A Citation-Based Ranking of Strategic Management Journals

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Abstract

Rankings of strategy journals are important for authors, readers, and promotion and tenure committees. We present several rankings, based either on the number of articles that cited the journal or the per-article impact. Our analyses cover various periods between 1991 and 2006, for most of which the *Strategic Management Journal* was in first place and *Journal of Economics & Management Strategy* (*JEMS*) second, although *JEMS* ranked first in certain instances. *Long Range Planning* and *Technology Analysis & Strategic Management* also achieve a top position. *Strategic Organization* makes an impressive entry and achieves a top position in 2003-2006.

Keywords: Journal rankings; Citation analysis; Strategic Management; Academic impact; Strategy.

1. INTRODUCTION

The academic research field of strategic management is still relatively young. It is not yet 30 years since the publication of the *Strategic Management Journal* (*SMJ*) and the *Journal of Business Strategy* (*JBS*) signaled the onset of the field's legitimacy. While *Long Range Planning* (*LRP)* was first published in 1968, it has not always been regarded as academically oriented. True, these journals were preceded by fine management journals that considered the strategy area to be a part of their domains. However, it was only after the Academy of Management's establishment of a strategy division[1] in the early 1970s and the birth of the Strategic Management Society in the early 1980s that the strategy field was able to proclaim its independence as a legitimate academic discipline.

Over these three decades the field has matured.[2] *SMJ* has maintained more of a scholarly research focus while *JBS* publishes more applied research (Rumelt *et al*., 1994), and several newer journals have entered the field. The *Journal of Economics & Management Strategy* (*JEMS*) explicitly recognizes the important role of economics in strategic thinking. While much excellent strategy research continues to be published in general management, organization studies, and economics journals, the journals mentioned above, being dedicated to strategy, play crucial roles as flagships for the strategy field and as venues for ongoing strategy-related conversations.

1.1. Journal quality and rankings

That the quality of a scholarly article is strongly indicated by the quality of the journal in which it appears is a basic assumption in the academic profession. Indeed, a journal earns its reputation and high quality status by publishing good articles, leading to this strong association. For this

reason many people and organizations are interested in indications of journal quality: promotion and tenure committees, funding agencies, and people who write reference letters, need to know the journal's quality in order to assess correctly the qualifications of a candidate for promotion, tenure, or a grant (Bergh *et al.*, 2006). In addition, readers are interested in journal quality in order to make informed decisions about which journals to read, and authors use this information to decide to which journals to submit their work.

Moreover, academic rankings of universities, schools/faculties, and departments, are usually based on the research output of their faculty, which obviously has to take into account not only the quantity of research but also its quality. One of the common methods to measure research quality is to give different value to publications in different journals based on the journal's quality.[3] For this purpose, rankings of journal quality are needed. Thus, ranking journals not only serves the purpose of providing objective information about journal quality, but also helps to evaluate the research output of individuals and institutions (see for example Gioia and Corley, 2002; Coupe, 2003; Lubrano *et al.*, 2003; Pfeffer and Fong, 2004).

A widespread method to gauge journal quality is based on the number of citations the journal receives. When an article is cited, it generally suggests that it has contributed significantly to the literature on which the citing article builds, and so the number of citations that an article receives is a commonly-used indication of its quality. When we add up the number of citations that all the articles published in a certain journal received, we therefore obtain a measure of journal quality. The method may be a simple count of citations received or may involve other manipulations, such as giving different weights to different citing journals, or dividing the number of citations received by the number of articles in the cited journal.

Because of the importance of these citations and attendant indicators of journal quality, several databases now exist that record citations in academic journals. ISI Web of Knowledge

(henceforth ISI) and its "Web of Science" database, for example, continuously track thousands of journals in various disciplines and record all their citations.[4] Based on this database, ISI also publishes its "Journal Citation Reports" (henceforth JCR) that includes several indicators of journal performance including the total number of citations that a journal received in a given year from all other journals in the database.

A related phenomenon is the publication of journal articles (such as this one) that themselves report various analyses and rankings of academic journals. For example, economics journals were ranked by Liebowitz and Palmer (1984), Laband and Piette (1994), Kalaitzidakis *et al.* (2003), and Axarloglou and Theoharakis (2003); behavioral economics and socio-economics journals by Azar (2007); marketing journals by Theoharakis and Hirst (2002); business ethics journals by Paul (2004); management journals by Tahai and Meyer (1999) and Podsakoff *et al.* (2005); and international business journals by Dubois and Reeb (2000). Macmillan (1989) reported ratings by senior strategy scholars, ranking *SMJ* and *Long Range Planning* (*LRP*) among several general management journals that publish strategy articles. Franke *et al.* (1990) imply in their title that they rank strategic management journals, but the journals they rank mostly belong to general management and not specifically to strategic management.

