 economists in the Greater Dublin area, which covers six institutions: the four universities (DCU, NUIM, TCD and UCD), the ESRI and the CBI.³⁷ Some 74% of all economists in Ireland are in or near Dublin, but 87% of top economists. It is clear that recent movements of economists have had an impact on the distribution within Dublin, with an increased concentration of highly-published economists in UCD.³⁸ Using the Top 40 economists as the reference point, the top institutions in terms of research economists are UCD (14), ESRI (8), TCD (8), NUIM (3), NUIG (3), UoL (2), CBI (1) and DCU (1).³⁹ But there are different ways of looking at this. UCD has the highest number of economists in the Top 40, but then there are more economists at UCD than at any of the other universities. If one divides the number of economists in the Top 40 by the number of publishing economists (Table A1), ESRI scores 0.50, UCD scores 0.47 and TCD scores 0.42; the other institutions score 0.33 (UoL) or less. If one looks at the average overall scores across all publishing economists, the ESRI (0.58) and TCD (0.53) are rather similar and ahead of UCD (0.46) and NUIM (0.28).⁴⁰ Finally, if one looks at the h_1 index (Schubert, 2007), we find UCD has 5,⁴¹ while TCD and the ESRI have 4, NUIM has 3 and each of the other university departments has 2. We note that the lower ranked departments may of course have a world-class presence in some specific areas of economics; the current analysis is limited to the aggregate field of economics.

Table 2 shows the Top 40 economists according to *Web of Science* data. Publication and citation numbers are clearly different between the two databases. For younger authors, numbers are generally lower, because *Web of Science* covers fewer journals than does

³⁶ The score of economists ranked 41st and lower is less than 10% of the top economist.

³⁷ For over 30 years economists at these institutions shared a research workshop programme (the Dublin Economic Workshop), which in recent years has rotated between UCD, NUIM and TCD. This cross-institutional link seems to be unique in the Irish academic context.

³⁸ The relative position of UCD is obviously higher when Peter Neary is included. PP Walsh, who is currently at TCD but will be moving to UCD shortly, has been included in the UCD count.

³⁹ The highest ranked economist at UCC is Brian McElroy (61st place).

⁴⁰ This measure has been considerably altered by recent changes in staff between institutions in the Dublin area since September 2006, with the ESRI dropping by 0.18 points, while TCD rose by 0.11 points, UCD fell by 0.06 points, and NUIM rose by 0.06 points.

⁴¹ That is, there are five department members with an h index of at least 5 (Schubert, 2007).

Scopus (but it is not a subset).⁴² Because *Web of Science* goes back further in time, longer-established authors record a higher number of publications. The ranking in Table 2 can be seen as giving greater emphasis to historic strength, while Table 1 reflects current excellence to a greater extent. Nonetheless, the overall rankings have a rank correlation of 0.71.

Neither Table 1 nor Table 2 says much about future promise. Therefore, in Table 3, we repeat Table 2 but now corrected for age. We do not know the physical age of most authors, and the year that they obtained their PhD is unknown too. Besides, not everyone has a PhD, including some senior people. Furthermore, some published their first paper well before obtaining a PhD. To account for differences in ‘stage of career’, we divide all scores by 2007 minus the year of publication of the first paper.

The rank correlation of the overall scores in Tables 2 and 3 is 0.57. Some people appear at the top of both leagues. Peter Neary and Brian Nolan have upheld an impressive productivity for three decades or more. Other people are at the top of Table 2 by virtue of a long career rather than a high annual productivity. The impact of correcting for ‘stage of career’ can be particularly dramatic in the case of younger researchers. For example, Alan Ahearne, Peter Clinch, Paul Devereux and Kanika Kapur are ranked 66th, 29th, 34th and 13th in Table 2, but when corrected for career length, they rise to 8th, 7th, 10th and 3rd place, respectively.

The ranking of institutes that emerges from Table 2 is roughly the same as that for Table 1. On the basis of the *Web of Science*, UCD has 12 and TCD has 10 economists in the Top 40, followed ESRI with 7; NUI Galway and NUI Maynooth each have 4, CBI has 2, and UoL has 1.⁴³ Although the individual ranking is different between Tables 2 and 3, the institutional ranking changes slightly, with NUI Maynooth moving closer to the top. UCD has 14 economists in the annual Top 40, followed by ESRI with 8 and TCD with 7; NUI Maynooth has 5, NUI Galway 3, and CBI, DCU and UoL have 1 each.⁴⁴

⁴² Elaine Hutson is affected most: None of her seven publications are in *Web of Science*.

⁴³ David Jacobson is the highest-ranking economist at DCU (at 48th place) and Niall O’Sullivan at UCC (at 56th place).

⁴⁴ Niall O’Sullivan is the ranking economist of UCC, at 45th place on this metric.

4. Comparison with *EconLit* and *IDEAS/REPEC*

Table 4 contrasts the ranking based on the number of publications according to *Scopus* and *Web of Science* with those in *EconLit*, the database used by Barrett and Lucey (2003) and Coupe and Walsh (2003). Twelve economists in the *Scopus* top 15 appear also in the *EconLit* top 15, and eleven in the *Web of Science* top 15. Reflecting the differences between indices, Denis Conniffe and Cormac O Gráda stand out: *Scopus* does not record their earlier papers, and *EconLit* does not record their non-economics papers. *Web of Science* records both, and hence these two researchers are ranked much higher in this database.

The rank correlations between the various indices vary widely: between *Scopus* and *EconLit* it is 0.57 for all assessed in both rankings for the number of publications; between *Scopus* and *Web of Science* it is 0.59, and between *EconLit* and *Web of Science* it is 0.83. These correlations indicate that there is potential merit from using several databases rather than one single database. The differences reflect the differences in coverage noted above. *EconLit* is more restrictive than *Scopus* with regard to the journals included, which places some of the more multidisciplinary researchers (e.g., Peter Clinch, Richard Tol, Chris Whelan) at a disadvantage, while it has a better historical cover, which favours economists with an earlier career start (e.g., Brendan Walsh, Frances Ruane, Frank Browne) over younger economists (e.g. Paul Devereux).

Table 5 shows the Top 15 based on citations for data from *Scopus* and *Web of Science*. Ten researchers appear in both rankings and the rank correlation for all assessed is 0.74. In Table 5, the *Web of Science* ranking is shown with and without correcting for self-citations. Fourteen authors appear in both of these Top 15s, and the rank correlation is 0.99. Nonetheless, the practice of self-citation varies considerably. On the one hand, Bernadette Andreosso-O'Callaghan does not appear to have ever cited her own papers and Brendan Walsh appears to cite himself only in every 10th paper. On the other hand, Peter Neary's self-citation rate is on average 4.2 times per paper, and self-citations make up 22% of his total citations. Richard Tol cites himself on average 3.4 times per paper, with self-citations accounting for 47% of his total citations. Brian Nolan is more modest,

citing himself only 1.2 per paper, and self-citations at 19%. Because of this lower rate of self-citation, Nolan passes Tol when correcting for self-citation.

