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Just how Good are the top Three Journals in Finance?

An Assessment based on Quantity and Quality Citations

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Just How Good are the Top Three Journals in Finance? An Assessment Based on Quantity and Quality Citations*

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Abstract

The paper is concerned with ranking academic journal quality and research impact in Finance, based on the widely-used Thomson Reuters ISI (2013) Web of Science citations database (hereafter ISI). The paper analyses the 89 leading international journals in the ISI category of "Business - Finance" using quantifiable Research Assessment Measures (RAMs). The analysis highlights the similarities and differences in various RAMs, all of which are based on alternative transformations of journal citations and impact. Alternative RAMs may be calculated annually or updated daily to determine the citations frequency of published papers that are cited in journals listed in ISI. The RAMs include the classic 2-year impact factor including journal self citations (2YIF), 2-year impact factor excluding journal self citations (2YIF*), 5-year impact factor including journal self citations (5YIF), Immediacy including journal self citations, Eigenfactor (or Journal Influence), Article Influence, h-index, PI-BETA (Papers Ignored - By Even The Authors), Self-citation Threshold Approval Rating (STAR), 5YD2 (namely, 5YIF divided by 2YIF), Escalating Self Citations (ESC), and ICQ (Index of Citation Quality). The paper calculates the harmonic mean of the ranks of up to 16 RAMs. It is shown that emphasizing 2YIF to the exclusion of other informative RAMs can lead to a misleading evaluation of journal quality and impact relative to the harmonic mean of the ranks. The analysis of the 89 ISI journals in Finance makes it clear that there are three leading journals in Finance, namely Journal of Finance, Journal of Financial Economics and Review of Financial Studies, which form an exclusive club in terms of the RAMs that measure journal quality and impact based on alternative measures of journal citations. The next two journals in Finance in terms of overall quality and impact are Journal of Accounting and Economics and Journal of Monetary Economics.

Keywords: Research assessment measures, Impact factor, IFI, C3PO, PI-BETA, STAR, Eigenfactor, Article Influence, h-index, 5YD2, ICQ, ESC, harmonic mean of the ranks, finance, journal rankings.

JEL Classifications: C18, C81, Y10.

1. Introduction

The perceived quality and impact of academic journals are important in evaluating the perceived research performance of individual researchers for hiring, tenure and promotion decisions. Rightly or wrongly, such perceived journal quality and impact are typically used as a proxy for the quality of an academic paper, as publication in a highly regarded journal is seen as imparting an important signal regarding the purported quality of the published paper.

The determination of the leading journals in any discipline can be based on a wide range of quantitative and qualitative assessments, ranging from expert (and possibly subjective) assessments of journal impact, evaluation of high quality and high impact articles, and the use of quantifiable bibliometric Research Assessment Measures (RAMs).

In the academic discipline of Finance, it is often a necessary condition to publish a certain number of papers in the top 3 journals in order to be given tenure and promotion, or to be appointed to a senior academic position. Therefore, the question raised in the title of the paper can be of great importance to establishing and maintaining an academic career in Finance.

The leading database for generating RAMs to evaluate the quality and impact of academic journals, as well as the research performance of individual researchers, is the Thomson Reuters ISI Web of Science (2013) database (hereafter ISI). Virtually all RAMs are based on alternative transformations of citations data.

As has been discussed widely in the literature, although there are important caveats regarding the methodology and data collection methods underlying any database, the ISI citations database is the oldest and most widely-used source of RAMs (see, for example, Chang et al. (2011a, b, c, d) and Chang et al. (2014) for caveats regarding ISI). It is widely held that the ISI database is a benchmark against which other general databases, such as SciVerse Scopus, Google Scholar and Microsoft Academic Search, social science open access repositories, such as the Social Science Research Network (SSRN), and discipline-specific databases, such as Research Papers in Economics (RePEc) (which also includes most journals in Finance and Accounting), are compared.

Journal editors and publishers promote the ISI impact factors of their journals based on citations and, if their journals do not yet have an ISI impact factor, publicize the fact that their journals have either been selected for coverage in ISI, and hence are being tracked by ISI, or that the journal has applied for inclusion in ISI.

Various RAMs and weighting schemes have been used to compare the quality and impact of journals in a wide range of ISI disciplines, such as the 40 leading ISI journals in Economics (Chang et al. (2011a), Chang and McAleer (2014c)), the leading 10 ISI journals in each of Management, Finance and Marketing (Chang et al. (2011a)), the leading 6 ISI journals in each of 20 disciplines in the Sciences (Chang et al. (2011b)), the leading ISI journals in Econometrics and Statistics (Chang et al. (2011c)), the leading 26 ISI journals in Neuroscience (Chang et al. (2011d)), the leading ISI journals in statistics & Probability (Chang and McAleer (2012)), the leading ISI journals in Finance based on survey responses (Chang and McAleer (2013b)), the 10 leading ISI and RePEc journals in Econometrics (Chang and McAleer (2013c, 2014c)), the leading ISI journals in agricultural, energy, environmental and resource economics (Chang and McAleer (2014a)), and the leading journals in the ISI discipline of Economics (Chang et al. (2014)).

Despite the wide selection of ISI and other journals across a number of disciplines that have been analysed to date, not all of the leading 89 journals in the ISI discipline of "Business – Finance" have been analysed and ranked in terms of citations quality and impact. For this reason, one of the primary aims of this paper is to undertake such a rankings analysis, and to answer the question posed in the title of the paper.

The paper also evaluates the strong perception held in the Finance profession regarding the leading academic journals. There would be little or no disagreement that the leading academic journals are Journal of Finance, Journal of Financial Economics and Review of Financial Studies, followed by Journal of Financial and Quantitative Analysis. In fact, the survey results reported in Chang and McAleer (2013b) ranked Journal of Finance at number 1, followed closely by Journal of Financial Economics and Review of Financial Studies as equal number 2, and Journal of Financial and Quantitative Analysis as a distant number 4. Chang and McAleer (2013b) ranked 21 (34) ISI journals in Finance using 13 (10) RAMs, where the journals were selected by a panel of international experts. In this paper, we will rank 58 (88)

ISI journals in Finance using 16 (13) RAMs using all the journals in the ISI category of "Business – Finance".

This paper evaluates the usefulness of 16 RAMs for 89 leading ISI journals in Finance, and calculates the harmonic mean of the ranks of the alternative RAMs. Together with the arithmetic and geometric means, the harmonic mean is one of the three Pythagorean means, and is defined as the reciprocal of the arithmetic mean of the reciprocals. The rankings based on a single RAM is an extreme as it is subsumed in the harmonic mean of the ranks when all the other RAMs are given zero weights in the calculation (for further details see, for example, Chang and McAleer (2013a)).

The journals rankings presented in the paper suggest there are three leading journals in Finance, namely Journal of Finance, Journal of Financial Economics and Review of Financial Studies. These three journals form an exclusive club in terms of the RAMs that measure journal quality and impact based on journal citations. The next two journals in terms of overall quality and impact are Journal of Accounting and Economics and Journal of Monetary Economics.

The plan of the remainder of the paper is as follows. Section 2 presents some key RAMs using ISI data that may be calculated annually or updated daily, including the most widely used RAM, namely the classic 2-year impact factor including journal self citations (2YIF), 2-year impact factor excluding journal self citations (2YIF*), 5-year impact factor including journal self citations (5YIF), Immediacy (or zero-year impact factor (0YIF)), Eigenfactor (or Journal Influence), Article Influence, C3PO (Citation Performance Per Paper Online), hindex, PI-BETA (Papers Ignored - By Even The Authors), 2-year Self-citation Threshold Approval Ratings (2Y-STAR), Historical Self-citation Threshold Approval Ratings (H-STAR), Impact Factor Inflation (IFI), Cited Article Influence (CAI), 5YD2 (5YIF Divided by 2YIF), ESC (Escalating Self Citations), and ICQ (Index of Citations Quality). Section 3 discusses and analyses 16 RAMs for 89 leading journals in the ISI category of "Business, Finance", and provides a harmonic mean of the ranks as a robust rankings method of alternative RAMs. Section 4 summarizes the ranking outcomes and discusses some practical aspects of ranking journal quality and impact.

2. Research Assessment Measures (RAM)

A widely-used RAM database for evaluating journal impact and quality based on citations is the Thomson Reuters ISI Web of Science (2013). As discussed in a number of papers (see, for example, Chang et al. (2011a, b, c) and Chang et al. (2014)), the RAMs are intended as descriptive statistics to capture journal quality and impact, and are not based on a mathematical model. Hence, in what follows, no optimization or estimation is required in calculating the alternative RAMs.

As the alternative RAMs that are provided in ISI and in several recent publications may not be widely known, this section provides a brief description and definition of 16 RAMs that may be calculated annually or updated daily (for further details see, for example, Chang et al. (2011a, b, c) and Chang et al. (2014)).