In principle, the data in JCR could be used to rank any subset of the journals that is covered therein. Unfortunately, however, the vast majority of journals in the field of strategic management are not covered by JCR. Moreover, the two main citation measures provided by JCR (total citations and the impact factor) are not optimal for evaluating the quality of management or economics journals. The number of total citations received by a journal gives an advantage to journals that publish many articles or to those that have existed for many years. JCR attempts to overcome these problems by also presenting the impact factor of a journal, which is a per-article measure of impact. Unfortunately, the impact factor considers citations only to the previous two

years. Two years might be a reasonable period for disciplines such as physics, where current research is very quickly reflected in further research, but is too short for disciplines such as management or economics, where it often takes several years before the impact of articles is taken up in further research (for a discussion about the differences between economics and physics in this respect see Azar, 2008, section 5.1).

Due to these shortcomings of the JCR data, researchers publish rankings of journals in management or economics, even though in many cases they do not add any journals that are not covered in JCR. They do so in order to compute impact factors of more than two years (e.g., Kalaitzidakis *et al.*, 2003), or to add other adjustments to the data that create better rankings than a simple ranking of the JCR impact factors.

In strategic management, however, no journal ranking that includes all or even most of the journals has hitherto been published. Consequently, there is no objective measure of journal quality for most journals in the field. While this might not be a major problem for promotion and tenure committees at a small number of elite business schools (because in such institutions, publications only in the very top journals are considered for promotion and tenure), being able to evaluate the quality of strategy journals that are not at the top of the field is crucial in the vast majority of institutions worldwide. Strategy journals that are not included in JCR and in previous rankings of journals are very heterogeneous in their quality, and tenure and promotion committees might find it hard to evaluate these journals' quality in the absence of any objective measure of quality of these journals or a ranking that includes them. This article addresses this need by identifying a list of strategic management journals and using citation analysis in order to provide an objective ranking of journal quality for various periods.

The rest of the article is organized as follows. The next section discusses the methodology we used. Section 3 presents, for various periods, two rankings: one is based on the number of articles

that cited each journal, and the other computes a per-article impact measure. The following section raises the issue of differences between disciplines and journals in citation patterns, and how these should be accounted for in a ranking of journals that belong to several disciplines (e.g., management and economics). We then re-compute and present the rankings of Section 3, adjusted so that this issue is accounted for, by taking into consideration the number of references in the citing journals (for the journals we had the data required to do so.) Section 5 concludes.

2. METHODOLOGY

The first step in creating a ranking of strategic management journals is to decide which journals belong to this field. To do so, the databases of ISI and Ulrich's Periodicals Directory (henceforth UPD) were searched, and publications that satisfied the conditions of being active, academic/scholarly, published at least once a year, and in English, were considered.[5] The journal descriptions in UPD, the information provided on the journals' websites (e.g., the aims and scope of the journal), and the journals' articles, were used in order to determine which journals focus on strategic management (or primarily on the relationship between strategic management and another aspect of management) and should therefore be included in the ranking.[6] We then eliminated those journals that we judged to be primarily affiliated with another discipline[7], those that are not published regularly or seemed to have ceased being active[8], and those for whom we found less than five citing articles for the 1997-2006 period.[9] We were left with the 15 publications appearing in Table I.[10]

[Table I here]

In order to rank the journals, the ISI database was used. This database tracks only a select population of well-established journals, which does not include most of the journals in our

compiled list of strategic management journals. Consequently, these non-ISI indexed journals also do not appear in JCR. Fortunately, however, the ISI database is nevertheless useful, because it records all citations from the indexed journals, even when the cited journal is not an indexed journal. This allows us to use the ISI database to obtain citation information even for journals that ISI does not index. It should be emphasized that the citations recorded in this database are therefore not all the citations that a certain journal received, but only those that appeared in journals indexed by ISI.

For technical reasons related to the structure and search capabilities of the ISI database, when one wants to include journals that are non-indexed and to limit the period in which the articles were cited, it is impossible to obtain the number of citations the journal received. It is possible, however, to obtain another measure of citations: the number of different articles that cited a certain journal in a certain period. We therefore used this latter citation measure, which was also used in previous articles that ranked journals that are not indexed by ISI (Azar, 2007). The difference between the two measures is that if, for example, one article cites three different articles that appeared in a certain journal, the number of total citations for this journal includes three different citations, but the number of citing articles includes only one citing article.[11]

Obtaining the number of citing articles for each journal required a process involving different searches in the ISI database and filtering the results.[12] Two journals changed their names in the relevant period (*Strategic Change* was titled *Journal of Strategic Change* until 1996, and *Strategy & Leadership* was titled *Planning Review* until 1996), so we took into account the citations to the former titles of these two publications.

To allow examination of the field's development, we obtained the number of citing articles for several different time periods: four consecutive four-year periods between 1991 and 2006, and the ten-year period 1997-2006. These data are displayed in Table II. Each period includes

citations in which both the citing article and the cited article appeared in that period. The advantage of the 10-year period is that it gives a measure of quality that is based on more information and therefore is less noisy (especially in the lower-ranked journals where the number of citing articles is small). On the other hand, the shorter four-year periods allow us to see the evolution of the field over time, and the latest such period (2003-2006) represents the most up-to-date quality of the listed journals.