Table 6 explores the Top 15 again, by calculating the h-index for data from *Scopus* and *Web of Science*. Using this approach, twelve authors appear in both rankings, and the rank correlation is 0.68.

Finally, Table 7 presents an analysis of the ordering of the top ten economists based on five sources: *Scopus* (using each of the five rankings in Table 1), the *EconLit* data (as used in Table 4), the *Web of Science* data (five rankings each from Tables 2 and 5) the two Barrett and Lucey (2003; Table A3) rankings, the six Coupe and Walsh (2003; Table A4) rankings, and the *IDEAS/REPEC* ranking (Table A2). Those listed 1st, 2nd, and 3rd places confirm the results in Tables 1 and 2. Kanika Kapur is the only woman in this “hall of fame”.

Under all of the different rankings based on all the different databases, Philip Lane, Peter Neary, Brian Nolan, and Richard Tol are among the top 3 in more than half of the rankings.⁴⁵ The other economists at the top of Table 7 also do consistently well, regardless of the data source or the evaluation method. What is very clear from Table 7, reinforcing what was evident in Tables 1 and 2, is that Ireland’s top economists are not located in any single institution but rather are spread over 4 institutions. Therefore unless they are seen as part of a collective to the outside world, Ireland is not likely to be viewed as attractive to prospective graduate students, academics looking for a job, or potential research funders.

IDEAS/REPEC also provides global and European ranks. It ranks Ireland at 42nd place among countries and US states, with a score comparable to Austria, Portugal and New Zealand. It should be noted, however, that Austria and Portugal have much larger populations, which should lead one to expect them to have higher positions, but against this, their researchers may publish in German or Portuguese, which would reduce their expected ranking in these indices. Lubrano et al. (2003) offer some data on this. In the 1990s, Ireland published 121 papers in economics journals per million people. The EU15 average is 100; Spain produced only 40, the UK 223. However, Ireland has 67

⁴⁵ Richard Tol was not included in the earlier studies, but then he does not rank highly in *EconLit*.

economists per million people. The EU15 average is 53; Italy is lowest at 23, the Netherlands highest at 112. Ireland-based authors published 1.8 papers per person (per decade). This is slightly below the EU15 average of 1.9; the range is from 1.5 in Spain to 2.1 in Greece.⁴⁶

According to Thomson Scientific's *Essential Science Indicators*, Ireland ranks a respectable 26th out of 79 countries in terms of citations per paper published in economics and business. This amounts to a rate of 3.3 citations per paper, which compares with 4.6 citations per paper for England (9th) and 6.5 citations for the USA (3rd). Lubrano *et al.* (2003) show that 63% of Irish papers are published in national journals. This is the highest number among small EU15 countries. Finland is a distant second at 53%, and the Netherlands has only 8%. In this sense, Ireland is like large European countries. France-based authors, for instance, publish 85% of their papers in France-based journals. The corresponding figures for Germany and the UK are 66% and 40%. The EU15 average is 48%. Publication in local journals generally reduces the readership and consequently the citations rates of published papers.

IDEAS/REPEC counts only two or three Irish economists amongst its Global Top 5%, but seven or eight amongst its European Top 5%. Again, these people are spread over 5 different institutions, and do not appear as a collective. See Table A2. The Geary Institute is the highest ranking Irish institute among the *IDEAS/REPEC* Global Top Institutes at 82nd place, while the IIS ranks 153rd (out of 3210). The position of the Geary Institute is helped by the presence, on a part-time basis, of James Heckman, who is ranked number 4 on the *IDEAS/REPEC* individual ranking. Lubrano *et al.* (2003) confirms this, including only UCD in the European Top 100 (at place 58 or 63, depending on the method). Kalaitzidakis *et al.* (2003) similarly rank only UCD, 135th (out of 200) in the world and 49th (out of 120) in Europe. Thus while UCD is clearly the dominant institution according to these metrics, our analysis shows that the combined researchers institutions in the Greater Dublin Area would register a much higher status and would be more

⁴⁶ Lubrano *et al.* (2003) also show that Ireland has 2.1 economics departments per million people. The EU15 average is 1.3. Only Finland (3.5) and Sweden (2.4) have a higher department density than Ireland, while the Netherlands has only 0.6 departments per million people.

attractive to prospective PhD students as a collective than as individual institutions⁴⁷ for the simple reason that the collective would have more top-level researchers.⁴⁸

6. Conclusion

With the increased emphasis on research and fourth-level education in Irish universities, the large increase in expenditure on research institutes in universities in recent years, the expected increase in expenditure in the coming years, the emphasis on cooperation in order to ensure critical mass, and the desire to have world-class research in Ireland, the distribution of research across researchers and research institutions is important. This paper sets out to examine the current research output of economists based at these institutions in Ireland using data from both *Scopus* and *Web of Science*, and relates the outcomes to previous studies.

Several results are apparent. Firstly, the results are reasonably consistent with those of earlier Irish studies, allowing for the differences in coverage. Secondly, as might be expected, the distribution of research is skewed by academics, partly due to the fact that they are at different stages of their careers; this is evident in the differences in ranking between Tables 2 and 3.⁴⁹ The skewness also reflects different research agendas and patterns, and different levels of responsibility for activities other than producing peer-reviewed journal articles. Thirdly, the distribution of research is skewed by institution, which reflects the scale of economics in the different institutions, the age distribution within those institutions, and other demands on the time of researchers. However, it is clear that the research-active economists publishing in peer-reviewed journals are heavily concentrated in institutions in the Greater Dublin area, which is where the largest numbers of economists are based. While it would not be possible for any one of these institutions at its current scale, including UCD which has the largest number of economists, to make the claim that it is a significant and competitive centre for broad

⁴⁷ Operating as a collective, such a research conglomeration would be seen more positively in terms of producing trained postgraduates for research and academic posts, and for posts in the financial and service sectors.

⁴⁸ The different metrics show that UCD has between 25 and 35 percent of the top 40 researchers.

⁴⁹ The issue of age is discussed in greater detail in Barrett and Lucey (2003).

research and post-graduate teaching on a global scale, the institutions in the Greater Dublin Area in collaboration could aspire to such a claim. (Of course it is possible for an institution to aspire to and achieve significant international status in a particular field of economics.) Put in a national context, where education is heavily funded by the state and where cross-institutional cooperation is being promoted, it may not be relevant to Ireland that any one institution ranks particularly strongly on any one of the international or European metrics of research activity, but rather how Ireland overall ranks compared with appropriate comparator countries.