2.1 Annual RAM

With four exceptions, namely Eigenfactor, Article Influence (AI), Cited Article Influence (CAI) and Index of Citations Quality (ICQ), all existing RAMs are based on citations data and are reported separately for the sciences and social sciences. RAMs may be computed annually or updated daily. The annual RAMs given below are calculated for a Journal Citations Reports (JCR) calendar year, which is the year before the annual RAMs are released. For example, the most recent RAMs were released by ISI (2013) in late-June 2013 for the JCR calendar year 2012.

(1) 2-year impact factor including journal self citations (2YIF):

The classic 2-year impact factor including journal self citations (2YIF) of a journal is typically referred to as "the impact factor", is calculated annually, and is defined as "Total citations in a year to papers published in a journal in the previous 2 years / Total papers published in a journal in the previous 2 years". The choice of 2 years by ISI is arbitrary. It is widely held in the academic community, and certainly by the editors and publishers of journals, that a higher 2YIF is better than lower.

(2) 2-year impact factor excluding journal self citations (2YIF*):

ISI also reports a 2-year impact factor without journal self citations (that is, citations to a journal in which a citing paper is published), which is calculated annually. As this impact factor is not widely known or used, Chang et al. (2011c) refer to this RAM as 2YIF*. Although 2YIF* is rarely reported, a higher value would be preferred to lower.

(3) 5-year impact factor including journal self citations (5YIF):

The 5-year impact factor including journal self citations (5YIF) of a journal is calculated annually, and is defined as "Total citations in a year to papers published in a journal in the previous 5 years / Total papers published in a journal in the previous 5 years." The choice of 5 years by ISI is arbitrary. Although 5YIF is not widely reported, a higher value would be preferred to lower.

(4) Immediacy, or zero-year impact factor including journal self citations (0YIF):

Immediacy is a zero-year impact factor including journal self citations (0YIF) of a journal, is calculated annually, and is defined as "Total citations to papers published in a journal in the same year." The choice of the same year by ISI is arbitrary, but the nature of Immediacy makes it clear that a very short run outcome is under consideration. Although Immediacy is not frequently reported, a higher value would be preferred to lower.

(5) 5YIF Divided by 2YIF (5YD2):

As both 2YIF and 5YIF include journal self citations, if it is assumed that journal self citations are uniformly distributed over the 5-year period for calculating 5YIF, their ratio will eliminate the effect of journal self citations and capture the increase in the citation rate over time. In any event, the impact of journal self citations should be mitigated with the ratio of 5YIF to 2YIF. We define a new dynamic RAM as 5YD2 as "5YD2 = 5YIF / 2YIF". In the natural, physical and medical sciences, where citations are observed with a frequency of weeks and months rather than years, it is typically the case that 5YIF < 2YIF (see Chang et al. (2011b, d)), whereas the reverse, 5YIF > 2YIF, seems to hold generally in the social sciences, where citations tend to increase gradually over time (see Chang et al. (2011a, c)). Thus, emphasizing the different speeds at which citations are accrued over time, a lower 5YD2 would be preferred to higher in the sciences, while a higher 5YD2 would be preferred to lower in the social sciences.

(6) Eigenfactor (or Journal Influence):

The Eigenfactor score (see Bergstrom (2007), Bergstrom and West (2008), Bergstrom, West and Wiseman (2008)) is calculated annually (see www.eigenfactor.org), and is defined as: "The Eigenfactor Score calculation is based on the number of times articles from the journal published in the past five years have been cited in the JCR year, but it also considers which journals have contributed these citations so that highly cited journals will influence the network more than lesser cited journals. References from one article in a journal to another article from the same journal are removed, so that Eigenfactor Scores are not influenced by journal self-citation." The value of the threshold that separates 'highly cited' from 'lesser cited' journals, as well as how the former might 'influence the network more' than the latter, are based on the Eigenfactor score of the citing journal. Thus, Eigenfactor might usefully be interpreted as a weighted total citations score, or a "Journal Influence" measure. A higher Eigenfactor score would be preferred to lower.

(7) Article Influence (or Journal Influence per Article):

Article Influence (see Bergstrom (2007), Bergstrom and West (2008), Bergstrom, West and Wiseman (2008)) measures the relative importance of a journal's citation influence on a perarticle basis. Despite the misleading suggestion of measuring "Article Influence", as each journal has only a single "Article Influence" score, this RAM is actually a "Journal Influence per Article" score. Article Influence is a scaled Eigenfactor score, is calculated annually, is standardized to have a mean of one across all journals in the Thomson Reuters ISI database, and is defined as "Eigenfactor score divided by the fraction of all articles published by a journal." A higher Article Influence would be preferred to lower.

(8) IFI:

The ratio of 2YIF to 2YIF* is intended to capture how journal self citations can inflate the impact factor of a journal, whether this is an unconscious self-promotion decision made independently by publishing authors or as an administrative decision undertaken by a journal's editors and/or publishers. Chang et al. (2011a) define Impact Factor Inflation (IFI) as "IFI = 2YIF / 2YIF*". The minimum value for IFI is 1, with any value above the minimum capturing the effect of journal self citations on the 2-year impact factor. A lower IFI would be preferred to higher.

(9) **H-STAR**:

ISI has implicitly recognized the inflation in journal self citations by calculating an impact factor that excludes self citations, and provides data on journal self citations, both historically (for the life of the journal) and for the preceding two years, in calculating 2YIF. Chang et al. (2011b) define the Self-citation Threshold Approval Rating (STAR) as the percentage difference between citations in other journals and journal self citations. If HS = historical journal self citations, then Historical STAR (H-STAR) is defined as "H-STAR = [(100-HS) - HS] = (100-2HS)". If HS = 0 (minimum), 50 or 100 (maximum) percent, for example, H-STAR = 100, 0 and -100, respectively. A higher H-STAR would be preferred to lower.

(10) 2Y-STAR:

H-STAR examines the self-citation threshold approval rating over the historical period for which data for a journal are available, namely from the inclusion of the journal in ISI, whereas 2Y-STAR examines the self-citation threshold approval rating based on data for the preceding two years. If 2YS = journal self citations over the preceding 2-year period, then the 2-Year STAR is defined by Chang et al. (2011b) as "2Y-STAR = [(100-2YS) – 2YS] = (100-2(2YS))". If 2YS = 0 (minimum), 50 or 100 (maximum) percent, for example, 2Y-STAR = 100, 0 and -100, respectively. A higher 2Y-STAR would be preferred to lower.

(11) Escalating Self Citations (ESC):

As self citations for many journals in the sciences and social sciences have been increasing over time, it would seem useful to present a dynamic RAM that captures such an escalation over time. The difference given by 2YS – HS measures Escalating Self Citations in journals over the most recent 2 years relative to the historical period for calculating citations, which will differ across journals. We define a new dynamic RAM as "ESC = 2YS – HS = (H-STAR – 2Y-STAR) / 2". Given the range of each of H-STAR and 2Y-STAR is (-100, 100), the range of ESC is also (-100, 100), with -100 denoting minimum, and 100 denoting maximum, escalation. A lower ESC would be preferred to higher.

(12) Index of Citations Quality (ICQ):

Wilhite and Fong (2012) and Chang, et al. (2013), among others, have argued the well-known practice of coercive journal citations by both editors and publishers distorts the intended meaning and interpretation of journal impact and influence. Chang and McAleer (2014b, c) suggested the following Index of Citations Quality (ICQ) to try to evaluate the impact of coercive self citations: "ICQ = AI / 5YIF = Quality Weighted Citations / Total Citations =

"Quality weighted citations in the past 5 years, excluding journal self citations" / "Total citations in the previous 5 years, including journal self citations". A higher ICQ would generally be preferred to lower.

2.2 Daily Updated RAM

Some RAMs are updated daily, and are reported for a given day in a calendar year rather than for a JCR year.

(13) C3PO:

ISI reports the mean number of citations for a journal, namely total citations up to a given day divided by the number of papers published in a journal up to the same day, as the "average" number of citations. In order to distinguish the mean from the median and mode, the C3PO of an ISI journal on any given day is defined by Chang et al. (2011a) as "C3PO (Citation Performance Per Paper Online) = Total citations to a journal / Total papers published in a journal." A higher C3PO would be preferred to lower. [Note: C3PO should not be confused with C-3PO, the Star Wars android.]

(14) h-index:

The h-index (Hirsch, 2005)) was originally proposed to assess the scientific research productivity and citations impact of individual researchers. However, the h-index can also be calculated for journals, and should be interpreted as assessing the impact or influence of highly cited journal publications. The h-index of a journal on any given day is based on historically cited and citing papers, including journal self citations, and is defined as "h-index = number of published papers, where each has at least h citations." The h-index differs from an impact factor in that the h-index measures the number of highly cited papers historically. A higher h-index would be preferred to lower.

