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Universities and authors: a ranking for international finance

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Abstract

We rank universities and colleges and we list the top 100 authors in the sub-field of International Finance using the EconLit database and measuring quality by the number of American Economic Review-equivalent articles published over the ten-year period 1996-2005. We observe that there is some dissimilarity between the ranking of this sub-field and that of the general field of Economics, so that the sub-field rankings provide extra information. The results may be useful for students considering post-graduate work in International Finance

1. Introduction

It is acknowledged that universities want high-quality students (*e.g.*, Kalaitzidakis *et al.*, 2003) and that top students aim at high-quality universities. On the university side, high-quality students are important because top students have high potential for proposing new ideas, are good vehicles of diffusion for the ideas that emerge within the university, are rewarding to teach and so attract top professors, and are likely themselves to become top researchers and advance the university's reputation and prestige. More generally, since new ideas are a primary driver of economic growth (Boskin and Lau, 2000), and new ideas result from research and development activities where the primary input is high-skilled labour (Romer, 1990), where knowledge diffusion and externalities make an important contribution (*e.g.*, Jaffe 1989; Acs, Audretsch and Feldman, 1992) when a university is able to enlist high-quality students it may become an important economic engine for its region (Griliches, 1992, 1997). As successful innovation depends on the ability of firms effectively to incorporate new ideas in their activities (Kline and Rosenberg, 1986; Freeman, 1987), which increases with social proximity to research and development centres (Boschma, 2005), high-quality students are also important vehicles of diffusion for the ideas that emerge from within the university (Park, 2004).

Given the positive economic effects of centres of excellence in teaching and research, public authorities encourage universities, through funding policy, to attract high-quality students (*e.g.*, Greenaway and Haynes, 2003).

On the student side, it is important to be accepted by a high-quality university because the learning process encompasses informal diffusion of knowledge among students and between professors and students (Polanyi, 1966), and it is a signal to the labour market that the student is a high-quality person (Spence, 1973). Informal learning and signalling enlarge the probability that the student attains a highly-paid job (Weiss, 1995).

An implication of the globalisation phenomenon is that universities now expand their areas of student recruitment beyond borders and that students search for opportunities to study over a much broader territory. Due to this widening of the recruitment process, assessment methods used locally to distinguish universities become uninformative and it is crucial to apply methods that are objective and internationally valid. Thus, international aptitude and assessment tests such as the Graduate Record Examination (GRE) and the Graduate Management Aptitude Test (GMAT) have become global standards for comparing students' knowledge and competence.

On the university side, considering that there is a connection between their ability to create new ideas and regional development, the level of development of the region where a university is located informs us of its quality. However, universities' geographic areas of influence overlap and the quality of each university is not identically distributed across all fields of knowledge. Thus, it is necessary to investigate more directly, going beyond just inferring a university's quality from its location.

In economics, the diffusion of relevant new ideas is accomplished through the publication of articles in reputed journals where the affiliation and fields of knowledge of the articles' authors are made explicit. Due to this fact, since Fusfeld (1956) an extensive literature has developed on the ranking of economics departments by using published articles as a source of information (*e.g.*, Grave *et al.*, 1982; Scott and Mitias, 1996; Kalaitzidakis *et al.*, 2003).

Although there is an abundance of published rankings, (*e.g.*, Cribari-Neto *et al.*, 1999, Barrett *et al.*, 2000, Phillips and Kinnear, 2004) they do not, however, cover all sub-fields of economics, which would benefit prospective post-graduate students who are usually interested in deepening their studies in a particular sub-field.

In this paper, we first construct a university ranking in Macroeconomics and International Finance including all articles referenced in the EconLit database over the period between the

beginning of 1996 and the end of 2005. Then, by measuring the correlation between specific and generic rankings, we examine the correlations between the International Finance ranking and the Macroeconomics and Economics rankings. Second, we construct a list of top authors in International Finance. Finally, by computing author mobility, we evaluate whether high productive authors are created in, or hunted by, high-prestige universities.

2. Methodology

We use data covering the period 1996-2005, which is extracted from Econlit, using the American Economic Association ECJR0012 and ECJR0014 CD-ROMs. The articles considered are limited to those published in the journals ranked in Kalaitzidakis *et al.* (2003) with a quality index superior to one (76 journals). The final working database contains 64,003 articles. The data was stored in a Microsoft Access database (see Figure 1). Authors' affiliations other than universities and colleges (*e.g.*, research institutions such as the NBER or the CEPR) have been removed from our database. Very few authors declare affiliation to more than one university or college.

Although articles include methodological *Journal of Economic Literature* (JEL) codes that are irrelevant to the identification of the article sub-field, we conjecture that a more specialised article will have less JEL codes. After having excluded from our database the pre-1991 descriptor codes since they duplicate the corresponding current JEL codes, on average there are 2.56 JEL codes per article.

We use as a quality-adjustment factor the Kalaitzidakis *et al.* (2003, Table 1, column 5) index that reduces the number of pages of an article to quality-equivalent *American Economic Review* (AER) pages. We employ a log transformation of this index due to the fact that Kalaitzidakis *et al.* (2003) ranking is extremely steep, Vieira (2008), Sousa and Vieira(2011).¹

In mathematical form, for each article i authored by author j , the score of j is calculated by dividing the logarithm of the journals' quality index, $\ln(W_i)$, by the number of authors, B_i , raised to the power of 0.76. This exponent indicates that an article's quality density increases with the number of co-authors, which has been estimated by Vieira (2008). The article contribution is then weighted by the ratio of the number of sub-field JEL codes, NJ_i , and the total number of JEL codes, TJ_i , and multiplied by an indicator variable, δ_{ji} , which is set to one when j is an author of an article in the database and is zero otherwise. Finally, the author score, A_j , is computed by adding the contribution over all articles, normalised to the AER index logarithm, $\ln(100)$:

$$A_j = \frac{1}{\ln(100)} \sum_{i=1}^N \frac{\ln(W_i)}{B_i^{0.76}} \frac{NJ_i}{TJ_i} \delta_{ji} \quad (1)$$

The score of institution k , S_k , is computed by adding the scores of all authors who reference it as an affiliation in their last published article:

$$S_k = \sum_{j=1}^M A_j \gamma_{kj} \quad (2)$$

—where γ_{kj} is set to one when k is the last affiliation of j and is zero otherwise, and M is the number of authors. This score approximates the institutions' number of published articles

¹ Comparing the 100 top listed authors ranked with and without a logarithmic transformation, we obtain a Spearman correlation coefficient of 0.82.

equivalent to those of an AER article.