[Table II here]

Table II reflects the overall impact of each journal measured by the number of articles that cited the journal. However, there is a large variation in the number of articles published by the various journals, and naturally journals that publish more articles have higher chances to get cited (given a constant journal quality). Consequently, it is also interesting to know what the per-article impact of each journal is. This is similar to the way in which JCR computes impact factors – taking the total citations (which satisfy certain criteria about when the citing and cited articles appeared) a journal received and dividing it by the number of articles published in the journal in the relevant period.

To compute the per-article impact of the journals, we obtained the number of articles that each journal published in every year using various sources (ISI Web of Knowledge, ProQuest databases, and the journals' websites). We then obtained a per-article impact measure by taking the number of citing articles from Table II and dividing it by the total number of articles published by the journal in the relevant period.[13] The results are reported in Table III.

[Table III here]

3. RESULTS AND DISCUSSION

As seen in Table II, when considering the journals' overall impact, *Strategic Management Journal* ranked first in each period we studied. In the next two places in the 1997-2006 period were *Journal of Economics & Management Strategy* (*JEMS*) and *Long Range Planning* (*LRP*), followed by *Technology Analysis & Strategic Management* (*TASM*). The top three journals in the most recent four-year period (2003-2006) are also *SMJ*, *JEMS*, and *LRP*, but here the fourth place reflects the dramatic entry of *Strategic Organization (SO![14])* – quite remarkable for a new journal first published in 2003.

When considering per-article impact (see Table III), *SMJ* is again first in all periods, but we can see that the difference between *SMJ* and the next journals is not as large as was in Table II. The reason is that *SMJ* publishes much more articles than *JEMS*, *LRP*, *TASM*, and various other journals. *JEMS* is again second in the 1997-2006 period (as in Table II), but now it is not only closer to *SMJ* but also farther up from the third journal, *LRP*, which in turn is followed closely by *TASM*. An examination of the 2003-2006 period shows that after *SMJ* we have the newcomer *SO!*, followed by *JEMS* and *LRP*.

An examination of the most recent changes in the journals' overall impact reveals that *JEMS, LRP, Business Strategy and the Environment*, and *Advances in Strategic Management*, made an impressive improvement from 1999-2002 to 2003-2006. The per-article impact of these journals also improved significantly in the same time, suggesting that the improvement in overall impact is due to increased quality of the journals and not only due to an increase in the number of articles they publish. Below we discuss the most important journals and the developments in the strategy field in more detail.

3.1. *Strategic Management Journal*: The industry leader

As noted above, *SMJ* consistently and undisputedly leads the strategy field over the 16-year period surveyed. This finding is consistent with prior rankings of management journals, including those by Macmillan (1989) and Tahai and Meyer (1999). Moreover, the 2006 edition of JCR shows that *SMJ* holds a leading position not only in the area of strategy, but also in the broader fields of management and business (JCR ranks *SMJ* in both the management and business categories). In the management category of JCR 2006, for example, *SMJ* ranks third out of 78 journals (in terms of the total number of citations received in 2006), after *Management Science,* and the *Academy of Management Journal*, and before the *Academy of Management Review*, *Administrative Science Quarterly, Harvard Business Review, Organization Science, Organizational Behavior and Human Decision Processes, MIS Quarterly*, and the *Journal of Management*.

In the business category of JCR 2006, *SMJ* ranks second out of 64 journals, after the *Academy of Management Journal* and before the *Academy of Management Review*, *Administrative Science Quarterly, Journal of Marketing, Journal of Marketing Research, Harvard Business Review,* and *Journal of Consumer Research*. Combining the categories of management and business together, *SMJ* ranks third out of 118 journals. If we add to management and business the related categories of finance and public administration, *SMJ* ranks fourth out of 183 journals. Among the finance and public administration journals, only the *Journal of Finance* received more citations than *SMJ*, and *SMJ* surpassed top journals such as *Journal of Financial Economics, Journal of Monetary Economics,* and the *Review of Financial Studies*.

The top position of *SMJ* in the JCR ranking that includes all journals in the management, business, finance, and public administration categories reflects not only on the quality of *SMJ* but also on the importance of the strategy field within management and business. *SMJ* surpasses 179 journals (and also hundreds of other journals that are of lower quality and therefore are not included in JCR) and is preceded by only three journals. Moreover, if we limit attention to field journals, the only one that surpasses *SMJ* is the *Journal of Finance*. This means that the top strategy journal (*SMJ*) is more influential than the top field journals in marketing, organizational behavior, accounting, and other fields of business and management.

Another database of Thomson Scientific's ISI Web of Knowledge, called "Essential Science Indicators," is also based on citations, but divides journals to fewer disciplines and tracks citations over a longer period than JCR. It also excludes many journals that appear in JCR – the ones in the bottom of the ranking in terms of citations. In this database the various journals in business, management and finance are combined with economics journals in a field called "Economics and Business." In the ranking of journals in this field, based on total citations received (as of July 2007), *SMJ* ranks third out of 200 journals, following the *American Economic Review* and *Journal of Finance*, and before *Management Science, Academy of Management Journal, Quarterly Journal of Economics, Academy of Management Review, Journal of Financial Economics, Econometrica,* and the *Journal of Political Economy*. The "Highly Cited Papers" module of this database shows that three of the 10 most-cited articles in economics and business over the last 10 years appeared in the *SMJ* – more articles than in any other journal.[15] These various indications for the leading position of *SMJ* in the entire field of business and management (and even when combined with economics) support the conclusion that the strategy field has become a mature and leading area of research.

