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New Approaches to Ranking Economics Journals

Yolanda K. Kodrzycki*

Pingkang Yu[†]

*Federal Reserve Bank of Boston, yolanda.kodrzycki@bos.frb.org

[†]George Washington University, pingkang_yu@yahoo.com

New Approaches to Ranking Economics Journals*

Yolanda K. Kodrzycki and Pingkang Yu

Abstract

We develop a flexible, citations- and reference-intensity-adjusted ranking technique that allows a specified set of journals to be evaluated using a range of alternative criteria. We also distinguish between the influence of a journal and that of a journal article, with the latter concept arguably being more relevant for measuring research productivity. The list of top economics journals can (but does not necessarily) change noticeably when one examines citations in the social science and policy literatures, and when one measures citations on a per-article basis. The changes in rankings are due to the broad interest in applied microeconomics and economic development, to differences in citation norms and in the relative importance assigned to theoretical and empirical contributions, and to the lack of a systematic effect of journal size on influence per article. We also find that economics is comparatively self-contained but nevertheless draws knowledge from a range of other disciplines.

KEYWORDS: economics journals, social sciences journals, policy journals, finance journals, rankings, citations, research productivity, interdisciplinary communications

*Kodrzycki is senior economist and policy advisor at the Federal Reserve Bank of Boston, 600 Atlantic Avenue, Boston, MA 02210. Yu is an economics Ph.D. student at George Washington University. Much of the research for this paper was conducted while Yu was with the Federal Reserve Bank of Boston. The views expressed in this paper are those of the authors and do not necessarily represent the views of the Federal Reserve Bank of Boston or the Federal Reserve System. We are grateful for the excellent research assistance provided by Joyce Hannan, Erin Lindsay, and, most extensively, James Dang and Nelson Gerew. We acknowledge receiving valuable comments on previous drafts from two anonymous referees, Basant Kumar Kapur, Glenn Rudebusch, and our colleagues at the Federal Reserve Bank of Boston, particularly Michelle Barnes, Chris Foote, Jeff Fuhrer, Fabià Gumbau-Brisa, Jane Katz, Borja Larrain, Paul Willen, and Bo Zhao. This version represents a substantive revision to our 2005 Federal Reserve Bank of Boston working paper.

1. Introduction

For at least the past two decades, economists have devoted serious effort to ranking economics journals based on their intellectual influence. Liebowitz and Palmer (1984) made seminal contributions by analyzing a large number of economics journals, controlling for differences in their size and age, and adjusting citation counts by a measure of the influence of the citing journals. Key studies following in this vein include Laband and Piette (1994) and Kalaitzidakis et al. (2003). In addition to providing insights on the relative standings of journals in the economics profession, such evaluations have become instrumental in evaluating the research productivity of academic departments and individual scholars.

Despite their various innovations, studies have continued to assess economics journals according to how frequently they cite one another, in line with the framework proposed by Liebowitz and Palmer (p. 82):

[E]conomists, being a rather narrow-minded and self-centered group, are probably more concerned with a journal's impact on the economics profession [than on other disciplines]. And even within the discipline, a journal's impact on highly influential journals is probably of greater value than its impact on less influential journals.

While this assumption may produce the appropriate methodology for some purposes, it is not suitable for analyzing the broader influence of economics journals. Nor does it produce rankings that address the varying needs of different researchers within economics.

The current study extends the literature on journal rankings by developing a flexible, citations-adjusted and reference-intensity-adjusted ranking technique that allows a specified set of journals to be evaluated using a wide range of alternative criteria. As a result, the set of *evaluated* journals is not constrained to be identical to the set of *evaluating* journals. While the methodology is quite general, specific applications developed in the study rank economics journals according to their influence on the social science literature as well as on policy, as measured by citations in economics-oriented public policy journals.

This research is motivated in part by intellectual curiosity: Economists may be interested in knowing whether the journals they hold in highest esteem are the same as or different from the ones that other social scientists use in their evaluation of economic research. In addition, the research is intended to guide publication decisions and evaluations of journals. For example, scholars may seek a more systematic understanding of the channels through which economic research is disseminated to other fields, a topic explored in Pieters and

Baumgartner (2002). We believe this need to be particularly acute with respect to contributions in applied microeconomics. In contrast to monetary policy and international finance—subjects that are almost exclusively the province of economists—topics such as housing, health care, and regulation are likely to be of interest to a diverse range of scholars and policymakers outside the economics field. Similarly, economists pursuing cross-disciplinary research currently lack systematic evidence on where to submit their papers to maximize their influence. Existing studies are unable to provide guidance on whether such research is likely to be more influential if targeted to an economics periodical, or to a publication that attracts a more diverse set of readers.

Much of the literature on economics journals either focuses on a small set of core journals or relies heavily on the definitions of economics contained in *Journal Citation Reports (JCR)* and its predecessor databases to examine a greater number of journals. For purposes of this study, we are interested in identifying as comprehensive a list as possible of journals whose articles extensively use concepts and methodologies that are central to economics, so as to draw appropriate boundaries between economics and other fields. We therefore inspect the content of journals in order to determine their field. This approach is inherently subjective, but it offers advantages relative to the existing literature. By including *Industrial and Labor Relations Review*, *Journal of Finance*, and *Review of Financial Studies*, for example, as well as other journals with significant economics content, we both: 1) compare the influence of these journals to the influence of the journals encompassed by the *JCR* definition of economics, and 2) assign a positive weight to any citations in these journals to articles appearing in the economics literature. Other researchers have lamented the exclusion of selected journals from the *JCR* list but have not attempted to measure their influence or to develop an alternative list of economics journals. Another advantage of using a content-driven definition of economics is that this approach enables us to assess how various characteristics of journals, such as their relative emphasis on theory versus applications, tend systematically to influence rankings. Finally, a content-based approach is essential in examining the influence of economics on the field of policy, which, to our knowledge, has not been defined comprehensively by any other study examining journals.

The next section of the paper reviews previous research on the influence of economics journals on their own and other fields. Section 3 details the methodologies for ranking economics journals according to citations in other economics journals, in economics and all other social sciences journals, and in any subset of social sciences journals. Furthermore, we adopt the procedure of Palacios-Huerta and Volij (2004), whereby journal rankings are corrected for the number of references provided by citing journals. In addition to focusing on different bodies of citations, we also draw a critical distinction between the

influence of a journal and the influence of a journal article. While the influence of journal editors may be judged by the total numbers of references to their journal as a whole, the more relevant statistic for potential contributors is based on the number of times an average article is cited. We believe that per-article measures (as in Palacios-Huerta and Volij) are more meaningful than the per-page or per-character measures used in most other studies. Articles are the natural units for measuring research output, whereas their lengths are heavily influenced by journal editorial policies. Section 4 describes in conceptual terms our content-driven definitions of economics and policy analysis, and then indicates the process by which these definitions were applied in the context of the *JCR* database.

Section 5 presents results and compares these findings to those of previous studies, including providing further discussion of whether to measure influence according to the overall number of references a journal receives (as in Liebowitz-Palmer), as opposed to its share of references per article in the journals used for evaluation (as in Palacios-Huerta and Volij). In the context of large and diverse sets of citing and cited journals, we demonstrate that ignoring reference intensity can skew results dramatically more than in the sample of economics journals chosen by Palacios-Huerta and Volij to illustrate their methodology. This portion of the paper also provides a regression-based assessment of whether journal content, field, and size have systematic effects on journal rankings. Section 6 concludes by summarizing the insights gleaned from developing these various new approaches to identifying and ranking economics journals.

2. Previous Literature on Economics and Its Relationship to Other Social Sciences

Existing studies of economics journals have used convenient but rather restrictive definitions of the field. This focus may have resulted in incorrect rankings of journals for certain purposes, as well as some misleading conclusions about the connections between economics and the other social sciences. In addition, by using total numbers of citations as the measure of citation intensity, most existing ranking studies provide a methodology that may be ill-adapted to cases in which citing journals represent fields with heterogeneous citation norms.

2.1 Effects of Definitions on Journal Rankings

As a conceptual matter, the field of economics could be considered quite large. The EconLit database maintained by the American Economic Association includes roughly 1,000 journals. Operationally, however, ranking studies restrict themselves to the publications encompassed by *Journal Citation Reports* because

the *Reports* are the only extensive source of citation information. *JCR* encompasses over 1,700 social sciences publications. Its economics category, which contains almost all of the publications used in previous ranking studies, has about 160 journals.¹

It is well known within the literature that focusing on economics as defined in *JCR* results in the omission of certain journals that academic economists hold in high regard but that are scattered among other *JCR* social science categories.² *JCR* economics excludes some relatively prominent publication outlets in the areas of finance, labor, environmental studies, public economics, health care, political science, demography, and law, as well as some publications that focus on regions outside the United States. Journals outside the *JCR* economics category figure prominently in the publications records of leading academic economists.³

The standard approach of restricting the list of citing journals to be the same as the list of cited journals also results in inherent biases in creating rankings. Not surprisingly, it raises the rankings for some economics journals that are likely to be read almost exclusively by economists.⁴ It also misses the influence that economists might have on other fields of scholarship.

¹ Liebowitz and Palmer initially considered all the journals listed in the *Journal of Economic Literature*. However, their rankings focused on 108 journals that were in *JEL* and also contained in the *Social Science Citation Index*, the former name for the database containing journal citations. (This title is now used for the database of references to particular articles within journals.) The Liebowitz and Palmer selection criteria are unclear. For 1990, Laband and Piette used essentially the same journals as in Liebowitz and Palmer, adjusted for entries and exits. They noted that these journals are drawn almost entirely from the economics category of the *Social Sciences Citation Index*, while concluding that that category also contains “23 noneconomics journals.” Kalaitzidakis et al. ranked the 159 journals contained in the economics section of *JCR*, with a few minor changes.

² See, for example, Davis (1998) and García-Castrillo et al. (1992).

³ We examined the publications outlets for two leading university economics departments in the United States over the most recent five-year period. For each department, our Internet searches indicated that the faculty had published in approximately 130 different journals. In each case, about 50 of these journals are found in the economics part of *JCR*, about 20 to 30 are found in other social science categories, and the remainder do not appear to be encompassed by the social sciences segment of *JCR*.

⁴ For example, a comparison of columns 2 and 3 of Table 1 in Liebowitz and Palmer indicates that, compared with other economics journals, *Journal of Monetary Economics* and *International Economic Review* are cited fairly heavily by social sciences journals, but they rise to the top ten in citations by other economics journals. By contrast, several journals in the fields of law, agriculture, and demography—which *SSCI* includes in its economics category but which probably have a significant readership among scholars in other disciplines—fall out of the highest ranks as

2.2 Perceptions of Economics Journals by Other Fields and Vice Versa

A related literature pertaining to linkages between economics and other fields uses cross-citations both to define fields and to determine the strength and directions of information flow between fields. Although some studies compare numbers of citations across journals, none, to our knowledge, implements iterative, impact-adjusted rankings of economics journals.

Leydesdorff (2004) considers the pattern of cross-citations among all social sciences journals in *JCR*, and he uses this pattern to define distinct subject areas. He finds that linkages among social sciences journals are looser than among natural sciences journals. Social science scholars differ both in the issues they study and in the methods they use (for example, quantitative versus qualitative analysis), thereby producing not only less dense patterns of cross-citations within fields but also greater uncertainty in drawing boundaries between fields. Leydesdorff demonstrates that finance is a separate field under one method of analyzing citations, but constitutes a branch of economics under another method.

Pieters and Baumgartner consider citation patterns within economics and between economics and other disciplines. Their sample consists of 42 economics journals with high impact,⁵ five prominent journals from each of nine social science and business disciplines (anthropology, political science, psychology, sociology, accounting, finance, management, marketing, and management information systems/operations research), and five journals “whose aim is to bridge economics with the sister disciplines.”⁶ They find that these other disciplines draw a significant share of their interdisciplinary knowledge from economics, but that economics builds only slightly on the other disciplines, apart from finance. Within economics, Pieters and Baumgartner identify seven separate

a result of restricting citations to economics journals. Unfortunately, this evidence in Liebowitz and Palmer cannot be interpreted as simply reflecting broad versus narrow citations because column 3 also introduces citations-based weights for journals within economics.

⁵ They base their choices on the “impact factor” as calculated by the *SSCI*, which refers to the number of citations within two years of publication. Although this impact is based on citations in all of the social sciences, Pieters and Baumgartner restrict their list to the journals in the *SSCI* economics category, so essentially they consider a subset of the journals evaluated by Kalaitzidakis et al.

⁶ Pieters and Baumgartner select the following journals to represent interdisciplinary studies: *American Journal of Economics and Sociology*, *Economics and Philosophy*, *Journal of Economic Behavior and Organization*, *Journal of Economic Psychology*, and *Journal of Policy Analysis and Management*.

clusters and find that all journal clusters make at least one-half of their citations to the general interest group, while the general interest group draws heavily from the theory and method cluster but not from the other, more applied clusters. Finally, based on their sample, the authors conclude that communication between economics and other disciplines occurs via the central, most influential journals within economics rather than through more applied or explicitly interdisciplinary journals.

MacRae and Feller (1998) and Reuter and Smith-Ready (2002) perform exercises similar to those in Pieters and Baumgartner, but focus on ties between economics and policy, and consider even fewer journals. They conclude that policy-related research draws on the economics discipline, but that flows in the other direction are comparatively rare.

2.3 Different Measures of the Volume and Intensity of Citations

In the writings on the interconnectedness of different disciplines, authors confront literatures of widely varying sizes. For example, Pieters and Baumgartner find that the top five psychology journals offered roughly twice the number of citations as the top five finance journals, which in turn offered three times as many citations as the top five political science journals. For this reason, studies of interdisciplinary linkages tend to scale the number of citations received by each group of journals by the total number of citations offered by journals in the citing group.

In the Liebowitz and Palmer ranking methodology, on the other hand, a journal's influence increases in proportion to the total number of citations it receives during a specified period of time. Thus, a citing journal will have a greater effect on the rankings if it provides a larger number of citations. Palacios-Huerta and Volij propose an alternative ranking methodology that is invariant to reference intensity. Under the invariant approach, citing journals have greater influence on the rankings if they publish a greater number of articles, but not if the average number of references per article is higher. Thus, two journals containing the same number of articles have an equal effect on the rankings (before weighting their "votes" iteratively by the number of times their articles are cited).

Our view is that the invariant method provides a useful normalization in the case of citation practices that vary across literatures or across journal types within a body of literature. For this reason, corrections for reference intensity appear appropriate for the applications in this paper. On the other hand, the Liebowitz-Palmer approach allows journals with strong ties to a given literature (as measured by the number of references to that literature) to have greater influence in determining rankings than journals with weak ties. This attribute also

has some intuitive appeal. However, we argue below that, as an empirical matter, the Liebowitz-Palmer approach produces some anomalous rankings when journals within particular clusters cite each other very frequently, as is the case for the finance-oriented portion of the economics literature.

3. Alternative Approaches to Ranking Journals

As the previous section indicates, the literature on journal rankings has used the *JCR* definition of economics to determine both the list of journals to be ranked and the set of citations used for ranking. Studies examining how different fields influence one another have either selected key journals to represent economics or drawn from the *JCR* list, but they have not ranked journals. Our study uses new approaches to construct impact- and reference-intensity-adjusted rankings (presented in this section) and to classify journals (Section 4).

