Finance journal rankings: A paper affiliation methodology

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Abstract

Finance journal rankings are a key factor when deciding where to publish and what to read. Despite their great development in recent years, rankings are still not sufficiently precise or updated with sufficient frequency. In this paper, we employ a new methodology called "*paper affiliation index*" to produce finance journal rankings, using research impact metrics and, indirectly, expert knowledge. Both of these are based on secondary, objective measures in our approach. This makes it possible to produce lists every year without human manipulation at virtually no cost. We compare our methodology with the approaches that dominate the creation of finance journal rankings and present a new ranking with 65 journals.

Keywords: finance Journal ranking; finance journal rating; methodology; impact factor.

1. Introduction

Journal rankings and ratings are a common way of assessing journal quality, a topic that has been researched for decades (Krueger 2017). *Management*, and within this field, *finance*, are the academic fields to which journal rankings and ratings have paid most attention in recent years, with up to thirteen recent lists were analyzed in Eleftheriou and Polemis (2020). Journal rankings are a key factor in decisions regarding where to publish and what to read; program enrollment of potential researchers and students; faculty's tenure, promotion, and remuneration; editors' management of journals; subscriptions to journals by libraries; and media rankings construction. In addition, they frequently serve as a broad proxy for research quality and its impact.

Despite their remarkable development in the field of finance (Eleftheriou and Polemis 2020), they still have many problems and limitations. For this reason, the specialized literature continues to call for more research on this topic (Guo et al. 2016).

According to the literature on journal rankings, there are two types of methods for evaluating journals: *stated preference* studies and *revealed preference* studies. The first approach surveys members of a specific academic field, while the second one relies on citation analyses (Tahai and Meyer 1999). This general scheme also applies to the subject of finance (Chan et al. 2016).

Both main methods have their advantages and disadvantages. The most significant problems of the survey approach are the sample, the subjectivity of the experts interviewed, and the time required for this method. Studies based on citations are cheaper in this regard, which allows them to be published annually (e.g., *Journal Citation Reports* ranking), but they have the problem of being manipulated by self-citations, or by clusters of journals that form alliances to cross citations. Besides the problems inherent to each method, another major challenge is that the two approaches do not build consistent rankings (Mingers and Yang 2017) and cannot be used as substitutes, although they should be used as complementary approaches (Serenko and Dohan 2011).

Some authors have tried to correct the weaknesses of these methods. For example, in the field of finance, Currie and Pandher (2011, 2020) proposed an expert-based method called *active scholar assessment* (ASA) that reduces the problem of experts being unfamiliar with many evaluated journals, while JCR has improved its methodology to correct the problem of self-citation (Bajo et al. 2020). In this paper, we use a methodology (called *paper affiliation index* – PAI) with which to create finance journal rankings using expert (authors of papers and journals' editorial teams) decisions and research impact, both of which are based on secondary, objective measures, and thus making it possible to produce lists once a year without human manipulation at virtually no cost. We have focused on the field of

finance because it is where the greatest variety of recent rankings and ratings and new methodologies have been produced (e.g., Bajo et al. 2020, Crook and Walkup 2016, Currie and Pandher 2020, Danielson and Heck 2016, and Kao et al. 2016).

We evaluated 2,245 institutions and 65 finance journals, with the top 5, according to our rankings, being the following: *Journal of Finance*, *Review of Financial Studies*, *Journal of Financial Economics*, *Critical Finance Review*, and *Review of Corporate Finance Studies*.

The background of the paper is presented in the following sections, which is followed by an explanation of the method and a comparison to other contemporary methods. We next present our results, compare them with ASA and other methods, and conclude by discussing them.

2. Literature review

Recent literature reviews show that journal ranking studies have used two main methods to rank finance journals (Bajo et al. 2020, Currie and Pandher 2020): the stated preference approach and the revealed preference approach.

2.1. Stated preference approach

The rationale for using a stated preference approach to evaluate publications outlets is the idea that the reputation that journals have among experts in the subject under consideration is a good predictor of their quality (Tahai and Meyer 1999). Surveys are the main instrument used within this particular methodology (Chan et al. 2016), and this approach has been used in the field of finance for a long time. Among the first studies, Coe and Weinstock (1983) produced a list of 20 journals by surveying finance department chairpersons for their views on relative journal quality. These authors found that journals of high merit are perceived to have low acceptance rates and vice versa and observed that perceived acceptance rates are not correlated with the real ones. Borde et al. (1999) asked chairpersons of finance departments in business schools about their opinion on the relative quality of 55 finance, insurance, and real estate journals listed in *Heck's 1995 McGraw-Hill*

Finance Literature Index. One of their main findings was that many of the journals received a "no opinion" response. For example, only 27 of the 125 chairpersons were willing to grade *Geneva Papers on Risk and Insurance Theory*, demonstrating how difficult it is to evaluate very young or very specialized journals by subject or region using this method. Another finding was that statistically significant differences were found when replies were separated as to whether respondents' universities offered Ph.D. level courses. Oltheten et al. (2005) ranked 40 journals surveying finance academics and found that the quality of a journal is perceived differently depending on the researcher's geographic origin, research interests, seniority, and journal affiliation among the non-top journals.

Other studies viewed survey methods as being subjective and biased (Cudd and Morris 1988, Kao et al. 2016, Podsakoff et al. 2005). One of the main criticisms of this approach is that experts have limited knowledge of the journals that are being assessed, as well as the fact that their responses are biased towards the journals that they usually read or where they usually submit their papers (Serenko and Dohan 2011). Along with this, a greater dispersion has been observed in the ratings obtained by the lower-ranked journals, and also that faculty who had more publications in the top journals tended to give lower ratings to publications in the lower-ranked journals (Cudd and Morris 1988). Moreover, some studies have been criticized for lacking a representative sample of journals and for the inability to examine trends (Singh et al. 2007), and for a non-response bias (Kao et al. 2016), on account of the response rates usually being low. Memory also plays a role since the ratings are affected by the journal's reputation, which is mainly formed by the past reputation (Coe and Weinstock 1983, Haucap and Muck 2015). It was also observed that the evaluation criteria for assessing the journals differed according to the type of expert consulted (Kim 1991); and that there are biases derived from the characteristics of the journals such as their orientation, i.e., whether they are academic or practitioner journals, national or foreign, refereed or non-refereed journals, or other aspects like age or size, e.g., number of articles published per year (Haucap and Muck 2015, Kim 1991, Serenko and Dohan 2011, Tahai and

Meyer 1999). In Table 1, we compile a list of weaknesses and strengths of the stated preference approach. It should be noted that the subjectivity of the method might be considered a positive feature, in that it is based, at least in theory, on the expert's personal and direct knowledge of the journal under review.

In recent years, the methods developed for this approach have become more sophisticated, aiming to overcome some of its weaknesses. Among the most notable contributions is the *active scholar assessment* (ASA) methodology proposed by Currie and Pandher (2011, 2020). In the last round, this methodology uses the answers from active scholars who have published in a set of 102 finance journals to rank and categorize them based on quality and importance. This methodology considerably reduces the problem of lack of expert knowledge about the quality of many journals. Instead of asking respondents to grade all journals directly, it uses respondent-level data on quality and awareness to rank journals by quality and importance.

