

RANKING THE ACADEMIC IMPACT OF 100 AMERICAN LAW SCHOOLS

Paul J. Heald*
Ted Sichelman**

ABSTRACT: *U.S. News & World Report* and rankings-minded scholars have constructed several measures of faculty impact at U.S. law schools, but each has been limited in a variety of ways. For instance, the *U.S. News* “peer assessment” rankings rely on the qualitative opinions of a small group of professors and administrators and largely mirror the overall rankings (correlations of 0.96 in 2016). While the scholarly rankings improve upon *U.S. News* by using the quantitative measure of citation counts, they have relied on the Westlaw database, which has notable limitations. Additionally, these rankings have failed to capture the component of scholarly impact on the broader legal community. We overcome these limitations by offering citation-based rankings using the more comprehensive Hein database and impact rankings based on Social Science Research Network (SSRN) download counts, as well as a combination of the two metrics. Notably, we find a high correlation with the previous scholarly rankings (about 0.88), but a significantly lower correlation with the *U.S. News* peer assessment rankings (about 0.63). Specifically, we find that many law schools in dense urban areas with large numbers of other law schools that are highly ranked in the *U.S. News* survey are underrated in the *U.S. News* peer assessment rankings relative to our faculty impact metrics. Given the relatively low correlation between our rankings and the *U.S. News* peer assessment rankings—and the fact the *U.S. News* peer assessment rankings largely track its overall rankings—we strongly support *U.S. News*’s plans to rank schools on the basis of citation counts and recommend that *U.S. News* adopt a quantitative-based metric as a faculty reputation component of its overall rankings.

CITATION: Paul J. Heald & Ted Sichelman, *Ranking the Academic Impact of 100 American Law Schools*, 60 JURIMETRICS J. 1–39 (2019).

*Richard W. & Marie L. Corman Research Professor, University of Illinois College of Law.

**Professor of Law, University of San Diego College of Law; Director, Center for Intellectual Property Law & Markets; Director, Center for Computation, Mathematics, and the Law.

We are grateful to Shane Marmion at Hein for providing raw data on citation counts. Many thanks to Amy Fitzgerald and a hard-working, but anonymous, research assistant, as well as numerous law school librarians, for help in data gathering and name matching. We thank Brian Leiter, Robert Morse, Lee Petherbridge, and participants at a faculty workshop at the University of Illinois College of Law for helpful comments and suggestions and Adam Chilton, Chris Guthrie, Gregory N. Mandel, Jonathan Masur, and Gregory Sisk for their thoughtful commentary on our study appearing in this volume.

Despite intense and justifiable criticism, the *U.S. News & World Report* rankings of American law schools has had—and will undoubtedly continue to have—sizable influence. The *U.S. News* rankings affect not only prospective students' enrollment decisions but also those by professors in initial and lateral employment. In many cases, the *U.S. News* rankings affect hiring decisions by law firms. Additionally, the ranking of an author's law school leads to substantial "letterhead" effects when law journals make decisions to accept or reject an article submission. In turn, the ranking of a law journal's home law school affects professors' decisions to accept publication offers from those law journals. Finally, law school reputation affects opportunities for professors to obtain grant funding, appear in major media outlets, and secure outside consulting work.

The largest component of the *U.S. News* rankings is a category termed "Peer Assessment," accounting for 25 percent of the overall ranking. Unfortunately, one of the greatest weaknesses of the *U.S. News* peer assessment methodology is its reliance on the opinions of a relatively small group of polled professors and administrators,¹ particularly because they are currently given no empirical basis upon which to quantify their assessment of their peer institutions.² In many cases, respondents rely on relatively uninformed perceptions of an unquantified conventional wisdom. This seems especially the case for administrators—who nominally account for 50 percent of the respondents³—because they presumably have little time to keep abreast of the scholarly literature and conferences. Indeed, empirical analysis of the *U.S. News* peer assessment score shows that it closely tracks the overall rankings, essentially creating an inertial feedback loop that provides little in the way of an independent metric tracking academic reputation. This result has had the unfortunate effect of law schools focusing on other, more "moveable," metrics—such as student average LSAT score and undergraduate GPA—to increase their overall *U.S. News* ranking, rather than improving faculty quality.

1. Specifically, *U.S. News* surveys the most junior tenured faculty member, the head of the appointments/hiring committee, the Dean, and the Academic Dean (or equivalent) at each law school. See Robert Morse et al., *Methodology: 2020 Best Law Schools Rankings*, U.S. NEWS & WORLD REP. (Mar. 28, 2019, 2:04 PM), <https://www.usnews.com/education/best-graduate-schools/articles/law-schools-methodology> [<https://perma.cc/T9UE-9CVF>].

2. In response to input from the authors and others, *U.S. News* has announced that it will construct a "scholarly impact" component to its rankings based on overall citation rankings of each law school. Nonetheless, this component would, at least at first, be an entirely independent ranking that would not be incorporated into the overall ranking. See Robert Morse, *U.S. News Considers Evaluating Law School Scholarly Impact*, U.S. NEWS & WORLD REP. (Feb. 13, 2019, 1:00 PM), <https://www.usnews.com/education/blogs/college-rankings-blog/articles/2019-02-13/us-news-considers-evaluating-law-school-scholarly-impact> [<https://perma.cc/DE82-4G4S>]. To the extent that *U.S. News* decides that the "scholarly impact" ranking will contribute to the overall ranking, it will very likely be a small contribution, and it is unclear if those who vote on the "peer assessment" component would take the "scholarly impact" rankings into account when making their assessments. Nonetheless, as we discuss below, we largely view these developments as favorable.

3. Deans account for 50 percent of those polled for the peer assessment category. Because *U.S. News* does not release the breakdown of who responded to each question, the actual reporting percentage could be higher or lower than 50 percent.

Ranking the Academic Impact of 100 American Law Schools

In response, some commentators have made progress in providing data to better inform opinions of law school faculty. For example, in 2012, Gregory Sisk and his coauthors constructed a ranking of 70 law schools based on citation counts to articles contained in the Westlaw “JLR” (Journals & Law Reviews) database,⁴ and then updated that ranking for the top third of those law schools in 2015 and again in 2018.⁵ The results were then published by Brian Leiter on his influential *Leiter Reports* blog. Although these rankings have been helpful in providing an independent metric for faculty impact and reputation, they suffer from several important limitations, including reliance on a somewhat limited database (Westlaw), failure to include citations to all authors in pieces with three or more authors (e.g., “Smith et al.”), counting citations to multiple articles by the same author appearing in a single publication as one total citation to that author, counting references to blog posts as citations, counting cites to chapters in edited volumes as citations for the editors in addition to the chapter authors, and undercounting due to spelling errors in citations. Other commentators have suggested a variety of other approaches and criticized existing methodologies.⁶

4. Gregory Sisk et al., *Scholarly Impact of Law School Faculties in 2012: Applying Leiter Scores to Rank the Top Third*, 9 U. ST. THOMAS L.J. 838, 850 (2012); see *Top 70 Law Faculties in Scholarly Impact, 2007–2011*, BRIAN LEITER’S L. SCH. RANKINGS (July 2012), http://www.leiterrankings.com/new/2012_scholarlyimpact.shtml [<https://perma.cc/M4MV-FUFL>].

5. See generally Gregory Sisk et al., *Scholarly Impact of Law School Faculties in 2015: Updating the Leiter Score Ranking for the Top Third*, 12 U. ST. THOMAS L.J. 100 (2015); Gregory Sisk et al., *Scholarly Impact of Law School Faculties in 2018: Updating the Leiter Score Ranking for the Top Third*, 15 U. ST. THOMAS L.J. 95 (2018) [hereinafter Sisk et al., *Scholarly Impact in 2018*].