We assume, as usual, that the Macroeconomics JEL codes are D9, E0-E6, F3-F4, H5-H6, H72, H74, H8 or O4 and that International Finance JEL codes are F30-F36, F39 or F41 - F42. We also compute raw numbers, R_j , that sum the number of articles weighted by the number of authors, B_i , the ratio of the number of sub-field JEL codes, NJ_i , and the total number of JEL codes, TJ_i .

$$R_j = \sum_{i=1}^N \frac{1}{B_i} \frac{NJ_i}{TJ_i} \quad (3)$$

3. Results

In our database there are 64,003 articles with a Kalaitzidakis *et al.* (2003) index greater than 1, which corresponds to 22,815 AER-equivalent articles. Of these, 15.7% are in the Macroeconomics field and 2.7% in the International Finance sub-field.

Regarding universities and colleges, the top fifteen accounts for some 20% of the International Finance overall output (see Figure 2). We have ranked universities and colleges whose published work totals approximately two thirds of AER-equivalent pages in International Finance, *i.e.*, the 100 top universities or colleges (Table I).²

Due to the fact that some of the top institutions are not universities, we ranked them in Table II.

We then studied how far the rankings in International Finance, Macroeconomics and overall Economics are correlated among the top 200 universities ranked by AER-equivalent publications in overall Economics (Table III). A small and statistically insignificant correlation coefficient informs us of universities' high level of specialisation, *i.e.*, that general rankings are inadequate when the choice of one university for a sub-field of specialisation is on the agenda. On the other hand, correlation coefficients between the general Economics rankings and the International Finance or Macroeconomics rankings (Table I) are in each case strongly significantly positive ($p\text{-value} \approx 0$) at the university level. Nevertheless, the correlation coefficients are not close to one, indicating that sub-field rankings add some information to the general ranking.

Regarding authors, we list (Table IV) the most productive authors (quality-adjusted) who altogether contribute approximately 30% of quality-adjusted published papers in International Finance, *i.e.*, the top 100 authors in International Finance over the period 1996-2005. It is interesting to note that the top 35 authors account for some 15% of published AER-equivalent output (Figure 2).³

We then studied correlation among the top 100 authors ranked by AER-equivalent publications in overall Economics (Table V).

Considering that some of the top economics authors are not included in Table III, we ranked them in Table VI.

On average, correlation between Quality-adjusted output and Raw number of articles is 96% for universities (Table I) and 87% for authors (Table IV).

Regarding authors' mobility during the period under analysis, 18.5% of the 200 International Finance top authors changed their affiliation. Although our research seems to suggest that

² These two thirds include fifteen institutions that are not universities. For example, the International Monetary Fund alone contributes 5.6% of published papers in International Finance in our database.

³ Due to space limitations, it is impractical to list here all of those authors that account for two thirds of AER-equivalent published papers, *i.e.*, the top 525.

author mobility tends to be downwards on the university ranking, the differences are not in fact statistically significant. Authors' downward movement would indicate that top-ranking universities "capture" outstanding young students as their future high-prestige professors and that mistake occurs.

4. Conclusion

In this paper, we rank universities and colleges in the sub-field of International Finance. Additionally, we list the top 100 authors in this sub-field and Macroeconomics and top 30 Economists in Economics.

One goal of constructing a specialised university and author ranking is to evaluate the conjecture that, due to specialisation, sub-field rankings add some information to general-field rankings: our analysis supports this conjecture that specialised rankings are relevant.

A second goal is to provide information relevant to students selecting potential universities and research supervisors, and we hope that the rankings provided will prove useful in this respect.

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Figure 1: Structure of the database

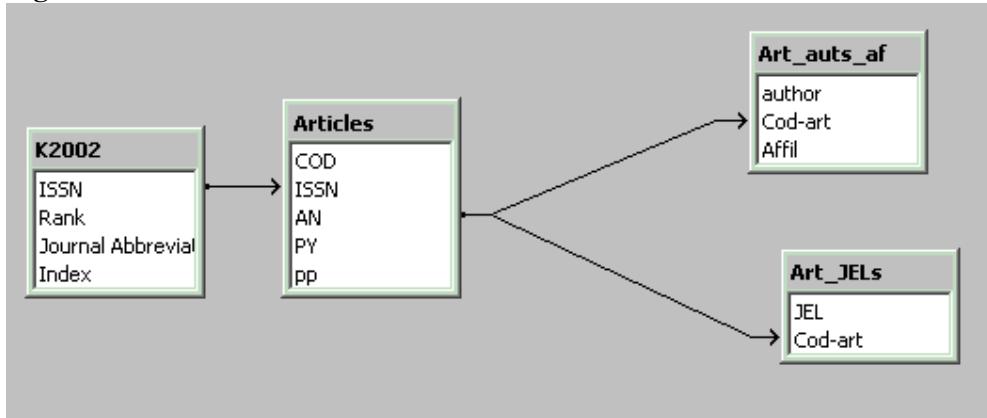
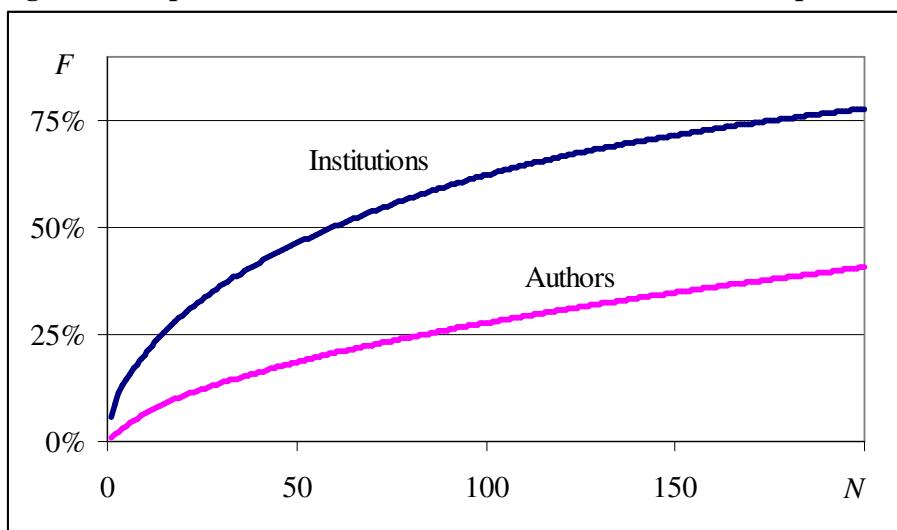