References

- BARRETT, ALAN and BRIAN LUCEY (2003), 'An Analysis of the Journal Article Output of Irish-based Economists, 1970 to 2001', *Economic and Social Review*, Vol. 34, No. 2, pp. 109-143.
- BODENHORN, HOWARD N. (2003), 'Economic Scholarship at Elite Liberal Arts Colleges: A Citations Analysis with Rankings' *Journal of Economic Education*, Vol. 34, No. 2, pp. 341-359.
- COUPE, T. and P.P. WALSH (2003), 'Quality Based Rankings of Irish Economists 1990-2000', *Economic and Social Review*, Vol. 34, No. 2, pp. 145-149.
- HIRSCH, J.E. (2005), 'An Index to Quantify an Individual's Scientific Research Output', *Proceedings of the National Academy of Science*, Vol. 102, pp. 16569-16572.
- JOLINK, A. (2006), 'Scoren naar Behoren', *Economische Statistische Berichten*, Vol. 7, No. 4, pp. 158-159.
- KALAITZIDAKIS, PANTELIS, THEOFANIS P. MAMUNEAS and THANASIS STENGOS (2003), 'Ranking of Academic Journals and Institutions in Economics', *Journal of the European Economic Association*, Vol. 1, No. 6, pp. 1346-1366.
- LUBRANO, MICHEL, LUC BAUWENS, ALAN KIRMAN and CAMELIA PROTOPOESCU (2003), 'Ranking European Economics Departments: A Statistical Approach', *Journal of the European Economic Association*, Vol. 1, No. 6, pp. 1367-1401
- NEARY, J. PETER, JAMES A. MIRRLEES, and JEAN TIROLE (2003), 'Evaluating Economics Research in Europe: An Introduction' *Journal of the European Economic Association*, Vol. 1, No. 6, pp. 1239-1249
- SCHUBERT, A. (2007), 'Successive h-Indices', *Scientometrics*, **70** (1), 201-205.

Figure 1. Engel curve of the aggregate score (cf. Table 1) of all 135 Ireland-based economists.

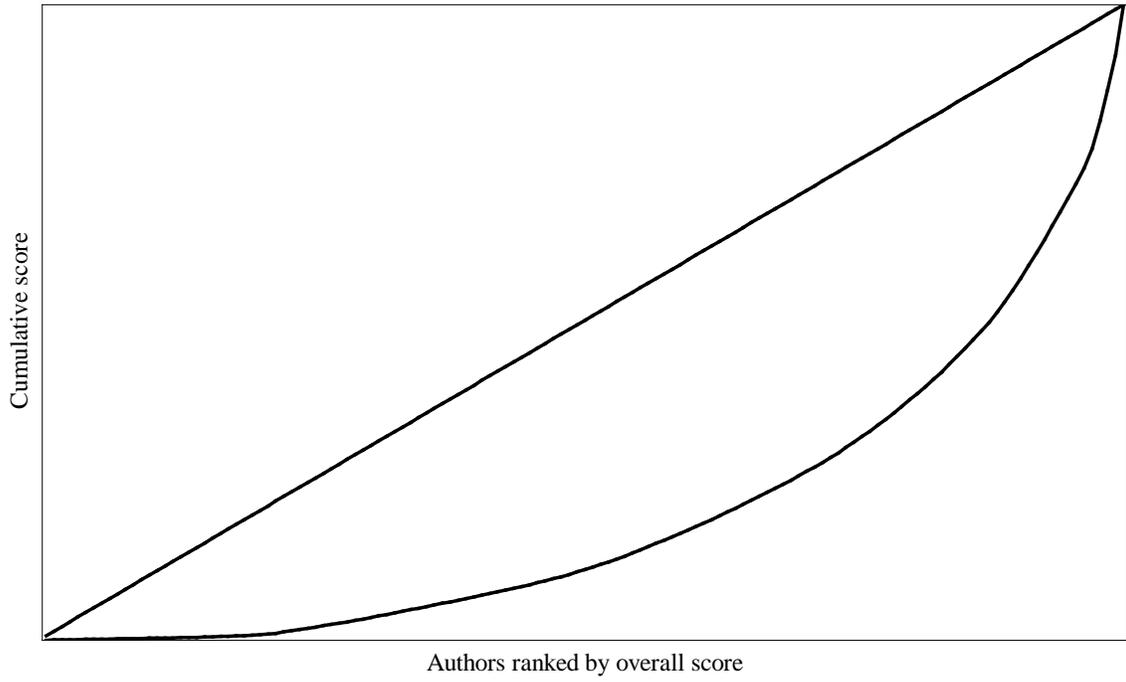


Table 1. Top-40 Economists in research institutions in the Republic of Ireland according to Scopus.

Rank	Name	Affiliation		Overall ^a	Publications		Citations		h-index		Most cited	
		2007	Previous		#	rank	#	Rank	#	rank	#	Rank
1	Tol, R.S.J.	ESRI	Hamburg	3.77	89	1	750	1	17	1	70	4
-	Neary, J.P.	Oxford	UCD	2.60	32	3	422	2	12	2	88	2
2	Lane, P.R.	TCD	Colombia	2.32	29	5	393	3	8	4	91	1
3	Nolan, B.	UCD	ESRI	2.09	35	2	208	4	10	3	76	3
4	Barry, F.G.	TCD	UCD	1.46	27	7	150	5	6	6	55	6
5	Kapur, K.	UCD	RAND	1.16	31	4	146	6	7	5	19	19
6	Whelan, C.T.	ESRI		1.12	24	8	128	7	6	6	30	13
7	Harmon, C.P.	UCD	NUIM	1.08	9	33	99	9	5	10	50	9
8	Bradley, J.	TCD	ESRI	1.02	6	45	78	15	4	19	56	5
9	Bergin, J.	UCD	Queen's	1.02	9	33	64	17	4	19	54	7
10	Leahy, D.M.	NUIM	UCD	0.98	11	24	87	12	5	10	41	10
11	Kelly, M.	UCD		0.98	13	16	104	8	6	6	31	12
12	Honohan, P.	TCD	WB, ESRI	0.97	28	6	83	13	5	10	23	17
13	O'Rourke, K.H.	TCD	UCD	0.91	15	11	95	10	5	10	29	16
14	O'Neill, D.	NUIM	Newcastle	0.82	10	26	66	16	5	10	30	13
15	Clinch, J.P.	UCD		0.78	19	9	79	14	5	10	15	28
16	Callan, T.	ESRI		0.76	10	26	63	18	4	19	30	13
17	Ruane, F.P.	ESRI	TCD	0.68	15	11	47	22	6	6	9	39
18	O Grada, C.	UCD		0.67	14	13	57	19	5	10	13	32
19	Walsh, P.P.	UCD	TCD	0.64	13	16	51	21	5	10	12	34
20	Barrett, S.D.	TCD		0.62	7	39	47	22	4	19	22	18
21	Barrett, A.	ESRI		0.61	11	24	47	22	4	19	17	20
22	Reynolds-Feighan, A.	UCD		0.59	10	26	52	20	5	10	10	36
23	Harrison, M.J.	TCD		0.58	5	55	35	29	2	40	33	11
24	Maitre, B.	ESRI		0.55	12	20	37	27	4	19	12	34
25	Walsh, B.	UCD	TCD	0.53	5	55	44	25	4	19	16	23
26	Keane, M.J.	UCG		0.52	12	20	32	31	4	19	10	36
27	Whelan, K.T.	CBI	Fed Res	0.50	12	20	36	28	4	19	7	43
28	Farrell, L.	UCD	Melbourne	0.49	6	45	42	26	3	30	17	20
29	Boyle, G.E.	UoL	NUIM	0.48	8	38	31	32	3	30	16	23
30	Conniffe, D.	NUIM	ESRI	0.46	19	9	17	42	3	30	4	62
31	Morgenroth, E.L.W.	ESRI		0.45	4	62	34	30	3	30	17	20
32	Cotter, J.	UCD		0.44	13	16	19	39	2	40	14	29
33	Devereux, P.J.	UCD	UCLA	0.42	13	16	22	36	3	30	6	48
34	Andreosso-O'Callaghan, B.	UoL		0.41	14	13	14	49	3	30	5	52
35	FitzGerald, J.D.	ESRI		0.40	7	39	26	33	4	19	5	52
37	Gallagher, L.A.	DCU	UCC	0.37	9	33	26	33	3	30	7	43
37	McCloughan, P.	TCD		0.36	6	45	17	42	2	40	14	29
38	Kennelly, B.	NUIG		0.34	2	93	21	37	2	40	16	23
39	Thom, D.R.	UCD		0.33	4	62	19	39	2	40	13	32
40	O'Shea, E.	NUIG		0.33	3	75	16	44	2	40	14	29