6. See e.g., Bernard S. Black & Paul L. Caron, *Ranking Law Schools: Using SSRN to Measure Scholarly Performance*, 81 IND. L.J. 83, 112–17 (2006); Gregory Scott Crespi, *Judicial and Law Review Citation Frequencies for Articles Published in Different “Tiers” of Law Journals: An Empirical Analysis*, 44 SANTA CLARA L. REV. 897 (2004); Theodore Eisenberg & Martin T. Wells, *Ranking and Explaining the Scholarly Impact of Law Schools*, 27 J. LEGAL STUD. 373 (1998) (discussing the proper interpretation of citation counts); Tracey E. George, *An Empirical Study of Empirical Legal Scholarship: The Top Law Schools*, 81 IND. L.J. 141, 143 (2006); Jeffrey L. Harrison & Amy R. Mashburn, *Citations, Justifications, and the Troubled State of Legal Scholarship: An Empirical Study*, 3 TEX. A&M L. REV. 45, 69 (2015); J.B. Heaton, *One Pill Makes You Larger: Flaws in Sisk’s Westlaw Methodology Illustrated with Leiter’s Citations*, 2018 WIS. L. REV. FORWARD 27 (2018); Lawprofblawg & Darren Bush, *LAW REVIEWS, CITATION COUNTS, and TWITTER (Oh My!): Behind the Curtains of the Law Professor’s Search for Meaning*, 50 LOY. U. CHI. L.J. 327 (2018); Brian Leiter, *Measuring the Academic Distinction of Law Faculties*, 29 J. LEGAL STUD. 451 (2000); Gary M. Lucas, Jr., *Measuring Scholarly Impact: A Guide for Law School Administrators and Legal Scholars*, 165 U. PENN. L. REV. ONLINE 165 (2017) (advocating the use of Google Scholar and noting shortcomings of using Hein and SSRN); Richard A. Posner, *An Economic Analysis of the Use of Citations in the Law*, 2 AM. L. & ECON. REV. 381 (2000); Christopher J. Ryan, Jr., *A Value-Added Ranking of Law Schools* (AccessLex Inst., Research Paper No. 18-05, 2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2623728 (using improvement in student metrics to measure the comparative quality of a legal education); Brian Galle, *How I’d Fix the Sisk-Leiter Citation Studies*, MEDIUM: WHATEVER SOURCE DERIVED (May 25, 2016), <https://medium.com/what-ever-source-derived/how-id-fix-the-sisk-leiter-citation-studies-4489f87ed387#.n6oeh4jff6> [<https://perma.cc/733Z-PQNK>] (advocating use of Google Scholar); see also Adam Chilton et al., *Rethinking Law School Tenure Standards* (Sept. 17, 2019) (unnumbered working paper), https://papers.ssrn.com/sol3/Papers.cfm?abstract_id=3200005 (analyzing how changing tenure standards could affect faculty citation rates).

While we certainly have our doubts about the wisdom of engaging in the elusive search for data-driven rankings, we believe that in general more data is better than less, and our project intends to improve on the existing, data-driven rankings methodologies in at least four ways. First, we count faculty citations in the HeinOnline database, which has several significant advantages over Westlaw. Unlike Westlaw—which generally lists just the first author of a work with three or more authors—Hein citations include all authors of articles, so we can credit the institution of every multiple author with a cite.⁷ In addition, the Hein database contains a much larger selection of foreign periodicals compared to Westlaw, which allows for an expanded measure of international impact. “Thank you” “star-footnote” citations are not counted when we conduct searches on Hein.⁸ In other words, consistent with citation count methodologies in the sciences, only substantive cites count. Relatedly, unlike Westlaw—and again consistent with well-accepted methodologies—Hein does not count citations to blog posts or to a book merely edited by a scholar. Another benefit is that Hein does not use author name to determine citations. Rather, Hein uses the Bluebook citation (e.g., “152 Harv. L. Rev. 22”) and variants of that format to link each article to other articles. This method counts multiple citations to different articles by a single author in a given publication as multiple citations and also overcomes spelling errors in author names that may lead to inaccurate citation counts.⁹ On the other hand, our reliance on Hein’s citation methodology results in books, book chapters, treatises, and other non-law review citations not being counted. We realize this is a substantial limitation, and we plan to include these citations in future iterations of our study by analyzing the entire set of text on Hein in raw data format (which Hein has graciously made available to us).¹⁰

Second, we go beyond citation counting and include download statistics from the Social Science Research Network (SSRN) as a measure of academic impact. Westlaw’s JLR database and Hein cites catch formal scholarly references to an article, but they provide no indication of how often the article has been read (rather than cited) not only by legal academics but also by practition-

7. The ability to count all authors of a three-plus author articles is increasingly important in the legal academy, as the number of these articles is substantially on the rise, particularly because of the increase in empirical articles.

8. The Sisk et al. rankings have corrected this issue as of 2018. Sisk et al., *Scholarly Impact in 2018*, *supra* note 5, at 109–10.

9. However, Hein’s method may miss citations that do not follow standard Bluebook format, or citations to works prior to publication, such as when they are posted on SSRN. Because these issues essentially affect all authors equally, we do not view them as a major limitation, especially when ranking at the school-level.

10. Hein does capture citations from judicial opinions to law review articles, but given how low the number of these citations were compared with overall citations, for simplicity, we excluded them from our dataset. In other words, including such citations would have no material effect on the rankings, in the absence of a multiplier, and we did not believe such a multiplier could be justified given the aim of our study. Nonetheless, we are making the school-level judicial opinion citation data available for those who wish to use it.

ers and others outside the legal academy. By incorporating SSRN data, we provide a better sense of the “splash” an article has made.¹¹ We argue that an article that has been downloaded 1000 times is likely to have enhanced its author’s reputation more than an article that has been cited 10 times. With that said, we realize there are substantial limitations in using SSRN to determine overall impact, particularly because some articles have outsized download counts, some subject areas have much heavier usage than others, and SSRN is subject to potential gaming. However, we explain in our discussion of methodology below how SSRN has become more reliable since its wild and woolly early days, and how we adjust for potential skew in SSRN download counts.

Third, we expand upon previous rankings by assessing 100 law schools, with plans to reassess and update our data every year, rather than every three years, as in the Sisk et al. rankings. And, starting next year, we plan to expand beyond the top 100, likely covering every U.S.-based ABA accredited law school. In this regard, as described further below, we solicited input from every one of the 100 law schools in our survey to ensure the accuracy of our lists of faculty members.

Fourth, and perhaps most importantly, we make our project open source. Specifically, we provide aggregate citation and download data across ten different metrics for all institutions in our study.¹² The final rankings that we set forth here are based merely on a suggested methodology, and those favoring different weighting methods for various categories of data can easily download our spreadsheets and construct their own system. We do not, however, report individualized data for each professor, though we may report this data in a later study. In this study, we are uninterested in arguments about whether Professor X is more influential than Professor Y.

In short, we do not aim to be perfect; we merely aim to provide better data than has been available. In this regard, our article makes several notable contributions to the literature. First, we show that despite the wide divergence of various methodologies that can be used to rank law school impact, the results are quite similar. Within in our rankings, we report both SSRN-only and Hein-only generated results, and there is a high correlation (0.84) between the two sets of rankings. These results are consistent with our view that SSRN download counts, when appropriately treated for skew, provide a meaningful indication of faculty impact. Additionally, there is a high correlation (0.88) between our overall rankings and that of Sisk et al. These results are quite surprising, because SSRN only counts downloads and Hein only counts citations. Moreover, as described above, our citation methodology includes many citations Sisk et al. do

11. An earlier study by Bernard Black and Paul Caron ranked law schools using SSRN data, but ours differs in that we focus on mean and median counts per tenured and tenure-track faculty member (rather than those of all faculty and nonfaculty affiliated with a given law school), plus we compensate for potential skew in SSRN download counts of particular authors. *See generally* Black & Caron, *supra* note 6. Of course, the time periods measured also differ. *See generally id.*

12. The data can be accessed at <https://www.dropbox.com/s/x76s2kff2vq8p18/Final%20Heald-Sichelman%20Data--Feb%202016%20Rankings.xlsx?dl=0> (Excel file) [<https://perma.cc/8F38-DYG3> (PDF file)].

not (e.g., multi-author article citations), and vice-versa (e.g., citations to books and treatises). Moreover, the Sisk et al. rankings exclude pre-tenured faculty whereas we do not. Thus, one can infer that despite these notable differences in methodology and data, quantitative rankings of law school impact are quite robust to changes in approach. This finding is significant, because—contrary to widespread claims that citation rankings are valuable only if they are exhaustively complete and accurate—it provides a strong indication of the reliability of quantitative measures of faculty impact.¹³

Second, we should note that quantitative rankings do diverge in important ways from qualitative, survey-based rankings, such as the peer assessment ranking used by *U.S. News*. Specifically, the correlation between our overall ranking and the peer assessment ranking was 0.63, with many striking differences. Notably, we found schools in relatively dense urban areas with higher-ranked schools in *U.S. News* close by were often ranked much higher in our rankings than in the *U.S. News*, whereas schools in college towns or other geographic areas with no higher-ranked schools in *U.S. News* nearby were often ranked much lower in our rankings. Presumably, schools in dense urban areas compete more vigorously for students, the credentials of whom play a large role in the overall *U.S. News* rankings, which in turn play a major role in the *U.S. News* peer assessment rankings. By effectively removing student credentials from the equation, our rankings, in our view, provide a more accurate picture of faculty impact than the *U.S. News* peer assessment rankings.