Figure 2: Empirical distribution for International Finance output



Notes: N =number of institutions or authors; F = cumulated frequency

Table I: The Top 100 Universities and Colleges in International Finance, 1996-2005

| Rank | Institution | Quality-adjusted output | | | Raw number of articles | | |
|------|-------------------------|-------------------------|-------|-------|------------------------|--------|-------|
| | | Econ | Macro | IntF | Econ | Macro | IntF |
| 1 | Harvard U | 509,21 | 87,52 | 20,83 | 734,68 | 116,09 | 30,29 |
| 2 | U CA, Berkeley | 342,89 | 48,95 | 15,16 | 499,22 | 64,98 | 23,73 |
| 3 | U Warwick | 132,67 | 27,64 | 10,67 | 232,33 | 49,31 | 18,21 |
| 4 | Columbia U | 198,88 | 37,02 | 8,91 | 315,42 | 51,61 | 14,01 |
| 5 | UCLA | 185,25 | 34,47 | 7,76 | 270,83 | 46,21 | 11,52 |
| 6 | NYU | 245,07 | 40,24 | 6,84 | 342,92 | 49,64 | 8,62 |
| 7 | MIT | 336,93 | 48,00 | 6,41 | 449,75 | 60,45 | 10,12 |
| 8 | U MD | 153,82 | 17,48 | 6,36 | 261,43 | 26,38 | 8,05 |
| 9 | LSE | 239,03 | 30,29 | 5,79 | 400,20 | 53,95 | 10,00 |
| 10 | U British Columbia | 106,57 | 13,68 | 5,73 | 189,92 | 23,07 | 10,12 |
| 11 | Stanford U | 298,96 | 40,45 | 5,73 | 440,68 | 51,10 | 8,48 |
| 12 | U WI | 169,43 | 17,25 | 5,52 | 254,67 | 24,30 | 7,75 |
| 13 | U Southern CA | 76,76 | 7,13 | 4,75 | 133,17 | 16,31 | 6,71 |
| 14 | Northwestern U | 252,26 | 30,84 | 4,68 | 331,35 | 33,70 | 5,10 |
| 15 | U VA | 75,08 | 15,26 | 4,42 | 115,00 | 21,04 | 4,64 |
| 16 | Georgetown U | 67,20 | 12,76 | 4,38 | 109,25 | 17,71 | 6,56 |
| 17 | U CA, Santa Cruz | 31,68 | 6,60 | 4,23 | 59,33 | 13,54 | 7,04 |
| 18 | Trinity College, Dublin | 11,92 | 7,23 | 4,12 | 21,50 | 12,04 | 7,23 |
| 19 | National Chung Cheng U | 3,85 | 1,34 | 4,09 | 9,00 | 3,17 | 7,25 |
| 20 | U MN | 126,01 | 22,74 | 4,09 | 192,48 | 27,85 | 5,34 |
| 21 | Princeton U | 220,07 | 44,09 | 4,01 | 270,28 | 54,35 | 5,49 |
| 22 | U Glasgow | 23,25 | 12,15 | 3,99 | 62,33 | 23,81 | 6,94 |
| 23 | U PA | 266,64 | 44,09 | 3,78 | 370,25 | 53,93 | 6,69 |
| 24 | U CA, Davis | 127,86 | 15,94 | 3,70 | 227,25 | 26,28 | 5,28 |
| 25 | Yale U | 194,12 | 20,46 | 3,60 | 278,27 | 30,08 | 5,96 |
| 26 | U Nottingham | 74,52 | 10,64 | 3,58 | 173,03 | 25,64 | 10,68 |
| 27 | U Rochester | 96,03 | 15,21 | 3,51 | 140,10 | 19,60 | 4,92 |
| 28 | U WI, Milwaukee | 20,36 | 7,84 | 3,38 | 53,50 | 22,29 | 8,11 |
| 29 | Duke U | 135,85 | 12,22 | 3,13 | 206,17 | 18,67 | 4,26 |
| 30 | U Toronto | 130,03 | 21,90 | 3,12 | 217,08 | 33,49 | 5,38 |
| 31 | Rutgers U | 73,25 | 11,82 | 2,98 | 134,17 | 22,52 | 4,71 |
| 32 | U MI | 167,29 | 17,13 | 2,91 | 255,25 | 22,79 | 3,43 |
| 33 | U Essex | 69,12 | 5,90 | 2,86 | 117,00 | 9,24 | 4,48 |
| 34 | U Oslo | 37,60 | 6,72 | 2,78 | 68,17 | 12,90 | 6,00 |
| 35 | U Chicago | 305,89 | 30,35 | 2,75 | 394,87 | 33,60 | 3,53 |
| 36 | U Pompeu Fabra | 49,95 | 17,63 | 2,74 | 72,92 | 22,57 | 4,16 |
| 37 | GIIS, Geneva | 7,72 | 4,41 | 2,68 | 16,00 | 5,92 | 3,33 |
| 38 | WV U | 21,71 | 5,21 | 2,50 | 44,50 | 9,13 | 3,98 |
| 39 | U Exeter | 24,45 | 7,06 | 2,37 | 51,17 | 13,42 | 4,29 |
| 40 | U Copenhagen | 56,24 | 14,97 | 2,36 | 91,83 | 23,42 | 3,92 |
| 41 | U Torcuato Di Tella | 17,23 | 8,66 | 2,36 | 26,83 | 12,09 | 3,24 |
| 42 | Copenhagen Bus School | 12,80 | 4,15 | 2,30 | 25,67 | 6,87 | 3,70 |
| 43 | Brandeis U | 10,66 | 2,06 | 2,28 | 22,33 | 3,06 | 2,99 |
| 44 | U Houston | 35,91 | 7,39 | 2,23 | 66,50 | 12,66 | 4,41 |