^a The overall score equals the sum of the number of publications, citations, most-cited paper, and h-index, each divided by the score of the highest ranked individual.

Table 2. Top-40 Economists in research institutions in the Republic of Ireland according to *Web of Science* (lifetime).

Rank	Name	Affiliation		Overall ^a	Publications		Citations		h-index		Most cited	
		2007	Previous		#	rank	#	Rank	#	rank	#	Rank
-	Neary, J.P.	Oxford	UCD	3.69	65	3	1218	1	17	1	248	1
1	Tol, R.S.J.	ESRI	U Hamburg	2.13	71	2	514	2	13	2	46	8
2	O Grada, C.	UCD		1.62	94	1	134	7	7	6	25	18
3	Nolan, B.	UCD	ESRI	1.60	56	5	346	3	8	3	63	4
4	Conniffe, D.	NUIM	ESRI	1.41	57	4	249	5	8	3	33	15
5	Lane, P.R.	TCD		1.35	37	8	290	4	7	6	76	2
6	Whelan, C.T.	ESRI		1.22	34	10	233	6	8	3	48	7
7	Barry, F.G.	TCD	UCD	0.98	41	7	110	13	5	11	40	10
8	Honohan, P.	TCD	WB, ESRI	0.93	54	6	83	18	4	20	13	33
9	O'Rourke, K.H.	TCD		0.89	31	11	134	7	6	8	24	19
10	McAleese, D.	TCD		0.84	37	8	63	21	4	20	40	10
11	Bradley, J.	TCD	ESRI	0.84	21	16	125	10	6	8	40	10
12	Kapur, K.	UCD	RAND	0.82	27	13	130	9	6	8	18	23
13	Bergin, J.	UCD		0.81	20	17	111	12	5	11	52	5
14	Gearry, P.T.	NUIM		0.80	16	23	112	11	4	20	74	3
15	Harrison, M.J.	TCD		0.78	24	14	108	15	5	11	35	14
16	Harmon, C.P.	UCD		0.69	11	38	91	16	5	11	51	6
17	Callan, T.	ESRI		0.68	17	22	86	17	5	11	33	15
18	Thom, D.R.	UCD		0.65	31	11	52	26	4	20	11	41
19	Ruane, F.P.	ESRI	TCD	0.61	20	17	62	22	5	11	12	35
20	Leahy, D.M.	UCD		0.60	15	26	69	20	4	20	37	13
21	Walsh, B.	UCD		0.57	24	14	42	29	4	20	12	35
22	Kelly, M.	UCD		0.56	13	32	71	19	5	11	16	26
23	Boyle, G.E.	UoL		0.54	16	23	37	35	5	11	12	35
24	Browne, F.X.	CBI		0.54	19	19	57	24	4	20	13	33
25	Whelan, K.T.	CBI		0.52	16	23	44	28	5	11	6	54
26	O'Neill, D.	NUIM		0.49	9	46	60	23	4	20	28	17
27	Boylan, T.A.	UCG		0.47	12	35	38	32	4	20	20	21
28	Clinch, J.P.	UCD		0.47	14	29	54	25	4	20	11	41
29	FitzGerald, J.D.	ESRI		0.46	9	46	50	27	4	20	21	20
30	O'Shea, E.	UCG		0.44	11	38	41	30	4	20	14	28
31	Whelan, B.J.	ESRI		0.44	15	26	39	31	3	35	17	25
32	Keane, M.J.	UCG		0.43	13	32	36	36	4	20	6	54
33	Devereux, P.J.	UCD		0.41	12	35	25	43	4	20	6	54
34	Kearney, C.	TCD		0.40	14	29	38	32	3	35	12	35
35	Maitre, B.	ESRI		0.40	10	42	30	38	4	20	8	48
36	Cuddy, M.P.	UCG		0.38	9	46	38	32	3	35	20	21
37	Walsh, P.P.	UCD	TCD	0.38	13	32	28	42	3	35	10	44
38	Madden, D.	UCD		0.36	12	35	29	40	3	35	7	51
39	Barrett, S.D.	TCD		0.35	19	19	13	55	2	46	5	57
40	O'Hagan, J.	TCD		0.35	14	29	23	46	2	46	15	27

^a The overall score equals the sum of the number of publications, citations, most-cited paper, and h-index, each divided by the score of the highest ranked individual.

Table 3. Top-40 Economists in research institutions in the Republic of Ireland according to *Web of Science* (annual).