Last, our research has already had real-world impact. Specifically, in response to input from us (based on our preliminary results) and others, *U.S. News* has announced the creation of a separate “scholarly impact” ranking of law schools based on each school’s Hein citations. For reasons we discuss below, we largely find this to be a positive trend. Additionally, based on the findings we present here, we encourage *U.S. News* to incorporate these scores into its overall rankings, partly in place of its current peer assessment metric. In other words, the fact that the *U.S. News* peer assessment score essentially follows the overall ranking—and is not highly correlated to our rankings or the Sisk et al. rankings—indicates that the survey respondents ranking faculty reputation are largely unaware of the separate trends in faculty research that presumably should be a major factor in the peer assessment score. Instead, it appears that many of these respondents consciously or unconsciously rely on previous years’ overall rankings for what should be a fully independent peer assessment score. By relying upon a quantitative metric such as citations or downloads, *U.S. News* could break this circularity to ensure a truly independent metric of faculty impact, which in our view is a very good proxy for faculty reputation.

In Part I of the paper, we discuss our methodology in further detail. In Part II, we describe the rationale for our suggested weightings of the results. In Part III, we present rankings based on these weightings, along with a brief discussion of the results and how different weightings might affect the outcomes. We also

13. See Ted Sichelman, *A Defense and Explanation of the U.S. News ‘Citation’ Ranking*, TAXPROF BLOG (Mar. 20, 2019), https://taxprof.typepad.com/taxprof_blog/2019/03/sichelman-a-defense-and-explanation-of-the-us-news-citation-ranking.html [<https://perma.cc/2F6A-J44T>].

discuss qualifications, limitations, and potential downsides of our rankings, and citation-based rankings more generally.

I. DESCRIPTION OF DATA COLLECTION

Our initial goal was to collect data on the top 100 law schools, but that decision itself required a method for identifying 100 schools. Since we considered SSRN downloads to be a relevant measure of impact, we compared the top 100 ranked schools in *U.S. News* with the top 100 (unadjusted) downloaded schools on SSRN.¹⁴ Because of the significant overlap, we chose the top 83 schools from each list, which gave us 100 schools for analysis. The list includes 63 of 64 schools¹⁵ ranked by Sisk et al. in their most recent rankings based on Westlaw citations. We explain below our methodology for faculty selection, Hein citation count, and SSRN download count.

A. Faculty Selection

We measured citation and download data of all “traditional” tenured and tenure-track faculty at each law school. We excluded librarians, clinicians, legal writing instructors, emeriti and adjuncts, even in rare cases where they have formal tenure status. For example, if John Smith is a fully tenured professor and head of the Acme Law School library, he was excluded. At several schools, clinicians and legal writing instructors enjoy the same status as professors whose primary responsibilities are classroom teaching and research. Such clinicians and instructors were excluded. Our rationale was meant to protect schools who make substantial investments in critical clinical and legal writing infrastructure. We believe that clinical education is crucially important, as are legal research and writing classes, and we did not want to punish schools that employ numerous clinicians and writing instructors. Several of our measures are based on median and mean average citation and download numbers. Because clinicians and legal writing instructors write comparatively less than their peers, a school with an above-average number of such personnel would be ranked comparatively lower than a similar school with a minimal clinical faculty and only a few writing instructors. This struck us as perverse and unfair. Next year, however, we may let schools cherry-pick tenured clinicians, librarians, and legal writing instructors who they would like to include and omit those who they do not, or we may simply include only those tenured clinicians, librarians, and legal writing instructors who have more than a school’s mean and median number of citations.¹⁶

Adjunct faculty were omitted for a different reason. Many schools list professors with tenure homes outside of their law schools on SSRN. Although

14. SSRN aggregate download figures for law schools often included download data from non-law faculty and students, which we do not count in our data.

15. The exception is Hofstra, which will be included in our update next year.

16. Two schools insisted, to their actual detriment, that we include their tenured and tenure-track legal writing instructors, which we refused to do. Indeed, both schools would have dropped several slots due to the expansion of the faculty number denominator in the mean and median citation and download calculations.

sometimes a close affiliation with adjunct faculty increases the reputation of a law school, too often schools simply want to capture downloads from a well-known economist or scientist to inflate their SSRN download numbers. Since we are unable to tell which adjuncts truly function as members of law faculties and which do not, we excluded them all. Emeriti were excluded for the same reason. Therefore, we are measuring the impact of schools' tenure-track faculty only.

Joint appointments presented particularly thorny problems and entailed much direct questioning of schools about the actual status of those members of non-law departments listed on law school web sites as being jointly appointed. Professors with courtesy appointments in law schools were not counted, but those with at least a 50 percent appointment who actually teach classes in a law school and have the right to vote on hiring, promotion, and tenure were counted.

Determining who does, and does not, qualify as a member of a tenure track faculty turned out to be extremely time consuming. We started with the *AALS Directory of Law Teachers 2015–2016*, which turned out to be wildly inaccurate. Nonetheless, we used it as a template to create spreadsheets for each school. We then visited the web site of each school, adding and subtracting professors who had changed schools, who were omitted from the *Directory*, who were mislabeled by the AALS, or who had retired. This allowed us to create a tentative faculty list for each school. We sent this list to three people at each school: the Dean, the Associate for Research (or closest equivalent), and one professor personally known to us. This exercise demonstrated to us how slow law schools are to update their web sites. At the large majority of schools, we received one or two responses, most of which contained additional corrections to our lists.

Using our first corrected list, we generated initial citation counts by matching the list of names to those in SSRN and HeinOnline, then emailed the individual results to the Dean and Associate for Research (or equivalent) at each school, requesting further corrections. About 60 of the 100 schools responded, and we created a second corrected list. To construct this second list, in addition to the list of names we received from each school, we also used automated and manual methods to match each name to multiple variants in HeinOnline, because (1) some authors are not consistent in how they spell their names in their articles (e.g., sometimes they use a middle initial, sometimes not, sometimes they spell out their first name, sometimes not); (2) some authors changed their last name, and (3) in some cases, Hein had spelling errors for author names (i.e., not in the citations of the author, but because of OCR errors in reading the author's byline). We also disambiguated single names that belonged to two separate authors, so that cite counts were properly attributed to the right person. This task of matching multiple author names and disambiguating single names was extremely time intensive, and required roughly 50 hours of automated and manual matching and checking. In this regard, we also made numerous corrections for faculty at the roughly 40 schools that did not respond. As such, we believe our accuracy is fairly high at this point, but invite corrections from any school, remembering that any errors in our lists could have been corrected earlier by a quick email.

We measured faculty status (retired or active; completed lateral move) as of February 1, 2016, mostly because our research assistants were measuring SSRN downloads as of that date. In later iterations of our rankings, we will take into account subsequent moves, retirements, new hires, and the like.

B. Hein Citation Counts

HeinOnline provided us the full set of raw data on citation counts for every author and every law journal article in its database as of September 2016. These counts included all-time citations, citations in the previous 10 years, and citations in the previous 12 months. Using the author name matching described above, we populated total citation counts for each author at each school, then aggregated those counts to determine school-wide citation counts.

As noted earlier, HeinOnline offers many advantages over Westlaw (and Lexis) given its wider journal coverage, ability to match all authors on articles with three or more authors,¹⁷ and precise citation algorithm (which overcomes limitations stemming from citations to multiple articles by the same author in a single work, misspellings, star footnotes, and edited volumes). We choose not to supplement Hein with other databases, such as Google Scholar, Web of Science, or JSTOR. Although Google Scholar does count citations for journals not in HeinOnline, it appears Google Scholar may not derive citations from a substantial percentage of American law journals, and in any event, it is clear that there are numerous errors in Google Scholar's total citation counts. A quick review of author profiles set up by law professors immediately reveals a plethora of articles by different authors with the same first initial and last name being included in total citation counts. Moreover, although law professors sometimes publish in peer review journals, most are still law-oriented in some respect—for example, law & economics journals—most of which are carried on HeinOnline.¹⁸ Finally, although some law professors publish in “pure” out-of-field journals, the small numbers who do so tend to be scattered among many different law schools, such that for the vast majority of schools, not counting these citations will have little effect on school-wide citation counts. Indeed, even for the schools that are top-heavy with PhDs, most still publish either in traditional law journals or “law and” peer-review journals that are carried on HeinOnline.