| Rank | Institution | Quality-adjusted output | | | Raw number of articles | | |
|------|------------------------|-------------------------|-------|------|------------------------|-------|------|
| | | Econ | Macro | IntF | Econ | Macro | IntF |
| 45 | U St Andrews | 16,62 | 7,27 | 2,16 | 42,00 | 14,00 | 4,78 |
| 46 | U Oxford | 66,31 | 6,79 | 2,13 | 143,83 | 15,24 | 4,58 |
| 47 | Brown U | 88,97 | 11,51 | 2,10 | 128,53 | 16,11 | 4,28 |
| 48 | Simon Fraser U | 50,37 | 4,31 | 2,10 | 90,00 | 7,12 | 2,74 |
| 49 | London Business School | 20,96 | 4,25 | 2,05 | 44,83 | 10,79 | 3,11 |
| 50 | Tel-Aviv U | 7,26 | 5,29 | 2,04 | 11,83 | 8,71 | 3,12 |
| 51 | Chinese U Hong Kong | 53,03 | 11,13 | 1,99 | 109,08 | 21,82 | 4,97 |
| 52 | U Melbourne | 61,39 | 12,96 | 1,97 | 145,75 | 31,73 | 4,75 |
| 53 | National U Singapore | 38,56 | 6,03 | 1,95 | 83,75 | 13,87 | 3,49 |
| 54 | U TX | 85,37 | 14,30 | 1,92 | 128,92 | 16,52 | 2,82 |
| 55 | U IL | 122,96 | 7,25 | 1,88 | 212,08 | 13,51 | 3,81 |
| 56 | U Lausanne | 8,56 | 3,08 | 1,86 | 14,75 | 4,26 | 2,47 |
| 57 | U York | 71,11 | 9,12 | 1,80 | 126,92 | 17,86 | 4,08 |
| 58 | U Crete | 5,22 | 2,02 | 1,80 | 11,50 | 3,58 | 3,33 |
| 59 | Fordham U | 12,87 | 2,49 | 1,79 | 19,67 | 3,19 | 1,83 |
| 60 | Australian National U | 75,87 | 12,44 | 1,77 | 179,00 | 26,51 | 5,64 |
| 61 | Birkbeck College | 7,40 | 9,64 | 1,76 | 13,17 | 13,68 | 2,75 |
| 62 | Boston U | 78,09 | 12,66 | 1,76 | 104,20 | 15,37 | 2,29 |
| 63 | Uppsala U | 33,90 | 8,29 | 1,71 | 61,50 | 13,59 | 2,67 |
| 64 | U Miami | 16,43 | 3,21 | 1,66 | 32,50 | 6,13 | 3,00 |
| 65 | Tel Aviv U | 64,68 | 3,26 | 1,65 | 97,45 | 6,43 | 4,43 |
| 66 | Williams College | 17,77 | 2,33 | 1,62 | 32,17 | 3,50 | 2,17 |
| 67 | U Notre Dame | 38,50 | 6,90 | 1,62 | 74,92 | 11,94 | 3,22 |
| 68 | Cornell U | 172,49 | 30,95 | 1,58 | 285,35 | 38,95 | 2,76 |
| 69 | Catholic U Leuven | 34,89 | 3,47 | 1,56 | 72,53 | 8,58 | 3,47 |
| 70 | U Aarhus | 29,77 | 8,23 | 1,56 | 55,03 | 17,63 | 3,54 |
| 71 | U KY | 50,44 | 4,47 | 1,56 | 99,18 | 8,93 | 2,51 |
| 72 | U Amsterdam | 81,17 | 14,68 | 1,55 | 140,08 | 24,18 | 2,80 |
| 73 | U Navarra | 14,41 | 8,53 | 1,55 | 29,33 | 17,24 | 1,86 |
| 74 | MI State U | 119,07 | 7,92 | 1,54 | 202,75 | 11,94 | 2,25 |
| 75 | McMaster U | 37,63 | 7,93 | 1,54 | 70,50 | 13,82 | 2,68 |
| 76 | U Montreal | 62,98 | 11,32 | 1,48 | 90,50 | 17,17 | 2,82 |
| 77 | U Alberta | 41,62 | 5,14 | 1,45 | 81,08 | 11,69 | 2,50 |
| 78 | Lafayette College | 8,99 | 2,87 | 1,43 | 23,00 | 6,50 | 2,33 |
| 79 | Queen's U, Kingston | 19,73 | 9,27 | 1,43 | 34,83 | 13,08 | 2,28 |
| 80 | NIER, Stockholm | 2,06 | 1,33 | 1,41 | 4,50 | 3,06 | 3,18 |
| 81 | U Rome "La Sapienza" | 21,81 | 8,72 | 1,40 | 43,75 | 16,08 | 3,03 |
| 82 | Purdue U | 75,78 | 6,72 | 1,37 | 144,67 | 11,49 | 2,00 |
| 83 | European U Institute | 40,72 | 12,81 | 1,37 | 58,50 | 18,88 | 2,60 |
| 84 | U Cambridge | 51,95 | 12,09 | 1,33 | 130,00 | 26,50 | 3,93 |
| 85 | Stockholm U | 31,69 | 8,81 | 1,33 | 50,83 | 14,10 | 2,63 |
| 86 | Dartmouth College | 91,46 | 10,36 | 1,32 | 151,03 | 15,86 | 2,01 |
| 87 | Hong Kong U ST | 49,54 | 8,51 | 1,31 | 80,58 | 12,31 | 2,13 |
| 88 | U Windsor | 13,87 | 1,88 | 1,31 | 25,17 | 3,18 | 2,17 |
| 89 | Boston College | 61,11 | 11,53 | 1,31 | 99,08 | 19,82 | 2,74 |