Insert Table 1 about here

2.2. Revealed preference approach

The revealed preference approach tries to overcome the subjectivity and biases of the approach based on experts' opinions. As stated by Tahai and Meyer (1999), the rationale behind using a revealed preference study to evaluate publication outlets is based on the fact that the aim of publishing papers is to disseminate knowledge, and therefore, the number of references a paper receives serves to evaluate not only the quality of the paper but also the quality of the journal that has attracted and accepted the paper. Citation analysis is the most used instrument by this approach (Guo et al. 2016). Several studies have used this method to build finance journal rankings. Mabry and Sharplin (1985) created one of the first rankings of this kind, based on citation, with 30 journals. Alexander and Mabry (1994) ranked 50 finance journals on the basis of their relative contributions to top-level finance research. In their study, journals were ranked based on the number of citations identified

in articles published in four top journals. Almost half of all the citations, excluding books and working papers, were concentrated in two journals: the *Journal of Financial Economics* and the *Journal of Finance*. Arnold et al. (2003) measured the impact of an article based on the number of times it is cited in the top six journals and deduced a pecking order among the top-level journals. They found that the top three journals are the *Journal of Finance*, the *Journal of Financial Economics*, and the *Review of Financial Studies*. Borokhovich et al. (2011) suggested a citation-based framework for assessing journal influence, examining 12 journals and applying it to the *Journal of Banking and Finance*. Kao et al. (2016) used a stochastic dominance approach to investigate 25 finance journals, overcoming the dynamic nature of changes in citation patterns over time. These authors concluded that rankings might change over time, especially in the case of the lower-ranked journals.

Citation analyses are more objective than survey-based approaches, but there are also several biases and problems. One of the main issues is that citations do not capture all the impact that a specific paper has; this problem is likely to be more evident in practitioner-oriented journals (Chan et al. 2013). Among the most important biases are the high rates of self-citation, some of which are required by the editor (Guo et al. 2016; Wilhite and Fong 2012), and citation rate heterogeneity related to the type of publication, nationality, and period (Seiler and Wohlrabe 2014, Tahai and Meyer 1999). The Matthew effect has also been observed in the most reputable journals, which receive a disproportionate amount of citations that are unjustified by the intrinsic quality of the papers (Larivière and Gingras 2010, Medoff 2006). Table 2 shows the main strengths and weaknesses of this approach.

Insert Table 2 about here

2.3. Stated vs. revealed preference approaches

Although both methods try to measure the impact of the journal and influence one another, and so we should expect a strong correlation between the two, several recent studies have found a weaker relationship between them. Mingers and Harzing (2007) presented a

ranking for business and management journals based on a statistical analysis of the Harzing data set which contains 13 rankings. They concluded that there is, in general, a high degree of conformity between rankings, but some highly ranked journals do poorly in citations, and conversely, some high impact journals have relatively low peer rankings. Haddawy et al. (2016) studied the relation between the three journals' metrics *Source Normalized Impact per Paper* (SNIP), *Raw Impact per Paper* (RIP) and *Journal Impact Factor* (JIF), and the journal rating system produced by the *Excellence in Research for Australia* (ERA) exercise based on experts' opinions. These authors noted that the correlations between ERA ratings and impact indicators are positive but moderate in the case of the business, management and accounting subject area (between 0.52 and 0.62). Ren (2016) examined the correlation of five finance journal ranking methods from *Harzing's Journal Quality List* and one citation count method and noted that the highest correlation is 0.38. In a paper by Mingers and Yang (2017), several (some new) citation indicators were compared to the *Association of Business Schools* (ABS) list based on experts' opinions. The authors found that (i) while the indicators appear to be correlated, they lead to large differences in journal rankings, and (ii) many journals that ranked high in the ABS list performed badly in citation indicators.

Those studies' findings pointed to a lack of consistency between rankings based on opinions and those based on citations. Kim (1991) observed that for a similar time period, citation measures identified a core of top journals which overlapped well with the core listings of the directors and deans. Yet this consistency decreases as more journals are added to the analysis. It is likely that the increase in the number of journals over the last 20 years and the more difficult expert assessment of the less prestigious journals have had a significant impact on the consistency of results between the two methods (this difficulty was also observed by Olthesen et al. 2005). All this makes one think that expert surveys and citation impact journal ranking methods cannot be used as substitutes but rather that they should be used as complementary approaches (Serenko and Dohan 2011).

2.4. Mixed and other approaches

Some recent works have proposed mixed approaches. Among the most recent, Yuan et al. (2020) proposed a mixed method where the weights of the indicators are obtained from the ratings of experts published in ranking lists such as those provided by ABS or ABDC *(Australian Business Deans Council)*. These approaches take advantage of the quality of currently available citation information, computational capacity, and the latest analysis tools, and while they use published information, they do not bear the cost of obtaining it directly. However, these approaches have the problem of keeping the expert-based rankings of the original sources up to date (e.g., ABS), as well as the fact that they are more complex approaches, which increases the risk of generating statistical artifacts.

Mixed approaches can also include lists generated by universities, departments, and other academic institutions. As it happens, a plethora of journal quality lists exists (Harzing 2020), but the ABDC and the ABS are the two most widely used and influential (Rahal and Zainuba 2019), having sufficient coherence between them in terms of the characteristics of the journals listed (acceptance rates, frequency of publication, etc.) (Krueger 2017). For example, the ABDC list is created by a carefully selected expert panel per field of study which is previously informed of the results of other lists (*ABS-AJG Journal Quality Guide*, *UT Dallas Top 100 List*, and *Financial Times*) and of citation metrics and, if necessary, may request expert peer review (ABDC 2019). As these lists require the participation of many experts, they are expensive to produce and are not updated every year. The current ABDC list was released in 2019 and the previous one in 2016.

Others have proposed what are known as *miscellaneous approaches* (Chang et al. 2016). Among these approaches are those based on the authors (Bajo et al. 2020), which have developed indicators such as the *author affiliation index* (AAI) or the *author concentration index* (ACI). Chen and Huang (2007) defined AAI as the ratio of articles authored by faculty at the world's top 80 finance programs to the total number of articles by all authors, and

they ranked 51 finance journals according to this index. Crook and Walkup (2016) used a modified version of the AAI and an iterative process to obtain a ranking of 20 finance journals. Their results show that new journals create an immediate impact on rankings, most probably because they attract high-profile authors in the early issues, and also that niche journals rank higher than broad-based journals outside the top five. Chan et al. (2013) ranked a set of 23 finance journals using normalized citations in *Google Scholar* and the ACI, and ranked 22 journals using editorial members' normalized citations in *Google Scholar*. These authors calculated a journal's ACI as the percentage of the journal's articles authored by N leading authors. This method is similar to AAI's logic, in that the ACI method uses individual authors' rankings and AAI uses authors' institutional rankings. This field of work also includes the studies by Danielson and Heck (2014, 2016), in which the publication records of prolific authors were examined to provide evidence of a pecking order among 23 high-impact finance journals.

Other studies have taken different approaches to the problem of ranking finance journals. Brown (2003) ranked 18 accounting and finance journals based on the number and percentage frequency of articles published in each journal that are heavily downloaded from the *Social Science Research Network* (SSRN). Meanwhile, Beattie and Goodacre (2006) produced several accounting and finance journal rankings using the submissions to the *UK Research Assessment Exercise* (RAE). And recently, Bajo et al. (2020) constructed a ranking by observing which finance publications are more correlated with the probability of a promotion amongst faculty affiliated with one of the universities included in the *Arizona State Ranking*.

3. The *Paper Affiliation Index* (PAI)'s methodology

3.1. Rationale

PAI is based on the following widely shared assumptions: (i) it is commonly accepted that a journal's quality reflects the quality of the papers published by the journal (Paul 2010: 401);

and (ii) the best universities attract and retain the best scholars, which enhances their reputation. In this regard, Crane (1965) noted that the best universities attract and hire the best students; and Lazarsfeld and Thielens (1958) stated that the higher a college's quality rating, the greater the proportion of highly productive social scientists on its faculty. Furthermore, Schichor (1970) suggested a circular relationship between institutional prestige and output, arguing that the finest scholars produce the best research, reinforcing the status of their institutions. PAI follows the path created by the miscellaneous approaches previously mentioned to its final, logical conclusion: since researchers are judged by the quality of the journals in which they publish their work (prestige flows from journals to researchers and universities), we could turn the tables and say that prestige also flows from universities to journals through their researchers' excellence.