17. The most common approach in the sciences is to provide a full citation for each author when multi-author works are cited. See Vaclav Vavrycuk, *Fair Ranking of Researchers and Research Teams*, 13 PLOS ONE, no. 4, art no. e0195509, 2018, at 1, 1, <https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0195509&type=printable> [<https://perma.cc/7FS5-MDT5>]. This full citation approach has raised concerns in the sciences, as numerous articles in that field often have numerous authors (regularly numbering above 10 authors). See *id.* In contrast, based on on-going research of one of us (Sichelman), a small proportion of law articles have three or more authors (less than 10 percent in recent years), and very few have more than five authors (less than 1 percent in recent years). As such, we consider the full citation approach, rather than fractional or weighted citations, to be most appropriate for law journal citation counts.

18. For instance, HeinOnline carries the *Journal of Law & Economics*, *Asian Journal of Law & Economics*, *Journal of Law, Economics & Policy*, *Review of Law & Economics*, *Journal of Competition Law & Economics*, *Journal of Legal Economics*, *American Law & Economics Review*, *Journal of Legal Studies*, and *Journal of Empirical Legal Studies*, among others.

In contrast, the Web of Science and JSTOR do generally provide accurate citations (or at least accurate citation formats in the case of JSTOR). However, unlike HeinOnline, we were unable to secure access to a raw set of citation information for either database, though we will attempt to do so in later iterations of our rankings. Even so, it is not clear to us that out-of-field citations—for instance, in the anthropology or psychology literature—have the same relevance for measuring law school impact as in-field citations. Thus, we believe any omission of out-of-field citations does cause any serious concern for the value of our rankings.

C. SSRN Download Data

We assume that the more people who read the academic work of a law school's faculty, the greater the impact on the school's reputation. In fact, evidence of consumption, even partial consumption, of a work may be more impressive than the evidence provided by mere citation to the same work. It's satisfying to have one's work appear in the middle of a long string cite buried in the fourth of seven footnotes in the middle of a long paper, but arguably it's even more satisfying to know that someone has actually found one's paper in a repository and downloaded it, presumably intending to read at least part of it. With some degree of confidence, we think that a high download count indicates that a professor's work is considered noteworthy to those interested in a particular field. On the other hand, many law journal citations are purely convenient, the result of a quick Westlaw search to fill in a footnote.

We have some indirect evidence that the law school community considers SSRN download data to be a relevant marker of attractiveness in the lateral hiring market. We were able to identify 33 law professors who moved laterally during 2014–2015. With one exception, all 33 faculty were full professors. The median number of SSRN downloads for these 33 professors during the 12-month period covered in our study¹⁹ was 571, and the median all-time downloads for the same professors was 6065. For the average non-laterally-moving full professor in our study, the 12-month and all-time means were much smaller, approximately 170 and 1750 respectively. In other words, professors moving laterally in 2014–2015 on average had more than three times as many SSRN downloads as their nonmoving peers. We have only anecdotal knowledge of hiring committees consciously considering download data in their decision-making, so we make no claims of causation, but we find the correlation suggestive of a connection between SSRN download statistics and attractiveness on the lateral market (and therefore a decent proxy for reputation and impact).

Ideally, we would like to measure downloads from all important repositories. Unfortunately, Westlaw and Lexis will not share their download data, nor will the Digital Commons, operated by Bepress.²⁰ For example, we could not include the over 10,000 downloads that one of us (Heald) has on the Bepress-

19. February 2015 to February 2016.

20. There are other problems with Bepress download data because it does not take significant precautions to prevent schemes to artificially increase download statistics.

associated digital commons at the University of Georgia College of Law. Many law schools make papers available for download from their own repositories, but public access to download statistics is usually not available. We could inquire, but unless all schools reported data, those refusing would be put at a disadvantage. More importantly, local repositories lack the safeguards against download inflation put in place by SSRN. Professor X's high download statistics from his home school repository may be the result of his assigning a large class to download his article, a poor measure for national or international impact.

SSRN is far from a perfect proxy for all downloading activity, but right now, it is the most comprehensive and accurate available data of its kind. If our current methodology is accepted as an improvement over existing rankings, then it will be easier to approach Westlaw, Lexis, and Bepress (again) next year for their download data, which might provide a more comprehensive measure of impact among lawyers.

At the same time, we recognize some limitations in SSRN download data. For instance, much of the downloading activity in certain fields is driven by practitioners. In some instances, certain articles may be of great interest to practitioners and even to the general public, but not considered noteworthy in the scholarly sense. Thus, depending on one's view of "faculty impact," SSRN counts driven by practitioner downloads may not be very relevant. Of course, there are contrary views, including ours (although we as coauthors even do not fully agree on the importance of SSRN downloads to faculty impact). For this reason, we report our rankings with and without SSRN download counts and, as noted earlier, we are providing the data for others to construct their own measures of rankings based on our data.

D. Safeguarding the Integrity of SSRN Download Statistics

Early in SSRN's history, our understanding is that it was possible to "game" the system through spurious downloads (e.g., a professor, or better yet, the professor's RA, downloading his or her own articles hundreds of times).²¹ Not long after SSRN's launch, SSRN put in place safeguards to prevent such abuse, such as checking for multiple downloads from the same IP address and requiring a user to be logged into a valid account to download an article.²² Given these safeguards and informal conversations with numerous faculty members, we believe download gaming has been minimal to nonexistent for many years, and whatever gaming may have occurred is arguably of little to no concern in school-wide SSRN counts.

21. See generally Benjamin Edelman & Ian Larkin, *Social Comparisons and Deception Across Workplace Hierarchies: Field and Experimental Evidence*, 26 *ORG. SCI.* 78 (2015) (analyzing potentially deceptive downloading practices on SSRN from 2002 to 2007).

22. Specifically, as of 2005, SSRN noted that it was spending "significant sums of money on sophisticated systems to identify both repetitive downloading by individuals and potentially fraudulent download patterns over time." Eric Goldman, *Update on SSRN Download Counts*, GOLDMAN'S OBSERVATIONS (Mar. 25, 2005), https://personal.ericgoldman.org/update_on_ssrn/ [<https://perma.cc/H8LQ-LK9A>] (quoting an e-mail from Gregg Gordon, CEO, SSRN, to Eric Goldman, Professor of Law, Santa Clara Univ. Sch. of Law).

E. SSRN Download Data Collection

Our research assistants gathered data during February 2016, meaning that any 12-month statistics represented download activity from March 2015 to February 2016. SSRN updates download statistics monthly and does not publish historical data of download status for prior months. Over time, we have had to correct our faculty lists (still using February 2016 as the relevant status date). So, on a small number of occasions, we had to make download estimates for faculty not included in the initial measurement. Constrained by the type of data that SSRN reports, we gathered for each of the over 4,000 tenured and tenure-track faculty members at the 100 schools download statistics in two categories: downloads for the prior 12-month period and all-time downloads.

II. RESULTS & RANKINGS

In this Part, we report our results. First, we discuss some interesting findings from our SSRN data. Next, we do the same from our Hein data. From there, we describe our suggested weighting of mean, median, and other indices for our rankings, including describing our weighting's strengths and weaknesses, and briefly consider other potentially useful metrics. Finally, we report our overall SSRN-only, Hein-only, and combined rankings in table format.

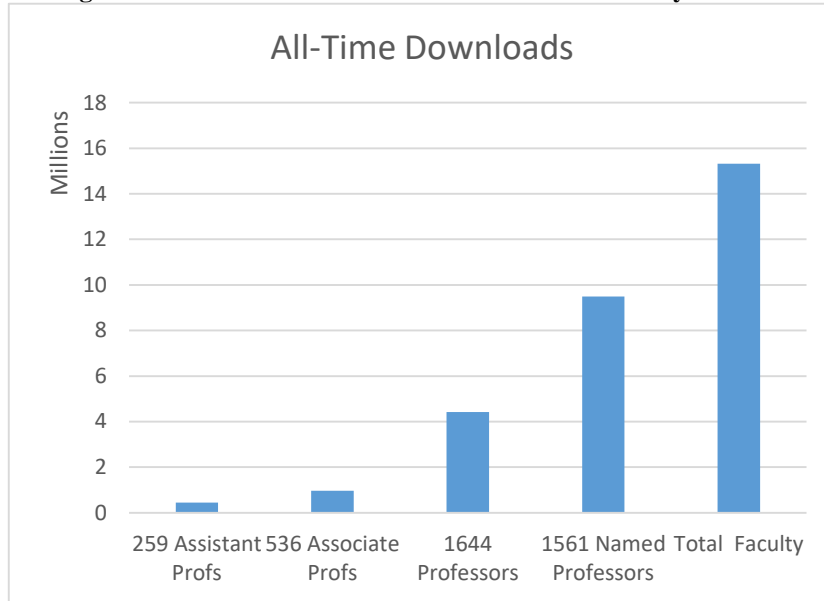
A. SSRN Downloads

We gathered SSRN data on 4009 tenured and tenure-track professors at 100 schools. We also noted the reported rank of each professor as either Assistant Professor, Associate Professor, Professor, or Named Professor.²³ Our pool contains 259 Assistant Professors, 536 Associate Professors, 1644 Professors, and 1561 Named Professors. For each school we report download statistics for the school's faculty in six categories: total all-time downloads; median all-time downloads; mean all-time downloads; total 12-month downloads; median 12-month downloads; and mean 12-month downloads. In theory, an emphasis on a particular subcategory might favor some schools over others, depending on a school's characteristics, so we note possible distortions.