| Rank | Institution | Quality-adjusted output | | | Raw number of articles | | |
|------|----------------------------|-------------------------|-------|------|------------------------|-------|------|
| | | Econ | Macro | IntF | Econ | Macro | IntF |
| 90 | U Limburg | 8,35 | 1,43 | 1,30 | 14,83 | 2,03 | 1,86 |
| 91 | U du Littoral Cote d'Opale | 1,27 | 1,27 | 1,27 | 2,00 | 2,00 | 2,00 |
| 92 | AZ State U | 62,89 | 8,33 | 1,26 | 93,67 | 13,39 | 2,64 |
| 93 | U Putra Malaysia | 4,10 | 1,65 | 1,26 | 7,33 | 2,53 | 1,78 |
| 94 | U Paris I | 35,25 | 7,01 | 1,25 | 62,37 | 9,42 | 2,18 |
| 95 | U Strathclyde | 8,21 | 3,43 | 1,25 | 20,33 | 7,33 | 2,08 |
| 96 | Erasmus U Rotterdam | 46,11 | 10,93 | 1,24 | 88,50 | 16,89 | 2,49 |
| 97 | Clemson U | 16,30 | 2,08 | 1,23 | 34,33 | 3,42 | 1,78 |
| 98 | U New South Wales | 24,83 | 6,49 | 1,22 | 59,00 | 15,43 | 3,50 |
| 99 | U Groningen | 24,65 | 4,23 | 1,22 | 61,92 | 13,12 | 2,72 |
| 100 | U Edinburgh | 20,63 | 3,27 | 1,21 | 43,00 | 6,15 | 1,56 |

Table II: The top non-educational institutions, 1996-2005

| Institution | Quality-adjusted output | | | Raw number of articles | | |
|----------------------------------|-------------------------|-------|-------|------------------------|--------|-------|
| | Econ | Macro | IntF | Econ | Macro | IntF |
| IMF | 174,08 | 81,67 | 32,65 | 345,53 | 153,37 | 59,00 |
| Fed. Res. System | 150,84 | 63,80 | 7,67 | 231,33 | 85,86 | 13,03 |
| Fed. Res. Bank NY | 51,31 | 19,01 | 5,85 | 81,83 | 29,60 | 8,45 |
| World Bank | 199,60 | 22,15 | 4,55 | 445,45 | 43,17 | 8,58 |
| Bank of England | 26,37 | 17,54 | 3,17 | 47,83 | 29,95 | 5,31 |
| Citigroup | 7,13 | 3,51 | 2,42 | 9,83 | 4,60 | 3,18 |
| European Central Bank | 22,14 | 12,60 | 2,03 | 46,63 | 24,91 | 4,18 |
| Federal Reserve Bank of St Louis | 26,46 | 14,36 | 1,88 | 50,83 | 24,10 | 3,25 |
| Inter-American Devel. Bank | 17,04 | 3,68 | 1,83 | 35,67 | 6,59 | 2,74 |
| Fed Reserve Bank of Minneapolis | 22,47 | 11,76 | 1,71 | 23,92 | 12,52 | 2,22 |
| Central Bank of Chile | 4,26 | 2,52 | 1,59 | 6,83 | 3,64 | 2,10 |
| Fed. Res. Bank of Richmond | 17,45 | 9,78 | 1,47 | 21,67 | 11,38 | 1,75 |

Table III: Rankings Correlations Among Top 200 Economics Universities or Colleges

| | Pearson | | | Spearman | | |
|--------|---------|--------|-------|----------|--------|-------|
| | IntFin | Macro | Econ | IntFin | Macro | Econ |
| IntFin | 1.000 | | | 1.000 | | |
| Macro | 0.838* | 1.000 | | 0.858* | 1.000 | |
| Econ | 0.573* | 0.807* | 1.000 | 0.571* | 0.655* | 1.000 |