Rank	Name	Affiliation	First publ.	Overall ^a	Publications		Citations		h-index		Most cited	
					#	rank	#	Rank	#	rank	#	Rank
1	Tol, R.S.J.	ESRI	1993	3.39	5.1	1	36.7	1	0.9	2	3.3	6
2	Lane, P.R.	TCD	1996	2.99	3.4	2	26.4	3	0.6	4	6.9	2
-	Neary, J.P.	Oxford	1972	2.80	1.9	7	34.8	2	0.5	8	7.1	1
3	Kapur, K.	UCD	1998	1.93	3.0	3	14.4	4	0.7	3	2.0	12
4	Bargain, O.	UCD	2006	1.37	1.0	16	1.0	51	1.0	1	1.0	27
5	Nolan, B.	UCD	1978	1.29	1.9	5	11.9	5	0.3	19	2.2	10
6	Clinch, J.P.	UCD	1999	1.22	1.8	8	6.8	8	0.5	7	1.4	18
7	Harmon, C.P.	UCD	1993	1.20	0.8	31	6.5	9	0.4	9	3.6	4
8	Ahearne, A.G.	UCG	2004	1.18	0.3	70	4.7	15	0.3	10	4.7	3
9	Maitre, B.	ESRI	2000	1.13	1.4	12	4.3	17	0.6	5	1.1	24
10	Devereux, P.J.	UCD	2000	1.13	1.7	10	3.6	19	0.6	5	0.9	32
11	Bergin, J.	UCD	1989	1.07	1.1	14	6.2	11	0.3	17	2.9	7
12	O'Rourke, K.H.	TCD	1989	1.06	1.7	9	7.4	6	0.3	10	1.3	19
13	Barry, F.G.	TCD	1985	0.99	1.9	6	5.0	12	0.2	24	1.8	14
14	Garvey, E.	UCG	2003	0.99	0.8	32	3.5	21	0.3	20	3.5	5
15	O'Neill, D.	NUIM	1995	0.95	0.8	32	5.0	12	0.3	10	2.3	8
16	Leahy, D.M.	UCD	1991	0.88	0.9	27	4.3	16	0.3	20	2.3	9
17	O Grada, C.	UCD	1969	0.86	2.5	4	3.5	20	0.2	33	0.7	40
18	Callan, T.	ESRI	1989	0.85	0.9	25	4.8	14	0.3	17	1.8	13
19	Whelan, C.T.	ESRI	1973	0.82	1.0	16	6.9	7	0.2	23	1.4	17
20	Conniffe, D.	NUIM	1967	0.77	1.4	13	6.2	10	0.2	26	0.8	33
21	Traistaru-Siedschlag, I.	ESRI	2004	0.70	1.0	16	1.0	51	0.3	10	1.0	27
22	Reynolds-Feighan, A.	UCD	2000	0.70	1.0	16	2.0	34	0.3	16	1.1	24
23	Farrell, L.	UCD	1997	0.66	0.7	35	3.0	27	0.3	15	1.0	27
24	Morgenroth, E.L.W.	ESRI	1999	0.65	0.5	54	3.1	24	0.3	20	1.5	15
25	Bradley, J.	TCD	1977	0.64	0.7	35	4.2	18	0.2	26	1.3	19
26	Whelan, K.T.	CBI	1991	0.64	1.0	16	2.8	28	0.3	14	0.4	57
27	Geary, P.T.	NUIM	1972	0.59	0.5	57	3.2	22	0.1	56	2.1	11
28	Barrett, A.	ESRI	1996	0.58	0.8	30	2.3	31	0.2	34	1.3	22
29	Honohan, P.	World Bank/TCD	1974	0.57	1.6	11	2.5	30	0.1	54	0.4	55
30	Cotter, J.	UCD	1998	0.54	1.0	16	1.4	43	0.1	57	1.3	19
31	Gallagher, L.A.	DCU & UCC	1997	0.53	0.9	29	1.6	40	0.2	26	0.8	34
32	Kelly, M.	UCD	1984	0.51	0.6	47	3.1	25	0.2	25	0.7	39
33	McAleese, D.	TCD	1970	0.50	1.0	16	1.7	38	0.1	59	1.1	26
34	Harrison, M.J.	TCD	1972	0.50	0.7	37	3.1	26	0.1	46	1.0	27
35	O'Shea, E.	UCG	1987	0.46	0.6	48	2.1	33	0.2	26	0.7	38
36	FitzGerald, J.D.	ESRI	1984	0.44	0.4	66	2.2	32	0.2	37	0.9	31
37	Walsh, P.P.	TCD/UCD	1989	0.43	0.7	34	1.6	42	0.2	38	0.6	41
38	Boyle, G.E.	UoL	1981	0.42	0.6	45	1.4	44	0.2	32	0.5	46
39	Roche, M.J.	NUIM	1995	0.41	0.9	28	1.0	51	0.2	38	0.3	64
40	Madden, D.	UCD	1989	0.40	0.7	38	1.6	39	0.2	38	0.4	56

^a The overall score equals the sum of the number of publications, citations, most-cited paper, and h-index, each divided by the score of the highest ranked individual.

Table 4. Ranking based on the number of peer-reviewed publications according to *Scopus*, *EconLit*, and *Web of Science*, Top 15 only.

<i>Scopus</i>			<i>EconLit</i>			<i>Web of Science</i>		
Rank	Name	Score	Rank	Name	Score	Rank	Name	Score
1	Tol, R.S.J.	89	-	Neary, J.P.	59	1	O Grada, C.	94
2	Nolan, B.	35	1	Honohan, P.	50	2	Tol, R.S.J.	71
-	Neary, J.P.	32	2	Lane, P.R.	39	-	Neary, J.P.	65
3	Kapur, K.	31	3	Barry, F.G.	38	3	Conniffe, D.	57
4	Lane, P.R.	29	4	Nolan, B.	35	4	Nolan, B.	56
5	Honohan, P.	28	4	Walsh, B.	35	5	Honohan, P.	54
6	Barry, F.G.	27	6	Tol, R.S.J.	30	6	Barry, F.G.	41
7	Whelan, C.T.	24	7	Conniffe, D.	25	7	Lane, P.R.	37
8	Clinch, J.P.	19	7	O Grada, C.	25	7	McAleese, D.	37
8	Conniffe, D.	19	9	Bradley, J.	24	9	Whelan, C.T.	34
10	O'Rourke, K.H.	15	9	O'Rourke, K.H.	24	10	O'Rourke, K.H.	31
10	Ruane, F.P.	15	11	Ruane, F.P.	23	10	Thom, D.R.	31
12	Andreosso-O'Callaghan, B.	14	12	Thom, D.R.	22	12	Kapur, K.	27
12	Lucey, B.M.	14	13	Leahy, D.M.	19	13	Harrison, M.J.	24
12	O Grada, C.	14	13	Lucey, B.M.	19	13	Walsh, B.	24
15	Cotter, J.	13	15	Browne, F.X.	18	15	Bradley, J.	21
15	Devereux, P.J.	13	15	Walsh, P.P.	18			
15	Kelly, M.	13						
15	Walsh, P.P.	13						

Table 5. Ranking based on the number of citations according to *Scopus* and *Web of Science* (with and without self-citations), Top 15 only.