An emphasis on all-time downloads should favor larger faculties with a greater number of active writers. It might also favor comparatively older faculties whose professors have been productive over a greater number of years. Of course, younger professors, more media savvy and hungry for tenure, might compete well with their older colleagues. Looking only at all-time downloads, faculties with comparatively more senior professors seem to have an advantage:

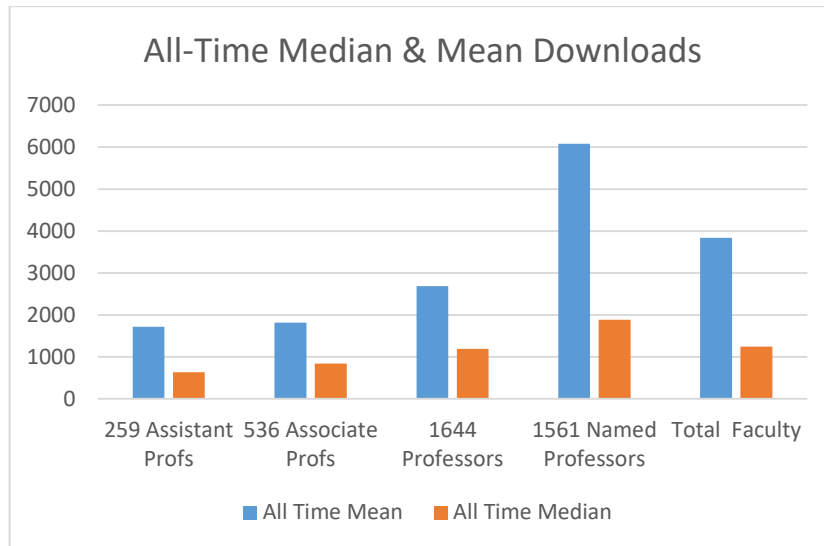
23. We realize that SSRN and online classifications of professor rank may be outdated or inaccurate in given cases. Nothing crucial in our analysis turns on whether someone is categorized properly as a "professor" or a "named" professor, and the results we report in this and the following section have no bearing on final rankings. Rather, we report findings based on rank mainly to explain how we ultimately determined our suggested weightings for our final rankings.

Figure 1. All-Time Download Statistics of Professors by Position



However, when one considers the mean and median all-time download statistics of professors in each category, the younger colleagues perform quite a bit better:

Figure 2. All-Time Median and Mean Download Statistics of Professors by Position

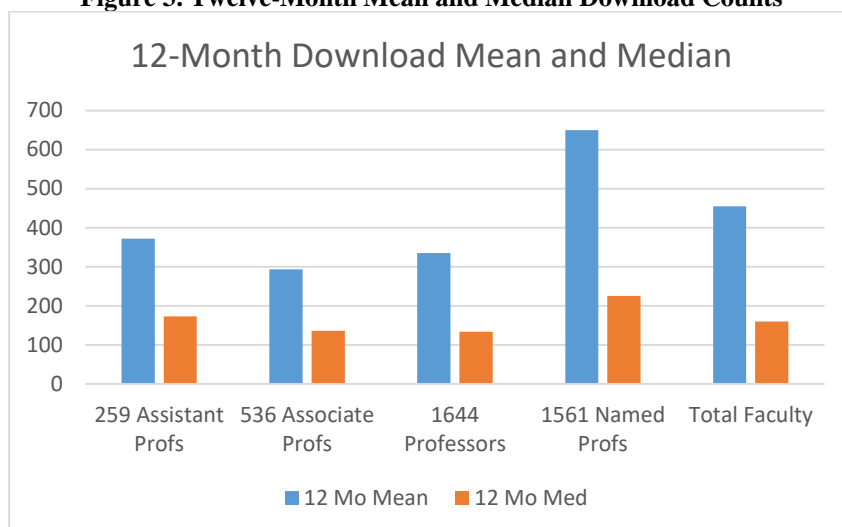


The assistant professors perform better when the all-time median is measured, with the assistant professor median at 636 all-time downloads, associate professors at 840, professors at 1194, and named professors at 1884. The story is much the same one looks at the all-time mean, with the assistant professor mean at 1716 all-time downloads, associate professors at 1816, full professors at 2685, and named professors at 6081. The relative parity of assistant and associate professors is interesting. Associate professors are a mix of two groups—relatively junior faculty soon to be promoted and those who may have been passed over for promotion. As a category, they seem to have generated about the same level of download interest as untenured assistant professors.

The low overall number of assistant professors, an average of about 2.5 per school, is also worth noting. In considering total all-time downloads, a school with no untenured faculty would seem to have an advantage over a school packed with untenured people, but we did not observe too sizeable an imbalance. As of February 2016, only 11 of the 100 schools we assessed had more than 5 assistant professors: Brooklyn (6), Denver (6), Florida State (6), Southern Methodist University of Arkansas (6), University of Kentucky (6), Cal-Irvine (6), University of Houston (8), Harvard (9), UCLA (9), University of Chicago (11), University of California-Berkeley (13). We note that three of the four schools with the highest number of assistant professors, Chicago, Harvard, and UCLA, finish first, third, and tenth respectively in the overall SSRN ranking that we suggest in the next section. Cal-Irvine with six assistant professors ranks seventh. Cal-Berkeley seems the most disadvantaged. Its 13 assistant professors had a mean all-time download count of 1862, barely above the cumulative mean of 1716 for assistant professors at other schools. The Cal-Berkeley assistant professor all-time median was 922, which is significantly higher than the average median of 636 for assistant professors at other schools.

Shifting from all-time to 12-month download counts, assistant professors fair extremely well as compared to professors in other ranks.

Figure 3. Twelve-Month Mean and Median Download Counts



The average 12-month mean download count per assistant professor is 372, as compared to only 293 for associate professors and 335 for full professors. Only named professors do better, with an average count of 650. The average 12-month median for assistant professors is 173, which again outstrips associate professors (136) and full professors (134). Named professors have 225 downloads over 12 months. Looking at 12-month download statistics, it is difficult to see a pervasive bias in favor of older faculties. Given that the group of assistant professors has been on tenure-track for 1–6 years, while the professors and named professors have been writing for 6 to 40+ years, the degree of parity is quite striking.

Another source of potential bias might lay in the choice of median versus mean statistics, which could confer an advantage or disadvantage based on faculty size. If a ranking focused exclusively on the median number of downloads per law faculty, then smaller, intensively productive schools might have an advantage over larger schools that may have a larger cohort of comparatively less productive professors. This might be evidenced in 12-month median download counts. The average law school has 40 faculty members. The following schools rank from 1-10 in 12-month median download counts (number of faculty in parentheses): 1. Cal-Irvine (**31**), 2. Chicago (38), 3. St. Thomas (**18**), 4. Vanderbilt (39), 5. Yale (49), 6. UCLA (65), 7. Penn (47), 8. Michigan (53), 9. Cornell (40), and 10. University of San Francisco (**21**). Some large schools do very well, but St. Thomas and San Francisco clearly are punching above their expected weight. Other large, well-respected large faculties do not fare as well as they would like under the 12-month median measure: Texas (68 faculty, ranked 34),

Georgetown (82 faculty, ranked 29), Cal-Berkeley (65 faculty, ranked 21), and Stanford (53 faculty, ranked 15).²⁴