Before describing these approaches, it is worth noting that the impact-adjusted ranking method inherently requires publications to be both a citing source and a cited source to enter the database of citations. As pointed out by other authors, articles in economics journals are referenced in books, reports, newspapers, and various other communications channels.⁷ Although this study uses what we believe to be a more appropriate definition of economics journals and compares the rankings for these journals using alternative bodies of citing literature, it follows the existing literature in excluding citations outside of scholarly journals, because we continue to lack measures of how often these publications cite scholarly journals. Furthermore, like other authors, we do not include citations for scholarly journals that—for whatever reason—happen to be omitted from the *JCR* social sciences database (such as *Econometric Reviews*, *Empirical Economics*, and *Journal of the American Statistical Association*).⁸

3.1 Evaluation Criteria

As in the literature starting with Liebowitz and Palmer and continuing through Kalaitzidakis et al., the approach used in this paper weights citations according to the influence of the citing journal and computes this influence by applying an

⁷ Several studies have explored alternatives to journal citations. For example, Liner (2002) examined the frequency with which economics journals are cited in economics textbooks. Dusansky and Vernon (1998) used surveys to rank the research productivity of economists or economics departments, and Oltheten et al. (2005) provide survey evidence on the quality of finance journals.

⁸ We did not have access to the *JCR* sciences database. For a description of the social science and science databases, see scientific.thomson.com/products/jcr.

iterative process. In the end, journals that are themselves cited heavily, or that are cited in *other* journals that are cited heavily, rank higher than journals that draw fewer citations or that tend to be cited in less influential journals. Following the thrust of the literature, we exclude self-citations in computing rankings and we control for journal age by selecting an eight-year period for citations, so as not to favor journals that have a long publications history.⁹

Our main innovation comes in comparing rankings that result from considering different sets of citing journals. Evaluating economics journals according to their influence within economics produces the within-discipline rankings. Essentially, this ranking process replicates the exercises in the Liebowitz and Palmer, Laband and Piette, and Kalaitzidakis et al. papers, using more recent data and our own refined selection of economics journals. The within-discipline rankings largely serve as a base case to which our other approaches are compared, as they can be expected to yield a list of highly influential journals that is similar to what previous studies have found. We concentrate on the results with the reference-intensity normalizations of Palacios-Huerta and Volij, but show unadjusted key results in the Appendix in order to facilitate comparisons with the prior literature.

In a broader context, we rank economics journals according to their adjusted impact on the social sciences. The iterative, impact-adjustment procedures are employed using all of the social science periodicals, each of which is ranked by its overall adjusted impact among the universe of social science periodicals in the *JCR* database. Some of these social science periodicals contain economics-related content, and therefore are more likely to cite economics journals than periodicals in largely unrelated fields. While some readers of this paper might argue for the inclusion of additional journals in the *JCR* social sciences database in our rankings of economics journals, we note that the references provided by these journals to economics journals *are* counted in producing our overall social sciences rankings—even though the journals themselves do not appear in our ranking results.

Our final method ranks economics journals according to their influence on a targeted subset of social sciences journals, in this case, on economics-oriented policy journals. This ranking may suit the interest of scholars interested in reading

⁹ Self-citations refer to cases in which articles in a given journal cite other articles published in the same journal. Laband and Piette provided the initial arguments in favor of excluding self-citations. Whatever its merits, this practice should reduce the relative influence of journals publishing comparatively large numbers of articles and of journals in comparatively large fields. However, in a discipline with many competing journals, the effects of excluding self-citations are minor. Kalaitzidakis et al. found that the identity and relative standings of the top five economics journals remain unchanged whether or not self-citations are included, and the list of the top twenty economics journals is virtually identical under the two sets of computations. Self-citations matter even less when citations outside of the discipline whose journals are being ranked are considered.

or writing for economics journals that have substantial influence on policy analysis and research, and, ultimately, on policymaking. The ranking of an economics journal according to this method depends on the frequency of citations of its articles in the specified subset of social science journals, as well as on the rankings of these journals as determined by their citations among all social science journals. We do not *ex ante* rule out the possibility that a journal could fall into both the economics and the policy categories. In practice, different definitions of “economics” and “policy” provide different degrees of overlap.

Acknowledging the fact that an individual author, when submitting a research paper, tends to pay more attention to maximizing the impact of his or her own cited work than to the impact of the journal as a whole, in each of the above three methods we also adjust by the number of articles published in each journal, thereby generating three additional rankings of journals according to their influence per article. Larger journals contain more articles, so they tend to attract more citations. The impact-per-article ranking is intended to filter out the size effect of a journal in a meaningful way, thus providing journal contributors (as well as those who evaluate their scholarly productivity) a fair reference.¹⁰

3.2 Within-Discipline Rankings: Economics Journals Evaluated by Influence on Other Economics Journals

Our methodology is quite general, but to fix ideas, we introduce the following notation characterizing the relationships among three sets of journals:

Let $E \subset S$ and $P \subset S$,

where E = Economics journals

P = Economics-oriented public policy journals

S = Social science journals,

¹⁰ It has been common practice in previous studies to provide an additional ranking based on impact per character (Liebowitz and Palmer, Laband and Piette, Kalaitzidakis et al.) or on “adjusted page” (Coupé, 2003, Hirsch et al., 1984, and Scott and Mitias, 1996). As Laband and Piette explain, some journals have more notes, comments, replies, and short articles than others. Notes, comments, and replies tend to be the final contributions to formal scholarly discussions and therefore attract few citations. Short articles, as well, are deemed to be cited less than full-length articles. However, the practices used have limited the number of journals entered into the analysis because of the laborious work of counting characters (108 journals in Liebowitz and Palmer, 71 in Laband and Piette, 92 in Kalaitzidakis et al., and far fewer in other studies). Kalaitzidakis et al. included per-article calculations in their sensitivity analysis, but this was not their central method used to rank economics departments. Palacios-Huerta and Volij and Liner and Amin (2004) show per-article rankings, but for smaller subsets of journals.

with the intersection of E and P not being an empty set. The three approaches discussed in this study can be thought of as E evaluated by citations in E (within-discipline rankings), E evaluated by citations in S (broad rankings), and E evaluated by citations in P (targeted rankings).

The iterative procedure introduced by Liebowitz and Palmer includes two major steps. The initial step calculates the number of times each economics journal is cited by other economics journals. Following Palacios-Huerta and Volij, we modify this step by scaling citation counts by the reference intensities of the citing journals. Then, the resulting citation measures are rescaled to 100, representing the index of citations to the most cited journal. This procedure results in rankings that are invariant to the average number of references in an article published in the citing journal.

$$Q_{i,0} = \sum_{j=1}^n C_{ij} / (\sum_{k=1}^n C_{kj} / a_j)$$

$$I_{i,0} = [Q_{i,0} / \text{Max}_i Q_{i,0}] * 100$$

where C_{ij} = number of citations to journal i from journal j ¹¹

a_j = number of articles in journal j

n = number of economics journals

$Q_{i,0}$ = initial citations index for journal i ¹²

$I_{i,0}$ = initial adjusted impact for journal i .

Once the initial adjusted impact of each journal is computed, it is used in the next iteration to weight the citations that this journal provides to the other journals. The t^{th} iteration of this procedure is represented as follows:

$$Q_{i,t} = \sum_{j=1}^n [C_{ij} / (\sum_{k=1}^n C_{kj} / a_j)] I_{j,t-1}$$

$$I_{i,t} = [Q_{i,t} / \text{Max}_i Q_{i,t}] * 100$$

where C_{ij} = number of citations to journal i from journal j

a_j = number of articles in journal j

¹¹ In all specifications, C_{ij} is set equal to zero in the case of $j = i$, so as to exclude self-citations.

¹² The equivalent expression for Q in Liebowitz and Palmer includes an additional term denoting the total number of citations each citing journal receives from all of the social sciences journals. Excluding this term (as we do), or substituting arbitrary non-negative numbers, does not affect the final rankings of economics journals when the rankings are based solely on impact within economics.

n = number of economics journals

t = number of iterations

$Q_{i,t}$ = weighted citations index for journal i after the t^{th} iteration

$I_{i,t}$ = adjusted impact for journal i after the t^{th} iteration.¹³

3.3 Broad Context Rankings: Economics Journals Evaluated by Influence on Social Sciences Journals

Equations for the social sciences ranking are the same as those for the within-economics ranking, except that reference intensity ($\sum C_{kj}/a_j$) and the number of journals in the calculation (n) refer to all social science journals in the database instead of just the economics journals.

3.4 Targeted Context Rankings: Economics Journals Evaluated by Influence on Policy Journals

The targeted context ranking, which provides an evaluation of economics journals according to their impact on economics-oriented policy journals, starts by ranking all of the social science journals in the database according to their overall impact among social sciences. This part of the calculation follows the same procedure as in the broad context rankings, and can be represented as follows:

$$\text{Initial step: } Q_{j,0} = \sum_{k=1}^n [C_{jk} / (\sum_{m=1}^n C_{mk} / a_k)] \quad I_{j,0} = [Q_{j,0} / \text{Max}_j Q_{j,0}] * 100$$

$$t^{\text{th}} \text{ iteration: } Q_{j,t} = \sum_{k=1}^n [C_{jk} / (\sum_{m=1}^n C_{mk} / a_k) I_{k,t-1}] \quad I_{j,t} = [Q_{j,t} / \text{Max}_j Q_{j,t}] * 100$$

where C_{jk} = number of citations to journal j from journal k

a_k = number of articles in journal k

n = number of social sciences journals

t = number of iterations

$Q_{j,t}$ = weighted citations share received by journal j after the t^{th} iteration

$I_{j,t}$ = adjusted impact for journal j after the t^{th} iteration

¹³ This study uses 30 iterations. The number of iterations needed to reach convergence varies with the number of journals included in the computations.

After the process converges, we have an adjusted impact $I_{j,t}$ representing the journal's overall influence on the universe of social sciences journals. Since economics-oriented policy journals are a subset of social science journals, the adjusted impact $I_{j,t}$ of each policy journal can be used as a weight to calculate the citations that each policy journal offers to the economics journals in the next step, which is given as follows:

$$Q_i = \sum_{j=1}^n [C_{ij} / (\sum_{m=1}^{n'} C_{mj} / a_j)] I_{jt} \quad I_i = [Q_i / \text{Max}_i (Q_i)] * 100$$

where n = number of policy journals
 n' = number of economics journals
 i refers to an economics journal
 j refers to a policy journal
 m refers to an economics journal
 Q_i = weighted citations share received by economics journal i from policy journals.
 I_i = adjusted impact of economics journal i from citations in policy journals.

3.5 Rankings of Journals by Influence per Article

The calculation of a journal's ranking by its influence per article follows the same equations as above for each of the three types of ranking exercises, except that the number of citations from one journal to another is adjusted by the number of articles published in the cited journal. That is, C is replaced by a new variable c :

$$c_{ij} \equiv C_{ij} / a_i \forall i, j$$

where a_i = number of articles published in journal i in a selected time period.

4. Definitions of Economics and Policy Journals

Our source for citations is the 2003 Social Science Edition of *Journal Citation Reports*, which reports the number of times that journal articles appearing in 2003 cited articles appearing in other entities. We restrict our analysis to citations of journal articles published between 1996 and 2003, thereby excluding any entries in publications other than scholarly journals or in scholarly journals prior to 2003. Our study encompasses the 1,714 social sciences journals that both provided and

received citations.¹⁴ To implement our within-discipline and targeted context rankings, we use new definitions of the economics and policy-related fields.

4.1 Defining Economics Journals: Concepts

We identify a journal's disciplinary origin by inspecting the content of its articles. An article is deemed to be an economics article if economic concepts (for example, prices, budget constraints, business cycles, capital formation) predominate and if the analysis draws on economic methodology essentially and extensively. A journal's disciplinary origin depends on the fraction of its articles that meet these criteria.

This definition of economics seems similar to the approach taken to produce the *JCR* category, so it is likely to result in a list of journals that has significant overlap with the lists used in previous studies. However, as mentioned above, the *JCR* economics list has been criticized by other authors. Furthermore, the criteria motivating the *JCR* classifications are not codified, perhaps resulting in some inconsistencies across journals or over time, and journals are not recodified if their content changes or becomes more or less closely linked to economics. We believe there is merit in specifying the methodology for categorizing journals, as well as in taking a fresh look at the economics literature rather than simply identifying a handful of classifications that are open to question because of the lack of transparency of the methodology used. Furthermore, as described below, our approach allows for economics to be defined either relatively narrowly or more broadly.

Our greatest difficulty comes in determining an objective boundary line between economics and finance. Scholars disagree about the extent to which finance is a subfield of economics versus a separate field with its own concepts and methods, especially with respect to journals focusing on general finance topics rather than specialized sub-fields (Summers 1985, Pieters and Baumgartner, Leydesdorff). We settle on a classification that results in the top finance publications (as determined in Oltheten et al. 2005) being included in our list of economics journals, narrowly defined.¹⁵

¹⁴ The 2003 social science edition of *JCR* provides statistics for 5,936 citing entities and 76,324 cited entities.

¹⁵ The 2005 working paper version of this study included *Journal of Financial Economics* and *Review of Financial Studies* in economics, but excluded *Journal of Finance*, *Journal of Financial and Quantitative Analysis*, and *Journal of Business*. The next four "finance" journals in Oltheten et al. are all in the economics section of *JCR* and are included in this paper's rankings of economics journals, narrowly defined. Our broader definition of economics encompasses finance topics and methods that are oriented toward practitioners, and therefore it contains a variety of additional finance journals.

4.2 Defining Policy Journals: Concepts

The citations literature offers examples of policy journals and supports the view that “policy” is a distinct literature that is closer to policymaking than to economics or other social sciences disciplines. However, it does not develop a comprehensive definition of what constitutes a policy journal. For purposes of this study, we draw on concepts developed in Hanushek (1990), which distinguishes between disciplinary research that has policy implications but flows directly from economics or another distinct social sciences field, on the one hand, and policy research, which is a more applied branch of the social sciences, (p. 291):

[P]olicy research focuses directly on policy issues. It is similar to disciplinary research in that it gives heavy weight to hypothesis formulation, to rigorous analysis, and to agreed upon statistical standards of evidence. It differs, however, in that its objective is to produce policy implications that have some hope or expectation of being taken seriously.¹⁶

As in the case of defining our economics category, we determine whether a journal is policy-oriented by the content of its articles. Individual articles constitute policy research if they meet Hanushek’s definition, present clear recommendations for policy, and are written in a manner and language appealing to decision makers. Alternatively, they may constitute disciplinary research, in which case they may have some bearing on contemporary issues or the formulation of public sector decision-making, but do not appear to be motivated by specific policy choices and do not offer findings on specific proposals under consideration by policymaking bodies.