<i>Scopus</i>			<i>Web of Science</i>			<i>WoS (excl. self-citations)</i>		
Rank	Name	Score	Rank	Name	Score	Rank	Name	Score
1	Tol, R.S.J.	750	-	Neary, J.P.	1218	-	Neary, J.P.	955
-	Neary, J.P.	422	1	Tol, R.S.J.	514	1	Nolan, B.	281
2	Lane, P.R.	393	2	Nolan, B.	346	2	Tol, R.S.J.	271
3	Nolan, B.	208	3	Lane, P.R.	290	3	Lane, P.R.	236
4	Barry, F.G.	150	4	Conniffe, D.	249	4	Conniffe, D.	177
5	Kapur, K.	146	5	Whelan, C.T.	233	5	Whelan, C.T.	171
6	Whelan, C.T.	128	6	O Grada, C.	134	6	Kapur, K.	111
7	Kelly, M.	104	6	O'Rourke, K.H.	134	7	O Grada, C.	106
8	Harmon, C.P.	99	8	Kapur, K.	130	8	Geary, P.T.	101
9	O'Rourke, K.H.	95	9	Bradley, J.	125	9	Bergin, J.	96
10	Leahy, D.M.	87	10	Geary, P.T.	112	10	O'Rourke, K.H.	90
11	Honohan, P.	83	11	Bergin, J.	111	11	Harrison, M.J.	87
12	Clinch, J.P.	79	12	Barry, F.G.	110	12	Bradley, J.	85
13	Bradley, J.	78	13	Harrison, M.J.	108	13	Callan, T.	77
14	O'Neill, D.	66	14	Harmon, C.P.	91	14	Harmon, C.P.	74
15	Bergin, J.	64	15	Callan, T.	86	15	Honohan, P.	73

Table 6. Ranking based on the *h*-index according to *Scopus* and *Web of Science*, Top 15 only.

<i>Scopus</i>			<i>Web of Science</i>		
Rank	Person	Score	Rank	Person	Score
1	Tol, R.S.J.	17	-	Neary, J.P.	17
-	Neary, J.P.	12	1	Tol, R.S.J.	13
2	Nolan, B.	10	2	Conniffe, D.	8
3	Lane, P.R.	8	2	Nolan, B.	8
4	Kapur, K.	7	2	Whelan, C.T.	8
5	Barry, F.G.	6	5	Lane, P.R.	7
5	Kelly, M.	6	5	O Grada, C.	7
5	Ruane, F.P.	6	7	Bradley, J.	6
5	Whelan, C.T.	6	7	Kapur, K.	6
9	Clinch, J.P.	5	7	O'Rourke, K.H.	6
9	Harmon, C.P.	5	10	Barry, F.G.	5
9	Honohan, P.	5	10	Bergin, J.	5
9	Leahy, D.M.	5	10	Boyle, G.E.	5
9	O Grada, C.	5	10	Callan, T.	5
9	O'Neill, D.	5	10	Harmon, C.P.	5
9	O'Rourke, K.H.	5	10	Harrison, M.J.	5
9	Reynolds-Feighan, A.	5	10	Kelly, M.	5
9	Walsh, P.P.	5	10	Ruane, F.P.	5
			10	Whelan, K.T.	5

Table 7. Irish Economists ranked 1st, 2nd, and 3rd place in 26 alternative rankings.^a

Person	Institute	1 st	2 nd	3 rd
<i>Neary, Peter</i>	<i>Oxford</i>	11	9	4
Tol, Richard	ESRI	10	3	1
Lane, Philip	TCD	5	7	4
Nolan, Brian	UCD	1	6	4
Honohan, Patrick	TCD	3	2	1
O'Rourke, Kevin	TCD	2	3	0
Kelly, Morgan	UCD	3	0	1
O Grada, Cormac	UCD	1	1	0
Kapur, Kanika	UCD	0	0	4
Conniffe, Denis	NUIM	0	1	2
O'Neill, Donal	NUIM	0	1	2
Bargain, Olivier	UCD	1	0	1
Barry, Frank	UCD	0	0	2
Ahearne, Alan	NUIG	0	1	0
Geary, Paddy	NUIM	0	1	0
Kearney, Colm	TCD	0	1	0
Whelan, Chris	ESRI	0	1	0
Harmon, Colm	UCD	0	0	1
Leahy, Dermot	NUIM	0	0	1
Walsh, Brendan	UCD	0	0	1

^a First, second and third place are without Peter Neary. For comparison, Neary's scores are shown nonetheless. As Neary is among the top 3 in 24 out of 26 rankings, inclusion of Neary affects the scores of all others. The rankings include IDEAS/REPEC (1; cf. Table A2), Barrett and Lucey (2; cf. Table A3), Coupe and Walsh (6; cf. Table A4), EconLit (1; cf. Table 2), Web of Science (11; cf. Tables 2, 3, 5) and this paper (5; cf. Table 1). The ranking here is based on 3 points for 1st place, 2 points for 2nd, and 1 point for 3rd.