(15) **PI-BETA**:

This RAM measures the proportion of papers in a journal that has never been cited, As such, PI-BETA is, in effect, a rejection rate of a journal **after** publication. Chang et al. (2011c) argue that lack of citations of a published paper, especially if it is not a recent publication, reflects on the quality of a journal by exposing: (i) what might be considered as incorrect decisions by the members of the editorial board of a journal; and (ii) the lost opportunities of

papers that might have been cited had they not been rejected by the journal. Chang et al. (2011c) propose that a paper with zero citations in ISI journals can be measured by PI-BETA (= Papers Ignored (PI) - By Even The Authors (BETA)), which is calculated for an ISI journal on any given day as "Number of papers with zero citations in a journal / Total papers published in a journal." As journals would typically prefer a higher proportion of published papers being cited rather than ignored, a lower PI-BETA would be preferred to higher.

(16) CAI:

Article Influence is intended to measure the average influence of an article across the sciences and social sciences. As an article with zero citations typically does not have any (academic) influence, a more suitable measure of the influence of cited articles would seem to be Cited Article Influence (CAI). Chang et al. (2011b) define CAI as "CAI = (1 - PI-BETA)(Article Influence)". If PI-BETA = 0, then CAI is equivalent to Article Influence; if PI-BETA = 1, then CAI = 0. As Article Influence is calculated annually and PI-BETA is updated daily, CAI may be updated daily. A higher CAI would be preferred to lower.

3. Analysis of RAM for 89 Leading ISI Journals in Finance

As has been argued in the literature, no single RAM captures adequately the quality and impact of a journal. Therefore, any measure of journal quality and impact is based on an arbitrarily chosen weighted mean, such as the harmonic mean of the ranks of the alternative RAMs. All RAMs are ranked from high to low, apart from IFI, PI-BETA and ESC, which are ranked from low to high.

The ISI category of Finance is listed under the discipline of "Business – Finance" (specifically, "Business, Finance"), and contains 89 journals. We compare the RAMs that are based on ISI citations data. Only articles from the ISI Web of Science are included in the citations database, which were downloaded from ISI on 14 May 2014 for all journals. The ISI data set starts in 1899, so all data are from the inclusion of the respective journals in ISI, except for Forbes, where 2004 is the first year in which the number of articles is below 10,000, which is the upper limit for which daily RAM (namely, h-index, C3PO, PI-BETA and CAI) are reported in ISI).

Some comments on the 89 journals in the ISI category of "Business – Finance" are in order. JASSA – The Finsia Journal of Applied Finance has zero entries for 2YIF, 2YIF* and Immediacy, and hence is excluded from the rankings analysis (but not from the discussion of the data in Table 1). Of the remaining 88 journals listed in ISI in Table 1 below, 30 journals have no data for Article Influence, and hence no data for CAI and ICQ. Therefore, data for all 16 RAMs are available for 58 journals, while data for 13 RAMs are available for 88 journals.

Table 1 presents 16 RAMs for the 89 leading journals in "Business – Finance" (hereafter "Finance"), which are ranked according to 2YIF. The means and ranges of 2YIF are, respectively, 1.006 and (0, 4.333), of 2YIF* are 0.806 and (0, 3.984), of 5YIF are 1.424 and (0.036, 6.185), and of Immediacy are 0.171 and (0, 0.867). These alternative impact factors are generally consistent with the related areas of both Management and Marketing (see Chang et al. (2011a)), but are typically considerably lower than many ISI disciplines in the sciences (see Chang et al. (2011b)). There are 14 journals with Immediacy of zero, which means there were no citations to these journals in the year of their publication. The mean and range of 5YD2 are 1.577 and (0.49, 4.71), respectively, so that 5YIF is considerably higher than 2YIF, which means that citations increase as the citations period is extended from two to five years.

Journal self citations in Finance seem to be very high, with a mean IFI of 1.679 and a range of (1, 27.8), in comparison with a mean IFI of 1.442 for 299 Economics journals in ISI (see Chang et al. (2014)). There are 10 IFI values in excess of 2, and 3 IFI values in excess of 3, with the highest being an extraordinary 27.8. On average, the 89 leading journals in Finance have 2YIF that is inflated by a factor of 1.679 through journal self citations. It is also worth mentioning that 12 of the 89 journals have zero self citations.

The h-index has a mean of 29 and a range of (2, 204), with Journal of Finance being the highest at 204, followed by Journal of Financial Economics at 179, Journal of Monetary Economics at 115, and Review of Financial Studies at 109. There are 14 journals with an h-index not greater than 10.

In terms of mean citations, C3PO has a mean of 7.406 and a range of (0.02, 72.57), with a significant contribution coming from Journal of Financial Economics. Eigenfactor has a mean of 0.00454 and a range of (0.00001, 0.06476), with 3 journals, Review of Financial Studies,

Journal of Financial Economics and Journal of Finance, clearly having the highest scores, and hence the greatest Journal Influence.

Article Influence has a mean of 1.363 and a range of (0.034, 8.824), with the same 3 journals having the greatest journal influence. As Article Influence is standardized to have a mean of one across all science and social science journals in the Thomson Reuters ISI database, the mean article influence in Finance is greater than for all the journals in the ISI database. Cited Article Influence (CAI) has a mean of 1.025 and a range of (0.001, 6.46), with the same 3 journals having the highest influence on the basis of cited journal articles.

For purposes of comparing quality versus quantity citations, ICQ has a mean of 0.719 and a range of (0.109, 1.772). As the mean is well below 1, on average the journals in Finance have citations quantity that exceeds the respective citations quality. The mean ICQ for Finance is only slightly higher than the mean ICQ of 0.679 for 276 Economics journals in ISI, though considerably lower than the mean ICQ of 1.255 for the leading 10 ISI journals in econometrics (see Chang and McAleer (2014c)).

The means and ranges for H-STAR and 2Y-STAR for the 89 journals are 71 and (-64, 100), and 57 and (-92, 100), respectively. The H-STAR and 2Y-STAR means of 71 and 57 reflect journal self citations of 14.5% and 21.5%, respectively, historically and for the preceding two years. On average, journal self citations have increased over the preceding two years as compared with historical levels. The ESC mean is 7 and has a range of (-13, 46). On average, self citations are escalating, with 14 journals having no change in the preceding 2 years relative to historical levels, 15 journals decreasing in self citations, and 59 journals increasing in self citations. Overall, two-thirds of the ISI journals in Finance have escalating self citations relative to historical levels.

The PI-BETA scores are illuminating. The mean is 0.396 so that, on average, 2 of every 5 papers that are published in the leading 89 journals in Finance is not cited. The range of (0.082, 0.982) suggests that the journal with the highest percentage of cited papers has one uncited paper for every 12 published papers, while the journal with the lowest percentage of cited papers has virtually no cited papers. The mean PI-BETA value in Table 1 is lower than the mean PI-BETA for 299 ISI journals in Economics (see Chang et al. (2014)).

The simple correlations of 16 RAMs for the 58 leading journals in Finance are given in Table 2, while the simple correlations of 13 RAMs for the 88 leading journals are given in Table 3. In Tables 2 and 3, there are 7 and 2 RAM pairs for which the correlations exceed 0.9 (in absolute value), respectively, and 15 and 7 RAM pairs, respectively, for which the correlations are in the range (0.8, 0.9), in absolute value. The correlations of 0.974 and 0.971 between 2YIF and 2YIF* in Tables 2 and 3, respectively, are very high, which indicates that the 2-year impact factors including and excluding self citations are very similar for the leading Finance journals in ISI. A similar comment applies to the very high correlation for the pairs (Article Influence, CAI) and (IFI, 2Y-STAR) in Table 2. The lower correlations for many other pairs of RAMs suggest that they provide additional information about the citations impact of journals in Finance.

In order to answer the question posed in the title of the paper, as well as to examine if reliance on 2YIF to the exclusion of the other RAMs can lead to a distorted evaluation of journal quality and impact, a robust ranking of the 88 leading journals in Finance given in Table 1 will be based on the harmonic mean of the ranks (see, for example, Chang and McAleer (2013a)).

In Table 4, the harmonic mean (HM) is calculated based on the ranks of 14 RAMs of the 58 leading Finance journals. As H-STAR and 2Y-STAR had 9 and 12 journals, respectively, with equal highest rank, it was not possible to discriminate accurately among the journals. For this reason, these two RAMs are not included in the calculation of HM. The journals in Table 4 are ranked according to HM. The leading 4 journals are Journal of Finance, Journal of Financial Economics, Review of Financial Studies, and Journal of Accounting and Economics. In comparison with the rankings in Table 1 that are based on 2YIF, only Journal of Finance remains unchanged at number 1, but the other three journals remain in the top 4.

Abacus is ranked number 5 (previously 36 based on 2YIF) because it is ranked number 1 using both IFI and ESC, but is ranked 50 or lower using four separate RAMs. Journal of Monetary Economics is ranked 6 (previously 12 based on 2YIF), but its range of ranks is (3, 38). Journal of Financial and Quantitative analysis is ranked 15 (previously 13 based on 2YIF), with a range of ranks of (7, 31).