The categories “policy research” and “disciplinary research with policy implications” implicitly suggest different ways in which academic studies may influence policymaking, but little if any scientific evidence exists on these channels. Hansen (1991) posits that different types of articles affect policymaking with different lags. Shulock (1999) confirms the existence of a link between policy evaluation and policy formulation by studying citations that appear in Congressional committee reports, but she does not distinguish between the types of research described by Hanushek, or between the rigorous analysis of policy

¹⁶ Hanushek goes on to distinguish a third type of research called “policy analysis” that is directly linked to the political process and is performed under a tight timetable for a client with specific questions concerning a policy proposal. Policy analysis is disseminated in the form of memos, reports, and testimony, as opposed to being published in scholarly journals.

issues that characterizes research and the mere presentation of data relevant to such analysis. Our content-based approach does not attempt to resolve questions about which inputs are used in making policy, but it permits the use of sensitivity analysis to determine how the definition of policy-oriented research affects the size of the policy literature and rankings of economics journals.

4.3 Selection of Journals for Content Analysis

The development of content-based lists of economics and policy journals consists of two stages: selecting groups of journals that appear most likely to cite journals in the *JCR* economics category, and then inspecting the content of individual journals from these groups to determine the degree to which they satisfy our conceptual definitions of economics and policy. This section describes the first stage, which was based on analysis of cross-citations between journals in the *JCR* economics category and the other 53 social sciences journal categories, and it offers several intermediate findings concerning interdisciplinary communications.

Extending the unidirectional utilization index used by MacRae and Feller to measure knowledge flows between individual journals, we developed similar indexes to summarize such flows across groups of journals. The utilization index U_{ij} is a measure of the intensity of citations from journals in category i to journals in category j , and is adjusted so as to be invariant to the sizes of the two literatures:

$$U_{ij} = \frac{C_{ij}}{\sqrt[2]{C_i C_j}}$$

where C_{ij} = number of citations given to category i from category j
 C_i = overall number of citations received by category i .
 C_j = overall number of citations given by category j .

When computing the number of within-category citations ($j = i$), we include journal self-citations so as to measure the full extent to which a discipline is self-contained as opposed to drawing from other literatures.¹⁷

A portion of the 54-by-54 matrix of utilization indexes is presented in Table 1. The first column refers to the intensity with which each of the social sciences cites itself, based on the *JCR* definitions of these disciplines. Judging by

¹⁷ *JCR* sometimes assigns journals to more than one category. Thus, for example, when an article in *Journal of Urban Economics* cites another article in the same journal, we count this citation as economics citing economics, economics citing urban studies, urban studies citing urban studies, and urban studies citing economics because the journal is cross-listed.

a within-discipline utilization index of .77, economics is more self-contained than the other categories shown, a finding that is consistent with previous research.¹⁸ However, some other disciplines do feed noticeably into *JCR* economics, including social sciences mathematics methods and finance, followed by industrial relations and labor, planning and development, and environmental studies (column 2). The Pieters and Baumgartner study did not address the information flows from these disciplines to economics. More generally, the *JCR*-based literature has not recognized that economics journals cite journals in the planning and development and environmental studies categories as frequently as they cite journals in the labor and industrial relations category.

Based on utilization indexes, the categories that draw contributions from *JCR* economics most heavily are (in order of impact of the economics category): finance, environmental studies, planning and development, urban studies, industrial relations and labor, management, business, education and educational research, and public administration (column 3). We selected these nine *JCR* categories for further investigation. From each category, we initially selected journals that appeared most connected to the economics literature, judging by title, overall number of citations to journals in the economics category, and share

Table 1 Utilization Indexes for Selected *Journal Citation Reports* Categories

	(1) Citing Same Category	(2) Cited by Economics	(3) Citing Economics
Economics	.77	.77	.77
Business, Finance	.58	.27	.27
Environmental Studies	.47	.08	.18
Planning and Development	.32	.08	.13
Urban Studies	.48	.06	.09
Industrial Relations and Labor	.33	.08	.08
Management	.61	.03	.07
Business	.57	.04	.07
Education and Educational Research	.59	.01	.07
Public Administration	.35	.01	.05
Political Science	.53	.04	.03
Social Sciences Mathematical Methods	.37	.31	.03
History of Social Science	.36	.05	.00

Source: Authors' calculations using 2003 Social Science Edition of *Journal Citation Reports*

¹⁸ Among all the social sciences, we find that only law is more self-contained than economics.

of total citations given to economics.¹⁹ Using these criteria, we selected 120 out of the 410 journals in the nine categories for further inspection.

We also selected for further review 164 of the 169 journals in the economics category, excluding those that are written in a language other than English or were otherwise difficult to categorize under the content rating scheme described in the next section.²⁰

4.4 Content Ratings

Producing the content ratings was a labor-intensive process. We compiled the mission statements and the titles and abstracts of 20 or more recent articles from each of the 284 journals under consideration.²¹ Mission statements generally describe the major areas the journals intend to cover and the types of audiences the journals intend to serve, with some offering more information than others. Not every journal has a mission statement, and some mission statements are more reflective of editorial directions than of actual content. For these reasons, the content ratings were based primarily on inspecting individual articles, with the mission statements serving as supplemental information. In some circumstances, full texts of articles were downloaded for review if the titles and abstracts were not sufficient to establish their ratings. The ratings for journals were based on aggregations of ratings for individual articles.

The rating scheme is illustrated in Chart 1. Each article is examined from three aspects: substance, disciplinary origin, and sophistication/technicality. Substance is a major category that, as a first cut, distinguishes articles according to whether or not they represent original research. Excluded from original research are pieces that present news or history without contributing noticeably to the development of economic thought or methods. This inspection of articles

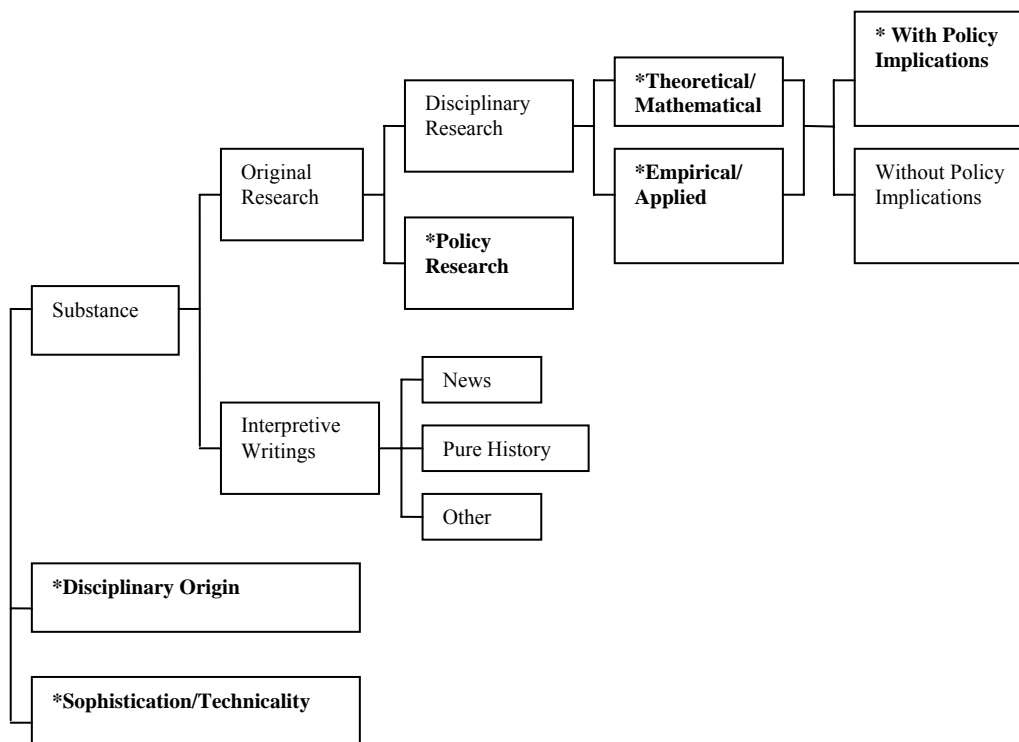
¹⁹ The *JCR* database encompasses 868 journals that offered citations to journals in the *JCR* economics category. Among them, 183 journals offered one-half or more of their citations to economics. They were all selected for content rating except for four non-English language journals. In addition, 105 journals that offered less than one-half of their citations to economics were selected for rating.

²⁰ The five excluded journals are *Desarrollo Economico-Revista De Ciencias Sociales*, *Ekonomiska Samfundets Tidskrift*, *Futures*, *Revue D' Etudes Comparatives Est-Ouest*, and *Trimestre Economico*.

²¹ We initially explored other possible criteria, such as *JEL* codes, to capture journal characteristics for the purpose of this project. However, none of the existing classification measures could capture all of the features that were necessary, including distinguishing both between economics and non-economics and between policy and non-policy.

Chart 1 Content-based Rating Scheme for Articles

* indicates rating variable that is scored



served to eliminate from the rankings additional journals that are oriented toward interpretive writings as opposed to original research.

Original research includes both disciplinary research and policy research, concepts explained in Section 4.2. Disciplinary research is further broken down into two types, theoretical or primarily focused on development of mathematical techniques, and empirical or applied.

In summary, then, each article is characterized by six variables—four dummy variables from the original research category plus one each denoting disciplinary origin and sophistication, with values of 0, 1, or 2. The ratings were calculated by a member of the research team using extensive written instructions,

and they were cross-checked for accuracy and consistency by at least one other member of the team.²²

A journal's ratings for the same six variables are generated by aggregating the scores of its articles, and they range from 0 to 2. For the four variables in the original research category, a journal is scored 2 if more than one-third of its articles are scored 1 for the same variable, 1 if between one-tenth and one-third of its articles are scored 1 for the variable, and 0 if fewer than one-tenth of its articles are scored 1. By these rules, journals exemplifying disciplinary research may be classified as either theoretical/mathematical or empirical/applied, or both. For example, *Journal of Economic Dynamics and Control* and *Journal of Econometrics* are highly theoretical/mathematical but not highly empirical, while *Journal of Human Resources* and *Review of Economics and Statistics* are highly empirical/applied but not highly theoretical. As a result of their wide-ranging mix of articles, *American Economic Review* and *Economics Letters* score 2 in both categories.

The categories "disciplinary research with policy implications" and "policy research" are mutually exclusive for individual articles, but some journals, such as *Brookings Papers on Economic Activity* and *Housing Policy Debate*, have more than one-third of their articles in each category. We find, on the other hand, that *Journal of Health Economics* specializes in disciplinary research with policy implications, while *IDS Bulletin—Institute of Development Studies* concentrates on policy research.

The journal scores for disciplinary origin and sophistication take the average scores of the same variables for their articles, rounded to the nearest integer. The disciplinary origin category indicates how closely related the article's subject matter and methodology are to economics. Sophistication indicates the degree to which the article targets a highly technical or academic audience. Disciplinary origin and sophistication are each scored at 0, 1, or 2. The ratings consider finance, management, and mathematics to be closer to economics (and therefore rated 1) than disciplines such as political science, anthropology, and philosophy (rated 0). On the other hand, the scoring for a variety of other fields such as urban, health care, and environmental studies depends on the analytical methods and topics contained in the article. As examples of disciplinary origin, *Journal of Law and Economics* and *Journal of Business* score 2, while *Journal of Law, Economics, and Organization* and *Journal of Accounting Research* score 1. Publications such as *Business Lawyer* and *Accounting, Organizations and Society* were examined but were deemed to contain relatively little economics content. For sophistication, *Rand Journal* and *Quarterly Journal of Economics* score 2, *Brookings Papers on Economic Activity* and *Journal of Economic Perspectives*

²²The 10-page instruction manual was developed by James Dang and further modified on the basis of a pilot experiment.

score 1, and *Housing Policy Debate* and *World Development* are in the least technical category among the social sciences journals considered.

4.5 Parameter Choices for Ranking Analyses

For the analyses presented below, we defined economics journals as those with disciplinary origin equal to 2, meaning that the majority of the articles rely essentially and extensively on economics. This narrow definition of the economics literature produces a list of journals that is much closer to what was used in previous studies than would a broader definition encompassing journals with a lower score for disciplinary origin (that is, either 1 or 2).²³ We rank 181 economics journals in total, of which 146 are drawn from the 169 journals in the economics category in *JCR*, and 35 are drawn from the other nine *JCR* categories.

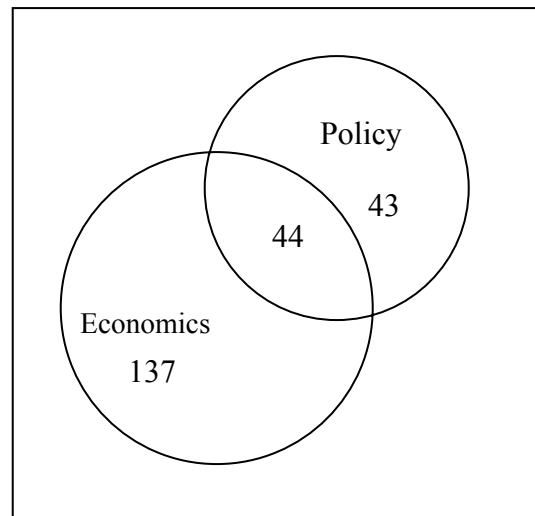
For the policy journals category, we included all policy research journals (those with values greater than 0), plus not-highly-sophisticated/technical journals (those with values less than 2) with more than one-third of their articles exemplifying disciplinary research with policy implications (disciplinary research with policy implications equal to 2).²⁴ This yields 87 policy journals in total, of which 44 journals are considered to be both economics journals and policy journals (See Chart 2 and Appendix Table 1).²⁵ In our view, the resulting list of policy journals is sufficiently different from our list of economics journals so as potentially to provide a different assessment from the standard methodology. At the same time, the process to select journals for content analysis (as described in Section 4.3) narrows the list of policy journals to those that are at least somewhat connected to the economics literature. Therefore, our targeted context rankings have the potential to be quite different from our rankings that include citations from the entire social sciences literature.

²³ We acknowledge that this definition of an economics journal excludes some economics-related journals covering two or more disciplines in a relatively even-handed manner. A ranking of economics journals more broadly defined (those for which disciplinary origin equals 1 or greater) would result in the inclusion of journals such as *Economics and Philosophy*, *Feminist Economics*, and *International Journal of Forecasting*.

²⁴ For the journals exemplifying disciplinary research with policy implications, including journals with sophistication equal to 2 would produce a set of policy journals with much more overlap with our economics category. The resulting ranking would be very similar to our within-discipline rankings. At the other extreme, restricting sophistication to 0 would yield only a tiny sample.

²⁵ We also conducted various sensitivity experiments, not reported in this study, along the lines suggested in the previous two footnotes.

Chart 2 Mapping of Economics Journals and Economics-related Policy Journals



5. Results

Tables 2 and 3 present the economics journal rankings according to three methodologies for the journal as a whole and per article, respectively. The rankings shown in these tables are invariant to the reference intensities of the citing journals. Comparable results not adjusted for reference intensities are found in Appendix Tables 2 and 3.

Consider first the results using each journal's total impact-weighted citations within economics, unadjusted for the number of articles these journals contain (Table 2). The most significant new finding is that three of the top ten journals are finance-oriented: *Journal of Finance*, *Journal of Financial Economics*, and *Review of Financial Studies*. Of these publications, only *Journal of Financial Economics* is included in the *JCR* economics category.

Otherwise, the list of journals with very high influence within the economics discipline generally agrees with previous findings. As in Kalaitzidakis et al. and predecessor studies, *American Economic Review* is the most influential economics journal within the scholarly economics journal literature. The remaining six journals in the top ten also appear in the top ten in Kalaitzidakis et al. for the most comparable exercise.