Table A1: Names and Ranks of Economists in Ireland* used in the Scopus Analysis

1	Tol, R.S.J.	ESRI	34	Andreosso-O'Callaghan, B.	UoL	68	McQuinn, K.	CBI	98	Rousseau, F.	NUIM
-	Neary, J.P.	UCD/U Oxford	35	FitzGerald, J.D.	ESRI	69	Deegan, J.	UoL	103	Pantelidis, T.	NUIM
2	Lane, P.R.	TCD	36	Gallagher, L.A.	DCU & UCC	70	Kawakatsu, H.	DCU	104	Considine, J.	UCC
3	Nolan, B.	ESRI/UCD	37	Matthews, A.	TCD	71	Kearney, I.	ESRI	105	Somerville, R.A.	TCD
4	Barry, F.G.	UCD/TCD	38	Kennelly, B.	UCG	72	O'Leary, E.	UCC	105	Velupillai, K.V.	UCG
5	Kapur, K.	UCD	39	Thom, D.R.	UCD	72	van Rensburg, T.M.	UCG	107	Hogan, T.	DCU
6	Whelan, C.T.	ESRI	40	O'Shea, E.	UCG	74	Walsh, F.	UCD	108	Leddin, A.	UoL
7	Harmon, C.P.	UCD	41	Whelan, B.J.	ESRI	75	Pastine, I.	UCD	108	Parlane, S.	UCD
8	Bradley, J.	EMDS/TCD	42	Kearney, C.	TCD	76	McAleese, D.	TCD	108	Piggins, A.	UCG
9	Bergin, J.	UCD	43	Lucey, B.M.	TCD	77	Denny, K.	UCD	108	Sjostrom, W.	UCC
10	Leahy, D.M.	UCD	44	Roche, M.J.	NUIM	78	Nolan, A.	ESRI	108	Thijssen, J.J.J.	TCD/U N'ham
11	Kelly, M.	UCD	45	Madden, D.	UCD	78	Traistaru-Siedschlag, I.	ESRI	113	Bergin, A.	ESRI
12	Honohan, P.	World Bank/TCD	46	Bargain, O.	UCD	80	Ferreira, S.	UCD	113	Birmingham, C.	CBI
13	O'Rourke, K.H.	TCD	47	Whelan, C.	UCD	80	Shinnick, E.	UCC	113	Browne, F.X.	CBI
14	O'Neill, D.	NUIM	48	Drudy, P.J.	TCD	82	O'Hagan, J.	TCD	113	d'Agostino, A.	CBI
15	Clinch, J.P.	UCD	49	Ahearne, A.G.	UCG	83	Doris, A.	NUIM	113	Di Maria, C.	UCD
16	Callan, T.	ESRI	50	Garvey, E.	UCG	83	O'Sullivan, P.	NUIM	113	Doran, D.	CBI
17	Ruane, F.P.	TCD/ESRI	51	Boylan, T.A.	UCG	83	Scott, S.	ESRI	113	Geary, P.T.	NUIM
18	O Grada, C.	UCD	52	Hutson, E.	UCD	86	O'Reilly, G.	CBI	113	Kelly, A.	UCD
19	Walsh, P.P.	TCD/UCD	53	Cuddy, M.P.	UCG	87	Broome, S.J.	NUIM	113	Lally, B.	UCG
20	Barrett, S.D.	TCD	54	Lenihan, H.	UoL	88	Delaney, L.	UCD	113	Largey, A.	DCU
21	Barrett, A.	ESRI	55	O'Donoghue, C.	UCG	88	Gekker, R.	UCG	113	Lyons, S.	TCD/ESRI
22	Reynolds-Feighan, A.	UCD	56	Siddiqui, A.S.	UCD	88	Kavanagh, E.	UCC	113	McCarthy, C.	UCD
23	Harrison, M.J.	TCD	57	Flavin, T.J.	NUIM	88	O'Toole, F.	TCD	113	McDonnell, T.	DCU
24	Maitre, B.	ESRI	58	Jacobson, D.S.	DCU	92	McDonough, T.	UCG	113	McGovern, S.	DCU
25	Walsh, B.	UCD	59	DeWit, G.	NUIM	93	Gavin, C.	CBI	113	Murphy, A.P.	CBI
26	Keane, M.J.	UCG	60	Sweetman, O.	NUIM	94	Kavanagh, C.	UCC	113	O'Donell, M.	UoL
27	Whelan, K.T.	CBI	61	McElroy, B.	UCC	95	Duffy, D.	ESRI	113	Poti, V.	DCU
28	Farrell, L.	UCD	62	Convery, F.J.	UCD	95	Murphy, A.E.	TCD	113	Power, B.	UCC
29	Boyle, G.E.	UoL	63	Pastine, T.	NUIM	97	Eakins, J.	UCC	113	Raghavendra, S.	UCG
30	Conniffe, D.	NUIM	64	Doyle, E.	UCC	98	Cassidy, M.	CBI	113	Tamura, Y.	TCD
31	Morgenroth, E.L.W.	ESRI	65	Newman, C.	TCD	98	Hurley, M.J.	NUIM	113	Walsh, K.	DCU/Rev Comm
32	Cotter, J.	UCD	66	Bredin, D.	UCD	98	Kirby, E.	UCC			
33	Devereux, P.J.	UCD	67	Kearns, A.	CBI	98	Mariuzzo, F.	TCD			

*This shows all economists by their current major affiliation, except in the case of Leahy and Walsh, where we insert where they are in process of going along with where they currently are based.

Table A2. Ranking^a of Irish economists according to IDEAS/REPEC, April 2007

Ireland	Rank ^b			Name	Institute
	EU ^c	Europe ^c	World		
-	45	48	210	J. Peter Neary	Oxford
1	50	53	223	Philip Lane	TCD
2	145	155	580	Kevin H. O'Rourke	TCD
3	226	239	>646	Patrick Honohan	TCD
4	260	276	>646	Richard S.J. Tol	ESRI
5	315	333	>646	Karl T. Whelan	CBI
6	550	582	>646	Colm P. Harmon	UCD
7	573	607	>646	Paul J. Devereux	UCD
8	>637	>691	>646	Patrick Paul Walsh	UCD
9	>637	>691	>646	Donal O'Neill	NUIM

^a The *IDEAS/REPEC* ranking is of self-registered economists only (12900 worldwide), and uses 600 journals and 1778 working paper series. The ranking is based on the harmonic average of the rankings on 13 productivity scores (7 counting the number of works, 6 counting the number of pages), 6 citation scores, the *h*-index, and 4 scores on the number of downloads.

^b *IDEAS/REPEC* only ranks the top 5% (world), 10% (EU, Europe), 20% (Ireland).

^c Note that members of virtual research centres with a European base (e.g., CEPR, CESifo, IZA) are counted as European, regardless of their actual allocation. Many top economists from the US are with CEPR and IZA, and this influences the ranking considerably. If such people are removed from the list, Philip Lane, for instance, rises to 34th place in the EU.

Table A3. Ranking^a of Irish economists according to Barrett and Lucey (2003).

Top 10 Raw	Raw rank	JCIF rank	Top 10 JCIF	JCIF rank	Raw rank
Honohan, Patrick	1	2	Neary, J. Peter	1	3
Borooah, Vani K.	2	3	Honohan, Patrick	2	1
Neary, J. Peter	3	1	Borooah, Vani K.	3	2
Hitchens, D.	4	45	Nolan, Brian	4	7
Kearney, Colm	5	20	Conniffe, Denis	5	8
Walsh, Brendan	6	7	Barry, Frank	6	13
Nolan, Brian	7	4	Walsh, Brendan	7	6
Conniffe, Denis	8	5	Harrison, Michael J.	8	23
McKillop, Donal G.	9	12	Browne, F.X.	9	18
O'Hagan, John W.	10	18	Ruane, F.	9	11
			Teague, Paul	9	23

^a Ranking based on the publication counts recorded in *EconLit*, with (JCIF) and without (raw) adjusting for journal quality as measured by the Journal Impact Factor; counts are divided by the number of authors.

Table A4. Ranking^a of Irish economists according to Coupe and Walsh (2003).