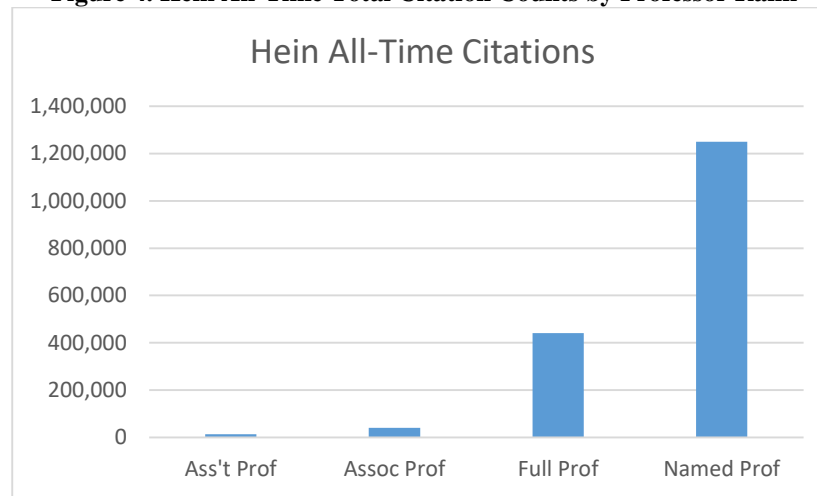
Of course, any bias from median downloads as a ranking criterion may be offset by the inclusion of all-time download statistics, which may favor schools with larger faculties. The top schools in terms of all-time downloads were Harvard, Columbia, George Washington, New York University, University of Chicago, Yale, University of Pennsylvania, Georgetown, Vanderbilt, Duke, and UCLA. Except for Chicago, which with 38 faculty is just slightly below the average of 40, the other eight schools have much larger than average faculties.

Another source of distortion might occur at schools where a single faculty member has earned an inordinately large share of downloads. This might cause a bias when the mean number of downloads and total downloads are employed as a ranking factor. If Law School X is ranked in the top 20 solely because Professor Y has 50 percent of her school's downloads, does the ranking really measure the impact of the school's faculty as a whole? This is also a concern for SSRN specifically, because a few of the most downloaded faculty have downloads a factor of 100 or greater than the average number of downloads. To correct for this potential distortion in mean download calculations, we use the well-known technique of Winsorization, whereby we reduce the number of downloads of each school's top two downloaded authors to equal the number of downloads counted for its third-most downloaded author.

B. HeinOnline Citations

Like our SSRN data, we generated citation counts for the same 4,009 professors using raw data provided to us by HeinOnline, as described earlier. As with SSRN, we generated all-time citation counts by professor rank.

Figure 4. Hein All-Time Total Citation Counts by Professor Rank

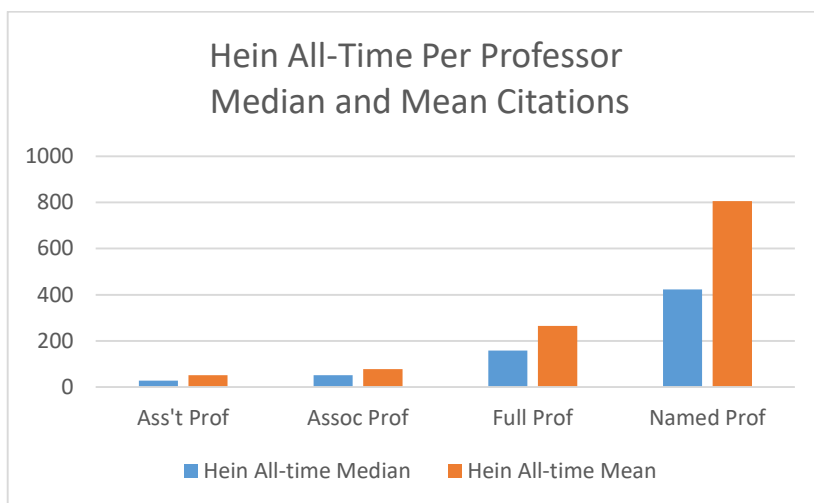


24. These 12-month median download rankings include all faculty at each school—that is, these data were not Winsorized—and thus slightly differ from the rankings and data we report below.

Assistant professors as a group totaled 13,307 citations; Associate professors, 41,289 citations; Full (non-named) professors, 441,692 citations; and Named professors, 1,249,020 citations.

Of course, like the SSRN counts, the differences are less stark when comparing means and medians across professor rank.

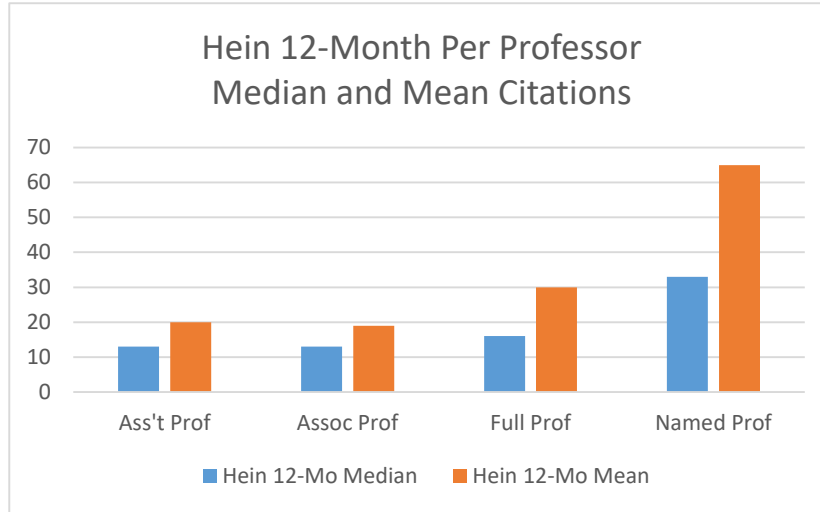
Figure 5. Hein All-Time Mean and Median Citation Counts by Professor Rank



Among assistant professors, the total citations per professor ranged from a low of 0 to a high of 601, with a median of 28 and a mean of 52. Among associate professors, the total citations per professor ranged from a low of 0 to a high of 1057, with a median of 51 and a mean of 78. For non-named full professors, the total citations per professor ranged from a low of 0 to a high of 4693 with a median of 158 and a mean of 265. Finally, for named professors, the total citations per professor ranged from a low of 2 to a high of 23,887, with a median of 423 and a mean of 805. Thus, like the total SSRN download counts, there was a substantial increase, especially from associate to full (non-named) professors and, again, from full (non-named) professors to named professors, in median and mean citation counts.

However, when one examines 12-month citation counts (i.e., citations from publications that went to print in the 12 months before our sample date of late 2016), like SSRN, the median and mean counts by professor rank are much closer.

Figure 6. Hein 12-Month Mean and Median Counts by Professor Rank



Among assistant professors, the 12-month citations per professor ranged from a low of 0 to a high of 198, with a median of 13 and a mean of 20. Among associate professors, the 12-month citations per professor ranged from a low of 0 to a high of 162, with a median of 13 and a mean of 19. For non-named full professors, the 12-month citations per professor ranged from a low of 0 to a high of 570 with a median of 16 and a mean of 30. Finally, for named professors, the 12-month citations per professor ranged from a low of 0 to a high of 1,870, with a median of 33 and a mean of 65. Again, like the total SSRN download counts, when comparing 12-month means and medians, Assistant and Associate Professors were very similar in overall count, with a slight increase for non-named full professors and a larger increase for named full professors.

Finally, one can examine how mean and median counts vary by school.²⁵ For instance, if one examines merely all-time mean citations, the top 10 rankings are (1) Yale (1828 citations); (2) Harvard (1471); (3) Columbia (1138); (4) NYU (1090); (5) Stanford (1077); (6) Chicago (813); (7) Penn (802); (8) Irvine (754); (9) Duke (752); (10) Vanderbilt (740). Of course, all-time mean citations place emphasis on senior superstars, who can skew an entire school's mean dramatically upward relative to its all-time median. For instance, the top 10 rankings by all-time median are (1) Yale (1148); (2) NYU (687); (3) Harvard (621); (4) Columbia (549); (5) Penn (541); (6) Chicago (528); (7) Stanford (442); (8) Minnesota (369); (9) Cornell (362); (10) George Washington (340). Thus, Yale's faculty as a whole exhibit more consistency in their total citation counts than Harvard's or Stanford's. Similarly, while Irvine, Duke, and Vanderbilt apparently have "superstars" who substantially increased their school's all-time mean

25. Here, unlike the SSRN data, we did not Winsorize the top two faculty members, because the Hein data did not exhibit the sort of skew in the SSRN data that could bias the overall rankings.

ranking, these schools show less consistency across their faculty as a whole than Minnesota, Cornell, and George Washington, which were in the top 10 schools when solely examining all-time medians. Nonetheless, there is a very high 0.92 correlation between law schools' all-time mean and all-time median for the 100 schools in our sample, indicating that most schools exhibit about the same frequency of "superstars" and "consistency" relative to their peers in the rankings.