3.2. *Journal of Economics & Management Strategy*: The influence of economics

No examination of the strategy field would be complete without including the influence of economics. Many issues in strategy, such as competitive strategy, entry and exit decisions, and monitoring and providing incentives to managers and workers, are also dealt with by economists – mostly in the fields of industrial organization and the economics of information. Indeed, *SMJ* acknowledged the importance of economics for strategic management by devoting an entire special issue (Winter 1991) to the relationship between economics and strategic management. As Schendel (1991, p. 2) writes in the introduction to that special issue, "…there is so much interest in the role that economics can and has played in strategic management."

While industrial organization journals such as *Rand Journal of Economics*, *Journal of Industrial Economics*, *International Journal of Industrial Organization*, and the *Review of Industrial Organization* publish many papers that are related to strategy, their scope is far broader and many of their interests are unrelated to strategy. For example, the focus in industrial organization research is often on market outcomes, public policy, or regulation, and not on the strategies that firms should adopt. Because our criterion for inclusion in the ranking was that the journal should focus on strategy, these journals are not included. However, one economics journal, the *Journal of Economics & Management Strategy* (*JEMS*), is explicitly focused on strategy – which is even reflected in its title – and therefore it is included in the ranking.

JEMS was first published in 1992. An editorial posted online[16] by Daniel F. Spulber, its founding and current editor, defines well the unique nature of *JEMS*:

> The Journal of Economics & Management Strategy (JEMS) focuses on the application of economic analysis to the study of the competitive strategies and the organizational design of firms. The journal is based on the proposition that economics has much to contribute to

business decision making and that in turn the study of microeconomics can be greatly strengthened by the consideration of practical issues in management strategy.

JEMS made an impressive and quick entry to the upper echelon of strategy journal rankings: because it was established in 1992, the first period in our rankings in which it can be meaningfully compared to other journals is 1995-1998, and it already captured in this period the third place in overall impact (the number of citing articles) and the second place in per-article impact. In the next two periods, 1999-2002 and 2003-2006, as well as in the longer 10-year period, 1997-2006, *JEMS* captured the second position in overall impact. In per-article impact it ranked second in 1999-2002 and 1997-2006, and third in 2003-2006. This is an impressive achievement that shows that when a journal captures an important niche that was not filled before, it can have a striking and rapid success – just as in the business world.

3.3. *Long Range Planning* and *Journal of Business Strategy*: The senior citizens

Both these journals have—at different times and to different extents—adopted somewhat of a practitioner approach to presenting research. *LRP*, which was founded over a decade before *SMJ* and *JBS*, has remained closer to a scholarly profile, and also maintained strong citation performance, being ranked as one of the top four journals in all periods examined, both in overall impact and in per-article impact. In overall impact, it ranks third in both the most recent short period (2003-2006) and in the longer 10-year period (1997-2006); in per-article impact, *LRP* ranks third in 1997-2006 and fourth in 2003-2006. *JBS*, on the other hand, seems to be on a declining trajectory with respect to its relative ranking, falling in overall impact from the third position in 1991-1994 to the eighth place in 2003-2006. Over the period 1997-2006, it ranks fifth.

3.4. Niche-oriented journals

Our citation analysis suggests that a journal focusing on a limited scope within the strategy field can sometimes attain an important position. The most striking example is of course *JEMS*, which focuses on the application of economic analysis to business strategy problems and was discussed above. Another niche-oriented journal that has a significant impact according to our analyses is *TASM*, which obtains a top-five position in overall impact in all periods and ranks fourth with over 700 citing articles in the 10-year period. In per-article impact, *TASM* ranks fourth in 1997-2006, sixth in 2003-2006, and third in the other periods. *Business Strategy and the Environment* is also a successful niche-oriented journal, which ranks sixth in overall impact in 2003-2006 and in 1997-2006. *Strategy & Leadership*, *Strategic Change*, and *Research Methodology in Strategy and Management* were cited less often and appear in the lower half of the rankings.

3.5. *Strategic Organization*: An impressive entry

In contrast with the above category, *SO!* seeks to integrate the strategy and organization studies fields, and one could thus argue that *SO!* has a relatively broad scope. *SO!* made an impressive entry to the field: in 2003-2006 it ranks second in per-article impact and fourth in overall impact, despite being established only in 2003. This shows again, as did the remarkable entry of *JEMS* in 1992, that while it often takes time to achieve a leading position (which requires coordination of expectations among authors, readers, reviewers, and editors, and therefore is usually a long process), it is not impossible to do so quickly. Hard work and enthusiasm of the founding editors, recruitment of leading people in the field to the editorial board, and finding a unique scope on which the journal focuses, seem to be necessary to allow such quick and successful entry.