The basis of our PAI lies in the individual decisions of the researchers, who choose where to submit their papers, and the editorial decisions of the journals, which decide what to publish (Authors 2021). Our method does not ask experts directly through surveys, as the ASA methodology does, nor does it use rankings developed by other experts, as some mixed methods do (e.g., Yuan et al. 2020), or external lists of top universities either, as the AAI methodology does. Instead, we obtain expert opinion indirectly through the actual decisions made by researchers who are active in paper publishing and by the editorial teams when accepting and publishing papers.

The rationale behind our method is based on the decisions made by authors to protect their reputation and careers, and the decisions made by publishers to protect the quality and reputation of their journals. On the one hand, top-ranked institutions attract and hire productive faculty who carry out high-quality and influential research in order to build or preserve their reputation and status. As a result, these institutions put in place formal systems and a demanding environment to ensure that their researchers provide high-quality effective research (Macdonald and Kam 2007). This requirement means that researchers focus on the most reputable journals and of the highest quality in their field.

Heintzelman and Nocetti (2009: 18) studied the problems economists face when choosing journals for their manuscripts, and, in general, they found support for "the common advice to 'aim high' by submitting first to the top-tier journals." In the field of finance, this behavior is reinforced by authors' self-selection bias, since many finance journals charge submission fees (Chen and Huang 2007). Matherly and Shortridge (2009) studied 124 accounting and finance journals. Their results showed that the majority of accounting and finance journals perceived to be of high quality charge a submission fee ranging from $0 (83 journals) to $400. According to these authors, the submission fee was also a strong predictor of the quality of the journals analyzed, and one "reason the higher quality journals charge a submission fee may be to discourage authors from submitting papers that do not have a legitimate chance of being accepted for publication." (p. 18). So this bias explains why researchers tend to send their best pieces to the best journals (Djulbegovic and Jacobs 2002). In this way, the best journals attract the best papers from the best researchers who have previously been attracted to and hired by the best universities.

On the other hand, editorial teams also try to maintain and improve the reputation of their journal by publishing papers of a quality that meets the expectations of the journal, as has been often documented in the literature (see a literature review in Besancenot and Faria 2012). As Macdonald and Kam (2007) state, "many submissions must be reviewed by editors without going to referees at all [...], the only practical way to sustain high rejection rates. In reality, editors – not referees – reject or accept papers [...]. It is easy enough for editors to guard the identity of the referee, but not that of the author, especially the prominent author. Self-citation often provides a clue. Heavy-laden editors and referees must often judge the quality of a paper by the reputation of its author." Because what is known as the *halo effect* occurs, an authors' reputation is influenced in part (and sometimes significantly) by their institution's reputation. Safón and Docampo (2020: 2002) defined the *halo effect* as "a cognitive bias where our opinion of one particular area then influences the way we perceive other areas. According to this bias, the raters […] attribute their positive

perception of a highly reputable university also to its schools, departments, faculty, and outputs (e.g., papers). Authors affiliated to highly reputed universities might enjoy a halo effect". According to these researchers, this effect would increase their chances of publishing in the best journals and of obtaining more citations. Baghestanian and Popov (2014) found a positive relationship between affiliation and the probability of publishing in a top economic journal.

Hence, a relationship between the quality (and reputation) of a journal and the quality (and reputation) of the institutions from which the published papers originate can be expected.

3.2. The procedure

Our index is based on the following logic: the quality of a journal is a function of the quality of the papers it publishes; the best universities attract and keep the best scholars; the best scholars produce the best research. Therefore, on the one hand, PAI is an assessment of a journal's quality based on an estimate of the quality of the institutions that contribute papers to that journal. On the other hand, the quality of the institutions is derived from their research performance. As a result, our methodology combines bibliometric data with expert evaluation and decisions in the sense that experts make decisions about where to send papers and which papers to publish.

PAI begins with an assessment of the institutions that contribute papers to the finance journals. A quick way to do this is to use the results from university rankings as a proxy for institutional quality and reputation, which has already been explored in the reputation literature (e.g., Beghin and Park 2019). However, this approach not only excludes prolific non-academic institutions (e.g., the *Fed* or the *National Bureau of Economic Research*), but it also restricts the analysis to universities that are included in rankings such as ARWU or THE. To overcome these shortcomings, we took the following steps.

First, we identified all articles or reviews published between 2011 and 2018 in the *WoS Core Collection* or the *Emerging Sources Collection*, using a query restricted to the Web of Science

research area BUSINESS, FINANCE. By categorizing the results by organization, we obtained a global list of the institutions that contributed to finance journals during that time period. A total of 2,245 institutions were identified. To avoid counting the same information twice, individual institutions were considered instead of the academic systems they were part of. Figure 1 depicts a histogram of the number of papers.

Insert Figure 1 about here

In order to determine the weights with which we measure the contributions of the analyzed institutions, we carried out two classifications inspired by the *Shanghai Ranking by Subjects* methodology (ARWU GRAS 2020). We chose the ARWU rankings as a reference because they are based on reliable, public domain data, have attracted international attention, and continue to have a significant influence both inside and outside of academia.

The ARWU GRAS 2020 ranking in the subject of finance is based on bibliometric results from the period 2014-2018, aggregated using a weighted combination of the following indicators (weights in brackets):

- Q1 (150): Publications (article type) in the first quartile (Q1).
- CNCI (50): Average citations per article normalized by the *WoS* category and publication year.
- IC (10): Percentage of international collaborations.
- TOP (100): Publications (article type) in a list of key journals identified through the *Shanghai Ranking's Academic Excellence Survey*.

Two of the ARWU GRAS indicators bear a strong dependence on lists of specific journals, i.e., Q1 and TOP. Since we did not want to get trapped in any kind of circular reasoning, we had to eliminate the journal dependency of our "Shanghai" like ranking; thus, we switched from the ARWU GRAS TOP indicator to an indicator borrowed from the Leiden ranking,

which is the number of the top 10% most frequently cited articles among those published in the same year. For the same reason, we changed the ARWU GRAS Q1 indicator to the number of the top 25% most frequently cited articles among those published in the same year. Papers in the top 10% most cited constitute a subset of the papers within the top 25% most cited; therefore, those papers are counted twice. This also occurs in the Shanghai ranking itself, since top publications in the field of finance are also Q1 publications. The case of the size-independent indicators is different as we are dealing with percentages. Since we are trying to reflect the influence of institutions on the quality of journals in our classification, it is more informative to use the percentage of articles in which the corresponding author is affiliated to a specific institution rather than the percentage of international collaborations. Hence, our first classification (Score 1) is based on the indicators listed below, with the corresponding ARWUGRAS weights:

- TOP 25% (150): Number of publications that, compared to other publications in the same field and in the same year, belong to the top 25% most frequently cited.
- CNCI (50): Average citations per article normalized by the *WoS* category and publication year.
- CA (10): Percentage of articles with the corresponding affiliation.
- TOP 10% (100): Number of publications which, compared with other publications in the same field and in the same year, belong to the top 10% most frequently cited.

Score 1 is, however, highly size-dependent because the two size-independent indicators (CNCI and CA) account for less than 20% of the total score. For this reason, we decided also to explore the results using a classification that was completely independent of institutions' size and thus free them from any bias in the indicator weighting procedure. We did so by using percentages both in the TOP 25% and the TOP 10% indicators. We then gave the four indicators the same weight (100) because they were now computed as averages or percentages. As a result, our second classification (Score 2) is based on the following indicators and weights:

- PTOP 25% (100): Percentage of publications which, compared with other publications in the same field and in the same year, belong to the top 25% most frequently cited.
- CNCI (100): Average citations per article normalized by the *WoS* category and publication year.
- CA (100): Percentage of articles with corresponding affiliation.
- PTOP 10% (100): Percentage of publications which, compared with other publications in the same field and in the same year, belong to the top 10% most frequently cited.