Of the leading 10 journals according to 2YIF in Table 1, 6 journals have remained in the top 10 according to HM. The 4 journals to have slipped out of the top 10 have remained in the top 20 at 13, 17, 18 and 19.

The journal to have shifted the largest number of positions is Forbes, which moved from 56, based on 2YIF, to 14 based on HM, primarily because of equal highest ranking using IFI. Indeed, four other large movers are ranked in the top 12 primarily because of their equal highest score using IFI.

As has been argued elsewhere, the harmonic mean of the ranks tends to reward journals with very strong individual performances according to a small number of RAMs, so that even one very strong ranking of a RAM can lead to a greatly improved ranking. A choice among the harmonic, geometric or arithmetic means of the ranks as the most appropriate Pythagorean mean of the ranks leads to an arbitrary choice of weights. The RAMs provided in Tables 1 and 4 allow alternative weights to be used for different journals, but concentration on an individual RAM, such as 2YIF, with zero weights imposed on all other RAMs, is not only highly restrictive, but also potentially misleading as a measure of journal quality and impact.

In Table 5, the harmonic mean (HM) is calculated based on the ranks of 10 RAMs of the 88 leading Finance journals. As in the case of Table 4, IFI, H-STAR and 2Y-STAR had 12, 9 and 12 journals, respectively, with equal highest rank, so it was not possible to discriminate accurately among the journals. For this reason, these three RAMs are not included in the calculation of HM. The journals in Table 5 are ranked according to HM. The leading 4 journals are again Journal of Finance, Journal of Financial Economics, Review of Financial Studies, and Journal of Accounting and Economics, which is the same ordering as in Table 4.

The number 5 ranking in Table 5 is Accounting Auditing & Accountability Journal, with three RAMs ranked worse than 60 and a range of rankings of (2, 70), which is a significant change from its ranking of 40 according to 2YIF. The number 6 ranking is Journal of Monetary Economics, with a range of rankings of (3, 54) and only one RAM ranked worse than 40.

The Journal of Risk Model Validation has moved from 88 based on 2YIF to 7 based on HM, primarily because of having the highest ranking using 5YD2, while International Insolvency

Review has moved from 85 to 8 based on having the highest ranking using ESC. These two journals were not ranked in Table 4 because they had no data on Article Influence, CAI and ICQ.

The simple ranking correlations of the 14 RAMs for the 58 leading journals in Finance, based on the rankings in Table 4, are given in Table 6. The correlations in Table 6 are not very close (in absolute value) to the correlations in Table 2 for the original RAM scores. There are 3 RAM pairs for which the correlations exceed 0.9 (in absolute value), with the highest correlation being for the pair (Article Influence, CAI) at 0.979, which suggests that the rankings according to Article Influence and CAI would be virtually identical.

In Table 6, the two highest correlations of RAMs with the Harmonic Mean are for Article Influence (at 0.713) and CAI (at 0.709), which are much higher than the correlation of 2YIF with HM at 0.568. Thus, 2YIF would clearly not be the most robust individual RAM if it were intended to capture HM. In this sense, using 2YIF as a single RAM to capture the quality and impact of a journal would lead to a misleading evaluation of its impact and influence.

The simple ranking correlations of the 11 RAMs for the 88 leading journals in Finance, based on the rankings in Table 5, are given in Table 7. The correlations in Table 7 are not very close (in absolute value) to the correlations in Table 3 for the original RAM scores. There are 3 RAM pairs for which the correlations exceed 0.9 (in absolute value), with the highest correlation being for the pair (h-index, C3PO) at 0.955, which suggests that the rankings according to h-index and C3PO would be virtually identical.

In Table 7, the two highest correlations of RAMs with the Harmonic Mean are for 2YIF* (at 0.69) and 5YIF (at 0.673), which are only slightly higher than the correlation of 2YIF with HM at 0.612. Thus, 2YIF would not be entirely misleading it were used to try to capture HM. In this sense, using 2YIF as a single RAM to capture the quality and impact of a journal would not necessarily lead to a misleading evaluation of its impact and influence.

4. Concluding Remarks

The paper evaluated the ranking of academic journal quality and research impact using the Thomson Reuters ISI Web of Science (2013) citations database (hereafter ISI) for the "Business – Finance" category. This paper analysed the leading 89 journals in the Finance using 16 quantifiable Research Assessment Measures (RAMs). The 16 RAMs that may be calculated annually or updated daily are used to rank journal quality and impact.

The paper highlighted the similarities and differences in alternative RAMs, and showed that several RAMs were highly correlated so that they had little informative incremental value in capturing the impact and performance of the highly-cited journals. Other RAMs were not highly correlated with each other, which meant they contained useful additional information. The harmonic mean of a subset of the ranks of the 16 RAMs were also presented for the leading Finance journals in ISI to provide robust journals rankings of quality and impact.

It was shown that emphasizing 2YIF of a journal to the exclusion of several other informative RAMs could lead to a misleading evaluation of journal quality and impact relative to the harmonic mean of the ranks of RAMs.

A similar comment would apply to emphasizing any individual RAM, with zero weights imposed on all other RAMs. Using such a rankings approach would not only be highly restrictive, but it would also be potentially misleading as a robust measure of journal quality and impact.

The journals rankings presented above indicate clearly that there are three leading journals in Finance, namely Journal of Finance, Journal of Financial Economics and Review of Financial Studies. These three journals form an exclusive club in terms of the RAMs that measure journal quality and impact based on alternative measures of journal citations. The next two journals in terms of overall quality and impact are Journal of Accounting and Economics and Journal of Monetary Economics. The Journal of Financial and Quantitative Analysis is not in the top 10 journals in Finance, despite a widely-held perception in the discipline that it might be just outside the top 3 journals.

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Table 1
16 Research Assessment Measures (RAM) for 89 Leading Finance Journals

Journal	2YIF	2YIF*	IFI	5YIF	Imme- diacy	5YD2	h- index	СЗРО	PI- BETA	Eigen- factor	AI	CAI	ICQ	H- STAR	2Y- STAR	ESC
J FINANC	4.333	3.984	1.088	6.185	0.867	1.427	204	31.11	0.354	0.05733	8.824	5.7	1.427	96	94	1
J ACCOUNT ECON	3.912	3.294	1.188	4.023	0.289	1.028	96	42.7	0.085	0.00741	2.453	2.244	0.61	82	70	6
J FINANC ECON	3.424	3.038	1.127	5.087	0.669	1.486	179	72.57	0.082	0.05835	6.327	5.808	1.244	88	78	5
REV FINANC STUD	3.256	2.863	1.137	5.367	0.421	1.648	109	37.75	0.108	0.06476	7.242	6.46	1.349	88	76	6
IMF ECON REV	2.529	2.206	1.146	2.559	0	1.012	11	3.72	0.419	0.00248	4.172	2.424	1.63	74	76	-1
ACCOUNT REV	2.319	1.743	1.33	3.204	0.603	1.382	82	6.25	0.568	0.00795	1.474	0.637	0.46	74	52	11
IMF STAFF PAPERS	2.312	2.312	1	1.344	0	0.581	29	9.24	0.147	0.00244	1.454	1.24	1.082	100	100	0
J FINANC INTERMED	2.208	2.132	1.036	2.46	0.107	1.114	40	14.37	0.204	0.00582	2.688	2.14	1.093	94	94	0
J ACCOUNT RES	2.192	1.863	1.177	3.368	0.256	1.536	88	20.85	0.196	0.00703	2.21	1.777	0.656	90	70	10
ACCOUNT ORG SOC	1.867	1.44	1.297	3.143	0.125	1.683	68	20.81	0.095	0.00364	1.028	0.93	0.327	76	56	10
J RISK UNCERTAINTY	1.771	1.25	1.417	2.016	0.167	1.138	53	25.16	0.109	0.0036	1.625	1.448	0.806	86	58	14
J MONETARY ECON	1.649	1.491	1.106	2.529	0.163	1.534	115	30.83	0.164	0.02718	3.742	3.128	1.48	96	82	7
J FINANC QUANT ANAL	1.636	1.579	1.036	2.13	0.214	1.302	79	15.39	0.206	0.01169	2.645	2.1	1.242	98	94	2
CONTEMP ACCOUNT RES	1.564	1.385	1.129	2.154	0.186	1.377	31	8.79	0.28	0.00348	1.094	0.788	0.508	80	78	1
J FINANC STABIL	1.463	0.878	1.666	1.568	0.208	1.072	13	3.33	0.386	0.00095	-	-	-	42	20	11
REV FINANC	1.44	1.4	1.029	2.456	0.357	1.706	17	4.41	0.372	0.00477	-	-	1	96	96	0
CORP GOV-OXFORD	1.4	0.431	3.248	1.581	0.156	1.129	11	2.77	0.388	0.00164	0.364	0.223	0.23	42	-38	40
MANAGE ACCOUNT RES	1.366	0.878	1.556	2.531	0.118	1.853	11	4.4	0.317	0.00105	-	-	-	68	30	19
REV ACCOUNT STUD	1.364	1.2	1.137	1.899	0.219	1.392	27	8.45	0.304	0.00231	1.214	0.845	0.639	82	76	3
FINANC MANAGE	1.33	0.907	1.466	1.568	0.235	1.179	46	8.52	0.219	0.00345	1.069	0.835	0.682	80	38	21