Notes: '*' denotes significantly different from zero at the 0.1% level

Table IV: The Top 100 Authors in International Finance, 1996-2005

| Rank | Author | Quality-adjusted output | | | Raw number of articles | | |
|------|-----------------------------|-------------------------|-------|--------|------------------------|-------|--------|
| | | Econ | Macro | IntFin | Econ | Macro | IntFin |
| 1 | Rogoff, Kenneth S | 6,72 | 5,54 | 5,04 | 8,83 | 7,56 | 6,86 |
| 2 | Obstfeld, Maurice | 8,06 | 7,02 | 4,53 | 11,17 | 9,79 | 7,17 |
| 3 | Lane, Philip R | 8,65 | 6,73 | 4,12 | 15,00 | 11,54 | 7,23 |
| 4 | Eichengreen, Barry | 6,86 | 4,25 | 4,00 | 13,17 | 7,54 | 6,38 |
| 5 | Taylor, Mark P | 9,76 | 5,89 | 3,98 | 18,50 | 10,46 | 6,08 |
| 6 | Engel, Charles | 5,82 | 5,00 | 3,87 | 7,67 | 6,58 | 5,22 |
| 7 | Edwards, Sebastian | 8,65 | 5,13 | 3,68 | 14,83 | 8,50 | 6,17 |
| 8 | Devereux, Michael B | 7,51 | 5,72 | 3,61 | 13,17 | 10,29 | 6,76 |
| 9 | Rose, Andrew K | 9,37 | 4,07 | 3,41 | 15,67 | 6,84 | 5,78 |
| 10 | Jeanne, Olivier | 7,06 | 5,35 | 3,31 | 11,00 | 8,33 | 5,42 |
| 11 | Velasco, Andres | 6,81 | 5,39 | 3,12 | 9,50 | 7,68 | 4,55 |
| 12 | MacDonald, Ronald | 4,57 | 3,67 | 3,01 | 6,83 | 5,38 | 4,21 |
| 13 | Sarno, Lucio | 5,74 | 4,37 | 2,92 | 13,17 | 9,60 | 5,99 |
| 14 | Wu, Jyh Lin | 3,31 | 3,20 | 2,45 | 8,17 | 7,42 | 4,42 |
| 15 | Frankel, Jeffrey A | 5,21 | 3,41 | 2,42 | 8,33 | 5,17 | 4,08 |
| 16 | Fischer, Stanley | 6,84 | 3,51 | 2,42 | 9,50 | 4,60 | 3,18 |
| 17 | Reinhart, Carmen M | 6,62 | 2,84 | 2,37 | 8,33 | 3,47 | 2,88 |
| 18 | Kehoe, Patrick J | 8,11 | 5,53 | 2,34 | 7,83 | 5,44 | 2,81 |
| 19 | Bahmani Oskooee, Mohsen | 4,60 | 3,08 | 2,14 | 12,50 | 8,20 | 5,16 |
| 20 | Chang, Roberto | 5,46 | 3,75 | 2,03 | 6,67 | 4,62 | 2,42 |
| 21 | Mussa, Michael | 2,00 | 2,00 | 2,00 | 2,00 | 2,00 | 2,00 |
| 22 | Taylor, Alan M | 6,96 | 3,10 | 1,93 | 10,67 | 4,52 | 2,53 |
| 23 | Bacchetta, Philippe | 3,40 | 2,68 | 1,86 | 4,83 | 3,71 | 2,47 |
| 24 | Mundell, Robert A | 3,35 | 2,85 | 1,85 | 4,00 | 3,50 | 2,50 |
| 25 | Aizenman, Joshua | 6,96 | 2,50 | 1,84 | 13,83 | 4,89 | 3,19 |
| 26 | Krueger, Anne O | 6,78 | 2,07 | 1,83 | 12,50 | 3,17 | 2,58 |
| 27 | Bleaney, Michael F | 5,70 | 3,53 | 1,82 | 16,33 | 10,28 | 5,99 |
| 28 | van Wincoop, Eric | 7,14 | 3,89 | 1,79 | 9,33 | 4,92 | 1,75 |
| 29 | Corsetti, Giancarlo | 4,55 | 3,52 | 1,65 | 6,17 | 4,86 | 2,64 |
| 30 | Pedroni, Peter | 3,48 | 1,62 | 1,62 | 5,00 | 2,17 | 2,17 |
| 31 | Mendoza, Enrique G | 3,80 | 2,68 | 1,61 | 4,67 | 3,39 | 1,68 |
| 32 | Wyplosz, Charles | 1,58 | 1,58 | 1,58 | 1,83 | 1,83 | 1,83 |
| 33 | Milesi Ferretti, Gian Maria | 3,50 | 2,78 | 1,57 | 5,17 | 4,17 | 2,50 |
| 34 | Perri, Fabrizio | 3,14 | 2,62 | 1,56 | 3,00 | 2,48 | 1,48 |
| 35 | Wu, Yangru | 3,73 | 2,59 | 1,55 | 6,17 | 3,61 | 2,19 |
| 36 | Campa, Jose M | 3,82 | 1,79 | 1,55 | 4,83 | 2,16 | 1,86 |
| 37 | Lyons, Richard K | 2,39 | 1,84 | 1,54 | 3,17 | 2,06 | 1,81 |
| 38 | Masson, Paul R | 2,30 | 2,22 | 1,53 | 4,17 | 4,00 | 3,00 |
| 39 | Uribe, Martin | 5,49 | 4,94 | 1,53 | 7,67 | 6,42 | 2,67 |
| 40 | Calvo, Guillermo A | 3,87 | 2,44 | 1,51 | 5,50 | 3,20 | 1,78 |
| 41 | Papell, David H | 4,01 | 2,71 | 1,50 | 6,83 | 4,88 | 3,08 |
| 42 | Flood, Robert | 2,98 | 1,72 | 1,48 | 5,17 | 2,75 | 2,25 |
| 43 | Duarte, Margarida | 1,70 | 1,59 | 1,47 | 2,00 | 1,88 | 1,75 |
| 44 | Bergin, Paul R | 3,03 | 3,03 | 1,47 | 4,50 | 4,50 | 2,33 |
| 45 | Alexius, Annika | 2,71 | 2,35 | 1,45 | 4,00 | 3,50 | 2,25 |
| 46 | Stockman, Alan C | 3,07 | 2,31 | 1,42 | 4,33 | 3,54 | 2,42 |
| 47 | McKinnon, Ronald I | 1,92 | 1,43 | 1,40 | 4,00 | 2,43 | 2,03 |
| 48 | Dornbusch, Rudi | 2,36 | 1,77 | 1,37 | 4,00 | 2,85 | 2,45 |
| 49 | Razin, Assaf | 4,91 | 2,55 | 1,36 | 6,83 | 3,63 | 2,03 |