Of course, as indicated by Figures 5 and 6 above, all-time citations place heavy emphasis on more senior professors who may have generated most of their citations many years ago relative to mid-career and junior professors who may be generating most of their citations now. Specifically, the top 10 schools by 12-month citations are (1) Yale (161); (2) Harvard (123); (3) Stanford (98); (4) Columbia (97); (5) Chicago (96); (6) NYU (94); (7) Vanderbilt (87); (8) Penn (86); (9) Irvine (81); and (10) Duke (78). Interestingly, these are the exact same 10 schools by ranking for all-time citations, indicating multiple nonexclusive possibilities: (1) that these schools' senior professors continue to remain productive and highly cited and/or their older articles continue to garner a large number of citations; and/or (2) that these schools' mid-level and junior professors have similar citation patterns across time to their schools' more senior professors. Indeed, the overall correlation among the 100 schools in our sample between all-time mean and 12-month mean is 0.97, and between all-time median and 12-month median, 0.90. We leave examination of exactly why this is so to later work.

C. Preferred Weightings of the Results to Generate Overall Rankings

To calculate school-wide rankings, as noted above, it is necessary to determine the relative importance of median and means, as well as all-time and 12-month downloads. As the previous discussion shows, there is no "correct" answer, as many view faculty reputation and impact through different lenses—some consider a handful of superstars to carry the reputation of the school, while others consider "depth and breadth" to be important; some consider established faculty to be more important than new faculty, even if the established faculty's "glory" years were a decade or more ago, while others only consider that last "few" years; and so forth.²⁶

Because of the varying considerations, for simplicity, we follow the Sisk et al. rankings and use 2 x the mean per faculty + 1 x median per faculty to calculate overall scores. From there, we weight all-time downloads and 12-month downloads equally. Below, we report citation counts solely by all-time median, all-time mean, 12-month median, and 12-month means, so that other scholars can adjust our methodology as they see fit—in that regard, we will soon release all of our school-wide data in an easily useable format.

²⁶ We do not incorporate total citations or downloads across an entire faculty, as this would in our view unfairly advantage larger schools.

D. Overall Rankings

1. *SSRN-Only Rankings*

Here, we report SSRN-only rankings based on our suggested weighting. Recall that while SSRN posts its own school-wide rankings, they are often distorted by the inclusion of authors who are not tenure-track faculty or tenured professors, such as emeritus faculty,²⁷ faculty from other departments, adjuncts, students, visiting faculty, and so forth. Our rankings overcome this issue by only including tenure-track and tenured professors, as defined earlier. Additionally, unlike SSRN, we provide a weighting between median and mean, as well as all-time and recent downloads, to provide a ranking that we believe is generally more consistent with beliefs about what should count for faculty impact. We report each school, followed by each individual SSRN metric, and the total score per our suggested ranking.

Table 1. Ranking by SSRN-Only Download Metrics²⁸

SSRN Ranking	School	SSRN 12 mos. (mean)	SSRN all (mean)	SSRN 12 mos. (median)	SSRN all (median)	Total SSRN Score
1	Harvard	948	9190	309	3023	23,608
2	Vanderbilt	855	7074	460	4807	21,124
3	Chicago	902	6581	418	3719	19,103
4	Yale	788	6611	464	3491	18,753
5	Penn	639	6770	327	3196	18,340
6	Columbia	794	6585	309	2753	17,820
7	Irvine	718	4767	487	4327	15,786
8	George Mason	590	5281	314	3063	15,120
9	GW	526	5412	170	1991	14,037
10	NYU	471	4460	313	2394	12,569
11	Duke	402	4309	245	2527	12,194
12	UCLA	523	4194	325	2197	11,956
13	Northwestern	495	4094	262	2209	11,648
14	St. Thomas	411	3591	325	3159	11,487
15	Stanford	399	4083	237	2135	11,336
16	Cornell	420	3687	301	2429	10,942
17	Illinois	377	3937	196	2103	10,927

27. In some instances, law schools list deceased faculty in their SSRN faculty rosters.

28. Table 1 reflects the Winsorization of the top two most-downloaded faculty members for the SSRN counts.

Ranking the Academic Impact of 100 American Law Schools

SSRN Ranking	School	SSRN 12 mos. (mean)	SSRN all (mean)	SSRN 12 mos. (median)	SSRN all (median)	Total SSRN Score
18	Davis	485	3393	335	2713	10,805
19	UMinn	411	3575	243	2099	10,315
20	UMich	437	3600	346	1885	10,305
21	Georgetown	450	4048	121	790	9906
22	FSU	411	2974	248	2819	9837
23	Cal-Berkeley	440	3677	165	1383	9781
24	Arizona	462	3363	231	1815	9696
25	Virginia	390	2970	279	2325	9325
26	San Diego	504	3207	90	812	8323
27	Case Western	318	2618	217	2113	8200
28	Notre Dame	290	2613	253	2080	8139
29	Temple	361	2785	194	1458	7945
30	Wash U St. Louis	352	2702	164	1579	7852
31	Pittsburgh	428	2367	226	1669	7483
32	Cardozo	264	2602	162	1588	7480
33	Emory	333	2368	174	1839	7415
34	Fordham	326	2406	152	1258	6875
35	Indiana Univ	222	2300	140	1502	6684
36	Boston Univ	272	2287	205	1346	6669
37	Texas-Austin	281	2393	182	1082	6611
38	San Francisco	302	1849	337	1917	6556
39	Brooklyn	263	2200	145	1474	6546
40	Arizona State	331	2306	149	1064	6487
41	Florida	326	2207	232	1168	6465
42	Loyola LA	286	2232	120	1229	6385
43	Wake Forest	256	2010	196	1445	6172
44	Washington & Lee	279	2285	153	679	5960
45	Colorado	298	1820	159	1516	5911
46	Utah	413	1941	153	1019	5880
47	Boston College	214	1900	122	1519	5870
48	Chapman	250	1923	147	1361	5853

SSRN Ranking	School	SSRN 12 mos. (mean)	SSRN all (mean)	SSRN 12 mos. (median)	SSRN all (median)	Total SSRN Score
49	North Carolina	311	1870	159	1291	5813
50	Maryland	321	1913	102	1153	5723
51	Loyola-Chicago	300	2205	41	658	5707
52	Tennessee	203	2131	95	726	5490
53	Ohio State	343	1562	171	1239	5220
54	USC	228	2048	88	498	5137
55	Penn State	308	1784	87	863	5132
56	Seton Hall	173	1599	137	1433	5115
57	William & Mary	285	1746	169	862	5093
58	Suffolk	259	1833	123	761	5067
59	Brigham Young	334	1675	197	723	4938
60	Alabama	250	1589	97	1048	4825
61	Iowa	222	1557	81	1147	4786
62	Thomas Jefferson	176	1516	132	1204	4719
63	Michigan State	147	1603	89	882	4471
64	Univ of Washington	240	1549	134	749	4461
65	Buffalo	230	1435	155	965	4450
66	Baltimore	209	1378	154	999	4326
67	American	190	1412	127	922	4254
68	Cincinnati	129	1360	109	1163	4251
69	Georgia	157	1376	105	909	4081
70	Pace	171	1358	78	891	4027
71	Kansas	218	1435	98	616	4020
72	Wisconsin	240	1330	125	741	4006
73	Seattle	183	1268	87	844	3834
74	Missouri	118	1531	74	415	3787
75	Houston	150	1265	102	815	3748
76	Chicago-Kent	166	1200	109	887	3726
77	St. John's	133	1216	99	892	3689
78	Denver	231	1089	111	893	3644

Ranking the Academic Impact of 100 American Law Schools

SSRN Ranking	School	SSRN 12 mos. (mean)	SSRN all (mean)	SSRN 12 mos. (median)	SSRN all (median)	Total SSRN Score
79	UNLV	141	1249	67	570	3417
80	Pepperdine	182	1100	85	745	3394
81	Hastings	237	1045	116	696	3374
82	Miami	187	1191	54	524	3332
83	Widener	206	1166	72	494	3310
84	Santa Clara	156	1321	27	214	3196
85	Villanova	133	1105	41	555	3072
86	Connecticut	181	958	83	594	2956
87	SMU	161	974	110	384	2764
88	Rutgers	134	938	54	274	2472
89	Georgia State Univ	140	730	101	428	2270
90	Oregon	132	696	64	289	2009
91	U Kentucky	88	680	20	378	1933
92	Richmond	97	644	37	198	1718
93	New Mexico	115	500	52	268	1547
94	Tulane	83	538	21	274	1539
95	Hawaii	105	618	4	50	1500
96	Nebraska	80	413	42	268	1295
97	Tulsa	58	394	13	160	1076
98	Arkansas	50	331	21	94	879
99	Oklahoma Univ	53	256	-	-	619
100	Baylor	24	89	-	-	227