Table 3 shows the size-dependent and size-independent scores obtained by the top 20 institutions from the total of 2,245 academic, corporate, governmental, health, nonprofit, and research institutions studied. Both scores are strongly correlated, which allows us to conclude that the quality and quantity of papers are compatible. Using total numbers instead of percentages in the TOP 25% and TOP 10% indicators reduces the difference in the scores. The average score in the TOP 25% is 6.5, whereas the average score in the corresponding size-independent indicator PTOP 25% is 41.9. Similarly, the average score in the TOP 10% is 4.7, whereas the average score in the corresponding size-independent indicator PTOP 10% is 24.8. Accordingly, changes in scores are clearly noticed in those institutions showing a small number of much cited papers among a moderate number of scientific contributions. A good example is the *University of Oregon*. This institution had produced a total of 71 contributions, of which 41 were in the TOP 25% and 27 in the TOP 10%. Its scores in the size-dependent TOP 25% and TOP 10% indicators were relatively small, 23.6 and 23.7, respectively. However, its values in the corresponding size-independent PTOP 25% and PTOP 10% indicators were 94.2 and 88.2, respectively. As a result, the institution jumped from position 104 in the size-dependent ranking to position 6 in the size-independent one.

Our scores and rankings of institutions are consistent with the general university rankings such as ARWU or THE, as well as the rankings created by Crook and Walkup (2016) and Xu et al. (2016).

Insert Table 3 about here

The second step we took was to determine the affiliation of the journals' papers. To obtain the mix of papers for each journal, we used data from papers published in 2019 that are included in the *WoS* database. Note that this year comes right after the period chosen for the institutions' evaluation (2011-2018). We proceeded in this way to respect the causality between the institution's reputation and paper acceptance decisions. Moreover, the period used to measure the quality of the institutions is lengthy, since reputation-building is a long-term cumulative process. As an example, Table 4 shows the distribution of papers by affiliation for the *Journal of Finance,* where 22 institutions contribute 48.50% of the papers. And Figure 2 shows the percentage of papers published in that journal and in *Managerial Finance* by tier, where each tier represents a level of institutions. In this plot, the tiers are constructed according to the cumulative size-dependent score: Tier 1, the first 25%, Tier 2, from 25.01% to 50%, Tier 3, from 50.01% to 75% and Tier 4, the rest.

Insert Table 4 about here

Insert Figure 2 about here

The third and final step is to obtain the index for each journal applying the formula: *Journal i PAI* = $\sum$ *Institution j score* x *Proportion of articles published by institution j in journal i*, where i = 1 to 65 journals, and j = 1 to 2,245 institutions. The weights in the formula were chosen based on the PAI rationale: the greater the proportion of papers written by authors from the best institutions, the higher the quality of the journal.

3.3. Sample of the empirical study

To be able to draw the sample of finance journals for our study, we looked at the most recent finance journals rankings of published by Currie and Pandher (2020), which are based on the ASA methodology, as the main source of comparison for assessing the robustness of our results. From the journals sample analyzed by these authors, we excluded those that were not included in the finance journal selection made by the *Australian Business Deans Council* (ABDC 2019) for its *Journal Quality List*. We also excluded journals for which we did not have access to proper bibliometric information. Thus, our final sample size was 65 journals.

3.4. Comparison with other methods

Comparison with the two dominant approaches

Unlike the stated preference approach, our methodology is fast, inexpensive, transparent, and anyone can replicate its results. In addition, it reduces the Matthew effect and many biases: given that the decisions of researchers and editorial teams revolve around the reputation of the journals and authors' institutions, our methodology does not introduce any biases based on gender, type of study, or the prevailing paradigm. Furthermore, our approach makes it possible to process a nation's complete research output and reduces the problems associated with the selection of experts, since practically all authors and all editorial teams of all the journals in the world are considered. With regard to the revealed preference approach, our methodology overcomes the problems derived from self-citations or "recommended citations" because the quality of the journals is not measured in terms of citations but in terms of the quality of the institutions of the authors contributing to the journal; and, to some extent, it overcomes the handicap of specialized journals and young, lesser known journals, as we demonstrate below with an example of a top journal in our ranking.

Comparison with the ASA, AAI, ACI, and bibliometric methods

The ASA methodology has developed a procedure to reduce the so-called "familiarity component" bias. Our method further improves this approach by eliminating this bias, since we do not ask experts about journals they are unaware of. What we do is take into account the journals they select for sharing their research results, weighted by the influence of their institution in the field under analysis. Moreover, because PAI is based on secondary data, it is faster and less expensive to calculate than any other survey-based method, such as ASA, or any expert panel-based method, such as ABDC.

PAI shares the logic of author-based methods such as AAI or ACI. These methods argue that a quality journal should be able to attract a large proportion of quality authors to publish in it (Chan et al. 2013) and, therefore, a high correlation between these indexes and the quality of the journal can be expected. The differences between our method and the previous ones lie in the formula, the simplicity of the calculations, the capacity to reach a greater number of journals, and the fact that a larger number of institutions are considered. In addition, our method does not prejudge whether an institution is a top one or not, which is one of the main problems of the AAI methodology (Agrawal et al. 2011). Instead, our method uses bibliometric data to assess the institution's quality and assigns a score instead of a dichotomous value (top or non-top), as the AAI methodology does. This problem is also present in the ACI methodology. For example, Chang et al. (2013) calculated the ACI as the proportion (concentration) of a journal's articles authored by a set of leading authors. Their study defines the set of "leading authors" by the number of citations they received during the period of 1990-2010 in a set of 23 finance journals, with authors classified as leading or non-leading. Our method is more refined because we do not work with different groups and broader because we use a larger number of journals.

And lastly, the usage of institutions on which our methodology is based enables us to deal with the well-known disambiguation problems associated with bibliometric analyses

conducted at the individual level (Tekles & Bornmann, 2020). Collecting the required information for each article is a costly process, which explains why the ACI analysis is usually applied to a small sample of journals (only 23 journals in a study by Chan et al. 2013). Our approach allows us to take full advantage of the aggregate institutional results offered by bibliometric databases in order to reach a larger collection of journals and institutions.

4. Results and discussion

We attain the scores and rankings of journals based on our PAIs by applying the procedures described in the previous section. As we assess institutions with size dependent and non-size dependent indicators, we obtain two PAIs and, therefore, two rankings. Table 5 shows our results and a comparison of them, using ASA, ABDC, AJG, AAI, *Scimago*'s SJR, and JCR Impact Factor data.

Insert Table 5 about here

Regarding the ASA score, Currie and Pandher (2020) reported journal rankings for respondent-level *quality* and *importance* scores. *Quality* represents the journal's quality as perceived by experts on the Likert scale of 1–5; and *importance* represents the quality score taking into account the respondents' awareness of a journal. The *2019 Journal ABDC Quality List* is the result of a comprehensive panel-led review (ABDC 2019). The *2018 Academic Journal Guide* results from a review based upon peer review, editorial, and expert opinions (AJG 2018). AAI is the modified *author affiliation index* (AAI) scores obtained by Crook and Walkup (2016) for the 20 journals of their study. They consider the top 80 and top 50 institutions as top institutions for their AAI calculation. We use the scores based on the top 80 equal weighting approach from that study because it is the most recent ranking among those which rank finance journals with AAI methodology. The 2019 JCR Impact Factor is

calculated by dividing the number of citations in 2019 by the items published in 2017 and 2018. The 2019 SJR indicator is a measure based on the citations and prestige of a journal calculated using an iterative algorithm and data from the three previous years.

Correlation analysis

In Table 6, we can see the correlations of Pearson and the correlations of Spearman for the PAI and ASA scores and rankings shown in Table 5.

Insert Table 6 about here

The correlation between PAI 1 and PAI 2 is almost perfect (Table 6), which is to be expected, given the high correlation between the scores obtained for the institutions. However, PAI 2, which corresponds to the size-independent measure, seems to be more closely related to the other indicators included in Table 6. In general, the lists analyzed show a similar picture to that of the PAI variables, with correlations between .68 and .95 for the scores, and between .56 and .92 for the rankings and ratings. The correlations between PAI and ASA are high, especially with ASA by quality (ASA 1), where they reach remarkably similar levels (.78 and .78). And in general terms, the correlations between PAI and the other indicators, and between ASA and the other indicators, are similar.