Without the adjustment for reference intensity, the above-mentioned finance journals rank first, second, and third, and *Journal of Financial and Quantitative Analysis* rises to ninth position (Appendix Table 2). This result is

Table 2 Rankings of Economics Journals by Journal Impact

Rank	Within Economics Impact		Overall Impact		Policy Impact	
	Journal's title	Index	Journal's title	Index	Journal's title	Index
1	AM ECON REV	100.00	J HEALTH ECON	100.00	AM ECON REV	100.00
2	J FINANC	98.67	HEALTH ECON	69.55	J HEALTH ECON	71.79
3	Q J ECON	88.40	INQUIRY-J HEALTH CAR	39.20	INQUIRY-J HEALTH CAR	70.29
4	ECONOMETRICA	79.86	Q J ECON	28.84	Q J ECON	56.58
5	J FINANC ECON	78.69	AM ECON REV	20.86	J ECON PERSPECT	48.59
6	J POLIT ECON	74.63	J HUM RESOUR	13.30	ECON J	40.39
7	REV FINANC STUD	48.02	J ECON PERSPECT	11.69	WORLD DEV	37.53
8	J ECON THEORY	42.13	J ECON LIT	10.22	HOUS POLICY DEBATE	33.31
9	REV ECON STUD	40.42	ECONOMETRICA	9.62	J ECON LIT	32.73
10	J ECONOMETRICS	35.86	J POLIT ECON	9.03	ECONOMETRICA	30.95
11	J ECON LIT	35.39	J ECONOMETRICS	8.24	J POLIT ECON	24.35
12	J MONETARY ECON	33.31	J RISK UNCERTAINTY	7.82	HEALTH ECON	23.47
13	J ECON PERSPECT	31.80	WORLD DEV	7.27	J POLICY ANAL MANAG	22.85
14	REV ECON STAT	31.52	REV ECON STAT	7.09	J PUBLIC ECON	17.51
15	EUR ECON REV	28.73	J PUBLIC ECON	7.03	J DEV STUD	15.48
16	INT ECON REV	26.60	HOUS POLICY DEBATE	6.91	CAN PUBLIC POL	15.17
17	J INT ECON	24.80	J FINANC	6.12	J FINANC	14.84
18	ECON J	24.78	J ECON PSYCHOL	6.07	J HUM RESOUR	14.69
19	J PUBLIC ECON	24.73	MON LABOR REV	5.65	RAND J ECON	14.64
20	GAME ECON BEHAV	22.62	ECON J	4.80	REV ECON STAT	14.14
21	RAND J ECON	20.54	REV ECON STUD	4.78	J DEV ECON	14.05
22	J MONEY CREDIT BANK	18.66	J POLICY ANAL MANAG	4.77	J URBAN ECON	12.51
23	ECON THEOR	18.11	RAND J ECON	4.39	J ECONOMETRICS	11.80
24	J BUS ECON STAT	17.55	J FINANC ECON	3.94	EUR ECON REV	11.75
25	ECON LETT	15.40	NATL TAX J	3.48	J LABOR ECON	10.32
26	J FINANC QUANT ANAL	14.69	APPL ECON	3.33	REG STUD	10.23
27	J ECON DYN CONTROL	13.87	AM J AGR ECON	3.30	AM J AGR ECON	10.18
28	BROOKINGS PAPECO AC	13.48	IND LABOR RELAT REV	3.06	DEV CHANGE	9.65
29	NBER MACROECON ANN	12.51	EUR ECON REV	3.01	IND LABOR RELAT REV	8.83
30	J BUS	12.20	J ECON THEORY	2.86	J FINANC ECON	8.34
31	ECONOMET THEOR	11.49	J ECON BEHAV ORGAN	2.64	BROOKINGS PAPECO AC	8.27
32	J ECON GROWTH	11.10	J MONETARY ECON	2.60	J MONETARY ECON	8.18
33	J DEV ECON	10.64	J INT ECON	2.54	IND RELAT	8.17
34	J LABOR ECON	10.44	ECON INQ	2.47	J LAW ECON	7.90
35	J BANK FINANC	9.75	IDS BULL-I DEV STUD	2.38	J ENVIRON ECON MANAG	7.77
36	J HUM RESOUR	9.14	J ENVIRON ECON MANAG	2.24	J BUS ECON STAT	7.55
37	J ECON BEHAV ORGAN	9.13	J LAW ECON	2.15	REV ECON STUD	7.42
38	REV ECON DYNAM	8.92	INT ECON REV	2.14	IDS BULL-I DEV STUD	6.98
39	CAN J ECON	8.35	J LABOR ECON	2.14	J INT ECON	6.92
40	J ACCOUNT ECON	8.20	J DEV ECON	2.13	LAND ECON	6.79
41	J APPL ECONOM	8.07	J DEV STUD	2.08	FISC STUD	6.57
42	J MATH ECON	7.75	J PROD ANAL	2.03	NATL TAX J	6.26
43	J INT MONEY FINANC	7.71	REV FINANC STUD	2.00	CAN J ECON	6.05
44	MACROECON DYN	7.05	GAME ECON BEHAV	1.99	ECON INQ	6.01
45	SOC CHOICE WELFARE	6.88	SOUTH ECON J	1.98	BRIT J IND RELAT	5.97
46	J IND ECON	6.67	J BUS ECON STAT	1.98	J PROD ANAL	5.97
47	INT J IND ORGAN	6.61	ECON LETT	1.81	WORLD BANK ECON REV	5.94
48	INT J GAME THEORY	6.31	LAND ECON	1.70	ECON DEV CULT CHANGE	5.56
49	J ENVIRON ECON MANAG	6.17	ECOL ECON	1.65	J ACCOUNT ECON	5.48
50	J FINANC INTERMED	6.11	CONTEMP ECON POLICY	1.61	J MONEY CREDIT BANK	5.45
51	J LAW ECON	5.55	BROOKINGS PAPECO AC	1.57	ECOL ECON	5.45
52	J URBAN ECON	5.29	DEV CHANGE	1.54	OXFORD REV ECON POL	5.14
53	J ECON HIST	5.26	J MEDIA ECON	1.48	WORLD BANK RES OBSER	4.91
54	NATL TAX J	5.18	J ECON MANAGE STRAT	1.43	FOOD POLICY	4.85
55	J HEALTH ECON	5.09	J MONEY CREDIT BANK	1.41	ENVIRON RESOUR ECON	4.76
56	ECON INQ	4.84	ENVIRON RESOUR ECON	1.40	CAMBRIDGE J ECON	3.96
57	J ECON MANAGE STRAT	4.33	J TRANSP ECON POLICY	1.25	SOUTH ECON J	3.84

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58	SCAND J ECON	4.30	J URBAN ECON	1.18	ECON LETT	3.81
59	IND LABOR RELAT REV	4.23	J POPUL ECON	1.18	J INT MONEY FINANC	3.56
60	AM J AGR ECON	4.11	AGR ECON	1.16	AGR ECON	3.50
61	ECON EDUC REV	4.05	WORLD BANK ECON REV	1.13	INT ECON REV	3.44
62	ECON POLICY	3.91	RESOUR POLICY	1.12	MON LABOR REV	3.37
63	J RISK UNCERTAINTY	3.89	REAL ESTATE ECON	1.09	REV INCOME WEALTH	3.28
64	WORLD BANK ECON REV	3.84	NBER MACROECON ANN	1.07	ENERGY J	3.23
65	IMF STAFF PAPERS	3.71	J ECON GROWTH	1.07	J REGIONAL SCI	3.21
66	INT TAX PUBLIC FINAN	3.64	ECON THEOR	1.06	J POPUL ECON	3.14
67	REV IND ORGAN	3.59	CAN J ECON	1.01	ECON EDUC REV	3.13
68	ECONOMICA	3.59	REG STUD	0.97	J APPL ECONOM	3.00
69	SOUTH ECON J	3.55	OXFORD B ECON STAT	0.96	OXFORD ECON PAP	2.92
70	PUBLIC CHOICE	3.19	J ECON DYN CONTROL	0.90	ECON DEV Q	2.89
71	OXFORD B ECON STAT	3.19	ECONOMET THEOR	0.89	OXFORD B ECON STAT	2.74
72	MATH SOC SCI	3.05	J APPL ECONOM	0.88	B INDONES ECON STUD	2.60
73	OXFORD ECON PAP	3.05	REG SCI URBAN ECON	0.81	IMF STAFF PAPERS	2.53
74	ENVIRON RESOUR ECON	3.01	ECON DEV CULT CHANGE	0.80	J IND ECON	2.40
75	LAND ECON	2.92	ECONOMICA	0.80	REG SCI URBAN ECON	2.40
76	APPL ECON	2.73	ECON EDUC REV	0.78	REAL ESTATE ECON	2.36
77	REG SCI URBAN ECON	2.52	J IND ECON	0.76	WORLD ECON	2.35
78	WORLD DEV	2.46	J FINANC QUANT ANAL	0.73	ENVIRON DEV ECON	2.34
79	REV INCOME WEALTH	2.42	J BUS	0.71	J ECON GROWTH	2.26
80	HEALTH ECON	2.21	J ACCOUNT ECON	0.70	J LABOR RES	2.22
81	LABOUR ECON	2.17	IND RELAT	0.67	NBER MACROECON ANN	2.20
82	IND RELAT	2.06	J ECON HIST	0.67	J AFR ECON	2.20
83	ECOL ECON	1.89	J INT MONEY FINANC	0.66	J AGR ECON	2.15
84	J POLICY ANAL MANAG	1.88	REV ECON DYNAM	0.65	J HOUS ECON	2.14
85	WELTWIRTSCH ARCH	1.85	INT J IND ORGAN	0.64	SMALL BUS ECON	2.14
86	ENVIRON DEV ECON	1.85	SCAND J ECON	0.62	J COMP ECON	2.11
87	J POPUL ECON	1.62	WORLD BANK RES OBSER	0.62	REV IND ORGAN	2.07
88	OXFORD REV ECON POL	1.59	TJDSCHR ECON SOC GE	0.61	APPL ECON	2.01
89	EXPLOR ECON HIST	1.51	J BANK FINANC	0.57	REV FINANC STUD	1.94
90	ENERGY J	1.51	OXFORD ECON PAP	0.55	INT J IND ORGAN	1.88
91	J DEV STUD	1.43	J AGR ECON	0.55	J ECON THEORY	1.84
92	J REGUL ECON	1.34	OXFORD REV ECON POL	0.54	ECON TRANSIT	1.84
93	J TRANSP ECON POLICY	1.34	ECON POLICY	0.49	ECON GEOGR	1.82
94	J JPN INT ECON	1.34	PUBLIC CHOICE	0.49	ENERG POLICY	1.73
95	J COMP ECON	1.30	IMF STAFF PAPERS	0.46	J ECON DYN CONTROL	1.58
96	J ECON PSYCHOL	1.23	REV INCOME WEALTH	0.46	J RISK UNCERTAINTY	1.52
97	MON LABOR REV	1.12	BRIT J IND RELAT	0.45	ENERG ECON	1.48
98	J AGR RESOUR ECON	1.11	MACROECON DYN	0.45	LABOUR ECON	1.45
99	APPL ECON LETT	1.08	SOC CHOICE WELFARE	0.44	J REGUL ECON	1.37
100	J REAL ESTATE FINANC	1.06	ECON GEOGR	0.44	DEV ECON	1.31
101	INQUIRY-J HEALTH CAR	1.03	S AFR J ECON	0.44	PUBLIC CHOICE	1.26
102	J ECON EDUC	0.96	ENERG POLICY	0.44	REV INT POLIT ECON	1.23
103	J ECON	0.94	J REAL ESTATE FINANC	0.44	GAME ECON BEHAV	1.19
104	KYKLOS	0.93	REV IND ORGAN	0.42	SCAND J ECON	1.16
105	ECON DEV CULT CHANGE	0.93	INT TAX PUBLIC FINAN	0.41	J FINANC QUANT ANAL	1.16
106	ECON TRANSIT	0.90	J MATH ECON	0.40	GROWTH CHANGE	1.12
107	RESOUR ENERGY ECON	0.88	INT J GAME THEORY	0.38	ECONOMICA	1.10
108	MANCH SCH	0.88	ECON DEV Q	0.36	ECON THEOR	1.05
109	JPN WORLD ECON	0.86	CAMBRIDGE J ECON	0.34	INT REV LAW ECON	0.99
110	J PROD ANAL	0.85	J AGR RESOUR ECON	0.32	J TRANSP ECON POLICY	0.98
111	J FORECASTING	0.83	ENVIRON DEV ECON	0.30	J BANK FINANC	0.96
112	REAL ESTATE ECON	0.82	LABOUR ECON	0.30	J ECON MANAGE STRAT	0.90
113	CONTEMP ECON POLICY	0.71	MATH SOC SCI	0.27	ECONOMET THEOR	0.89
114	WORLD ECON	0.70	ENERGY J	0.25	CAN J DEV STUD	0.89
115	ADV ECONOMETRICS	0.68	J REGIONAL SCI	0.25	J ECON HIST	0.88
116	AGR ECON	0.65	WORLD ECON	0.25	J ECON BEHAV ORGAN	0.87
117	JPN ECON REV	0.60	FOOD POLICY	0.23	J BUS	0.86
118	J HOUS ECON	0.60	PAP REG SCI	0.23	RESOUR ENERGY ECON	0.78
119	INT J FINANC ECON	0.59	APPL ECON LETT	0.22	AUST J AGR RESOUR EC	0.75