	1990-2000			1995-2000		
	Bauwens ^b	Impact ^c	Laband-Piette ^d	Bauwens ^b	Impact ^c	Laband-Piette ^d
1	O'Rourke, T.H.	O'Rourke, K.H.	Neary, J.P.	Lane, P.R.	Kelly, M.	Neary, J.P.
2	Honohan, P.	Neary, J.P.	Kelly, M.	Neary, J.P.	Neary, J.P.	Kelly, M.
3	Neary, J.P.	Honohan, P.	O'Rourke, K.H.	O'Rourke, K.H.	Lane, P.R.	O'Neill, D.
4	Lane, P.R.	Kelly, M.	O'Neill, D.	Barry, F.	O'Neill D.	Leahy, D.
5	Kelly, M.	Ó Gráda, C.	Leahy, D.	Kelly, M.	Honohan, P.	Lane, P.R.
6	Ó Gráda, C.	Lane, P.R.	Lane, P.R.	Honohan, P.	O'Rourke, K.H.	Ó Gráda, C.
7	Barry, F.	O'Neill, D.	Ó Gráda, C.	Madden, D.	Barry, F.	Harmon, C.
8	Madden, D.	Barry, F.	Harmon, C.	Murphy, A.	Madden, D.	O'Rourke, K.H.
9	Murphy, A.	Leahy, D.	Honohan, P.	Fountas, S.	Leahy, D.	Walsh, F.
10	Walsh, B.	Madden, D.	Walsh, F.	O'Neill, D.	Murphy, A.	Murphy, A.
11	Fountas, S.	Murphy, A.	Murphy, A.	Leahy, D.	Ó Gráda, C.	Honohan, P.
12	Leahy, D.	Nolan, B.	Madden, D.	Walsh, B.	Bradley, J.	Madden, D.
13	O'Neill, D.	Walsh, B.	Walsh, P.P.	Ó Gráda, C.	Walsh, B.	Barry, F.
14	Conniffe, D.	Bradley, J.	Barry, F.	Barrett, A.	Fountas, S.	Fingleton, J.
15	Nolan, B.	Matthews, A.	Fingleton, J.	O'Connell, J.	Walsh, P.P.	Bradley, J.
16	Bradley, J.	Conniffe, D.	Bradley, J.	Bradley, J.	Harmon, C.	Walsh, P.P.
17	Kearney, C.	Walsh, P.P.	Denny, K.	Reynolds, A.	Walsh, F.	Fountas, S.
18	Browne, F.	Sjostrom, W.B.	Walsh, B.	Conniffe, D.	Fingleton, J.	Barrett, A.
19	Sjostrom, W.B.	Harmon, C.	Fountas, S.	Keane, M.J.	Turner, T.	Hurley, M.
20	Walsh, P.P.	Fountas, S.	Barrett, A.	Roche, M.J.	Barrett, A.	Kearney, C.
21	Matthews, A.	Fingleton, J.	Hurley, M.	Harmon, C.	Matthews, A.	McCarthy, T.G.
22	Callan, T.	Keane, M.J.	Kearney, C.	Walsh, P.P.	Reynolds, A.	Gallagher, L.A.
23	Keane, M.J.	Walsh, F.	Browne, F.	Kearney, C.	O'Connell, J.	Boyle, G.E.
24	Barrett, A.	Ruane, F.	McCarthy, T.G.	Fingleton, J.	Keane, M.J.	O'Connell, J.
25	Denny, K.	Barrett, A.	Murphy, A.E.	Walsh, F.	Conniffe, D.	Roche, M.J.

^a Ranking based on the publication counts recorded in *EconLit*, with three alternative journal quality adjustments, and for two periods; counts are divided by the number of authors.

^b The Bauwens index is a renormalization of the Journal Impact Factor; it suppresses the differences between high-impact and low-impact journals, and assigns a minimal weight where the Journal Impact Factor is zero.

^c Journal Impact Factor; the impact factor of a journal in year t is the number of citations in year t to papers published in years $t-1$ and $t-2$, divided by the number of papers published in years $t-1$ and $t-2$.

^d The Laband-Piette Impact Factor covers 5 years (that is, $t-1$ to $t-5$, see footnote c), and corrects citations for journal quality.

Year	Number	Title/Author(s) ESRI Authors/Co-authors Italicised
2007	195	The Regional Dimension of Taxes and Public Expenditure in Ireland <i>Edgar Morgenroth</i>
	194	Do Consultation Charges Deter General Practitioner Use Among Older People? A Natural Experiment <i>Richard Layte, Hannah McGee and Ann O'Hanlon</i>
	193	An Analysis of the Impact of Age and Proximity of Death on Health Care Costs in Ireland <i>Richard Layte</i>
	192	Measuring Hospital Case Mix: Evaluation of Alternative Approaches for the Irish Hospital System <i>Chris Aisbett, Miriam Wiley, Brian McCarthy, Aisling Mulligan</i>
	191	The Impact of the EU-US Open Skies Agreement on International Travel and Carbon Dioxide Emissions <i>Karen Mayor and Richard S.J. Tol</i>
	190	Comparing the Travel Cost Method and the Contingent Valuation Method – An Application of Convergent Validity Theory to the Recreational Value of Irish Forests <i>Karen Mayor, Sue Scott, Richard S.J. Tol</i>
	189	The Impact of Flexible Working Arrangements on Work-Life Conflict and Work Pressure in Ireland <i>Helen Russell, Philip J. O'Connell and Frances McGinnity</i>
	188	The Housing Tenure of Immigrants in Ireland: Some Preliminary Analysis <i>David Duffy</i>
	187	The Impact of the UK Aviation Tax on Carbon Dioxide Emissions and Visitor Numbers <i>Karen Mayor and Richard S.J. Tol</i>
	186	Irish Sustainable Development Model (ISus) Literature Review, Data Availability and Model Design <i>Joe O'Doherty, Karen Mayor, Richard S.J. Tol</i>

- 185 Managing Term-Time Employment and Study in Ireland
Merike Darmody and Emer Smyth
- 184 The Effects of Human Capital on Output Growth in ICT Industries: Evidence from OECD Countries
Gavin Murphy and Iulia Traistaru-Siedschlag
- 183 Real Interest Parity in the EU and the Consequences for Euro Area Membership: Panel Data Evidence, 1979-2005
Martin O'Brien
- 182 Can Small Firms' Perceived Constraints Help Explain Survival Rates?
Seán Lyons
- 181 Understanding the Implications of Choice of Deprivation Index for Measuring Consistent Poverty in Ireland
Christopher T. Whelan
- 180 Centres of Research Excellence in Economics in the Republic of Ireland
Frances Ruane and Richard S.J. Tol
- 179 Airline Emissions of Carbon Dioxide in the European Trading System
John Fitz Gerald and Richard S.J. Tol
- 178 An Environmental Input-Output Model for Ireland
Joe O'Doherty and Richard S.J. Tol
- 2006** 177 The Impact of a Carbon Tax on International Tourism
Richard S.J. Tol
- 176 Economic Integration and Structural Change: The Case of Irish Regions
Edgar Morgenroth