Journal	2YIF	2YIF*	IFI	5YIF	Immediacy	5YD2	h- index	СЗРО	PI- BETA	Eigenfactor	Article Influence	CAI	ICQ	H- STAR	2Y- STAR	ESC
WORLD BANK ECON REV	1.325	1.3	1.019	2.704	0.143	2.041	58	20.93	0.238	0.00398	2.111	1.609	0.781	98	98	0
ACCOUNT HORIZ	1.288	1.058	1.217	2.128	0.333	1.652	11	2.69	0.429	0.00117	-	1	-	70	66	2
J BANK FINANC	1.287	0.821	1.568	1.721	0.212	1.337	74	10.76	0.142	0.01566	0.796	0.683	0.463	64	38	13
J RISK INSUR	1.237	0.724	1.709	1.39	0.116	1.124	38	4.11	0.487	0.00225	0.643	0.33	0.463	44	18	13
FINANC STOCH	1.212	1.096	1.106	1.597	0.267	1.318	29	11.34	0.174	0.00381	1.761	1.455	1.103	80	82	-1
J IND ECON	1.194	1.09	1.095	1.539	0.192	1.289	70	16.2	0.178	0.0054	1.85	1.521	1.202	98	84	7
J FINANC SERV RES	1.176	0.735	1.6	1.711	0.632	1.455	24	5.95	0.303	0.00098	-	-	-	70	26	22
EMERG MARK REV	1.167	0.479	2.436	1.603	0.361	1.374	8	2.18	0.385	0.00034	-	-	-	26	-16	21
J MONEY CREDIT BANK	1.104	0.983	1.123	1.7	0.31	1.54	72	11.73	0.278	0.0127	1.691	1.221	0.995	88	80	4
J FINANC MARK	1.093	0.977	1.119	1.505	0.222	1.377	22	10.44	0.226	0.00316	1.692	1.31	1.124	88	80	4
J CORP FINANC	1.035	0.648	1.597	1.774	0.16	1.714	38	9.87	0.236	0.00502	1.05	0.802	0.592	72	26	23
REAL ESTATE ECON	1.02	0.88	1.159	1.307	0.118	1.281	30	9.52	0.156	0.00172	0.777	0.656	0.594	74	74	0
AUDITING-J PRACT TH	1.015	0.612	1.658	1.408	0.2	1.387	36	8.42	0.248	0.0011	0.483	0.363	0.343	54	22	16
J BUS FINAN ACCOUNT	1.01	0.33	3.061	1.061	0.128	1.05	21	4.83	0.229	0.00144	0.313	0.241	0.295	58	-34	46
MATH FINANC	1	0.919	1.088	1.463	0.375	1.463	44	19.94	0.142	0.00382	1.486	1.275	1.016	90	86	2
J FINANC ECONOMET	0.976	0.881	1.108	1.58	0.091	1.619	13	4.12	0.387	0.00301	1.724	1.057	1.091	80	82	-1
FINANC ANAL J	0.952	0.603	1.579	0.959	0.412	1.007	27	3.6	0.566	0.00234	0.789	0.342	0.823	88	28	30
J EMPIR FINANC	0.934	0.818	1.142	1.626	0.12	1.741	14	3.3	0.362	0.00478	-	-	-	90	76	7
J REAL ESTATE RES	0.925	0.525	1.762	1.069	0.381	1.156	10	3.48	0.238	0.0009	0.511	0.389	0.478	44	14	15
ACCOUNT AUDIT ACCOUN	0.922	0.675	1.366	4.039	0.386	4.381	8	1.68	0.544	0.00133	-	-	-	28	48	-10

Journal	2YIF	2YIF*	IFI	5YIF	Immediacy	5YD2	h- index	СЗРО	PI- BETA	Eigenfactor	Article Influence	CAI	ICQ	H- STAR	2Y- STAR	ESC
INT J CENT BANK	0.895	0.807	1.109	1.295	0.088	1.447	10	1.85	0.543	0.00203	-	1	-	92	82	5
ACCOUNT FINANC	0.875	0.537	1.629	0.794	0.046	0.907	10	2.03	0.412	0.00065	0.192	0.113	0.242	48	24	12
WORLD ECON	0.872	0.797	1.094	1.244	0.135	1.427	36	3.92	0.491	0.00508	0.725	0.369	0.583	88	84	2
J INT MONEY FINANC	0.858	0.742	1.156	1.434	0.305	1.671	59	11.64	0.194	0.00641	0.915	0.737	0.638	82	76	3
INT REV ECON FINANC	0.855	0.366	2.336	1.104	0.231	1.291	11	1.99	0.394	0.00125	-	-	-	24	-14	19
ABACUS	0.85	0.85	1	1.01	0.105	1.188	11	2.62	0.446	0.00051	0.284	0.157	0.281	76	100	-12
AUST ACCOUNT REV	0.833	0.583	1.429	0.63	0.529	0.756	6	1.18	0.516	0.00028	-	1	1	42	40	1
N AM J ECON FINANC	0.825	0.55	1.5	1.133	0.143	1.373	8	1.95	0.323	0.0005	ı	ı	ı	70	34	18
QUANT FINANC	0.824	0.761	1.083	0.957	0.085	1.161	28	4.54	0.451	0.0046	0.633	0.348	0.661	74	86	-6
SIAM J FINANC MATH	0.795	0.795	1	0.795	0	1	8	2.21	0.407	0.00099	0.775	0.46	0.975	100	100	0
INT J FINANC ECON	0.784	0.745	1.052	0.776	0.2	0.99	20	4.94	0.279	0.0009	0.413	0.298	0.532	94	90	2
J FUTURES MARKETS	0.782	0.564	1.387	0.855	0.152	1.093	37	6.61	0.206	0.00191	0.426	0.338	0.498	56	46	5
J ACCOUNT PUBLIC POL	0.77	0.557	1.382	1.525	0.129	1.981	19	4.47	0.295	0.001	-	1	1	68	46	11
EUR FINANC MANAG	0.738	0.631	1.17	1.431	0.111	1.939	19	5.54	0.254	0.00242	0.798	0.595	0.558	58	72	-7
GENEVA RISK INS REV	0.722	0.722	1	0.732	0.091	1.014	6	2.76	0.25	0.00032	0.441	0.331	0.602	78	100	-11
NATL TAX J	0.698	0.593	1.177	0.732	0.25	1.049	49	6.49	0.3	0.00211	0.577	0.404	0.788	76	70	3
ANNU REV FINANC ECON	0.694	0.667	1.04	0.627	0.105	0.903	8	2.52	0.429	0.00099	1.111	0.634	1.772	90	92	-1
EUR ACCOUNT REV	0.654	0.558	1.172	1.465	0	2.24	15	3.63	0.441	0.00102	0.453	0.253	0.309	84	72	6
FED RESERVE BANK ST	0.64	0.62	1.032	0.748	0.125	1.169	17	4.12	0.317	0.00185	0.786	0.537	1.051	86	94	-4
J REAL ESTATE FINANC	0.621	0.526	1.181	1.203	0.11	1.937	34	7.67	0.247	0.00217	0.536	0.404	0.446	54	70	-8