The correlations obtained reach levels similar to those obtained for the validation of analogous methods. For example, Chen and Huang (2007) reported correlations between their AAI-based ranking and survey-based rankings of around .75, and correlations of .91 with another study. These authors explained that the high correlation with that study is partially due to the small sample of well-established journals employed, which is exactly what happened to us in the comparison with the AAI, with the samples overlapping each other in 17 journals. On another note, Crook and Walkup (2016) reported correlations between their AAI version and impact factor indicators which were slightly higher than .90,

but these correlations were also affected by the small sample, since they analyzed only 17 journals.

Top journals analysis

All the rankings, except ASA 2, position the same three journals among the top 3, with ABDC and AJG also giving these journals the maximum rating. Moreover, the list of top journals selected through the *Shanghai Ranking's Academic Excellence Survey* confirms that our methodology has been able to identify the same set of three journals at the top of the list using either PAI 1 or PAI 2.

In line with Kim's (1991) results, our PAI measures identified a set of top journals which overlapped well with the core listings of the experts for a similar time period. For example, 9 out of the top 10 journals according to PAI 1 and PAI 2 are rated as A* on the ABDC list, 7 out of the top 10 journals, according to our measures, are among the top 10 of ASA 1, and 6 out of the top 10 journals are among the top 10 of AJG (≥4).

There are, however, some top journals in our ranking whose position is somewhat surprising. For example, our top 12 include 3 journals (*Critical Finance Review*, *Journal of Applied Corporate Finance*, and *Quarterly Journal of Finance*) with the lowest ABS-AJG rating (=1). However, ABDC gives *CFR* an A* (the highest rating) and *JACF* and *QJF* an A rating. Why do some experts (ABDC) give the best ratings to some journals and other experts (ABS-AJG) the worst ratings to the same journals? Part of the explanation is the ABS-AJG methodology bias. They give the best ratings (4 and 4*) only to journals with a calculated impact factor, and many journals do not have it, especially the youngest ones (*CFR* was founded in 2012 and *QJF* in 2011). It also penalizes practitioner-oriented journals (e.g., *JACF*), which can only receive the lowest ratings (1 or 2), which can explain the divergence with ABS-AJG ratings.

Our results are consistent with those of Mingers and Yang (2017) in that, despite the high correlation among the indicators, many journals that rank high in an expert-based list perform relatively poorly on citation-based indicators, such as the case of the *Critical*

Finance Review or the *Quarterly Journal of Finance*. *CFR* holds the 4th and 6th positions in our PAIs, has an A* grade in ABDC, but is 20th in the SJR ranking. Here, again, the age factor plays a decisive role, but the size (papers per year) is also important. Krueger et al. (2021) have highlighted the disadvantage these types of journals have, noticing that a higher frequency each year results in a higher JCR value among finance journals, and that newer journals tend to have a lower JCR value. We must take into account that *CFR* is a "boutique" journal, publishing only 10-15 papers each year, given that it is very young (10 years old), and therefore little known, but our methodology detects its high quality. Recent rankings confirm our assessment. On the one hand, for the last 10 years, *CFR* has been the fourth-best finance journal according to the recursive REPEC rankings (see this result at cfr.pub/home), in exactly the same position as in our PAI1. On the other hand, in the latest Scopus ranking, *CFR* is considered Q1 in the field of finance, with an SJR of 1.806 in 2020, which places it among the top 10% of pure finance journals in Scimago. *Quarterly Journal of Finance* is also a young journal, but one of outstanding quality, as indicated by its recent inclusion in the *Emerging Journals Category* of the SSCI index (*Clarivate Analytics*), which serves as a precursor to the JCR classification. In addition, it has significantly improved its SJR in the subject of finance from Q2 (2019) to Q1 (2020). These results allow us to see our methodology as a good predictor of a young journal's future performance in citation-based rankings and as a method that overcomes the disadvantage experienced by journals with few articles, which has been reported by Krueger et al. (2021).

There are excellent journals, such as *Review of Finance* (*RoF*), that rank below other *a priori* lower quality journals, such as *CFR*. It is true that *RoF*'s position in the ranking is below *CFR*, but their scores are very similar (see PAI2, the difference is not statistically significant). If we transform the score to ratings, they would be in the same tier. Table 7 shows the institutions that contribute to these outlets (in *RoF* and *QJF* only the first 37). Many are top institutions according to the global rankings or the specific rankings for the subject of finance (Table 3). It can also be observed that highly reputed institutions such as *Harvard*

or the *NBER* have a greater presence in *CFR* than in *RoF*. According to our logic, both are good (top) journals, and we can see that our methodology is able to capture this evidence.

Insert Table 7 about here

5. Conclusions and implications

Journal rankings and ratings are frequently used to evaluate journal quality; however, such assessments rely upon the ability to find valid and reliable journal rankings or journal listings (Krueger 2017). In this study, we have applied a methodology with which to rank journals based on bibliometric data and expert decisions, and have applied it to the field of finance, obtaining a ranking of 65 journals. Our methodology has some important strengths with respect to the previous ones. First, the institutional classification we have created is comprehensive: the study includes all institutions that have contributed papers to the field of finance. Second, our procedure helps to reduce bias and to deal with known problems associated with current methodologies. Third, the data used in our methodology comes from public sources, the procedure is therefore easily replicable. Fourth, recent research has looked into how impact factor estimates and journal characteristics, which might influence impact factors, differ by business discipline (Krueger et al. 2021). Our methodology is not subject-dependent and thus can be transferred to other realms of knowledge. Fifth, once the bibliometric institutional data has been gathered, our procedure is not computationally costly: a *Python* implementation of our algorithm executes the whole computation in a few seconds. And sixth, our results seem to correct the pernicious Matthew effect which is so evident in citation-based methods. Our PAIs show (Table 5) that the *Journal of Finance* is the most prestigious journal (PAIs = 100) followed very closely by the *Review of Financial Studies* (PAI 1 = 94.7 and PAI 2 = 99.1), which occupies the second position ahead of the *Journal of Financial Economics* (PAI 1 = 91.6 and PAI 2 = 97.0). As

determined by the JCR's Impact Factor, the *Review of Financial Studies* would only obtain around 68% of the *Journal of Finance* impact, occupying the third position in this classification. According to *Scimago*'s SJR, the *Review of Financial Studies* would score around 75% in relation to the *Journal of Finance*. However, the evidence presented about the publication preferences of researchers from top institutions suggests that there is not such a big difference between these top two journals as the one shown by the Impact Factor or SJR. The PAIs, as well as ASA 1 and AAI, show much smaller differences between these two journals, which means that our indicators partly correct the Matthew effect, therefore showing that the influence of these two journals is very similar. The correction of this effect can also be seen in journals that our PAIs rank at the bottom of the list. For example, according to the SJR, *Managerial Finance* would only obtain about 1.5% of the impact and reputation of the *Journal of Finance*. Our PAIs, on the other hand, assign it much higher values, 42% in the case of PAI 1 and 72% in the case of PAI 2.