4. ADJUSTING FOR CITATION DIFFERENCES BETWEEN DISCIPLINES

The interdisciplinary nature of the strategy field creates a challenge that is generally not encountered by other rankings, which are limited to one discipline. The challenge comes from the different citation practices between management and economics, because the ranking combines an economics journal that is cited mostly by other economics journals (*JEMS*) and management journals, which are cited mostly by other management journals. If management journals cite more references than economics journals, this puts *JEMS* in a disadvantage compared to the other journals, because it is harder to get cited when the journals that might cite you have shorter reference lists.

The solution to this cross-disciplinary bias is to give a weight to being cited that depends on the average number of references in the citing journal. That is, being cited by a journal that cites on average 30 items should get twice the credit of being cited by a journal whose reference list includes 60 items on average. This idea is similar to the practice in rankings of individuals or institutions to divide the credit for an article between its authors, giving each author in an article with N authors 1/N of the credit (see Scott and Mitias, 1996; Dusansky and Vernon, 1998; Coupe, 2003; Kalaitzidakis *et al*., 2003). In that context, the idea is that an article carries a constant credit, and if several authors are responsible for the credit, it is divided equally between them. In our context, the equivalent idea is that an article carries a constant total credit it can give to its cited articles or journals. When one journal cites more items than another, each of its cited items should therefore get a smaller credit. In particular, if a journal cites on average N items, it makes sense to give each cited item a credit of 1/N.

Another way to understand why more references in the citing journal should result in less credit for each cited item is to think about how central is the cited item in the literature on which the citing article builds. If we take two articles of similar length and scope, one of which cites ten items while the other cites forty, we may propose that each of the ten articles cited by the first is on average more central in the relevant literature than each of the forty cited by the second. In other words, the more articles are cited, the more marginal in the literature is the average cited article, and therefore it should receive a smaller credit. Obviously, one can find specific examples of articles that violate this principle; however, when journals in one discipline, across hundreds of articles, include much longer reference lists than in another discipline, it is clear that this difference in citation patterns comes from different norms in the two disciplines about the extent of the literature review and how central in the literature should an article be in order to get cited. Consequently, one needs to adjust for this difference when ranking journals that belong to different disciplines.

In the usual rankings, all ranked journals belong to the same discipline and therefore the set of citing journals is similar for all ranked journals. Moreover, even if different ranked journals are cited by different journals, the citing journals generally belong to the same discipline, and the difference in their citation practices are likely to be small. In that case, adjusting for the number of references in the citing journals, while methodologically justified, complicates the analysis and requires a large investment (of the researchers' time) that is unlikely to change the results much. Therefore it is not surprising that disciplinary rankings do not insist on performing this adjustment. In this study, however, the cross-disciplinary differences between management and economics are potentially large and justify the extra work required to correct for them.

We were only able to obtain the data required for this adjustment from JCR 2006, which means that we can only make this adjustment for the five journals that are indexed by ISI and

therefore included in JCR. However, making this adjustment is still worthwhile, because these journals are generally the top strategy journals, and getting a more accurate measure of their relative impact is therefore especially interesting, even though we cannot make the adjustment for the other journals on the list.

To adjust for the number of references in the citing journals, we obtained from JCR 2006 the list of the five journals that cited the most times each of our ranked journals (that appear in JCR). We then recorded, also from JCR 2006, the average number of references in each of these five citing journals.[17] Presumably, taking the average number of references in the five journals that cite each ranked journal the most is a good proxy also for the average among the other journals that cite each ranked journal. Table IV presents the average number of references in these most-citing journals.

[Table IV here]

The next step is to use the information presented in Table IV to adjust the rankings of the relevant strategy journals according to the number of references in their citing journals. This is done by dividing the number of citing articles in Table II, or the per-article impact in Table III, by the average number of references in the five journals that cite the strategy journal most often (e.g., 77.06 for the *SMJ*, see Table IV). In the case of the per-article impact, to make the resulting numbers more convenient to use and present, we multiply the result by 1,000. Table V presents the adjusted ranking based on the number of citing articles, and Table VI presents the adjusted ranking based on the per-article impact.

[Tables V and VI here]

To summarize the main results, let us focus on two periods: the longest period (1997-2006), and the most recent period (2003-2006). Examining Table V we can see that the ranking order of the journals according to the number of citing articles does not change following the adjustment

to the number of references in the citing journals, but the relative magnitudes change considerably. In particular, *JEMS*, which remains second, is now much closer to the *SMJ* at the top, and is farther away from *LRP* at the third place.

The results of Table VI are even more striking. Considering again either 1997-2006 or 2003-2006, it turns out that when adjusting for the number of references in the citing journals, *JEMS* becomes the top strategy journal, followed by *SMJ*. *TASM* ranks third in 1997-2006, followed by *LRP*; in 2003-2006, however, *LRP* is third and *TASM* is fourth. The achievement of *JEMS* in capturing the top position is especially striking given that it is a relatively young journal, and is not supported by any scholarly society.[18] The difference between the results with and without the adjustment for the number of references in the citing journals stresses the importance of accounting for cross-disciplinary differences in rankings of journals, especially when the journals belong to more than one discipline.