Journal	2YIF	2YIF*	IFI	5YIF	Immediacy	5YD2	h- index	СЗРО	PI- BETA	Eigenfactor	Article Influence	CAI	ICQ	H- STAR	2Y- STAR	ESC
INT FINANC	0.6	0.575	1.043	0.927	0.118	1.545	8	2.09	0.496	0.00064	0.447	0.225	0.482	92	92	0
INT J HEALTH CARE FI	0.576	0.545	1.057	1.27	0	2.205	7	1.97	0.416	0.00073	-	-	-	92	90	1
PAC-BASIN FINANC J	0.571	0.333	1.715	1.162	0.068	2.035	7	1.46	0.514	0.00079	-	-	-	66	18	24
ACCOUNT BUS RES	0.533	0.356	1.497	0.792	0.045	1.486	11	2.3	0.482	0.00042	0.227	0.118	0.287	44	34	5
J PORTFOLIO MANAGE	0.525	0.232	2.263	0.562	0.093	1.07	35	3.91	0.431	0.00156	0.346	0.197	0.616	72	-10	41
J COMPUT FINANC	0.438	0.438	1	1.125	0	2.568	5	1.14	0.578	0.00095	-	-	-	100	100	0
J PENSION ECON FINAN	0.418	0.273	1.531	0.563	0.043	1.347	7	0.85	0.703	0.00055	-	-	-	48	32	8
ASIA-PAC J FINANC ST	0.417	0.2	2.085	0.351	0.1	0.842	5	1.07	0.506	0.00013	0.049	0.024	0.14	-6	-4	-1
J DERIV	0.406	0.375	1.083	0.758	0.053	1.867	9	2.3	0.435	0.00084	0.528	0.298	0.697	96	86	5
GENEVA PAP R I- ISS P	0.382	0.235	1.626	0.531	0.029	1.39	13	2.23	0.403	0.00054	0.161	0.096	0.303	26	24	1
FINANC UVER	0.34	0.151	2.252	0.414	0.2	1.218	7	1.21	0.553	0.00027	0.116	0.052	0.28	46	-10	28
J INT FIN MANAG ACC	0.333	0.333	1	0.579	0	1.739	3	0.87	0.55	0.00013	-	-	-	96	100	-2
J BEHAV FINANC	0.3	0.2	1.5	0.646	0.037	2.153	5	0.98	0.587	0.00042	-	-	-	70	24	23
FISC STUD	0.295	0.227	1.3	0.616	0.091	2.088	17	4.75	0.271	0.00083	0.48	0.35	0.779	94	54	20
FINANC RES LETT	0.291	0.255	1.141	0.472	0.04	1.622	5	1.14	0.529	0.00066	-	-	-	92	76	8
IKTISAT ISLET FINANS	0.278	0.01	27.8	0.416	0.235	1.496	4	0.49	0.679	0.00007	-	-	-	-64	-92	14
EUR J FINANC	0.262	0.238	1.101	0.743	0.085	2.836	7	1.31	0.551	0.00121	-	-	-	78	82	-2
FORBES	0.251	0.251	1	0.123	0.131	0.49	4	0.02	0.982	0.0025	0.075	0.001	0.61	100	100	0
FINANZARCHIV	0.229	0.171	1.339	0.312	0.056	1.362	9	1.64	0.537	0.00038	0.2	0.093	0.641	76	50	13
ASIA-PAC J ACCOUNT E	0.206	0.118	1.746	0.25	0.136	1.214	4	0.51	0.765	0.00011	-	-	-	38	16	11

Journal	2YIF	2YIF*	IFI	5YIF	Immediacy	5YD2	h- index	СЗРО	PI- BETA	Eigenfactor	Article Influence	CAI	ICQ	H- STAR	2Y- STAR	ESC
J OPER RISK	0.182	0.182	1	0.427	0	2.346	11	3.2	0.466	0.00032	-	-	-	100	100	0
INVEST ANAL J	0.176	0.059	2.983	0.313	0.182	1.778	3	0.69	0.662	0.00003	0.034	0.011	0.109	-14	-32	9
REV DERIV RES	0.16	0.16	1	0.326	0	2.038	4	0.96	0.563	0.00021	-	-	-	100	100	0
J RISK	0.152	0.152	1	0.507	0	3.336	5	0.96	0.632	0.00037	-	-	-	100	100	0
INT INSOLV REV	0.15	0.1	1.5	0.258	0	1.72	2	0.36	0.709	0.00006	-	-	-	8	34	-13
REV ESP FINANC CONTA	0.106	0.043	2.465	0.167	0.048	1.575	2	0.15	0.876	0.00004	-	-	-	-8	-20	6
J CREDIT RISK	0.091	0.091	1	0.389	0	4.275	4	0.68	0.633	0.0003	-	-	-	100	100	0
J RISK MODEL VALIDAT	0.031	0.031	1	0.146	0	4.71	3	0.6	0.67	0.0001	-	-	-	100	100	0
JASSA	0	0	-	0.036	0	-	2	0.07	0.95	0.00001	-	-	-	-	1	-
Mean	1.006	0.806	1.679	1.424	0.171	1.577	29	7.406	0.396	0.00454	1.363	1.025	0.719	71	57	7
Low	0	0	1	0.036	0	0.49	2	0.02	0.082	0.00001	0.034	0.001	0.109	-64	-92	-13
High	4.333	3.984	27.8	6.185	0.867	4.71	204	72.57	0.982	0.06476	8.824	6.46	1.772	100	100	46

Notes: The journals are ranked according to 2YIF. The journal acronyms are taken from ISI. Daily RAMs are not reported when there are more than 10,000 articles, so the data for Forbes are from 2004. Data for all other journals are from the year of their inclusion in ISI. The data were downloaded from ISI on 14 May 2014.

Table 2 Correlations of 16 RAM for 58 Leading Finance Journals

Journal	2YIF	2YIF*	IFI	5YIF	Immediacy	5YD2	h-index	СЗРО	PI-BETA	Eigenfactor	Article Influence	CAI	ICQ	H-STAR	2Y-STAR	ESC
2YIF	1															
2YIF*	0.974	1														
IFI	-0.217	-0.383	1													
5YIF	0.936	0.917	-0.244	1												
Immediacy	0.615	0.583	-0.062	0.685	1											
5YD2	-0.054	-0.029	-0.099	0.222	0.069	1										
h-index	0.801	0.795	-0.234	0.873	0.769	0.173	1									
СЗРО	0.774	0.772	-0.245	0.822	0.597	0.165	0.852	1								
PI-BETA	-0.458	-0.45	0.224	-0.464	-0.187	-0.205	-0.455	-0.585	1							
Eigenfactor	0.71	0.719	-0.179	0.816	0.698	0.158	0.844	0.775	-0.3	1						
Article Influence	0.846	0.876	-0.3	0.896	0.653	0.12	0.828	0.762	-0.361	0.901	1					
CAI	0.835	0.862	-0.291	0.893	0.629	0.134	0.835	0.845	-0.446	0.927	0.979	1				
ICQ	0.452	0.548	-0.524	0.422	0.264	-0.083	0.424	0.42	-0.296	0.472	0.674	0.645	1			
H-STAR	0.326	0.427	-0.715	0.328	0.161	0.025	0.335	0.327	-0.275	0.247	0.373	0.366	0.633	1		
2Y-STAR	0.246	0.422	-0.946	0.259	0.052	0.064	0.231	0.253	-0.207	0.202	0.342	0.329	0.584	0.776	1	
ESC	-0.054	-0.226	0.750	-0.072	0.081	-0.074	-0.021	-0.065	0.043	-0.065	-0.155	-0.142	-0.27	-0.198	-0.772	1

Table 3 Correlations of 13 RAM for 88 Leading Finance Journals

Journal	2YIF	2YIF*	IFI	5YIF	Immediacy	5YD2	h-index	СЗРО	PI-BETA	Eigenfactor	H-STAR	2Y-STAR	ESC
2YIF	1												
2YIF*	0.971	1											
IFI	-0.119	-0.168	1										
5YIF	0.905	0.885	-0.125	1									
Immediacy	0.603	0.546	0.049	0.642	1								
5YD2	-0.284	-0.24	-0.045	0.003	-0.183	1							
h-index	0.804	0.809	-0.106	0.8	0.632	-0.154	1						
СЗРО	0.779	0.788	-0.102	0.765	0.509	-0.127	0.874	1					
PI-BETA	-0.585	-0.563	0.192	-0.525	-0.291	0.261	-0.543	-0.612	1				
Eigenfactor	0.7	0.72	-0.07	0.755	0.575	-0.055	0.842	0.786	-0.345	1			
H-STAR	0.241	0.352	-0.583	0.228	-0.037	0.125	0.279	0.272	-0.323	0.207	1		
2Y-STAR	0.169	0.348	-0.533	0.192	-0.099	0.206	0.205	0.221	-0.205	0.183	0.842	1	
ESC	0.017	-0.159	0.184	-0.043	0.13	-0.207	0.003	-0.034	-0.064	-0.053	-0.183	-0.684	1

Table 4
14 RAM and Harmonic Mean (HM) of the Ranks for 58 Leading Finance Journals

Journal	НМ	2YIF	2YIF*	IFI	5YIF	Imme- diacy	5YD2	h- index	СЗРО	PI- BETA	Eigen- factor	AI	CAI	ICQ	ESC	2YIF- HM
J FINANC	1	1	1	15	1	1	20	1	4	35	3	1	3	4	19	0
J FINANC ECON	2	3	3	24	3	2	17	2	1	1	2	3	2	6	31	1
REV FINANC STUD	3	4	4	26	2	4	11	4	3	4	1	2	1	5	35	1
J ACCOUNT ECON	4	2	2	36	4	10	48	5	2	2	9	8	6	31	35	-2
ABACUS	5	36	25	1	37	42	35	43	46	46	52	50	50	53	1	31
J MONETARY ECON	6	12	11	19	10	26	16	3	5	10	4	5	4	3	38	6
IMF STAFF PAPERS	7	7	5	1	31	55	57	29	21	8	28	19	16	13	12	0
GENEVA RISK INS REV	8	42	33	1	48	46	49	55	45	26	55	44	41	33	2	34
IMF ECON REV	9	5	6	28	9	55	50	43	40	41	27	4	5	2	7	-4
ANNU REV FINANC ECON	10	44	34	10	50	42	55	51	47	42	43	21	28	1	7	34
WORLD BANK ECON REV	11	18	14	6	8	30	3	14	7	22	17	10	10	21	12	7
SIAM J FINANC MATH	12	38	28	1	42	55	52	51	51	39	43	32	31	17	12	26
J ACCOUNT RES	13	9	8	33	5	12	15	6	8	14	10	9	9	26	41	-4
FORBES	14	56	51	1	58	32	58	57	58	58	26	56	58	31	12	42
J FINANC QUANT ANAL	15	13	10	8	13	17	31	8	12	16	7	7	8	7	22	-2
EUR ACCOUNT REV	16	45	43	32	25	55	1	40	41	45	42	42	45	49	35	29
ACCOUNT REV	17	6	9	39	6	3	25	7	29	56	8	18	27	45	43	-11
J FINANC INTERMED	18	8	7	8	11	41	43	19	13	15	12	6	7	11	12	-10
ACCOUNT ORG SOC	19	10	12	37	7	34	9	12	9	3	20	25	19	48	41	-9
J RISK UNCERTAINTY	20	11	15	42	14	25	40	15	6	5	21	16	13	19	48	-9