120	ECON HIST REV	0.58	EXPLOR ECON HIST	0.21	INT TAX PUBLIC FINAN	0.75
121	J AGR ECON	0.57	J COMP ECON	0.21	ADV ECONOMETRICS	0.73
122	HOUS POLICY DEBATE	0.55	WELTWIRTSCH ARCH	0.19	ECON POLICY	0.71
123	ENERG POLICY	0.54	J FINANC INTERMED	0.19	INT REGIONAL SCI REV	0.71
124	J POLICY MODEL	0.53	EASTERN EUR ECON	0.18	REV ECON DYNAM	0.71
125	FISC STUD	0.52	J HOUS ECON	0.18	J INST THEOR ECON	0.67
126	J MACROECON	0.48	RESOUR ENERGY ECON	0.18	KYKLOS	0.66
127	J REGIONAL SCI	0.47	J REGUL ECON	0.18	J FORECASTING	0.66
128	WORLD BANK RES OBSER	0.46	GROWTH CHANGE	0.17	WELTWIRTSCH ARCH	0.64
129	J ECON SURV	0.41	EUR REV AGRIC ECON	0.17	SCOT J POLIT ECON	0.58
130	INT REGIONAL SCI REV	0.41	REV INT POLIT ECON	0.16	S AFR J ECON	0.50
131	DEV CHANGE	0.39	SMALL BUS ECON	0.16	MANCH SCH	0.47
132	ENERG ECON	0.37	KYKLOS	0.16	MACROECON DYN	0.46
133	EUR REV AGRIC ECON	0.37	ECON TRANSIT	0.16	EUR REV AGRIC ECON	0.44
134	ECON REC	0.36	SCOT J POLIT ECON	0.16	J ECON ISSUES	0.42
135	SCOT J POLIT ECON	0.34	ECON HIST REV	0.14	CHINA ECON REV	0.40
136	J AFR ECON	0.34	CAN J DEV STUD	0.14	J POST KEYNESIAN EC	0.40
137	J INST THEOR ECON	0.32	FISC STUD	0.14	J ECON PSYCHOL	0.39
138	REG STUD	0.32	J FORECASTING	0.13	J JPN INT ECON	0.39
139	DEV ECON	0.32	CAN PUBLIC POL	0.12	ECON REC	0.37
140	J EVOL ECON	0.29	ENERG ECON	0.12	APPL ECON LETT	0.37
141	SMALL BUS ECON	0.27	J AFR ECON	0.12	ANN REGIONAL SCI	0.35
142	IDS BULL-1 DEV STUD	0.25	J JPN INT ECON	0.12	POST-COMMUNIST ECON	0.35
143	NEW ENGL ECON REV	0.24	J ECON EDUC	0.11	CONTEMP ECON POLICY	0.34
144	FOOD POLICY	0.23	INT REGIONAL SCI REV	0.11	J ECON SURV	0.34
145	BRIT J IND RELAT	0.22	B INDONES ECON STUD	0.11	MATH SOC SCI	0.32
146	J LABOR RES	0.21	TELECOMMUN POLICY	0.10	J REAL ESTATE FINANC	0.32
147	ECON MODEL	0.20	JPN WORLD ECON	0.09	JPN WORLD ECON	0.30
148	INT REV LAW ECON	0.18	ADV ECONOMETRICS	0.09	RESOUR POLICY	0.27
149	J POST KEYNESIAN EC	0.18	J MACROECON	0.09	EXPLOR ECON HIST	0.26
150	JAHRB NATL STAT	0.17	J ECON ISSUES	0.09	NEW ENGL ECON REV	0.26
151	AUST J AGR RESOUR EC	0.15	DEV ECON	0.08	INT J GAME THEORY	0.24
152	CAMBRIDGE J ECON	0.14	MANCH SCH	0.08	PAP REG SCI	0.24
153	ECONOMIST-NETHERLAND	0.14	J INST THEOR ECON	0.08	J EVOL ECON	0.20
154	J ECON ISSUES	0.13	J LABOR RES	0.07	TJDSCHR ECON SOC GE	0.20
155	ANN REGIONAL SCI	0.12	ANN REGIONAL SCI	0.07	TELECOMMUN POLICY	0.19
156	GROWTH CHANGE	0.11	J EVOL ECON	0.07	SOC CHOICE WELFARE	0.16
157	ECON DEV Q	0.11	AUST J AGR RESOUR EC	0.07	J AGR RESOUR ECON	0.15
158	PAP REG SCI	0.11	INT J FINANC ECON	0.07	HITOTSUB J ECON	0.15
159	B INDONES ECON STUD	0.10	NEW ENGL ECON REV	0.06	EUR J IND RELAT	0.14
160	OPEN ECON REV	0.10	J POLICY MODEL	0.06	INF ECON POLICY	0.14
161	CHINA ECON REV	0.10	ECON REC	0.06	J POLICY MODEL	0.12
162	CAN PUBLIC POL	0.06	INT REV LAW ECON	0.06	OPEN ECON REV	0.08
163	TELECOMMUN POLICY	0.06	J ECON SURV	0.05	J ECON EDUC	0.06
164	INF ECON POLICY	0.05	J ECON	0.05	ECON MODEL	0.04
165	ECON GEOGR	0.05	J POST KEYNESIAN EC	0.04	J MEDIA ECON	0.02
166	CAN J DEV STUD	0.05	CHINA ECON REV	0.04	EMERG MARK FINANC TR	0.02
167	S AFR J ECON	0.04	ECON MODEL	0.04	AFR DEV REV	0.02
168	RESOUR POLICY	0.04	JPN ECON REV	0.04	ECON HIST REV	0.02
169	REV INT POLIT ECON	0.03	ECON PLANN	0.03	INT J FINANC ECON	0.02
170	ECON PLANN	0.03	EUR J IND RELAT	0.02	EASTERN EUR ECON	0.01
171	AFR DEV REV	0.02	POST-COMMUNIST ECON	0.02	J MACROECON	0.01
172	POST-COMMUNIST ECON	0.02	JAHRB NATL STAT	0.02	ECONOMIST-NETHERLAND	0.01
173	EASTERN EUR ECON	0.01	OPEN ECON REV	0.02	JPN ECON REV	0.00
174	EUR J IND RELAT	0.01	INF ECON POLICY	0.02	POLIT EKON	0.00
175	EMERG MARK FINANC TR	0.01	ECONOMIST-NETHERLAND	0.02	ECON PLANN	0.00
176	POLIT EKON	0.01	AFR DEV REV	0.01	J MATH ECON	0.00
177	HITOTSUB J ECON	0.00	HITOTSUB J ECON	0.01	ECON CAS	0.00
178	TJDSCHR ECON SOC GE	0.00	EMERG MARK FINANC TR	0.00	JAHRB NATL STAT	0.00
179	FINANC A UVER	0.00	POLIT EKON	0.00	J ECON	0.00
180	J MEDIA ECON	0.00	FINANC A UVER	0.00	J FINANC INTERMED	0.00
181	ECON CAS	0.00	ECON CAS	0.00	FINANC A UVER	0.00

Table 3 Rankings of Economics Journals by Per Article Impact

Rank	Within Economics Impact		Overall Impact		Policy Impact	
	Journal's title	Index	Journal's title	Index	Journal's title	Index
1	NBER MACROECON ANN	100.00	NBER MACROECON ANN	100.00	Q J ECON	100.00
2	Q J ECON	77.89	Q J ECON	86.12	NBER MACROECON ANN	94.87
3	J ECON LIT	66.32	J FINANC ECON	84.05	BROOKINGS PAP ECO AC	92.23
4	J FINANC ECON	63.64	J FINANC	81.37	J ECON LIT	87.48
5	J FINANC	59.85	J ECON LIT	72.68	J POLIT ECON	51.13
6	J POLIT ECON	58.90	REV FINANC STUD	68.62	J ECON PERSPECT	38.52
7	REV FINANC STUD	53.74	J POLIT ECON	63.87	AM ECON REV	34.52
8	BROOKINGS PAP ECO AC	42.92	ECONOMETRICA	44.17	ECONOMETRICA	28.83
9	ECONOMETRICA	41.37	BROOKINGS PAP ECO AC	42.61	HOUS POLICY DEBATE	28.01
10	REV ECON STUD	37.06	REV ECON STUD	38.18	J ECON GROWTH	26.91
11	J ECON GROWTH	34.24	J ACCOUNT ECON	37.69	J MONETARY ECON	26.77
12	AM ECON REV	27.10	J BUS	36.64	J POLICY ANAL MANAG	24.47
13	J BUS	25.74	J ECON GROWTH	34.82	RAND J ECON	23.97
14	J ECON PERSPECT	24.68	J FINANC QUANT ANAL	31.38	J ACCOUNT ECON	22.32
15	J MONETARY ECON	23.22	AM ECON REV	29.26	J FINANC	21.91
16	J FINANC QUANT ANAL	23.14	J ECON PERSPECT	26.28	REV ECON STUD	21.34
17	J FINANC INTERMED	20.23	J FINANC INTERMED	25.92	J INT ECON	20.97
18	RAND J ECON	19.69	J MONETARY ECON	23.86	ECON J	20.70
19	REV ECON STAT	17.53	RAND J ECON	21.68	J HUM RESOUR	19.62
20	REV ECON DYNAM	17.49	REV ECON STAT	18.23	J MONEY CREDIT BANK	19.59
21	INT ECON REV	17.44	INT ECON REV	17.78	J LABOR ECON	19.40
22	J INT ECON	16.20	REV ECON DYNAM	17.73	J FINANC ECON	18.48
23	J ECONOMETRICS	15.53	J ECONOMETRICS	16.97	J BUS ECON STAT	18.04
24	J MONEY CREDIT BANK	15.06	J INT ECON	16.61	REV ECON STAT	17.45
25	J BUS ECON STAT	14.87	J MONEY CREDIT BANK	15.69	J ECONOMETRICS	17.34
26	J ACCOUNT ECON	14.30	J BUS ECON STAT	15.45	J LAW ECON	16.97
27	MACROECON DYN	13.15	MACROECON DYN	13.62	EUR ECON REV	15.81
28	J ECON THEORY	12.83	J ECON THEORY	13.34	ECON POLICY	15.15
29	J LABOR ECON	12.68	ECON POLICY	13.02	J IND ECON	14.65
30	ECON POLICY	12.39	J LABOR ECON	12.75	J URBAN ECON	13.96
31	ECON J	12.08	ECON J	12.48	J PUBLIC ECON	13.77
32	EUR ECON REV	12.04	EUR ECON REV	12.35	J APPL ECONOM	13.75
33	J HUM RESOUR	10.73	J HUM RESOUR	11.59	IND RELAT	13.62
34	J PUBLIC ECON	10.66	J LAW ECON	11.57	MACROECON DYN	13.61
35	J IND ECON	9.84	J PUBLIC ECON	11.05	WORLD BANK ECON REV	13.30
36	J LAW ECON	9.26	J IND ECON	10.74	IND LABOR RELAT REV	12.64
37	J APPL ECONOM	8.54	GAME ECON BEHAV	9.06	J DEV ECON	12.53
38	GAME ECON BEHAV	8.52	J APPL ECONOM	8.70	SOUTH ECON J	12.37
39	WORLD BANK ECON REV	7.31	WORLD BANK ECON REV	7.97	IMF STAFF PAPERS	12.14
40	IMF STAFF PAPERS	7.27	J HEALTH ECON	7.58	J REGUL ECON	11.84
41	IND LABOR RELAT REV	6.92	J ECON DYN CONTROL	7.47	INT ECON REV	11.60
42	ECONOMET THEOR	6.57	IMF STAFF PAPERS	7.34	FISC STUD	11.54
43	J DEV ECON	6.56	J ECON MANAGE STRAT	7.32	ECON TRANSIT	10.97
44	ECON THEOR	6.50	J BANK FINANC	7.05	J ENVIRON ECON MANAG	10.52
45	J ECON DYN CONTROL	6.47	J INT MONEY FINANC	7.04	REV INCOME WEALTH	10.31
46	J ECON MANAGE STRAT	6.46	IND LABOR RELAT REV	7.02	J COMP ECON	9.82
47	J INT MONEY FINANC	6.11	J RISK UNCERTAINTY	6.76	NATL TAX J	9.77
48	J ENVIRON ECON MANAG	5.69	ECONOMET THEOR	6.74	WORLD BANK RES OBSER	9.31
49	J BANK FINANC	5.47	J DEV ECON	6.72	ENVIRON DEV ECON	9.17
50	ENVIRON DEV ECON	5.46	ECON THEOR	6.66	J HEALTH ECON	9.10
51	J URBAN ECON	5.18	J ENVIRON ECON MANAG	5.54	OXFORD REV ECON POL	8.92
52	SOUTH ECON J	4.98	J URBAN ECON	5.25	LAND ECON	8.59
53	J ECON HIST	4.70	J ECON HIST	5.22	J INT MONEY FINANC	8.03
54	SCAND J ECON	4.67	ENVIRON DEV ECON	5.21	ECON EDUC REV	7.78
55	NATL TAX J	4.56	SOUTH ECON J	4.90	ENERGY J	7.72
56	INT TAX PUBLIC FINAN	4.44	NATL TAX J	4.88	ADV ECONOMETRICS	7.69
57	J RISK UNCERTAINTY	4.36	SOC CHOICE WELFARE	4.87	WORLD DEV	7.31

58	LABOUR ECON	4.23	SCAND J ECON	4.73	J DEV STUD	7.23
59	INT J GAME THEORY	4.10	INT TAX PUBLIC FINAN	4.46	REV IND ORGAN	7.01
60	IND RELAT	4.02	IND RELAT	4.36	INQUIRY-J HEALTH CAR	6.96
61	J MATH ECON	3.99	INT J GAME THEORY	4.25	REV FINANC STUD	6.92
62	CAN J ECON	3.93	J POLICY ANAL MANAG	4.25	ECON INQ	6.85
63	SOC CHOICE WELFARE	3.87	J MATH ECON	4.17	J FINANC QUANT ANAL	6.30
64	OXFORD ECON PAP	3.75	LABOUR ECON	4.13	REV ECON DYNAM	6.17
65	REG SCI URBAN ECON	3.69	CAN J ECON	3.90	MON LABOR REV	6.10
66	ECON INQ	3.69	ECON INQ	3.89	J ECON MANAGE STRAT	6.02
67	J HEALTH ECON	3.69	REAL ESTATE ECON	3.88	ENVIRON RESOUR ECON	5.05
68	INT J IND ORGAN	3.68	INT J IND ORGAN	3.86	J BUS	4.92
69	ADV ECONOMETRICS	3.59	J ECON BEHAV ORGAN	3.85	CAN J ECON	4.80
70	J POLICY ANAL MANAG	3.52	OXFORD ECON PAP	3.81	OXFORD B ECON STAT	4.78
71	ECONOMICA	3.44	HOUS POLICY DEBATE	3.77	J POPUL ECON	4.76
72	J ECON BEHAV ORGAN	3.36	REG SCI URBAN ECON	3.67	LABOUR ECON	4.75
73	LAND ECON	3.33	ADV ECONOMETRICS	3.57	SCOT J POLIT ECON	4.63
74	REV INCOME WEALTH	3.19	ECONOMICA	3.49	REG SCI URBAN ECON	4.60
75	OXFORD B ECON STAT	3.07	INQUIRY-J HEALTH CAR	3.47	INT J IND ORGAN	4.53
76	REV IND ORGAN	3.06	LAND ECON	3.32	J FORECASTING	4.51
77	EXPLOR ECON HIST	3.03	ECON EDUC REV	3.29	OXFORD ECON PAP	4.49
78	ENERGY J	2.99	REV INCOME WEALTH	3.26	J HOUS ECON	4.43
79	ECON EDUC REV	2.92	OXFORD B ECON STAT	3.17	DEV CHANGE	4.36
80	J REGUL ECON	2.91	J REAL ESTATE FINANC	3.11	ECON GEOGR	4.33
81	FISC STUD	2.73	REV IND ORGAN	3.10	ECON DEV CULT CHANGE	4.27
82	J COMP ECON	2.66	EXPLOR ECON HIST	3.08	RESOUR ENERGY ECON	4.21
83	RESOUR ENERGY ECON	2.48	HEALTH ECON	2.99	ENERG ECON	4.06
84	ECON TRANSIT	2.48	FISC STUD	2.82	J INST THEOR ECON	4.05
85	ECON LETT	2.40	J COMP ECON	2.78	SCAND J ECON	3.97
86	REAL ESTATE ECON	2.28	ENERGY J	2.70	BRIT J IND RELAT	3.91
87	MATH SOC SCI	2.27	J REGUL ECON	2.68	J JPN INT ECON	3.83
88	ENVIRON RESOUR ECON	2.19	J TRANSP ECON POLICY	2.60	J AFR ECON	3.80
89	OXFORD REV ECON POL	2.18	ECON TRANSIT	2.56	ECOL ECON	3.77
90	J REAL ESTATE FINANC	2.18	MATH SOC SCI	2.50	REV INT POLIT ECON	3.77
91	J JPN INT ECON	2.03	ECON LETT	2.48	INT REGIONAL SCI REV	3.75
92	J HOUS ECON	2.01	OXFORD REV ECON POL	2.42	J ECON SURV	3.69
93	J POPUL ECON	1.99	J HOUS ECON	2.39	J TRANSP ECON POLICY	3.59
94	WELTWIRTSCH ARCH	1.81	RESOUR ENERGY ECON	2.28	J ECON HIST	3.56
95	J TRANSP ECON POLICY	1.74	J POPUL ECON	2.17	AM J AGR ECON	3.54
96	MON LABOR REV	1.63	ENVIRON RESOUR ECON	2.11	J REGIONAL SCI	3.49
97	HOUS POLICY DEBATE	1.63	J JPN INT ECON	2.09	AGR ECON	3.44
98	INT REGIONAL SCI REV	1.61	PUBLIC CHOICE	1.92	PUBLIC CHOICE	3.43
99	PUBLIC CHOICE	1.56	J ECON PSYCHOL	1.86	WORLD ECON	3.15
100	J ECON SURV	1.49	MON LABOR REV	1.85	J AGR ECON	3.15
101	AM J AGR ECON	1.47	WELTWIRTSCH ARCH	1.85	INF ECON POLICY	3.13
102	WORLD BANK RES OBSER	1.46	INT REGIONAL SCI REV	1.76	J RISK UNCERTAINTY	3.11
103	ECON DEV CULT CHANGE	1.31	WORLD BANK RES OBSER	1.75	ECONOMICA	3.04
104	J PROD ANAL	1.30	J FORECASTING	1.65	REG STUD	3.00
105	KYKLOS	1.30	J ECON SURV	1.57	INT TAX PUBLIC FINAN	2.94
106	J DEV STUD	1.29	AM J AGR ECON	1.49	J ECON DYN CONTROL	2.90
107	J FORECASTING	1.28	WORLD DEV	1.49	GAME ECON BEHAV	2.89
108	ECOL ECON	1.14	KYKLOS	1.47	AUST J AGR RESOUR EC	2.83
109	HEALTH ECON	1.12	J DEV STUD	1.46	J ECON PSYCHOL	2.82
110	CONTEMP ECON POLICY	1.03	ECON DEV CULT CHANGE	1.39	EUR J IND RELAT	2.74
111	INT J FINANC ECON	1.01	J PROD ANAL	1.37	INT REV LAW ECON	2.72
112	NEW ENGL ECON REV	0.99	INT J FINANC ECON	1.29	B INDONES ECON STUD	2.71
113	WORLD DEV	0.94	ECOL ECON	1.22	EXPLOR ECON HIST	2.68
114	J REGIONAL SCI	0.94	ECON HIST REV	1.15	ECON DEV Q	2.65
115	ECON HIST REV	0.89	BRIT J IND RELAT	1.13	J ECON THEORY	2.61
116	ENERG ECON	0.88	ECON GEOGR	1.08	KYKLOS	2.57
117	JPN WORLD ECON	0.85	CONTEMP ECON POLICY	1.04	ECON LETT	2.46
118	J ECON	0.85	NEW ENGL ECON REV	1.03	CONTEMP ECON POLICY	2.45
119	J ECON PSYCHOL	0.84	J REGIONAL SCI	1.01	IDS BULL-I DEV STUD	2.31