| Rank | Author | Quality-adjusted output | | | Raw number of articles | | |
|------|-----------------------|-------------------------|-------|--------|------------------------|-------|--------|
| | | Econ | Macro | IntFin | Econ | Macro | IntFin |
| 50 | Kim, Yoonbai | 2,00 | 1,60 | 1,36 | 3,50 | 2,52 | 2,18 |
| 51 | Kenen, Peter B | 1,35 | 1,35 | 1,35 | 2,00 | 2,00 | 2,00 |
| 52 | Alesina, Alberto | 12,95 | 4,33 | 1,35 | 14,33 | 4,61 | 1,25 |
| 53 | Kim, Soyoung | 4,63 | 4,23 | 1,34 | 8,00 | 6,92 | 2,33 |
| 54 | Gencay, Ramazan | 4,15 | 1,65 | 1,31 | 6,50 | 2,83 | 2,17 |
| 55 | Perotti, Roberto | 8,73 | 5,97 | 1,30 | 9,83 | 6,75 | 1,50 |
| 56 | Evans, Martin D D | 3,07 | 2,03 | 1,29 | 3,50 | 2,17 | 1,25 |
| 57 | Gil Alana, Luis A | 6,82 | 5,84 | 1,27 | 16,00 | 13,17 | 2,00 |
| 58 | Pansard, Fabrice | 1,27 | 1,27 | 1,27 | 2,00 | 2,00 | 2,00 |
| 59 | Jensen, Henrik | 6,44 | 5,96 | 1,27 | 9,00 | 8,30 | 2,11 |
| 60 | Carrasco, Marine | 3,46 | 1,23 | 1,23 | 3,83 | 1,33 | 1,33 |
| 61 | Shin, Hyun Song | 5,81 | 1,26 | 1,21 | 9,42 | 2,13 | 1,71 |
| 62 | Goldberg, Linda S | 2,81 | 1,30 | 1,20 | 3,33 | 1,52 | 1,39 |
| 63 | Rogers, John H | 3,53 | 2,20 | 1,19 | 5,33 | 3,58 | 2,25 |
| 64 | Sutherland, Alan | 2,49 | 2,41 | 1,17 | 5,50 | 5,33 | 2,70 |
| 65 | Mody, Ashoka | 4,39 | 1,91 | 1,16 | 8,17 | 2,80 | 1,40 |
| 66 | Mizen, Paul | 3,47 | 2,85 | 1,14 | 8,17 | 6,06 | 2,94 |
| 67 | Mark, Nelson C | 2,81 | 1,73 | 1,14 | 3,83 | 2,39 | 1,64 |
| 68 | West, Kenneth D | 8,61 | 1,87 | 1,13 | 11,00 | 2,58 | 1,00 |
| 69 | Wright, Jonathan H | 11,30 | 2,30 | 1,12 | 15,67 | 3,02 | 1,58 |
| 70 | Betts, Caroline M | 1,49 | 1,30 | 1,12 | 2,33 | 2,06 | 1,78 |
| 71 | Li, Kai | 3,99 | 1,10 | 1,10 | 6,50 | 1,50 | 1,50 |
| 72 | Chan, Kenneth S | 1,12 | 1,10 | 1,10 | 1,83 | 1,61 | 1,61 |
| 73 | Cheung, Yin Wong | 5,30 | 1,94 | 1,09 | 8,67 | 4,34 | 2,03 |
| 74 | Pierdzioch, Christian | 1,63 | 1,54 | 1,09 | 5,00 | 4,75 | 2,92 |
| 75 | Burnside, Craig | 5,81 | 2,66 | 1,09 | 6,67 | 2,98 | 1,28 |
| 76 | Dixon, Huw D | 6,87 | 3,58 | 1,09 | 11,67 | 5,51 | 1,58 |
| 77 | Chen, Show Lin | 1,90 | 1,76 | 1,07 | 4,17 | 3,92 | 1,92 |
| 78 | Sibert, Anne C | 3,09 | 3,00 | 1,07 | 4,50 | 4,33 | 1,67 |
| 79 | Barro, Robert J | 6,61 | 3,55 | 1,07 | 7,50 | 3,83 | 1,00 |
| 80 | Dixit, Avinash | 13,14 | 3,25 | 1,06 | 16,00 | 4,46 | 1,58 |
| 81 | Choi, In | 6,18 | 1,31 | 1,05 | 7,67 | 1,75 | 1,50 |
| 82 | Osler, Carol L | 1,24 | 1,24 | 1,05 | 2,00 | 2,00 | 1,75 |
| 83 | Canova, Fabio | 6,72 | 5,34 | 1,05 | 9,50 | 7,63 | 1,68 |
| 84 | Casella, Alessandra | 5,76 | 1,21 | 1,04 | 8,00 | 1,75 | 1,50 |
| 85 | Rebelo, Sergio | 3,74 | 2,73 | 1,03 | 4,33 | 3,13 | 0,94 |
| 86 | Lahiri, Sajal | 5,76 | 1,37 | 1,03 | 10,50 | 2,35 | 1,89 |
| 87 | Sachs, Jeffrey D | 5,01 | 1,80 | 1,03 | 7,17 | 2,39 | 1,22 |
| 88 | Levy Yeyati, Eduardo | 2,03 | 1,49 | 1,03 | 3,00 | 2,00 | 1,37 |
| 89 | Ventura, Jaume | 2,98 | 2,45 | 1,03 | 4,00 | 3,38 | 2,00 |
| 90 | Goldfajn, Ilan | 1,56 | 1,13 | 1,02 | 2,50 | 1,83 | 1,58 |
| 91 | Arifovic, Jasmina | 2,17 | 1,43 | 1,02 | 3,00 | 1,83 | 1,17 |
| 92 | Peel, David A | 5,85 | 3,15 | 1,02 | 11,83 | 6,60 | 1,71 |
| 93 | Rey, Helene | 2,55 | 1,02 | 1,02 | 3,08 | 1,00 | 1,00 |
| 94 | Kose, M Ayhan | 2,68 | 1,99 | 1,01 | 3,67 | 2,65 | 1,33 |
| 95 | Pill, Huw | 1,44 | 1,00 | 1,00 | 2,50 | 1,58 | 1,58 |
| 96 | Salvatore, Dominick | 1,06 | 1,02 | 1,00 | 2,00 | 1,33 | 1,00 |
| 97 | Portes, Richard | 1,56 | 1,00 | 1,00 | 1,83 | 1,00 | 1,00 |
| 98 | Goodhart, Charles | 2,83 | 2,21 | 1,00 | 7,50 | 5,31 | 2,00 |
| 99 | Bayoumi, Tamim | 2,49 | 2,06 | 0,99 | 5,17 | 4,08 | 2,08 |
| 100 | Miller, Victoria | 3,03 | 2,17 | 0,97 | 5,00 | 3,50 | 1,25 |