5. CONCLUSION

The purpose of this article is to examine the relative quality of strategy journals. We identify a list of journals that focus on strategic management and rank their overall impact in various periods, based on the number of articles that cited them. We also compute per-article impact by dividing the number of citing articles by the number of articles published by the journal in the relevant period. Finally, we also create rankings based on the number of citing articles and the per-article impact that adjust for the number of references in the citing journals. These citation-based measures are indications of journal quality, previously unavailable for most of the journals we analyze.

The two most interesting periods we analyze are 1997-2006, which reflects the performance of the journals over a long time, and 2003-2006, the most recent 4-year period. In both of these periods and in all the four different methodologies we employ, the *Strategic Management Journal* and the *Journal of Economics & Management Strategy* lead the strategy field. Depending on the methodology used, *SMJ* usually ranked first with *JEMS* second, but these positions were reversed in a few cases. *Long Range Planning* and *Technology Analysis & Strategic Management* also achieve a consistent position in the top strategy journals, in various periods and methodologies. *Strategic Organization*, which was first published in 2003, makes an impressive entry to the strategy field and achieves a top position in 2003-2006.

These results can teach us several lessons. The high ranking of *JEMS*, the only economics journal on the list and one of the younger journals, reminds us of the importance of economics to the strategy field.[19] It also shows that although difficult, it is not impossible, with good management and an appropriate market niche, to obtain a top position in a relatively short time. This latter point is also evident in the emergence of *SO!* as a top journal immediately after its establishment. This is not unique to strategy; Azar (2007), for example, finds that the *Journal of Economic Behavior & Organization* (*JEBO*) is the top journal in behavioral economics and socio-economics (by a large margin), even though several journals in these fields are much older.

When considering general-interest journals in broad fields, however, it is much harder to find top journals that are young. Taking economics as an example, the top five general-interest journals are often considered to be the *American Economic Review, Econometrica,* the *Journal of Political Economy,* the *Quarterly Journal of Economics,* and the *Review of Economic Studies*. The start year of these journals ranges from 1886 to 1933, implying that all of them are among the oldest economics journals (see Azar, in press, Table 1). This reflects the difficulty that new journals face in obtaining a top position.

The examples *JEMS*, *SO!* and *JEBO*, however, show that it is possible to achieve a top position quickly, at least in a sub-field. These examples seem to suggest that a crucial factor needed for success (in addition to things like good management of the journal and recruitment of an excellent editorial board) is to find an important niche that has not been well-served by incumbent journals. *JEMS* apparently achieved a top position in strategy by filling the niche of the intersection between economics and strategy; *SO!* did the same for the intersection of strategy and organization studies; and *JEBO* succeeded by entering the niche of behavioral economics, which did not have a strong incumbent previously.[20]

Our analyses should prove useful for authors in choosing where to submit their papers, readers in deciding what to read, and tenure and promotion committees in evaluating academic publications. This enterprise is especially valuable in a field in which many journals are relatively young and therefore their relative impact is not always clear. The overall picture—including the recognition of several strategy journals by the highly-selective database of ISI and the clear grounding of strategy in established fields like economics—also reflects well on the academic status of the field as a whole, and should encourage more researchers to contribute to this field as it successfully graduates from youth to maturity.

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Table I. Strategic management journals

Journal title	Year started	Coverage in SSCI	ISSN	Publisher
Advances in Strategic Management	1983	1996 & 1998-2006	0742-3322	J A I Press Inc.
Business Strategy and the Environment	1992	None	0964-4733	John Wiley & Sons Ltd.
Business Strategy Review	1990	None	0955-6419	Blackwell Publishing Ltd.
Journal of Business Strategies	1984	None	0887-2058	Lewis Center for Business and Economic Development
Journal of Business Strategy	1980	None	0275-6668	Emerald Group Publishing Ltd.
Journal of Economics & Management Strategy	1992	1995-2007	1058-6407	Blackwell Publishing, Inc.
Long Range Planning	1968	1968-1969 & 1971-2007	0024-6301	Pergamon
Research in Global Strategic Management	1990	None	1064-4857	J A I Press Inc.
Research Methodology in Strategy and Management	2004	None	1479-8387	Elsevier Ltd.
Strategic Change	1992	None	1086-1718	John Wiley & Sons Ltd.
Strategic Direction	1984	None	0258-0543	Emerald Group Publishing Ltd.
Strategy & Leadership	1972	None	1087-8572	Emerald Group Publishing Ltd.
Strategic Management Journal	1980	1980-2007	0143-2095	John Wiley & Sons Ltd.
Strategic Organization	2003	None	1476-1270	Sage Publications Ltd.
Technology Analysis & Strategic Management	1989	1994-2007	0953-7325	Routledge

Comment: The column of coverage in SSCI refers to the years in which the journal was indexed in SSCI. As mentioned in the text, we were able to track citations to journals whether or not they were indexed in SSCI, as long as the citing article appeared in a journal that is indexed by SSCI.