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120	BRIT J IND RELAT	0.84	DEV CHANGE	0.96	WELTWIRTSCH ARCH	2.21
121	SCOT J POLIT ECON	0.84	J EVOL ECON	0.92	HEALTH ECON	2.18
122	MANCH SCH	0.83	MANCH SCH	0.85	FOOD POLICY	2.16
123	INQUIRY-J HEALTH CAR	0.83	J ECON	0.85	ECON THEOR	2.06
124	JPN ECON REV	0.82	JPN WORLD ECON	0.85	ECON REC	2.03
125	J AGR ECON	0.82	J INST THEOR ECON	0.83	ECONOMET THEOR	1.98
126	AGR ECON	0.80	J AGR ECON	0.83	J BANK FINANC	1.92
127	J AFR ECON	0.78	JPN ECON REV	0.82	J ECON BEHAV ORGAN	1.89
128	J EVOL ECON	0.75	INT REV LAW ECON	0.81	JPN WORLD ECON	1.84
129	J AGR RESOUR ECON	0.68	SCOT J POLIT ECON	0.81	GROWTH CHANGE	1.83
130	APPL ECON	0.65	ENERG ECON	0.79	CAMBRIDGE J ECON	1.76
131	WORLD ECON	0.60	J AFR ECON	0.79	ENERG POLICY	1.51
132	J INST THEOR ECON	0.60	AGR ECON	0.78	J PROD ANAL	1.47
133	ECON REC	0.60	WORLD ECON	0.77	CAN PUBLIC POL	1.36
134	J ECON EDUC	0.59	REG STUD	0.72	APPL ECON	1.31
135	EUR REV AGRIC ECON	0.53	APPL ECON	0.69	J POST KEYNESIAN EC	1.29
136	INF ECON POLICY	0.53	J AGR RESOUR ECON	0.68	J LABOR RES	1.27
137	AUST J AGR RESOUR EC	0.52	J ECON EDUC	0.67	HITOTSUB J ECON	1.20
138	J LABOR RES	0.48	CHINA ECON REV	0.63	AFR DEV REV	1.17
139	INT REV LAW ECON	0.46	ECON REC	0.59	DEV ECON	1.09
140	CHINA ECON REV	0.45	CAMBRIDGE J ECON	0.58	MANCH SCH	1.04
141	ECONOMIST-NETHERLAND	0.43	INF ECON POLICY	0.54	REAL ESTATE ECON	0.99
142	J MACROECON	0.41	SMALL BUS ECON	0.53	INT J GAME THEORY	0.88
143	ENERG POLICY	0.38	REV INT POLIT ECON	0.52	EUR REV AGRIC ECON	0.80
144	PAP REG SCI	0.34	EUR REV AGRIC ECON	0.52	NEW ENGL ECON REV	0.78
145	DEV ECON	0.34	AUST J AGR RESOUR EC	0.49	MATH SOC SCI	0.73
146	DEV CHANGE	0.32	ECONOMIST-NETHERLAND	0.46	CHINA ECON REV	0.72
147	ANN REGIONAL SCI	0.32	PAP REG SCI	0.44	CAN J DEV STUD	0.72
148	SMALL BUS ECON	0.29	J MACROECON	0.41	EMERG MARK FINANC TR	0.70
149	CAMBRIDGE J ECON	0.26	GROWTH CHANGE	0.40	RESOUR POLICY	0.69
150	J POLICY MODEL	0.26	J LABOR RES	0.40	INT J FINANC ECON	0.64
151	GROWTH CHANGE	0.25	CAN J DEV STUD	0.39	S AFR J ECON	0.60
152	FOOD POLICY	0.25	IDS BULL-I DEV STUD	0.38	SMALL BUS ECON	0.56
153	REG STUD	0.25	DEV ECON	0.37	POST-COMMUNIST ECON	0.50
154	J POST KEYNESIAN EC	0.24	ANN REGIONAL SCI	0.37	PAP REG SCI	0.45
155	ECON PLANN	0.23	ENERG POLICY	0.36	J EVOL ECON	0.45
156	EUR J IND RELAT	0.20	ECON DEV Q	0.36	ANN REGIONAL SCI	0.44
157	ECON MODEL	0.19	B INDONES ECON STUD	0.32	TELECOMMUN POLICY	0.38
158	OPEN ECON REV	0.19	EUR J IND RELAT	0.31	J REAL ESTATE FINANC	0.35
159	AFR DEV REV	0.18	ECON PLANN	0.30	ECON MODEL	0.32
160	ECON DEV Q	0.18	J MEDIA ECON	0.29	OPEN ECON REV	0.31
161	B INDONES ECON STUD	0.18	FOOD POLICY	0.29	ECON HIST REV	0.29
162	IDS BULL-I DEV STUD	0.17	J POLICY MODEL	0.27	J ECON EDUC	0.28
163	JAHRB NATL STAT	0.15	TELECOMMUN POLICY	0.26	TJDSCHR ECON SOC GE	0.28
164	ECON GEOGR	0.15	J POST KEYNESIAN EC	0.26	J POLICY MODEL	0.25
165	HITOTSUB J ECON	0.15	AFR DEV REV	0.23	ECONOMIST-NETHERLAND	0.24
166	RESOUR POLICY	0.14	HITOTSUB J ECON	0.23	J MEDIA ECON	0.19
167	TELECOMMUN POLICY	0.12	OPEN ECON REV	0.22	J ECON ISSUES	0.17
168	APPL ECON LETT	0.12	TJDSCHR ECON SOC GE	0.21	J AGR RESOUR ECON	0.15
169	CAN PUBLIC POL	0.11	ECON MODEL	0.21	SOC CHOICE WELFARE	0.13
170	J ECON ISSUES	0.09	JAHRB NATL STAT	0.19	APPL ECON LETT	0.08
171	CAN J DEV STUD	0.08	RESOUR POLICY	0.19	EASTERN EUR ECON	0.07
172	S AFR J ECON	0.08	APPL ECON LETT	0.17	J MACROECON	0.06
173	REV INT POLIT ECON	0.06	POST-COMMUNIST ECON	0.17	JPN ECON REV	0.03
174	POST-COMMUNIST ECON	0.04	CAN PUBLIC POL	0.17	POLIT EKON	0.00
175	EMERG MARK FINANC TR	0.03	J ECON ISSUES	0.11	FINANC A UVER	0.00
176	J MEDIA ECON	0.03	S AFR J ECON	0.10	ECON CAS	0.00
177	EASTERN EUR ECON	0.02	EASTERN EUR ECON	0.07	JAHRB NATL STAT	0.00
178	POLIT EKON	0.02	EMERG MARK FINANC TR	0.07	J ECON	0.00
179	FINANC A UVER	0.01	POLIT EKON	0.02	J FINANC INTERMED	0.00
180	TJDSCHR ECON SOC GE	0.00	FINANC A UVER	0.01	J MATH ECON	0.00
181	ECON CAS	0.00	ECON CAS	0.00	ECON PLANN	0.00

due to the fact that the leading finance journals are more reference-intensive than the leading core economics journals, and they tend to cite each other heavily. At the end of the first iteration, *RFS* is in 20th position and *JFQA* is in 44th position. These journals are cited with only 18 percent and 7 percent of the frequency, respectively, as the leading journal, *AER*. They rise dramatically in the rankings because they garner so many citations by *JF* and *JFE*, which are in second and sixth positions, respectively, after the first iteration. We believe that this sensitivity of the *RFS* and *JFQA* rankings to citations in a small subset of the literature casts doubt on the desirability of using the Liebowitz and Palmer method in this application.

5.1 Influence of Economics Journals outside Economics

The overall-impact rankings differ noticeably from the economics-impact rankings (Spearman correlation coefficient = .74). Three health economics journals rise to the top, although two general-interest economics journals, *American Economic Review* and *Quarterly Journal of Economics*, remain in the top five. *Journal of Human Resources* moves up from number 36 in influence on economics to number 6 in influence on all social sciences, *Journal of Risk and Uncertainty* moves up from number 63 to number 12, and *Journal of Economics and Psychology* moves up from number 96 to number 18.

As compared with the economics-impact rankings, the overall-impact rankings give greater prominence to journals with comparatively broad accessibility. For example, *World Development*, *Housing Policy Debate*, *Monthly Labor Review*, and *Journal of Policy Analysis and Management* are relatively high on the list by overall impact. Of the prestigious technically-oriented publications in the areas of finance and monetary economics, only *Journal of Finance* remains in the top 20.

Some exceptions exist to the positive association between overall-impact rankings and accessibility. *Econometrica* and *Journal of Econometrics* remain highly influential according to their overall impact on the social sciences. This finding suggests that econometrics is widely applied--or at least highly regarded--across the whole spectrum of social sciences, and not just in economics.

The list of top journals by overall impact remains very similar if no adjustment is made for reference intensity. The first six journals for overall impact appear in the same order, and 18 of the journals in the top 20 in Table 2 appear in the top 20 in Appendix Table 2. The leading finance journals achieve similar rankings in the two lists, suggesting that the impact of their cross-citations is roughly offset by the citation patterns in the broader social science literature.

In the policy-impact rankings, prestigious economics journals such as *American Economic Review*, *Quarterly Journal of Economics*, *Econometrica*, and *Journal of Political Economy* continue to rank very high. This may be partially attributable to the selection of policy journals, all of which are somewhat economics-relevant and more than half of which overlap with economics journals. Leading economics journals

presumably have stronger influence on these types of policy journals than on policy-oriented social science journals in general.

On the other hand, policy-impact rankings for many other journals differ substantially from their economics-impact rankings (resulting in a Spearman correlation coefficient of only .55). Moving up most notably in the policy-impact rankings are journals in fields such as health economics, development economics, urban and regional economics, agricultural economics, and labor economics. Of the dozen policy research journals found in our economics list, *Canadian Public Policy*, *Housing Policy Debate*, *IDS Bulletin—Institute of Development Studies*, and *Inquiry—Journal of Health Care* move up smartly in going from the economics-impact rankings to the policy-impact rankings, and *Brookings Papers on Economic Activity* remains fairly highly ranked. Some of the other journals in this category move up while others move down, but none rises above the middle tier.

5.2 Influence per Article

Although journals tend to promote themselves by providing measures of their readership or citations, researchers considering alternative publication outlets should be interested in whether a typical article published in one journal has more or less influence than a typical article published in another. In many cases, rankings by adjusted impact-per-article are similar to those already discussed. In the within-economics approach, per-article rankings and all-articles journal rankings are strongly correlated (Spearman coefficient equals .94). The most noteworthy exceptions are the journals that publish only small numbers of articles but manage to achieve relatively high influence for the journal as a whole, such as *NBER Macroeconomics Annual*, *Brookings Papers on Economic Activity*, and *Journal of Economic Growth* (Table 3).²⁶ According to *JCR*, these journals published only 36, 102 and 73 articles, respectively, in the 1996-to-2003 study period, and they rank numbers 1, 8, and 11, respectively, in our per-article, reference-intensity-adjusted rankings. *American Economic Review*, which published more than one thousand articles in the study period, remains highly ranked (number 12). However, another large journal, *Economics Letters*, falls from 25 to 85, once its specialization in very short pieces is taken into account.

Using the per-article measure and adjusting for reference intensity, the results under the overall-impact approach are remarkably similar to those under the economics-

²⁶ The authors of articles appearing in *NBER Macroeconomics Annual* and *Brookings Papers on Economic Activity*, and to some extent *Journal of Economic Literature*, are selected by the editors of these publications rather than being chosen from among a pool of submissions. Their high rankings may be irrelevant for researchers deciding where to submit their papers but they remain relevant for those who evaluate the research productivity of authors. Excluding these two journals from the body of journals undergoing ranking, but including them as sources of citations advances *Journal of Financial Economics* and *Journal of Finance* to first and second place, respectively, in the per-article rankings.

impact approach (correlation = .985). The same journals are in the top ten for both lists, albeit in a somewhat different order. Judged by overall impact per-article, *NBER Macroeconomics Annual* is the highest-ranked journal, followed by *Quarterly Journal of Economics*. The only journal to rank in the top twenty by overall impact but not by economics impact is *Journal of Accounting and Economics* (11th in the overall rankings and 26th in the economics rankings). This journal receives three-quarters of its citations from non-economics journals, compared to only 30 percent for the *Journal of Economic Perspectives* and even less for most of the top economics journals.