Table V: Rankings Correlations Among Top 200 authors

| | Pearson | | | Spearman | | |
|--------|---------|--------|-------|----------|--------|-------|
| | IntFin | Macro | Econ | IntFin | Macro | Econ |
| IntFin | 1.000 | | | 1.000 | | |
| Macro | 0.672* | 1.000 | | 0.780* | 1.000 | |
| Econ | 0.412* | 0.611* | 1.000 | 0.411* | 0.555* | 1.000 |

Notes: '*' denotes significantly different from zero at the 0.1% level

Table VI: The Top 30 Authors in Economics, 1996-2005

| Rank | Author | Quality-adjusted output | | | Raw number of articles | | |
|------|-----------------------|-------------------------|------|------|------------------------|-------|------|
| | | PT | PM | PIF | Econ | Macro | IntF |
| 1 | Phillips,-Peter-C-B | 27,81 | 1,29 | 0,29 | 32,33 | 1,82 | 0,44 |
| 2 | Acemoglu,-Daron | 23,26 | 2,06 | 0,00 | 27,08 | 2,30 | 0,00 |
| 3 | Andrews,-Donald-W-K | 19,99 | 0,09 | 0,00 | 20,83 | 0,10 | 0,00 |
| 4 | Hahn,-Jinyong | 19,28 | 0,16 | 0,00 | 23,33 | 0,17 | 0,00 |
| 5 | Tirole,-Jean | 19,26 | 2,36 | 0,81 | 22,33 | 2,21 | 0,79 |
| 6 | Heckman,-James-J | 18,38 | 0,00 | 0,00 | 20,50 | 0,00 | 0,00 |
| 7 | Gruber,-Jonathan | 18,03 | 1,17 | 0,00 | 23,67 | 1,65 | 0,00 |
| 8 | List,-John-A | 17,10 | 0,30 | 0,00 | 25,28 | 0,25 | 0,00 |
| 9 | Levitt,-Steven-D | 16,01 | 0,00 | 0,00 | 19,83 | 0,00 | 0,00 |
| 10 | Ravallion,-Martin | 15,80 | 1,06 | 0,21 | 26,92 | 1,73 | 0,33 |
| 11 | Glaeser,-Edward-L | 15,73 | 0,83 | 0,00 | 20,67 | 1,17 | 0,00 |
| 12 | Laffont,-Jean-Jacques | 15,45 | 0,45 | 0,11 | 23,17 | 0,79 | 0,25 |
| 13 | Wooldridge,-Jeffrey-M | 15,39 | 0,00 | 0,00 | 20,00 | 0,00 | 0,00 |
| 14 | Hansen,-Bruce-E | 15,12 | 0,80 | 0,00 | 18,83 | 0,81 | 0,00 |
| 15 | Manski,-Charles-F | 15,12 | 0,00 | 0,00 | 18,33 | 0,00 | 0,00 |
| 16 | Baltagi,-Badi-H | 14,15 | 0,59 | 0,11 | 17,50 | 0,74 | 0,14 |
| 17 | Samuelson,-Larry | 14,14 | 0,00 | 0,00 | 15,17 | 0,00 | 0,00 |
| 18 | Granger,-Clive-W-J | 13,91 | 0,97 | 0,00 | 18,67 | 1,25 | 0,00 |
| 19 | Taylor,-A-M-Robert | 13,88 | 1,12 | 0,23 | 17,00 | 1,50 | 0,25 |
| 20 | Diebold,-Francis-X | 13,60 | 2,23 | 0,00 | 16,42 | 2,50 | 0,00 |
| 21 | Lee,-Lung-fei | 13,27 | 0,00 | 0,00 | 16,33 | 0,00 | 0,00 |
| 22 | Dixit,-Avinash | 13,14 | 3,25 | 1,06 | 16,00 | 4,46 | 1,58 |
| 23 | Shleifer,-Andrei | 13,06 | 0,61 | 0,50 | 15,20 | 0,60 | 0,50 |
| 24 | Alesina,-Alberto | 12,95 | 4,33 | 1,35 | 14,33 | 4,61 | 1,25 |
| 25 | Saikkonen,-Pentti | 12,91 | 1,18 | 0,44 | 14,83 | 1,33 | 0,50 |
| 26 | Jackson,-Matthew-O | 12,86 | 0,00 | 0,00 | 13,42 | 0,00 | 0,00 |
| 27 | Pesaran,-M-Hashem | 12,81 | 3,14 | 0,44 | 15,83 | 3,70 | 0,43 |
| 28 | Lewbel,-Arthur | 12,62 | 0,46 | 0,00 | 15,17 | 0,50 | 0,00 |
| 29 | Ghysels,-Eric | 12,51 | 1,30 | 0,16 | 14,50 | 2,00 | 0,17 |
| 30 | Poterba,-James-M | 12,36 | 2,28 | 0,00 | 16,58 | 2,64 | 0,00 |