Journal	НМ	2YIF	2YIF*	IFI	5YIF	Imme- diacy	5YD2	h- index	СЗРО	PI- BETA	Eigen- factor	AI	CAI	ICQ	ESC	2YIF- HM
MATH FINANC	21	29	21	15	26	7	19	18	10	6	18	17	15	15	22	8
J MONEY CREDIT BANK	22	23	19	23	18	8	14	10	14	29	6	15	17	16	29	1
FINANC STOCH	23	21	17	19	19	11	30	29	16	11	19	12	12	10	7	-2
J IND ECON	24	22	18	18	23	22	32	11	11	12	13	11	11	8	38	-2
J BANK FINANC	25	19	26	45	17	18	29	9	17	6	5	28	25	43	45	-6
J REAL ESTATE FINANC	26	47	45	35	34	40	5	26	26	24	33	37	32	46	3	21
EUR FINANC MANAG	27	41	36	31	28	39	4	37	30	27	29	27	29	37	4	14
FISC STUD	28	55	54	38	51	46	2	38	33	28	48	41	37	22	51	27
J INT MONEY FINANC	29	35	31	29	27	9	10	13	15	13	11	26	24	29	26	6
J FINANC ECONOMET	30	30	23	21	21	46	12	41	35	36	25	13	18	12	7	0
J FINANC MARK	31	24	20	22	24	15	26	34	18	19	24	14	14	9	29	-7
FED RESERVE BANK ST	32	46	37	7	47	34	37	38	35	34	36	30	30	14	6	14
CONTEMP ACCOUNT RES	33	14	13	25	12	23	26	27	22	31	22	22	23	39	19	-19
J CORP FINANC	34	25	35	47	16	27	8	20	19	21	15	24	22	35	53	-9
QUANT FINANC	35	37	29	13	39	49	38	31	34	47	16	35	38	25	5	2
REV ACCOUNT STUD	36	16	16	26	15	16	22	32	24	33	31	20	20	28	26	-20
FINANC MANAGE	37	17	22	43	22	14	36	17	23	18	23	23	21	24	52	-20
REAL ESTATE ECON	38	26	24	30	32	36	33	28	20	9	37	31	26	34	12	-12
FINANC ANAL J	39	31	39	46	38	5	51	32	42	55	30	29	39	18	55	-8
J DERIV	40	52	48	13	46	51	6	49	48	44	47	38	43	23	31	12

Journal	НМ	2YIF	2YIF*	IFI	5YIF	Imme- diacy	5YD2	h- index	СЗРО	PI- BETA	Eigen- factor	AI	CAI	ICQ	ESC	2YIF- HM
WORLD ECON	41	34	27	17	33	31	20	23	38	50	14	33	35	36	22	-7
J REAL ESTATE RES	42	32	46	52	35	6	39	47	43	22	45	39	34	42	49	-10
NATL TAX J	43	43	40	33	48	13	47	16	28	32	34	36	32	20	26	0
INT FINANC	44	48	41	11	40	36	13	51	52	51	50	43	47	41	12	4
INT J FINANC ECON	45	39	30	12	45	19	53	36	31	30	45	46	43	38	22	-6
AUDITING-J PRACT TH	46	27	38	50	29	19	24	23	25	25	41	40	36	47	50	-19
J FUTURES MARKETS	47	40	42	41	41	29	44	22	27	16	35	45	40	40	31	-7
J RISK INSUR	48	20	32	51	30	38	42	20	37	49	32	34	42	43	45	-28
INVEST ANAL J	49	58	58	56	56	24	7	58	57	57	58	58	57	58	40	9
CORP GOV-OXFORD	50	15	47	58	20	28	41	43	44	37	38	47	48	56	56	-35
ASIA-PAC J FINANC ST	51	51	55	53	55	44	56	56	56	52	57	57	56	57	7	0
J BUS FINAN ACCOUNT	52	28	50	57	36	33	46	35	32	20	40	49	46	51	58	-24
GENEVA PAP R I-ISS P	53	53	52	48	53	54	23	41	50	38	51	54	53	50	19	0
ACCOUNT BUS RES	54	49	49	44	44	53	17	43	48	48	53	51	51	52	31	-5
J PORTFOLIO MANAGE	55	50	53	55	52	45	45	25	39	43	39	48	49	30	57	-5
FINANZARCHIV	56	57	56	40	57	50	28	49	54	53	54	52	54	27	45	1
FINANC UVER	57	54	57	54	54	19	34	54	55	54	56	55	55	54	54	-3
ACCOUNT FINANC	58	33	44	49	43	52	54	47	53	40	49	53	52	55	44	-25

Notes: The journals are ranked according to the Harmonic Mean (HM) of the ranks. The difference reported in the last column is 2YIF – Harmonic Mean. H-STAR and 2Y-STAR have been excluded as there were 9 and 12 journals, respectively, that had the equal highest rank.

Table 5
10 RAM and Harmonic Mean (HM) of the Ranks for 88 Leading Finance Journals

Journal	HM	2YIF	2YIF*	5YIF	Immediacy	5YD2	h-index	СЗРО	PI-BETA	Eigenfactor	ESC	2YIF-HM
J FINANC	1	1	1	1	1	42	1	4	39	3	30	0
J FINANC ECON	2	3	3	3	2	38	2	1	1	2	45	1
REV FINANC STUD	3	4	4	2	6	29	4	3	4	1	50	1
J ACCOUNT ECON	4	2	2	5	16	77	5	2	2	9	50	-2
ACCOUNT AUDIT ACCOUN	5	40	41	4	8	2	61	67	70	44	4	35
J MONETARY ECON	6	12	11	12	35	36	3	5	10	4	54	6
J RISK MODEL VALIDAT	7	88	87	87	76	1	84	83	82	84	16	81
INT INSOLV REV	8	85	83	84	76	23	87	86	85	86	1	77
ACCOUNT REV	9	6	9	7	4	48	7	29	76	8	62	-3
J ACCOUNT RES	10	9	8	6	18	35	6	8	14	10	60	-1
ACCOUNT ORG SOC	11	10	12	8	46	26	12	9	3	22	60	-1
J RISK UNCERTAINTY	12	11	16	18	34	68	15	6	5	23	70	-1
J FINANC QUANT ANAL	13	13	10	16	25	57	8	12	16	7	35	0
J BANK FINANC	14	23	30	21	26	55	9	17	6	5	67	9
J FINANC INTERMED	15	8	7	13	55	71	19	13	15	12	16	-7
WORLD BANK ECON REV	16	21	15	9	39	12	14	7	22	19	16	5
IMF STAFF PAPERS	17	7	5	40	76	87	29	21	8	30	16	-10
IMF ECON REV	18	5	6	10	76	79	48	44	51	29	11	-13
ABACUS	19	46	29	52	56	63	48	54	57	68	2	27
MATH FINANC	20	35	23	35	10	40	18	10	6	20	35	15

Journal	НМ	2YIF	2YIF*	5YIF	Immediacy	5YD2	h-index	СЗРО	PI-BETA	Eigenfactor	ESC	2YIF-HM
J MONEY CREDIT BANK	21	29	21	23	14	34	10	14	29	6	43	8
J FINANC SERV RES	22	27	38	22	3	41	34	30	34	54	80	5
FINANC STOCH	23	25	18	26	17	56	29	16	11	21	11	2
J IND ECON	24	26	19	31	31	59	11	11	12	13	54	2
REV FINANC	25	16	13	14	12	25	40	37	41	17	16	-9
J INT MONEY FINANC	26	44	37	36	15	27	13	15	13	11	40	18
GENEVA RISK INS REV	27	55	40	64	60	78	72	52	26	75	3	28
J CREDIT RISK	28	87	84	79	76	3	79	82	80	77	16	59
J REAL ESTATE FINANC	29	60	57	45	54	17	26	26	24	35	5	31
CONTEMP ACCOUNT RES	30	14	14	15	32	49	27	22	31	24	30	-16
EUR FINANC MANAG	31	54	44	37	53	16	38	31	27	31	6	23
EUR J FINANC	32	77	71	63	64	5	67	70	72	46	9	45
J RISK	33	84	80	74	76	4	74	77	79	73	16	51
REAL ESTATE ECON	34	32	26	41	49	60	28	20	9	40	16	-2
J CORP FINANC	35	31	43	20	36	24	20	19	21	15	81	-4
FINANC MANAGE	36	20	24	29	20	64	17	23	18	25	78	-16
REV ACCOUNT STUD	37	19	17	19	24	45	32	24	35	33	40	-18
ACCOUNT HORIZ	38	22	20	17	13	28	48	53	52	47	35	-16
QUANT FINANC	39	49	35	54	64	66	31	35	58	18	7	10
J FINANC MARK	40	30	22	33	23	49	35	18	19	26	43	-10