Table II. Number of articles citing strategic management journals

	Last 10 years			Number of citing articles and rankings in the 4-year periods							
Journal title	**Citing articles 97-06**	**Rank 97-06**		**Citing articles 91-94**	**Citing articles 95-98**	**Citing articles 99-02**	**Citing articles 03-06**		**Rank 91-94**	**Rank 95-98**	**Rank 99-02**	**Rank 03-06**
Strategic Management Journal	5096	1		369	450	562	651		1	1	1	1
Journal of Economics & Management Strategy	1033	2		19	106	82	150		6	3	2	2
Long Range Planning	1020	3		127	121	73	113		2	2	4	3
Technology Analysis & Strategic Management	703	4		30	58	74	78		5	4	3	5
Journal of Business Strategy	290	5		42	19	27	24		3	7	5	8
Business Strategy and the Environment	279	6		3	17	25	61		11	8	7	6
Advances in Strategic Management	260	7		33	31	27	52		4	5	5	7
Business Strategy Review	185	8		9	8	22	12		8	10	8	11
Strategy & Leadership (formerly *Planning Review*)	170	9		14	23	14	19		7	6	9	9
Strategic Change (formerly *Journal of Strategic Change*)	113	10		3	9	9	13		11	9	10	10
Strategic Organization	104	11					104					4
Journal of Business Strategies	74	12		1	2	6	6		13	11	11	13
Strategic Direction	26	13		7	0	2	5		9	13	12	14
Research Methodology in Strategy and Management	10	14					10					12
Research in Global Strategic Management	7	15		6	1	1	0		10	12	13	15

Comment: The number of citing articles in 1997-2006 might exceed the sum in the various 4-year periods, because it includes citing articles that are not included in any of the 4-year periods, such as articles in 2006 that cite articles from 1997-2002.

Table III. Per-article impact of strategic management journals

	Last 10 years			Per-article impact and rankings in the 4-year periods							
Journal title	**Per-article impact 97-06**	**Rank 97-06**		**Per-article impact 91-94**	**Per-article impact 95-98**	**Per-article impact 99-02**	**Per-article impact 03-06**		**Rank 91-94**	**Rank 95-98**	**Rank 99-02**	**Rank 03-06**
Strategic Management Journal	7.65	1		1.49	1.82	2.15	2.38		1	1	1	1
Journal of Economics & Management Strategy	4.08	2		0.24	1.10	0.98	1.23		4	2	2	3
Long Range Planning	2.44	3		0.40	0.38	0.53	1.06		2	4	4	4
Technology Analysis & Strategic Management	2.37	4		0.27	0.50	0.62	0.66		3	3	3	6
Advances in Strategic Management	1.66	5				0.41	0.83			12	5	5
Strategic Organization	1.37	6					1.37			12		2
Business Strategy and the Environment	0.95	7		0.04	0.17	0.22	0.47		9	5	6	7
Journal of Business Strategies	0.82	8			0.05	0.15	0.18			8	8	9
Research Methodology in Strategy and Management	0.43	9					0.43			12		8
Business Strategy Review	0.42	10		0.11	0.05	0.17	0.06		6	8	7	13
Strategy & Leadership (formerly *Planning Review*)	0.34	11		0.05	0.09	0.08	0.09		8	6	10	10
Strategic Change (formerly *Journal of Strategic Change*)	0.26	12		0.03	0.06	0.05	0.08		10	7	11	11
Journal of Business Strategy	0.21	13		0.10	0.02	0.05	0.06		7	11	12	12
Research in Global Strategic Management	0.09	14		0.14	0.04	0.10	0.00		5	10	9	15
Strategic Direction	0.02	15			0.00	0.00	0.01			12	13	14

Comment: Missing values are either because the journal did not exist in that period, or because we could not obtain the number of articles published in the relevant period.

Table IV. The average number of references in the five most-citing journals

Journal Title	**Average number of references in the five most-citing journals**					
	1st journal	2nd journal	3rd journal	4th journal	5th journal	**Average**
Strategic Management Journal	69.9	79.8	101.5	62.6	71.5	**77.06**
Journal of Economics & Management Strategy	28.6	30.1	39.9	61.7	28.3	**37.72**
Long Range Planning	39	88.4	47.5	36.1	59.5	**54.1**
Technology Analysis & Strategic Management	44.6	56.2	40.4	47.5	54.4	**48.62**
Advances in Strategic Management	88.4	72.7	69.9	71.5	104.7	**81.44**

Comment: The table presents for each strategy journal that is included in JCR the average number of references in the five journals that cited it the most in 2006.

Table V. Number of citing articles adjusted for the number of references in the citing journals

Rank 97-06	**Journal title**	**Adjusted citing articles 97-06**	**Adjusted citing articles 91-94**	**Adjusted citing articles 95-98**	**Adjusted citing articles 99-02**	**Adjusted citing articles 03-06**
1	*Strategic Management Journal*	**66.13**	**4.79**	**5.84**	**7.29**	**8.45**
2	*Journal of Economics & Management Strategy*	27.39	0.50	2.81	2.17	3.98
3	*Long Range Planning*	18.85	2.35	2.24	1.35	2.09
4	*Technology Analysis & Strategic Management*	14.46	0.62	1.19	1.52	1.60
5	*Advances in Strategic Management*	3.19	0.41	0.38	0.33	0.64

Table VI. Per-article impact adjusted for the number of references in the citing journals

Rank 97-06	**Journal title**	**Adjusted per-article impact 97-06**	**Adjusted per-article impact 91-94**	**Adjusted per-article impact 95-98**	**Adjusted per-article impact 99-02**	**Adjusted per-article impact 03-06**
1	*Journal of Economics & Management Strategy*	**108.25**	6.46	**29.27**	25.88	**32.60**
2	*Strategic Management Journal*	99.29	**19.39**	23.64	**27.84**	30.83
3	*Technology Analysis & Strategic Management*	48.68	5.56	10.28	12.68	13.48
4	*Long Range Planning*	45.11	7.38	7.10	9.78	19.52
5	*Advances in Strategic Management*	20.33			5.02	10.14

Endnotes

[1] Originally called the "Business Policy and Planning" Division.