This study has several implications. Firstly, given the simplicity in obtaining our results, the *paper affiliation indexes* (PAIs) could easily be added by *Clarivate* or *Scimago* as complementary measures of their most used indicators (e.g., Impact Factor and SJR, respectively). Secondly, our results, and those that could be obtained every year using our methodology, can help researchers since they provide a consistent guide for selecting the journals in which to present their findings. Thirdly, our study may help the lowest-ranked journals in our ranking. Considering that the best research (sustained quantity and quality of research over time) usually takes place at the best institutions, if we were on the editorial board of one of those journals, we might wonder why we do not receive (more) manuscripts from the top institutions in the field of finance (top 20 shown in Table 3). Therefore, it would not be unreasonable for us to consider what we could do in order to make the journal more attractive to authors from top institutions worldwide without betraying our journal's mission and values. Finally, as mentioned above, our indicators offer several other advantages since survey-based methods are very costly in terms of time, and citation of

articles may be cyclical by nature (Kao et al. 2016). Our methodology is based on the quality and prestige of the institutions, and the decisions of the authors and the journals, which makes it stable over time and very cheap to implement. Consequently, we believe our methodology can serve as an opportunity, especially for the finance journals below the top, where there are more changes in the citation-based rankings over time, as demonstrated by Kao et al. (2016). Nevertheless, it is worth highlighting that the diversity in the number of publications per year may have an effect in the year-to-year evolution of our PAIs, since finance journals with a smaller number of annual contributions may show more volatility in the indexes we have constructed.

Concluding remarks

Rankings are really useful, but they may also be extremely cruel. Our methodology is based on the assumption that there is a causal relationship between the quality of the authors publishing in a journal and the journal's quality. Our ranking does not use a quality threshold but simply ranks the journals according to their estimated quality. The fact that a journal is ranked at the bottom of our list does not mean that it is not of high quality, i.e., that it does not publish high-quality papers or that it lacks the same rigorous review procedures as the top journals. It simply indicates that top-ranking journals have a higher estimated quality, implying that a greater number of papers in these journals will be of a higher quality.

Data availability

The datasets created and analyzed for this study may be found on Research Gate.

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Table 1. Weaknesses and strengths of the stated preference approach

Weaknesses	Strengths
It is slow, inefficient, and expensive, although most costs are hidden. Human judgment is subjective. It is almost by definition not transparent. It is inconsistent and sometimes characterized by a lack of inter-rater reliability. It is a biased process (e.g., gender bias regarding career decisions, bias against negative studies in publication decisions, bias in favor of prestigious institutes, and bias in favor of dominant paradigms). Its bias is strengthened by the Matthew effect. The process can be abused (e.g., blocking competitors, plagiarizing). It is not very good at identifying errors in data or even at detecting fraudulent research. It cannot process the complete research output of a nation and, therefore, will result in distorted rankings. It cannot provide information about the productivity and efficiency of the research system. The selection of peer reviewers may create problems for a variety of reasons (bias, lack of experts in emerging and interdisciplinary areas, lack of experts due to the speed of research areas, etc.).	It is founded on specialized knowledge of the subject, methodology, and literature, which is relevant for specific decisions. It has a social nature. The subjectivity of this approach can also be seen as a strength. It can help assess elements of research that are challenging to quantify, e.g., novelty. It can deliver a more nuanced and detailed understanding of research in the context of research production.

Source: Wilsdon et al. (2015: 60-61).

Table 2. Weaknesses and strengths of the revealed preference approach

Weaknesses	Strengths
Pressure exerted by reviewers or editors to cite their own journal or papers may include many self-citations to inflate the citation counts. *Matthew effect.* Highly impacted by the field of research referencing patterns (books vs. journals). Negative citations are counted. Niche and specialized journals are disadvantaged compared to their more general counterparts. Accuracy of the citation counts may be doubtful given the discrepancies between target articles and cited references (misspellings of journal or author names, errors in the reference lists, etc.), and mistakes in the indexing procedures. Coverage and adequacy of the citation database and its impact on the number of citations. Difficult to calculate.	Seen as objective. The procedure is transparent, and results can be reproduced using the same method. Based on a broader audience hence eliminating the impact of personal biases. Eliminates the impact of subjective measures such as reputation, opinion, or acceptance rates. Eliminates the effects of memory, and how this influences perception and provides an updated assessment of a journal's quality. A positive relationship between the citation impact and ranking. Inexpensive and easily produced.

Source: Rahal and Zainuba (2019: 29). Text in italics added.

Table 3. Institution quality scores. Top 20. 2011 to 2018

Institution	Score 1*	# papers	Institution	Score 2**	# papers
National Bureau of Economic Research	100.00	271	University of California San Diego	94.69	13
Federal Reserve System - USA	73.14	200	University of Chicago	94.52	61
University of Chicago	66.25	61	Dartmouth College	93.94	20
University of Pennsylvania	65.93	94	Duke University	93.66	40
New York University	64.94	125	University of Notre Dame	93.16	30
Harvard University	60.85	56	University of Oregon	91.94	13
Columbia University	57.34	108	Ohio State University	91.78	54
Massachusetts Institute of Technology	56.58	67	University of Pennsylvania	91.38	94
Tilburg University	55.87	64	University of Southern California	91.37	54
Stanford University	55.84	41	University of Washington Seattle	91.15	58
Centre for Economic Policy Research	55.76	88	Emory University	91.11	17
University of New South Wales Sydney	54.33	99	Stanford University	91.10	41
Duke University	53.94	40	University of Arizona	90.59	33
University of Toronto	53.66	75	Boston College	89.93	55
University of Southern California	52.75	54	Washington University (WUSTL)	89.63	47
Ohio State University	52.34	54	University of Utah	89.36	15
University of Washington	52.13	59	HEC Paris	88.69	23
University of Washington Seattle	51.72	58	University of Washington	88.47	59
University of Michigan	51.67	78	Ho Chi Minh City U. Economics	88.25	21
London School Economics & P.S.	51.25	77	Northwestern University	88.23	45

*Size-dependent score.

**Size-independent score. The maximum level of the score is reached by the *Medical University of Vienna, University of Food Technology – Bulgaria, and Hunan University of Science & Technology*, with a single high impact paper. These universities and others with fewer than 11 papers in the journals included in Table 6 have not been included in this short list. It should be noted that there are over 480 institutions with more than 10 publications in the journals included in Table 6 between 2011 and 2018. On the other hand, if a university contributes with only a small number of papers published in those journals, despite the high impact it might have achieved, its influence on the journal's PAI is very limited.

Table 4. Distribution of papers by affiliation for the *Journal of Finance* (only institutions contributing at least 1% of the total number of publications in 2019 are shown)

Institution	Papers (%)
National Bureau of Economic Research	11.98
Federal Reserve System - USA	3.19
University of Pennsylvania	2.40
Centre for Economic Policy Research - UK	2.40
Stanford University	2.40
New York University	2.00
Massachusetts Institute of Technology (MIT)	2.00
University of Chicago	2.00
Columbia University	1.80
London School Economics & Political Science	1.80
University of Southern California	1.80
Ohio State University	1.80
University of Texas Austin	1.60
Northwestern University	1.60
Princeton University	1.40
University of Oxford	1.20
Indiana University Bloomington	1.20
Boston College	1.20
London Business School	1.20
Yale University	1.20
Stockholm School of Economics	1.20
Hautes Etudes Commerciales (HEC) Paris	1.20
	∑ 48.50

Source: InCites.