Journal	НМ	2YIF	2YIF*	5YIF	Immediacy	5YD2	h-index	СЗРО	PI-BETA	Eigenfactor	ESC	2YIF-HM
MANAGE ACCOUNT RES	41	18	27	11	49	19	48	38	36	49	75	-23
AUST ACCOUNT REV	42	47	49	67	5	86	72	72	66	78	30	5
J COMPUT FINANC	43	66	60	48	76	6	74	73	77	55	16	23
J FINANC ECONOMET	44	36	25	28	60	31	45	39	44	27	11	-8
FINANC ANAL J	45	37	47	53	7	80	32	46	75	32	85	-8
J OPER RISK	46	81	77	76	76	7	48	50	59	75	16	35
FED RESERVE BANK ST	47	59	45	62	46	65	40	39	36	39	8	12
J EMPIR FINANC	48	38	31	24	48	21	44	48	40	16	54	-10
EUR ACCOUNT REV	49	58	52	34	76	8	43	45	56	50	50	9
WORLD ECON	50	43	33	44	42	42	23	42	62	14	35	-7
J REAL ESTATE RES	51	39	58	50	9	67	56	47	22	57	72	-12
NATL TAX J	52	56	48	64	19	76	16	28	33	36	40	4
AUDITING-J PRACT TH	53	33	46	38	28	47	23	25	25	48	73	-20
J FUTURES MARKETS	54	52	51	56	38	72	22	27	16	38	45	-2
J FINANC STABIL	55	15	27	29	27	73	45	48	43	55	62	-40
EMERG MARK REV	56	28	59	25	11	51	61	60	42	74	78	-28
INT J HEALTH CARE FI	57	62	55	43	76	9	67	64	50	62	30	5
J ACCOUNT PUBLIC POL	58	53	53	32	44	15	38	36	32	51	62	-5
FISC STUD	59	74	74	69	60	11	40	34	28	60	77	15
J INT FIN MANAG ACC	60	72	65	70	76	22	84	79	71	81	9	12

Journal	НМ	2YIF	2YIF*	5YIF	Immediacy	5YD2	h-index	СЗРО	PI-BETA	Eigenfactor	ESC	2YIF-HM
J RISK INSUR	61	24	39	39	52	70	20	41	61	34	67	-37
CORP GOV-OXFORD	62	17	61	27	37	69	48	51	45	41	86	-45
ANNU REV FINANC ECON	63	57	42	68	56	84	61	55	52	52	11	-6
INT J FINANC ECON	64	51	36	60	28	82	37	32	30	57	35	-13
J BUS FINAN ACCOUNT	65	34	67	51	45	75	36	33	20	43	88	-31
REV DERIV RES	66	83	79	81	76	13	79	77	74	80	16	17
INT FINANC	67	61	50	55	49	33	61	61	63	65	16	-6
SIAM J FINANC MATH	68	50	34	57	76	81	61	59	48	52	16	-18
J BEHAV FINANC	69	73	75	66	74	10	74	76	78	70	81	4
INT J CENT BANK	70	41	32	42	63	42	56	66	69	37	45	-29
ASIA-PAC J FINANC ST	71	68	75	80	58	85	74	75	64	81	11	-3
INT REV ECON FINANC	72	45	63	49	22	58	48	63	46	45	75	-27
PAC-BASIN FINANC J	73	63	65	46	66	14	67	69	65	61	83	-10
J DERIV	74	69	62	61	68	18	59	56	55	59	45	-5
FORBES	75	78	70	88	43	88	79	88	88	28	16	3
N AM J ECON FINANC	76	48	54	47	39	52	61	65	38	69	74	-28
J PORTFOLIO MANAGE	77	65	73	72	59	74	25	43	54	42	87	-12
GENEVA PAP R I-ISS P	78	70	72	73	75	46	45	58	47	67	30	-8
INVEST ANAL J	79	82	85	82	33	20	84	81	81	88	59	3
ACCOUNT BUS RES	80	64	64	59	71	38	48	56	60	70	45	-16

Journal	HM	2YIF	2YIF*	5YIF	Immediacy	5YD2	h-index	СЗРО	PI-BETA	Eigenfactor	ESC	2YIF-HM
IKTISAT ISLET FINANS	81	76	88	77	20	37	79	85	83	85	70	-5
ACCOUNT FINANC	82	42	56	58	70	83	56	62	49	64	66	-40
FINANC RES LETT	83	75	69	75	73	30	74	73	67	63	57	-8
FINANC UVER	84	71	81	78	28	61	67	71	73	79	84	-13
J PENSION ECON FINAN	85	67	68	71	72	54	67	80	84	66	57	-18
REV ESP FINANC CONTA	86	86	86	86	69	32	87	87	87	87	50	0
FINANZARCHIV	87	79	78	83	67	53	59	68	68	72	67	-8
ASIA-PAC J ACCOUNT E	88	80	82	85	41	62	79	84	86	83	62	-8

Notes: The journals are ranked according to the Harmonic Mean (HM) of the ranks. The difference reported in the last column is 2YIF – Harmonic Mean. IFI, H-STAR and 2Y-STAR have been excluded as there were 12, 9 and 12 journals, respectively, that had the equal highest rank. Article Influence, CAI and ICQ were not available for 30 journals.

Table 6 Correlations of 14 RAM and Harmonic Mean (HM) of the Ranks for 58 Leading Finance Journals

Journal	2YIF	2YIF*	IFI	5YIF	Imme- diacy	5YD2	h-index	СЗРО	PI-BETA	Eigen- factor	AI	CAI	ICQ	ESC	НМ
2YIF	1														
2YIF*	0.894	1													
IFI	0.115	0.11	1												
5YIF	0.798	0.902	0.114	1											
Immediacy	0.441	0.469	-0.103	0.49	1										
5YD2	-0.048	0.004	-0.034	0.314	0.13	1									
h-index	0.641	0.679	0.028	0.769	0.598	0.265	1								
СЗРО	0.703	0.737	0.178	0.819	0.573	0.293	0.907	1							
PI-BETA	0.586	0.579	0.108	0.591	0.373	0.137	0.65	0.839	1						
Eigenfactor	0.632	0.705	0.247	0.82	0.57	0.222	0.864	0.837	0.563	1					
AI	0.746	0.794	0.384	0.848	0.451	0.204	0.719	0.821	0.599	0.839	1				
CAI	0.765	0.796	0.357	0.848	0.461	0.207	0.745	0.879	0.723	0.825	0.979	1			
ICQ	0.405	0.387	0.573	0.373	0.218	-0.028	0.385	0.506	0.373	0.557	0.776	0.742	1		
ESC	-0.042	-0.103	0.731	-0.067	-0.312	-0.062	-0.216	-0.061	-0.057	-0.014	0.144	0.132	0.257	1	
HM	0.568	0.552	0.626	0.611	0.212	0.093	0.421	0.548	0.427	0.583	0.713	0.709	0.587	0.376	1

Note: The Harmonic Mean of the ranks is given as HM.

Table 7
Correlations of 11 RAM and Harmonic Mean (HM) of the Ranks for 88 Leading Finance Journals

Journal	2YIF	2YIF*	5YIF	Immediacy	5YD2	h-index	СЗРО	PI-BETA	Eigenfactor	ESC	HM
2YIF	1										
2YIF*	0.916	1									
5YIF	0.918	0.872	1								
Immediacy	0.594	0.489	0.549	1							
5YD2	-0.311	-0.239	0.032	-0.228	1						
h-index	0.779	0.777	0.743	0.537	-0.196	1					
СЗРО	0.799	0.822	0.772	0.515	-0.162	0.955	1				
PI-BETA	0.709	0.702	0.663	0.434	-0.213	0.794	0.899	1			
Eigenfactor	0.781	0.827	0.785	0.492	-0.138	0.876	0.846	0.675	1		
ESC	-0.168	0.115	-0.11	-0.309	0.118	-0.178	-0.087	-0.103	-0.018	1	
HM	0.612	0.690	0.673	0.377	0.14	0.581	0.648	0.528	0.625	0.327	1

Note: The Harmonic Mean of the ranks is given as HM.