The opinions of economics journals have a high influence on the per-article overall rankings. *Journal of Economics Literature* is the most heavily cited social science journal on a per-article basis, adjusted for the reference intensities of the citing journals. In other words, in terms of the notation used in section 3, its initial adjusted impact I_0 is higher than that of any other journal in the entire JCR social sciences database. *Quarterly Journal of Economics* and *NBER Macroeconomics Annual* also have initial adjusted impacts that are relatively high, at least half that of *JEL*. As a result, their citation patterns tend to “crowd out” those of non-economics social sciences journals in subsequent iterations, so there is relatively little scope for the citations of these journals to influence the rankings.

For policy-impact per article, adjusted for reference intensity, the top journals are *NBER Macroeconomics Annual* and *Quarterly Journal of Economics*—identical to their economics-impact rankings. *Brookings Papers on Economic Activity* moves up to third position, from eight in the economics list. More dramatically, *Housing Policy Debate* and *Journal of Policy Analysis and Management* move up to the top twenty according to policy impact per-article—far above their economics rankings.

As indicated in Appendix Table 3, without the adjustments for reference intensity, the overall and policy journal rankings per article differ more from the economics rankings per article. For example, *Journal of Law and Economics* and *Journal of Risk and Uncertainty* rank first and fourth, respectively, in overall impact per article, but only 31st and 68th in economics impact per article. *Journal of Regulatory Economics* and *Economic Transitions* rank 11th and 14th in policy impact per article, but 53rd and 50th in economics impact per article. The explanation is that articles in law and psychology journals offer more citations on average than articles in other social sciences fields. The reference intensities of these JCR categories were 9.6 and 7.4, respectively, compared to—for example—5.6 for business, finance; 4.5 for economics; and only 1.3 for history. The lengthy reference sections in law and psychology articles serve to boost the standings of related journals in the economics field under the Liebowitz-Palmer method relative to their standings under the invariant method.

5.3 Insights from Adopting a Content-based Definition of Economics

The journals we considered from the non-economics categories in *JCR*, which have been ignored in other studies ranking economics journals, vary greatly in their rankings. As noted already, the most significant changes in the economics-impact rankings come from including more of the economics-oriented finance journals. *Journal of Finance* and *Review of Financial Studies* appear in the top ten, partly because they are cited by general economics journals and partly because a high share of the citations in finance-oriented economics journals are to other, similar journals. Several other previously unranked finance- and business-oriented journals appear in the top 50 in the economics-impact rankings, measured by impact-adjusted citations both in total and per article. These are *Journal of Business*, *Journal of Financial Intermediation*, and *Journal of International Money and Finance*. *Industrial and Labor Relations Review* and *Environment and Development Economics* also are found in the top 50 economics-impact rankings per article. Most of the other added publications are in the middle-to-lower range in economics impact.

Economics-oriented journals outside the *JCR* economics category tend to achieve much higher ranks in the overall-impact and policy-impact rankings. Some even rise to the top range. Thus, the inclusion of these journals is important in order to capture the channels through which the economics discipline influences social sciences at large and policy-related publications in particular.

5.4 The Effects of Journal Characteristics on Rankings: Regression Analysis

The summary presented above is based largely on examples of relatively well-known journals. In order to determine the factors systematically associated with a journal's position in various ranking exercises and to summarize better the patterns of rankings in general, we estimated regressions using some of the variables in our journal-scoring database. The regressions are not intended to provide a full explanation of the factors affecting the rankings, since many factors at play, such as the editors' and authors' characteristics, are not captured by our database.

Table 4 presents the results of using ordinary least squares to explain journal rankings for the six specifications that included the adjustment for reference intensity. The dependent variables are the journal rankings, from 1 to 181. Therefore, independent variables serving to move journals higher in the rankings are associated with a negative coefficient. Recognizing the problems in estimating standard errors when the values for the dependent variables are interdependent, we tried two additional specifications, each of which yielded similar conclusions to OLS with respect to key findings.²⁷

²⁷ The first alternative was rank transformation (Iman and Conover 1979). Under this approach, the independent variables also were expressed as rankings, and then their effects on journal rankings were estimated using OLS. The other alternative was propensity score matching, a nonlinear approach

Table 4 Regression Analysis of Economics Journal Rankings

Independent Variable	Total Journal Ranking			Per Article Ranking		
	Economics Impact	Overall Impact	Policy Impact	Economics Impact	Overall Impact	Policy Impact
Highly Theoretical ¹	-41.98 *** (8.69)	-19.71 ** (9.04)	-8.92 (9.23)	-45.09 *** (9.37)	-43.53 *** (9.44)	-25.75 *** (9.76)
Highly Empirical/Applied ²	-5.72 (10.30)	-17.19 (10.72)	-29.00 *** (10.93)	-12.08 (11.11)	-9.10 (11.19)	-31.87 *** (11.57)
Strong Policy Orientation ³	-4.56 (8.52)	-20.30 ** (8.87)	-33.21 *** (9.05)	-5.09 (9.19)	-7.80 (9.26)	-28.38 *** (9.57)
JCR Economics Category ⁴	-15.96 * (9.04)	1.40 (9.41)	1.71 (9.60)	-13.64 (9.76)	-10.32 (9.83)	-11.22 (10.16)
Interdisciplinarity ⁵	-7.60 (7.01)	-20.59 *** (7.30)	-11.01 (7.45)	-6.79 (7.56)	-11.75 (7.62)	-7.59 (7.88)
Average Number of Articles per Year	-0.51 *** (0.11)	-0.67 *** (0.11)	-0.53 *** (0.12)	-0.09 (0.12)	-0.09 (0.12)	-0.04 (0.12)
Constant	146.50 *** (13.40)	150.85 *** (13.94)	150.76 *** (14.22)	133.70 *** (14.45)	130.72 *** (14.56)	146.48 *** (15.05)
R Squared	0.28	0.22	0.19	0.17	0.15	0.10
Adjusted R Squared	0.26	0.20	0.17	0.14	0.13	0.07

Notes:

1 Equals 1 if content variable "theory" is equal to 2, 0 otherwise.

2 Equals 1 if content variable "empirical" is equal to 2, 0 otherwise.

3 Equals 1 if included in policy journal list, 0 otherwise.

4 Equals 1 if included in economics category in *JCR*, 0 otherwise.

5 Equals 1 if classified in more than one category in *JCR*, 0 otherwise.

Whether examined in a narrow or a broad or a targeted context, journals publishing more articles tend to have greater influence than journals containing fewer articles. By contrast, a journal's size has no systematic effect on the average influence per article. Therefore, authors should not expect to have their articles cited any more frequently, or in more prestigious publications, if they appear in journals that publish large numbers of other articles.

As commonly believed, publishing theoretical or mathematical research tends to raise a journal's standing within the economics discipline. Such an orientation also

(Rosenbaum and Rubin 1983). The outcome measure was journal rank, the "treatment" was each of the independent variables in turn, and journals were matched pairwise with replacement using the remaining independent variables. To measure the effects of the size of the journal under propensity score matching, we converted average articles per year to a dichotomous variable. The other independent variables were already dichotomous, so no transformations were necessary to implement the procedure.

improves an economics journal's rankings in the social sciences at large. The link was less strong between theoretical orientation and influence among policy journals.²⁸

An empirical/applied orientation plays an important role in boosting a journal's rankings based on policy impact, but does not turn out to be a robust factor affecting a journal's rankings within economics or in the social sciences at large. These findings bear important implications for scholars and journal editors who want to build broader influence outside of economics. They also help to explain why some comprehensive journals with both theoretical and empirical focuses, such as *American Economic Review* and *Quarterly Journal of Economics*, perform well across a range of rankings.

As discussed, the iterative method assigns differential weights to journal citations, depending on how frequently the citing journals are cited by other journals. To help evaluate how our journal rankings are affected by the number of citations versus the prestige of citing journals, we estimated similar regressions using the unweighted rankings produced in the first iteration and compared them with those produced through iteration. Within economics, articles in empirical journals received almost as many citations as articles in theoretical journals, as shown in the first-iteration rankings (Appendix Table 4). Therefore, it is the smaller average influence of the journals citing articles in empirical journals that reduces their influence on the profession, as compared with theoretical journals.

The final three variables in Table 4 test whether an economics journal's field, broadly defined, has an effect on its impact-adjusted citations. One of these variables indicates whether or not the journal has a strong policy orientation. Another denotes whether or not the journal is listed in the *JCR* economics category, providing an indicator of whether or not it is encompassed by the traditional view of economics, and was therefore included in previous ranking studies. Not surprisingly, journals receive greater attention within their own circles. Policy impacts are higher for policy-oriented journals, and economics impacts are (weakly) higher for *JCR*-designated economics journals. On the other hand, being in either of these categories yields comparatively little influence on standing among all social science journals, after controlling for the mix of theoretical versus empirical content. The last variable is an indicator of whether or not a journal is interdisciplinary, measured by whether or not *JCR* lists the journal in more than one field. Journals in econometrics and mathematical methods, international economics, and some planning- and business-oriented fields are frequently cross-listed. Being interdisciplinary usually has an insignificant effect on most of the rankings.

6. Conclusion

Evaluations of the research productivity of economists tend to restrict their focus to the publications in the economics category of the *Journal Citation Reports*. This study

²⁸ We did not include sophistication in the regressions because this variable is highly collinear with theoretical orientation and policy orientation.

extends the impact-adjusted citations-based ranking method so as to make it applicable to the use of alternative evaluative criteria. It expands the scope for impact-adjusted computations from journals in a particular discipline to the whole body of social science journals. It further extends the method to determining a journal's influence according to a targeted set of journals. This technique is applied to ranking economics journals according to their influence on policy journals, but it can be applied more generally to any case in which the body of evaluating literature differs from the body of literature being evaluated.

In all, the study compares the results of six different ranking methodologies: influence within economics, within social sciences, and within policy, each of which is measured according to total impact-adjusted citations as well as by average impact-adjusted citations per article. We adjust for reference intensity in computing these rankings, while also making key comparisons to rankings based on the more traditional approach, which does not include an adjustment for reference intensity. We argue that adjusting total citations by the number of articles published in each cited journal is a control for size superior to other controls that focus on the number of pages or characters. Furthermore, it is our preferred method when using citations to gauge the expected influence of a scholarly paper.

We assign journals to categories according to their content, choosing a definition of economics content that results in the inclusion of the most prominent journals in finance in our rankings. Using a ranking based on citations within economics, *American Economic Review* ranks highest, followed by *Journal of Finance*, *Quarterly Journal of Economics*, *Econometrica*, and *Journal of Financial Economics*. Applying the same body of citations but adjusting for the number of articles published in the cited journals results in *NBER Macroeconomics Annual* attaining the top ranking and *Brookings Papers on Economic Activity* and *Journal of Economic Literature* also rising to the top five. The four rankings using broader bodies of citing literature yield two new frontrunners—*Journal of Health Economics* (for overall impact, not adjusted for the number of articles) and *Quarterly Journal of Economics* (for policy impact, adjusted for the number of articles). *American Economic Review* and *NBER Macroeconomics Annual* repeat as the top journals in the remaining two categories. In addition, the relative standings of many other journals are different from what they are in the base case that measures total impact-adjusted citations within economics. The changes in rankings are due in part to idiosyncratic factors about each journal's readership, notably the relatively broad interest outside economics in certain topics in applied microeconomics as well as economic development. The changes are due also to differences in the relative importance that different literatures assign to theoretical and empirical contributions. Finally, they reflect the finding that journal size has no systematic effect on influence per article, regardless of which body of citing literature is used. Notwithstanding these sources of differences, the journal rankings per article are very similar based on citations in economics and in the entire social sciences literature,

but this result depends crucially on adjusting for differences in citing intensity across different fields.

The second major contribution of the study lies in investigating the interdisciplinary communication patterns among social sciences based on including the universe of the social science journals in *JCR*. This analysis identifies the list of disciplines that contribute to the development of economics as well as the disciplines that draw significant contributions from economics. On the one hand, we confirm other researchers' conclusions that the economics literature is more self-contained than almost any other social science discipline. On the other hand, we find that economists draw considerably from mathematical methods used in other social sciences, not just those used in economics. Our results also serve to highlight mutual links between some economics journals and journals in the environmental studies and planning and development literatures that have been largely ignored in previous discussions of *JCR* categories.

This paper has focused on characteristics of articles and journals, and on the intensity of citations across journals. Much more extensive research would be needed to identify which types of contributions from the economics literature are used most in other fields—contributions to methodology, theory, or empirical questions or results. This would require categorizing and identifying the nature of specific citations, not just tallying them.

In recent years, the Internet has opened a new and increasingly prominent communication channel in the intellectual community. Studies appear to be cited more and more in electronically-available working paper form before being published. Furthermore, some journals have “gone electronic” without abandoning the refereeing process that characterizes many of the existing academic publications. It is natural to ask how these and other changes in the structure of publications and citations affect the relevance of ranking studies. The application of the impact-adjusted citations methodology to these alternative outlets would require that they be included in the data as both citing and cited publications. The criteria for inclusion in the *JCR* database do not impose any obvious barriers for electronic journals.²⁹ Those who are interested in continuing to use ranking studies should hope that the entry of electronic journals with relatively short refereeing and publication lags will serve to produce quicker dissemination of economic research in general. This would reduce the proportion of studies that are cited as working papers, which generally lack the quality controls imposed by journals. In the meantime, based on our findings regarding total versus per-article citations, we urge those who may undertake studies of the influence of working paper series to consider their impacts *per working paper*, not just in total.

²⁹ Further broadening the database to encompass working papers poses the problem of duplication of citations: Any journal article referred to in a working paper would automatically be cited again in the published version.