[2] See Nag *et al.* (2007) for an extended discussion of how the strategy field may be defined.

[3] Another common method is to take a list of high-quality journals and count the articles in these journals without further adjustment for journal quality (i.e., treating all the journals in the list as having the same quality). Two major drawbacks of this method are that it ignores the quality differences between the journals in the list, and it ignores altogether journals not on the list. A third common method is to examine the number of citations that the articles written by the individual (or the institution's faculty) received, without a consideration of the quality of the journals in which the articles were published. This method is based on the idea that the number of citations an article receives might reflect its quality. A major drawback of this method is that it does not allow for up-to-date rankings, because it might take many years until an article's quality is reflected in the number of citations it receives.

[4] The "Web of Science" database includes Science Citation Index Expanded, Social Sciences Citation Index (SSCI), and Arts & Humanities Citation Index.

[5] UPD is a database that provides information on numerous serials in various fields, a large majority of which are not covered by ISI and JCR. Consequently, by consulting this database it is possible to locate journals in strategy that are not indexed by ISI and JCR.

[6] Because we limit attention to journals that focus on strategic management, several journals that publish top-quality research in strategy but also publish articles in other fields, such as *Management Science*, the *Academy of Management Review* and the *Academy of Management Journal*, are not included in the list of journals we rank. Because the ISI data do not indicate whether an article is a strategy article or not, the citation information of these journals does not reflect only their contribution to the strategy field, but rather some average between their contribution to strategy and to other fields. We therefore decided to include in the ranking only journals that focus on strategic management.

[7] For example, *Journal of Strategic Marketing*, *Journal of Strategic Management Education* (this journal would also be excluded by the citations cut-off, see footnote 8), and *Strategic Finance*.

[8] For example, *Academy of Strategic Management Journal*, *Advances in Applied Business Strategy*, and *Journal of International Business Strategy*.

[9] For example, *International Journal of Business Strategy, International Journal of Applied Strategic Management,* and *International Journal of Strategic Change Management*.

[10] Three of the 15 publications are annual series: *Advances in Strategic Management*, *Research in Global Strategic Management*, and *Research Methodology in Strategy and Management*. The other 12 publications are journals that are published more than once a year.

[11] The two citation measures are obviously highly correlated. While there are certain reasons to prefer the number of total citations (when possible), there are also reasons why the number of citing articles might reflect better the correct impact of the journals. For example, review articles may cite dozens of articles, many of which are articles that were published in the same journal that publishes the review article. This can give a large boost to the journal's total citations and bias the results (especially if certain journals are more likely to publish review articles than others). When counting the number of citing articles, on the other hand, the effect of such a review article is limited, because it counts as one citing article, just as any other article does. In any event, we did not have to decide which citation measure is more appealing from a methodological perspective, because as mentioned above, technical limitations allowed us to use only the number of citing articles.

[12] ISI uses various abbreviations to record the names of journals, and not always in a consistent manner for journals that are not indexed. Therefore, in order to get all the citations to a journal, one needs to search for all possible ways it could be indexed and to use wildcards in the search for this purpose, and then go over the results one by one to make sure no other journals are included due to the use of wildcards.

[13] We should emphasize that the result is not directly comparable to the impact factors reported by JCR, for two reasons. First, we use the number of citing articles and not the number of citations. Second, JCR impact factors are based on the number of citations in a certain year to articles published in the preceding two years, while our computations are based on different periods.

[14] The exclamation mark in "*SO!*" was coined by the founding editors of the journal (see http://www.rotman.utoronto.ca/~baum/so.html).

[15] The ranks of these three articles are first, third and ninth.

[16] See http://www.kellogg.northwestern.edu/research/journals/JEMS/Aims%20and%20Scope%20pages/editorial.htm, accessed May 24, 2007.

[17] In one case the information was not available in JCR so we took it from SSCI.

[18] The *SMJ*, on the other hand, is the official journal of the Strategic Management Society (SMS), see http://strategicmanagement.net/index.php. This gives an obvious advantage to *SMJ* over journals not affiliated with a society; for example, members of the SMS receive the *SMJ* as part of their membership, thus promoting the journal, the *SMJ* gets publicity on the SMS website, etc.

[19] For an analysis of how economics influences management research more generally and how this influence changed over time, see Azar (in press).

[20] The surge in the interest in behavioral economics recently probably also helped *JEBO* to become so influential.