Table 5. Journal rankings comparison

Journal (shorted by PAI 1)	Scores and ratings									Rankings based on scores						
	PAI 1[a]	PAI 2[b]	ASA 1[c]	ASA 2[d]	ABDC[e]	AJG[f]	AAI[g]	JCR[h]	SJR[i]	PAI 1[a]	PAI 2[b]	ASA 1[c]	ASA 2[d]	AAI[g]	JCR[h]	SJR[i]
Journal of Finance	100.0	100.0	100.0	100.0	A*	4*	100.0	100.0	100.0	1	1	1	1	1	1	1
Review of Financial Studies	94.7	99.1	96.3	71.90	A*	4*	91.5	68.2	75.0	2	2	3	5	2	3	2
Journal of Financial Economics	91.6	97.0	98.6	85.70	A*	4*	86.8	84.1	70.1	3	3	2	2	3	2	3
Critical Finance Review	87.5	92.0	72.0	20.63	A*	1			6.4	4	6	21	33			20
Review of Corporate Finance Studies	85.0	92.7	74.9	27.82	A*	3			30.2	5	4	15	22			4
Journal of Financial Intermediation	82.9	92.4	86.1	51.89	A*	4	50.8	41.4	27.7	6	5	7	8	6	6	5
Review of Asset Pricing Studies	77.2	91.9	84.3	29.23	A*	3			8.8	7	7	9	20			14
Review of Finance	75.5	89.7	89.9	52.26	A*	4	52.8	42.4	21.3	8	10	5	7	4	5	6
Journal of Applied Corporate Finance	74.8	90.7	63.8	26.06	A	1				9	9	30	26			
Journal of Financial and Quantitative Analysis	73.2	90.8	95.4	78.19	A*	4	52.7	39.7	20.4	10	8	4	4	5	7	7
Financial Management	72.6	85.5	77.8	43.63	A	3	33.0	24.6	7.2	11	13	10	10	11	18	16
Quarterly Journal of Finance	67.6	86.5	68.9	21.94	A	1			4.1	12	12	27	31			28
Mathematical Finance	66.3	86.6	76.0	27.94	A	3	41.0	33.0	13.7	13	11	13	21	8	13	8
Journal of Financial Services Research	65.6	82.7	69.2	25.12	A	3		23.3	6.0	14	20	26	28		20	21
Journal of International Money and Finance	64.7	83.5	74.5	31.81	A	3		29.6	8.8	15	17	16	18		15	13
European Financial Management	64.1	84.9	73.5	39.13	A	3	21.7	21.6	5.8	16	15	18	11	13	24	24
SIAM Journal on Financial Mathematics	62.9	83.9	61.9	7.72	B	2		19.3	8.9	17	16	35	63		27	12
Journal of Financial Markets	62.7	83.5	77.4	37.47	A*	3	47.9	24.6	7.1	18	17	11	13	7	18	17
Journal of Corporate Finance	62.4	85.5	86.5	55.67	A*	4	35.1	37.0	9.2	19	14	6	6	9	8	11
British Actuarial Journal	61.9	82.5	57.1	9.77	B	1			0.9	20	22	52	59			64
Journal of Risk and Insurance	61.2	82.4	74.3	26.66	A	3	34.0	22.2	9.5	21	24	17	24	10	22	10
Finance and Stochastics	60.9	82.5	75.8	25.73	A	3		30.1	11.8	22	21	14	27		14	9
Journal of Banking and Finance	60.3	82.8	86.1	81.07	A*	3	20.0	33.3	7.8	23	19	7	3	14	12	15
ASTIN Bulletin	60.2	80.8	57.1	11.72	A	2		18.1	6.9	24	29	52	56		29	19
Journal of Alternative Investments	59.6	80.9	51.1	13.89	B	2			1.3	25	28	60	49			57
Journal of Empirical Finance	59.1	81.9	77.2	48.11	A	3	22.6	23.0	5.9	26	25	12	9	12	21	23
Journal of Int. Financial Management and Accounting	58.9	82.4	50.5	8.86	B	2		33.5	2.7	27	23	61	60		11	39
North American Actuarial Journal	58.9	80.0	59.4	13.56	A	2			3.3	27	33	42	50			35
Geneva Risk and Insurance Review	57.4	80.8	59.4	14.82	B	2		11.0	6.0	29	30	42	45		35	21
Annals of Finance	56.9	78.7	59.8	19.71	B	2			2.1	30	38	40	34			47
International Journal of Finance and Economics	56.8	81.4	60.9	17.84	B	3		13.8	1.9	31	26	37	37		32	49
Journal of Risk	55.9	80.0	62.7	19.36	B	2		7.1	1.7	32	33	32	35		37	50
Int. Journal of Theoretical and Applied Finance	55.6	79.0	58.4	13.09	B	2			2.3	33	36	46	52			42
Geneva Papers on Risk and Insurance	55.5	76.7	59.2	15.40	B	2		12.7	2.1	34	47	44	43		34	47
European Journal of Finance	55.3	80.4	70.8	38.55	A	3		17.9	2.7	35	31	23	12		30	39
Quantitative Finance	55.0	79.3	73.5	35.83	A	3		21.9	4.0	36	35	18	14		23	29
Journal of Futures Markets	54.9	78.8	69.8	26.30	A	3	15.4	20.0	4.0	37	37	25	25	17	25	29
Journal of Credit Risk	54.6	77.4	60.5	16.33	C	1		10.2	1.3	38	42	38	42		36	57
Pacific-Basin Finance Journal	53.8	78.6	62.7	31.82	A	2		35.0	3.9	39	39	32	17		10	31
Insurance, Mathematics and Economics	53.4	76.5	63.6	16.91	A*	3		19.9	7.0	40	49	31	40		26	18
International Review of Financial Analysis	53.2	81.0	70.0	27.23	A	3		36.7	5.1	41	27	24	23		9	27
Journal of Derivatives	52.1	75.1	64.2	25.12	A	2		5.1	1.0	42	53	29	28		40	63
Agricultural Finance Review	51.5	77.2	47.6	6.60	C	1			3.3	43	46	63	65			35
Journal of Operational Risk	50.8	72.7	57.8	10.00	C	2		6.4	1.5	44	58	51	58		38	52
Review of Quantitative Finance and Accounting	50.3	76.7	68.9	20.76	B	3			3.9	45	47	27	32			31
Journal of Computational Finance	50.1	74.1	61.9	17.25	C	1		12.9	2.2	46	56	35	39		33	45
Journal of Asset Management	49.9	75.1	58.4	15.05	B	2			1.4	47	53	46	44			54
Journal of Financial Research	49.8	76.5	71.2	31.93	A	3	17.3	18.5	2.4	48	49	22	16	16	28	41
Financial Review	49.4	76.1	73.5	34.17	A	3	17.3		2.3	49	51	18	15	15		42
Finance Research Letters	48.4	80.1	60.0	29.69	A	2		51.8	5.8	50	32	39	19		4	24
Review of Derivatives Research	48.4	75.9	59.2	12.76	B	2		4.7	1.3	50	52	44	53		41	57
Journal of Multinational Financial Management	47.8	78.2	58.0	14.24	B	2		28.8	2.8	52	40	49	47		16	38
Journal of Behavioral and Experimental Finance	47.4	78.0	57.1	13.54	A	1			5.6	53	41	52	51			26
Global Finance Journal	45.6	77.4	56.5	19.02	A	2			3.2	54	42	56	36			37
Journal of Risk Model Validation	45.3	71.9	58.4	11.50	C	1		6.1	1.1	55	60	46	57		39	61
China Finance Review International	44.9	77.3	47.6	8.41	C	1			3.6	56	44	63	62			34
Research in International Business and Finance	44.9	77.3	56.5	12.06	B	2		26.4	3.7	56	44	56	55		17	33
International Journal of Managerial Finance	44.2	74.6	58.0	14.24	A	2			2.2	58	55	49	47			45
Journal of Risk Finance	43.7	73.9	56.7	12.52	B	1			2.3	59	57	55	54			42
Review of Behavioral Finance	42.1	71.3	62.1	17.37	B	1			1.4	60	61	34	38			54
Asia-Pacific Financial Markets	42.1	69.4	56.1	14.70	C	2			1.2	60	62	59	46			60
Managerial Finance	42.0	72.1	59.6	23.37	B	1			1.5	62	59	41	30			53
Qualitative Research in Financial Markets	36.7	67.9	48.9	7.49	B	1			1.4	63	64	62	64			54
Int. J. of Islamic and ME Finance and Management	36.4	68.6	47.2	8.74	B	1		17.7	1.7	64	63	65	61		31	50
Journal of Emerging Market Finance	35.8	65.5	56.3	16.44	B	2			1.1	65	65	58	41			62

[a] Based on size-dependent data.

[b] Based on size-independent data.

[c] ASA ranking by *quality* developed by Currie and Pandher (2020) based on data from the year 2018. Standardized variable (x*100/max) for easy comparison.