Appendix Table 1 Policy Journals and their Overlap with Economics

Policy Journal	Also Economics Journal?	Policy Journal (continued from the left)	Also Economics Journal?
ADMIN SOC	N	J PLAN EDUC RES	N
AFR DEV REV	Y	J PLAN LIT	N
AGR ECON	Y	J POLICY ANAL MANAG	Y
AM REV PUBLIC ADM	N	J POLICY MODEL	Y
AUST J AGR RESOUR EC	Y	J PUBL ADM RES THEOR	N
AUST J PUBL ADMIN	N	J SOC POLICY	N
B INDONES ECON STUD	Y	J TRANSP ECON POLICY	Y
BROOKINGS PAP ECO AC	Y	J URBAN AFF	N
CAN J DEV STUD	Y	J URBAN PLAN D-ASCE	N
CAN PUBLIC ADMIN	N	J URBAN TECHNOL	N
CAN PUBLIC POL	Y	J WORLD TRADE	N
CONTEMP ECON POLICY	Y	LOCAL GOV STUD	N
DEV CHANGE	Y	NATL TAX J	Y
DISASTERS	N	NBER MACROECON ANN	Y
ECOL ECON	Y	OXFORD REV ECON POL	Y
ECON DEV Q	Y	POLICY POLIT	N
ECON GEOGR	Y	POLICY SCI	N
ECON J	Y	POLICY STUD J	N
ECON PLANN	Y	PROG PLANN	N
ECON POLICY	Y	PUBLIC ADMIN DEVELOP	N
EDUC EVAL POLICY AN	N	PUBLIC ADMIN REV	N
EDUC URBAN SOC	N	PUBLIC INTEREST	N
ENERG POLICY	Y	PUBLIC MONEY MANAGE	N
ENERGY J	Y	REG STUD	Y
ENVIRON DEV ECON	Y	REV ECON STAT	Y
ENVIRON PLANN C	N	SOC NATUR RESOUR	N
ENVIRON URBAN	N	SOC POLICY ADMIN	N
EUR J IND RELAT	Y	STUD COMP INT DEV	N
EUR URBAN REG STUD	N	SUSTAIN DEV	N
FINANC A UVER	Y	TRANSPORTATION	N
FISC STUD	Y	URBAN AFF REV	N
GROWTH CHANGE	Y	URBAN EDUC	N
HABITAT INT	N	URBAN LAWYER	N
HOUS POLICY DEBATE	Y	WORK EMPLOY SOC	N
IDS BULL-I DEV STUD	Y	WORLD BANK ECON REV	Y
IMF STAFF PAPERS	Y	WORLD BANK RES OBSER	Y
INQUIRY-J HEALTH CAR	Y	WORLD DEV	Y
INT DEV PLANN REV	N	WORLD ECON	Y
INT J FINANC ECON	Y		
INT LABOUR REV	N		
INT REV ADM SCI	N		
J AFR ECON	Y		
J AM PLANN ASSOC	N		
J DEV STUD	Y		
J ECON LIT	Y		
J ECON PERSPECT	Y		
J EUR PUBLIC POLICY	N		
J HEALTH POLIT POLIC	N		
J HUM RESOUR	Y		

(continued to the right)

Appendix Table 2 Top 50 Economics Journals Ranked by Journal Impact without Adjustment for Reference Intensity of Citing Journals

Rank	Within Economics Impact		Overall Impact		Policy Impact	
	Journal's title	Index	Journal's title	Index	Journal's title	Index
1	J FINANC	100.00	J HEALTH ECON	100.00	AM ECON REV	100.00
2	J FINANC ECON	76.92	HEALTH ECON	91.35	Q J ECON	70.22
3	REV FINANC STUD	48.13	INQUIRY -J HEALTH CAR	31.84	J HEALTH ECON	40.76
4	AM ECON REV	46.80	Q J ECON	23.11	J POLIT ECON	39.66
5	Q J ECON	44.19	AM ECON REV	19.22	J ECON LIT	32.68
6	J POLIT ECON	36.16	J HUM RESOUR	11.36	J ECON PERSPECT	31.80
7	ECONOMETRICA	28.74	J RISK UNCERTAINTY	9.38	ECONOMETRICA	31.12
8	J ECONOMETRICS	15.43	HOUS POLICY DEBATE	8.71	J FINANC	27.76
9	J FINANC QUANT ANAL	15.34	J ECON PSYCHOL	7.71	ECON J	27.00
10	J ECON LIT	14.73	J ECON PERSPECT	7.37	J DEV ECON	22.98
11	REV ECON STUD	14.09	ECONOMETRICA	7.34	REV ECON STAT	22.58
12	J MONETARY ECON	13.93	RAND J ECON	7.02	J DEV STUD	21.91
13	REV ECON STAT	13.60	J ECON LIT	6.57	J PUBLIC ECON	21.68
14	J ECON PERSPECT	12.72	J ECONOMETRICS	5.83	EUR ECON REV	21.61
15	J BUS	12.55	WORLD DEV	5.58	RAND J ECON	20.67
16	EUR ECON REV	11.44	J POLIT ECON	5.55	J ECONOMETRICS	19.50
17	J ECON THEORY	10.57	J ECON BEHAV ORGAN	4.72	J MONETARY ECON	18.16
18	J INT ECON	9.66	J PUBLIC ECON	4.57	J FINANC ECON	17.34
19	J MONEY CREDIT BANK	9.09	J FINANC	4.24	HOUS POLICY DEBATE	17.32
20	ECON J	8.83	REV ECON STAT	3.97	BROOKINGS PAP ECO AC	17.30
21	RAND J ECON	8.57	MON LABOR REV	3.95	J HUM RESOUR	16.38
22	J PUBLIC ECON	8.46	J POLICY ANAL MANAG	3.62	J URBAN ECON	15.77
23	J BANK FINANC	8.28	J MEDIA ECON	3.61	WORLD DEV	15.00
24	INT ECON REV	8.24	ECON INQ	3.10	J LABOR ECON	14.96
25	J ACCOUNT ECON	8.08	ECON J	2.94	J BUS ECON STAT	14.02
26	J FINANC INTERMED	7.58	REV ECON STUD	2.81	REV ECON STUD	13.80
27	J BUS ECON STAT	7.40	J FINANC ECON	2.81	AM J AGR ECON	13.36
28	J ECON DYN CONTROL	6.95	APPL ECON	2.62	INQUIRY -J HEALTH CAR	13.13
29	BROOKINGS PAP ECO AC	5.94	IND LABOR RELAT REV	2.48	J MONEY CREDIT BANK	12.71
30	GAME ECON BEHAV	5.45	CONTEMP ECON POLICY	2.39	J INT ECON	12.61
31	NBER MACROECON ANN	5.22	GAME ECON BEHAV	2.28	HEALTH ECON	12.57
32	ECON LETT	5.03	AM J AGR ECON	2.26	IND LABOR RELAT REV	12.42
33	ECON THEOR	4.92	SOUTH ECON J	2.09	DEV CHANGE	12.37
34	J INT MONEY FINANC	4.51	J ECON THEORY	1.90	J ACCOUNT ECON	10.84
35	ECONOMET THEOR	4.38	J PROD ANAL	1.79	J POLICY ANAL MANAG	10.09
36	J DEV ECON	3.99	J DEV STUD	1.54	J LAW ECON	9.63
37	J LABOR ECON	3.77	IDS BULL-I DEV STUD	1.46	IDS BULL-I DEV STUD	9.09
38	J LAW ECON	3.48	J LAW ECON	1.44	WORLD BANK ECON REV	8.83
39	J ECON GROWTH	3.47	EUR ECON REV	1.41	IND RELAT	8.55
40	MACROECON DYN	3.25	J LABOR ECON	1.33	ECON DEV CULT CHANGE	8.11
41	J HUM RESOUR	3.02	J POPUL ECON	1.26	ECON LETT	8.02
42	J IND ECON	3.01	NATL TAX J	1.26	ECON INQ	7.72
43	CAN J ECON	2.92	J ECON MANAGE STRAT	1.23	J INT MONEY FINANC	6.93
44	J APPL ECONOM	2.90	J DEV ECON	1.17	J ENVIRON ECON MANAG	6.79
45	J ECON BEHAV ORGAN	2.86	DEV CHANGE	1.14	WORLD BANK RES OBSER	6.78
46	REV ECON DYNAM	2.85	J INT ECON	1.14	NATL TAX J	6.54
47	INT J IND ORGAN	2.37	J MONETARY ECON	1.12	J APPL ECONOM	6.47
48	J ECON HIST	2.02	J ENVIRON ECON MANAG	1.10	ECOL ECON	6.47
49	J URBAN ECON	1.80	REV FINANC STUD	1.09	FOOD POLICY	6.42
50	NATL TAX J	1.65	ECONOMICA	1.08	J IND ECON	6.23

Appendix Table 3 Top 50 Economics Journals Ranked by Per Article Impact without Adjustment for Reference Intensity of Citing Journals

Rank	Within Economics Impact		Overall Impact		Policy Impact	
	Journal's title	Index	Journal's title	Index	Journal's title	Index
1	J FINANC	100.00	J LAW ECON	100.00	NBER MACROECON ANN	100.00
2	J FINANC ECON	97.28	J ECON LIT	80.03	BROOKINGS PAP ECO AC	90.12
3	NBER MACROECON ANN	94.50	Q J ECON	72.51	Q J ECON	81.95
4	Q J ECON	83.20	J RISK UNCERTAINTY	40.84	J ECON LIT	51.47
5	REV FINANC STUD	82.78	J POLIT ECON	37.25	J POLIT ECON	35.40
6	J ECON LIT	62.51	J FINANC	36.82	J ECON PERSPECT	31.53
7	J POLIT ECON	59.39	J FINANC ECON	35.42	AM ECON REV	26.92
8	BROOKINGS PAP ECO AC	49.96	J ECON PERSPECT	32.26	J ACCOUNT ECON	23.81
9	J BUS	40.07	RAND J ECON	29.80	J MONETARY ECON	23.41
10	J FINANC QUANT ANAL	37.98	NBER MACROECON ANN	27.19	RAND J ECON	22.64
11	J FINANC INTERMED	37.02	INT REV LAW ECON	21.27	J REGUL ECON	21.09
12	ECONOMETRICA	31.74	REV FINANC STUD	19.38	ECON J	19.97
13	J ECON GROWTH	29.00	AM ECON REV	19.01	J IND ECON	19.73
14	REV ECON STUD	27.63	BROOKINGS PAP ECO AC	17.69	ECON TRANSIT	18.96
15	AM ECON REV	26.64	REV ECON STUD	16.29	J FINANC ECON	18.37
16	J MONETARY ECON	24.06	ECONOMETRICA	12.71	ECONOMETRICA	17.47
17	J ECON PERSPECT	23.28	J ACCOUNT ECON	12.10	J MONEY CREDIT BANK	16.53
18	J ACCOUNT ECON	22.61	J IND ECON	11.41	J FINANC	16.40
19	RAND J ECON	16.75	HOUS POLICY DEBATE	10.13	J ECON GROWTH	16.10
20	J MONEY CREDIT BANK	16.69	J FINANC QUANT ANAL	9.86	EUR ECON REV	15.51
21	J INT ECON	16.47	J LABOR ECON	9.66	J COMP ECON	15.33
22	REV ECON STAT	16.37	NATL TAX J	9.59	REV ECON STUD	14.97
23	MACROECON DYN	14.36	ECON INQ	9.30	REV ECON STAT	14.45
24	J ECONOMETRICS	14.03	J BUS	9.17	HOUS POLICY DEBATE	14.02
25	J BUS ECON STAT	13.18	J ECON GROWTH	8.61	J INT ECON	13.75
26	INT ECON REV	12.78	ECON J	8.14	J BUS ECON STAT	13.50
27	REV ECON DYNAM	12.37	J ECON PSYCHOL	7.98	SOUTH ECON J	13.41
28	ECON POLICY	12.18	IND LABOR RELAT REV	7.18	MACROECON DYN	13.33
29	EUR ECON REV	11.80	REV ECON STAT	6.98	J LAW ECON	12.52
30	ECON J	10.62	J PUBLIC ECON	6.94	IMF STAFF PAPERS	12.48
31	J LAW ECON	10.43	J FINANC INTERMED	6.30	J APPL ECONOM	11.27
32	J IND ECON	9.10	J MONETARY ECON	5.93	J ECONOMETRICS	11.23
33	J LABOR ECON	8.66	EUR ECON REV	5.73	J POLICY ANAL MANAG	10.12
34	J BANK FINANC	8.09	SOUTH ECON J	5.42	ECON POLICY	10.05
35	J PUBLIC ECON	7.60	J HUM RESOUR	5.04	J HUM RESOUR	9.53
36	J INT MONEY FINANC	7.42	J INT ECON	4.59	J PUBLIC ECON	9.47
37	IMF STAFF PAPERS	7.40	J ECON MANAGE STRAT	4.19	INT ECON REV	8.71
38	J APPL ECONOM	7.03	PUBLIC CHOICE	4.18	J DEV ECON	8.20
39	J HUM RESOUR	6.88	ECON POLICY	4.11	SCOT J POLIT ECON	8.06
40	J ECON THEORY	6.63	J ENVIRON ECON MANAG	3.86	REV IND ORGAN	7.52
41	J ECON DYN CONTROL	6.43	J MONEY CREDIT BANK	3.75	IND RELAT	7.43
42	J DEV ECON	6.26	MON LABOR REV	3.70	J LABOR ECON	7.37
43	WORLD BANK ECON REV	6.16	J ECON THEORY	3.64	J URBAN ECON	7.32
44	ECONOMET THEOR	5.08	J BUS ECON STAT	3.57	J FINANC QUANT ANAL	7.20
45	J ECON HIST	4.27	J DEV ECON	3.39	IND LABOR RELAT REV	6.42
46	IND LABOR RELAT REV	4.12	ECONOMICA	3.39	J FORECASTING	6.23
47	GAME ECON BEHAV	4.10	J ECON BEHAV ORGAN	3.35	MON LABOR REV	6.13
48	J COMP ECON	3.95	J REGUL ECON	3.32	INF ECON POLICY	6.06
49	J ECON MANAGE STRAT	3.88	J POLICY ANAL MANAG	3.31	NATL TAX J	5.73
50	ECON TRANSIT	3.85	INT ECON REV	3.27	PUBLIC CHOICE	5.58

Appendix Table 4 Regression Analysis of Economics Journal Rankings after First Iteration

Independent Variable	Total Journal Ranking			Per Article Ranking		
	Economics Impact	Overall Impact	Policy Impact	Economics Impact	Overall Impact	Policy Impact
Highly Theoretical ¹	-29.42 *** (8.55)	-23.35 *** (8.50)	-5.76 (8.99)	-35.16 *** (9.74)	-29.08 *** (9.72)	-7.63 (9.32)
Highly Empirical/Applied ²	-23.70 ** (10.13)	-21.58 ** (10.07)	-29.26 *** (10.65)	-29.10 ** (11.55)	-29.76 ** (11.52)	-32.46 *** (11.05)
Strong Policy Orientation ³	-13.01 (8.38)	-15.10 * (8.33)	-36.90 *** (8.82)	-15.91 * (9.55)	-26.02 *** (9.53)	-43.87 *** (9.14)
JCR Economics Category ⁴	-11.63 (8.89)	-0.02 (8.84)	-1.21 (9.36)	-13.68 (10.14)	-3.35 (10.11)	-3.82 (9.70)
Interdisciplinarity ⁵	-4.44 (6.90)	-15.46 ** (6.86)	-8.73 (7.25)	-1.34 (7.86)	-15.12 * (7.84)	-11.40 (7.52)
Average Number of Articles per Year	-0.77 *** (0.11)	-0.84 *** (0.11)	-0.59 *** (0.11)	-0.08 (0.12)	-0.10 (0.12)	-0.02 (0.12)
Constant	165.40 *** (13.17)	160.32 *** (13.10)	155.07 *** (13.86)	145.07 *** (15.02)	144.43 *** (14.98)	139.91 *** (14.37)
R Squared	0.31	0.32	0.23	0.10	0.10	0.18
Adjusted R Squared	0.28	0.29	0.21	0.07	0.07	0.15

Notes:

- 1 Equals 1 if content variable "theory" is equal to 2, 0 otherwise.
2. Equals 1 if content variable "empirical" is equal to 2, 0 otherwise.
- 3 Equals 1 if included in policy journal list, 0 otherwise.
- 4 Equals 1 if included in economics category in *JCR*, 0 otherwise.
- 5 Equals 1 if classified in more than one category in *JCR*, 0 otherwise.

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