[d] ASA ranking by *importance* created by Currie and Pandher (2020) based on data from the year 2018. Standardized variable (x*100/max) for easy comparison.

[e] 2019 Australian Business Deans Council Journal Quality List (ABDC 2019). Rating, no ranking.

[f] 2018 ABS Academic Journal Guide (AJG 2018). Rating, no ranking.

[g] AAI ranking created by Crook and Walkup (2016) based on data from 2010 to 2014.

[h] 2019 JCR Impact Factor. Standardized variable (x*100/max) for easy comparison.

[i] 2019 SJR edition. Standardized variable (x*100/max) for easy comparison.

Table 6. Correlations

Variable		Pearson's correlation		Spearman's correlation		Pearson's correlation		Spearman's correlation	
	N	PAI 1	PAI 2	PAI 1	PAI 2	ASA 1	ASA 2	ASA 1	ASA 2
PAI 1	*65*		.97		.95	.78	.68	.72	.57
PAI 2	*65*	.97		.95		.78	.69	.71	.60
ASA 1	*65*	.78	.78	.72	.71		.91		.91
ASA 2	*65*	.68	.69	.57	.60	.91		.91	
ABDC	*65*	N/A	N/A	.65	.69	N/A	N/A	.78	.77
AJG	*65*	N/A	N/A	.56	.58	N/A	N/A	.78	.77
AAI	*17*	.95	.94	.92	.92	.86	.72	.88	.65
JCR	*41*	.78	.83	.57	.75	.72	.79	.63	.66
SJR	*64*	.76	.73	.73	.81	.70	.75	.73	.61

Notes. N/A: not applicable. All correlations are statistically significant at the 0.01 level (2-tailed). The ABDC rating system codes A*, A, B, and C have been transformed into a scale of 1 (A*) to 4 (C). The AJG rating system codes 4*, 4, 3, 2, and 1 have been transformed into a scale of 1 (4*) to 5 (1).

Table 7. Distribution of papers published in 2019 among the *Review of Finance*, *Critical Finance Review*, and *Quarterly Journal of Finance* journals by affiliation

Review of Finance	
Institution	Papers
National Bureau of Economic Research	3.4%
Federal Reserve System - USA	2.9%
Tilburg University	1.4%
University of St Gallen	1.4%
University of Mannheim	1.4%
Centre National de la Recherche Scientifique	1.2%
University of Toronto	1.2%
Erasmus University Rotterdam	1.2%
London Business School	1.2%
University of Naples Federico II	1.2%
University of New South Wales Sydney	1.0%
City University London	1.0%
University of Michigan	1.0%
University of California Berkeley	1.0%
Indiana University Bloomington	1.0%
National University of Singapore	1.0%
Hong Kong University of Science & Technology	1.0%
Goethe University Frankfurt	1.0%
University of Virginia	1.0%
INSEAD Business School	1.0%
BI Norwegian Business School	1.0%
New York University	0.7%
University of Sydney	0.7%
London School Economics & Political Science	0.7%
University of Chicago	0.7%
University of Hong Kong	0.7%
European Central Bank	0.7%
Tsinghua University	0.7%
Harvard University	0.7%
York University - Canada	0.7%
Stanford University	0.7%
KU Leuven	0.7%
Lancaster University	0.7%
University of Lausanne	0.7%
Hautes Etudes Commerciales (HEC) Paris	0.7%
Lund University	0.7%
Universidade Nova de Lisboa	0.7%
	39.5%

Critical Finance Review	
Institution	Papers
National Bureau of Economic Research	6.8%
Columbia University	4.5%
University of Pennsylvania	4.5%
University of Georgia	4.5%
University of Florida	4.5%
University of Iowa	4.5%
Federal Reserve System - USA	2.3%
New York University	2.3%
Monash University	2.3%
Cornell University	2.3%
University of Michigan	2.3%
University of Washington	2.3%
Chinese University of Hong Kong	2.3%
University of Washington Seattle	2.3%
Harvard University	2.3%
York University - Canada	2.3%
University of California Berkeley	2.3%
Tilburg University	2.3%
Australian National University	2.3%
National Taiwan University	2.3%
University of Cambridge	2.3%
University of Missouri Columbia	2.3%
University of Arizona	2.3%
University of Mannheim	2.3%
University of Connecticut	2.3%
Georgia Institute of Technology	2.3%
Queens University - Canada	2.3%
Luiss Guido Carli University	2.3%
Virginia Polytechnic Institute & State University	2.3%
Wilfrid Laurier University	2.3%
Saint John's University	2.3%
National Taipei University	2.3%
University of Cincinnati	2.3%
University of Texas Arlington	2.3%
William & Mary	2.3%
Oregon State University	2.3%
Citigroup Incorporated	2.3%
	100.0%

Quarterly Journal of Finance	
Institution	Papers
Concordia University - Canada	4.3%
Federal Reserve System - USA	3.3%
University of Alabama Tuscaloosa	3.3%
Hebrew University of Jerusalem	3.3%
University of Pennsylvania	2.2%
Boston College	2.2%
University of Virginia	2.2%
Johns Hopkins University	2.2%
Kansas State University	2.2%
University of North Carolina Charlotte	2.2%
George Washington University	2.2%
University of Texas Arlington	2.2%
Bar Ilan University	2.2%
National Bureau of Economic Research	1.1%
New York University	1.1%
Columbia University	1.1%
University of Sydney	1.1%
University of Waterloo	1.1%
University of Melbourne	1.1%
Cornell University	1.1%
Pennsylvania State University	1.1%
Massachusetts Institute of Technology (MIT)	1.1%
University of Washington	1.1%
University of Washington Seattle	1.1%
Tsinghua University	1.1%
Harvard University	1.1%
Indiana University Bloomington	1.1%
Shanghai Jiao Tong University	1.1%
Ohio State University	1.1%
Fordham University	1.1%
University of Wisconsin Madison	1.1%
University of Minnesota Twin Cities	1.1%
Shanghai University of Finance & Economics	1.1%
Washington University (WUSTL)	1.1%
University of Florida	1.1%
Drexel University	1.1%
Temple University	1.1%
	59.8%

Fig. 1 Histogram of the number of papers

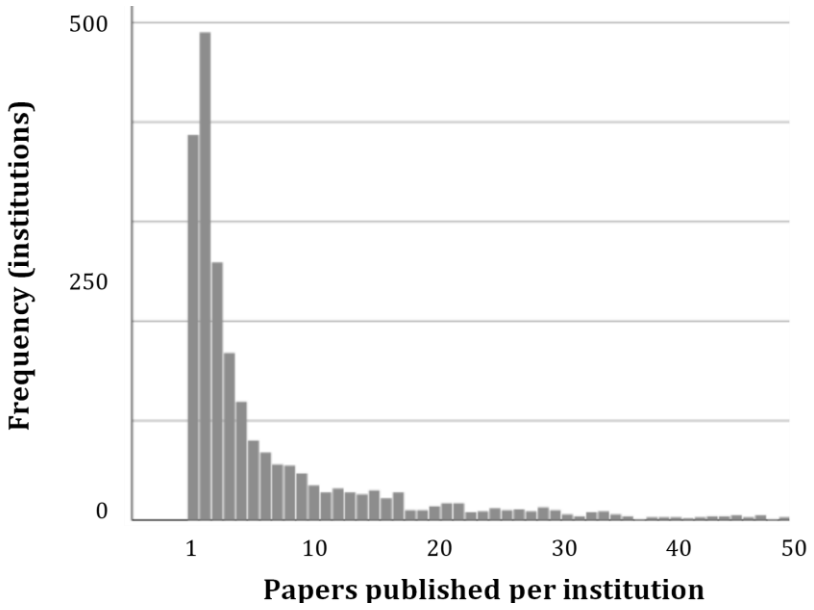

Figure 2. Distribution of papers published in the *Journal of Finance* (JoF) and *Managerial Finance* (MF) by tier