2. *Hein-Only Rankings*

Here, we report Hein-only rankings based on citation counts following our suggested weighting.²⁹ As noted earlier, although this ranking is similar to the Sisk et al. methodology, there are some notable differences. First, we overcome data limitations in the Westlaw database (used by Sisk et al.), such as an expanded set of law journals, failure to count all 3+-author citations, counting multiple citations in a single article to a single author as multiple citations, ignoring citations for editors of books, overcoming misspelling issues, and others. Second, unlike Sisk et al., who focus merely on recent (5-year) citation counts, half

²⁹ Unlike the SSRN-based rankings, because no single faculty member's citation count substantially deviated from other faculty members, we did not Winsorize the Hein data.

of our metric is based on all-time citations, providing substantial weight to senior faculty who often are thought to carry a law school's scholarly reputation. Third, we include pre-tenure faculty members.

Table 2. Ranking by Hein-Only Citation Metrics

Hein Ranking	School	Cited 12 mos. (mean)	Cited Total (mean)	Cited 12 mos. (median)	Cited Total (median)	Hein Total Score
1	Yale	160	1828	98	1148	5223
2	Harvard	123	1471	47	621	3856
3	NYU	94	1090	59	687	3114
4	Columbia	96	1138	57	549	3075
5	Stanford	97	1077	45	442	2837
6	Chicago	96	813	70	528	2414
7	Penn	86	802	47	541	2364
8	Duke	78	752	53	316	2029
9	Irvine	81	755	51	305	2027
10	Vanderbilt	87	740	52	290	1995
11	Cornell	72	707	51	362	1970
12	Northwestern	64	736	30	309	1939
13	Texas-Austin	53	699	32	338	1873
14	UCLA	72	632	44	330	1782
15	Georgetown	61	656	27	299	1758
16	Virginia	63	644	37	252	1702
17	GW	62	562	29	340	1617
18	Cal-Berkeley	58	636	37	185	1609
19	UMich	51	542	33	301	1519
20	UMinn	50	477	38	369	1462
21	Boston Univ	45	517	30	293	1446
22	Cardozo	38	424	29	328	1282
23	Wash U St. Louis	51	425	35	277	1266
24	Emory	35	432	20	311	1264
25	USC	31	430	18	320	1260
26	Iowa	40	494	23	158	1249
27	Illinois	37	387	24	288	1159
28	Alabama	35	469	16	134	1158

Ranking the Academic Impact of 100 American Law Schools

Hein Ranking	School	Cited 12 mos. (mean)	Cited Total (mean)	Cited 12 mos. (median)	Cited Total (median)	Hein Total Score
29	St. Thomas	43	414	22	220	1155
30	George Mason	40	390	26	264	1150
31	Fordham	40	386	28	253	1132
32	Pittsburgh	26	356	19	316	1098
33	Davis	49	388	29	194	1098
34	Case Western	37	365	26	251	1082
35	Ohio State	33	373	21	234	1067
36	Arizona	40	398	24	159	1058
37	San Diego	35	389	12	163	1022
38	Wake Forest	36	359	27	187	1003
39	Colorado	33	347	26	209	995
40	Brooklyn	33	344	27	196	976
41	Hawaii	26	434	9	47	975
42	Maryland	35	312	21	247	963
43	Chicago-Kent	26	337	16	196	937
44	Indiana Univ	30	298	22	255	933
45	North Carolina	29	330	21	186	924
46	Florida	29	304	22	210	899
47	Notre Dame	34	291	31	217	899
48	Arizona State	25	331	17	135	866
49	William & Mary	38	274	22	215	863
50	Utah	36	271	28	214	855
51	Houston	22	310	17	162	843
52	San Francisco	28	272	18	221	838
53	Boston College	22	269	17	212	810
54	Hastings	26	282	18	150	783
55	Washington & Lee	30	293	14	116	775
56	Miami	19	297	11	121	765
57	UNLV	29	273	15	144	764
58	FSU	39	264	23	130	760

Hein Ranking	School	Cited 12 mos. (mean)	Cited Total (mean)	Cited 12 mos. (median)	Cited Total (median)	Hein Total Score
59	Temple	25	236	18	185	727
60	Seton Hall	21	220	15	198	695
61	Brigham Young	28	242	18	130	687
62	Kansas	23	243	11	123	665
63	Cincinnati	22	228	15	146	661
64	American	23	231	16	128	651
65	Richmond	26	231	17	117	649
66	Penn State	20	252	9	69	622
67	Santa Clara	21	211	9	121	595
68	Michigan State	21	190	18	150	590
69	Tulane	14	213	11	121	587
70	SMU	17	211	12	114	582
71	U Kentucky	17	188	11	150	570
72	Loyola-Chicago	21	204	11	108	569
73	Loyola LA	25	188	18	123	567
74	Rutgers	16	218	10	79	557
75	Georgia	27	185	27	103	553
76	Chapman	15	187	10	128	541
77	Pepperdine	19	202	13	79	534
78	Nebraska	17	188	9	112	531
79	Wisconsin	22	178	14	113	527
80	Missouri	16	180	10	121	523
81	Pace	17	166	13	129	508
82	Seattle	17	170	16	101	490
83	Denver	27	146	17	109	471
84	St. John's	14	164	11	104	470
85	Tennessee	22	160	13	86	463
86	Buffalo	14	174	8	63	446
87	Baltimore	17	155	12	89	444
88	Villanova	17	156	6	87	438
89	Connecticut	15	154	9	81	429

Ranking the Academic Impact of 100 American Law Schools

Hein Ranking	School	Cited 12 mos. (mean)	Cited Total (mean)	Cited 12 mos. (median)	Cited Total (median)	Hein Total Score
90	Thomas Jefferson	13	146	11	100	429
91	Widener	15	152	8	86	427
92	Tulsa	10	134	5	116	409
93	Univ of Washington	18	146	10	71	409
94	Suffolk	15	140	7	73	391
95	Georgia State Univ	13	116	7	52	317
96	Oregon	14	110	7	56	310
97	Oklahoma Univ	13	96	8	42	268
98	New Mexico	10	86	4	26	223
99	Arkansas	6	62	3	39	178
100	Baylor	3	31	1	14	82

3. Combined SSRN Download & Hein Citation Count Rankings

Here, pursuant to our suggested weighting discussed earlier, we combine the SSRN and Hein scores equally. Because SSRN download counts are substantially higher than Hein citation counts, we determine the number of standard deviations (z-score) from each school's score from the mean for that metric, then average the SSRN and Hein z-scores together for a final score.

Table 3. Ranking by SSRN Download and Hein Citation Metrics

Combined Ranking	School	Total SSRN Score	Hein Total Score	SSRN Z-score	Hein Z-score	Average Z-score
1	Yale	18,753	5223	2.56	5.25	3.91
2	Harvard	23,608	3856	3.60	3.53	3.57
3	Columbia	17,820	3075	2.36	2.55	2.45
4	Chicago	19,103	2414	2.64	1.71	2.18
5	Vanderbilt	21,124	1995	3.07	1.19	2.13
6	Penn	18,340	2364	2.47	1.65	2.06
7	NYU	12,569	3114	1.24	2.60	1.92
8	Stanford	11,336	2837	0.97	2.25	1.61
9	Irvine	15,786	2027	1.93	1.23	1.58
10	Duke	12,194	2029	1.16	1.23	1.19
11	GW	14,037	1617	1.55	0.71	1.13

Combined Ranking	School	Total SSRN Score	Hein Total Score	SSRN Z-score	Hein Z-score	Average Z-score
12	Northwestern	11,648	1939	1.04	1.12	1.08
13	Cornell	10,942	1970	0.89	1.15	1.02
14	UCLA	11,956	1782	1.10	0.92	1.01
15	George Mason	15,120	1150	1.78	0.12	0.95
16	Georgetown	9906	1758	0.67	0.89	0.78
17	Virginia	9325	1702	0.54	0.82	0.68
18	Cal-Berkeley	9781	1609	0.64	0.70	0.67
19	UMich	10,305	1519	0.75	0.59	0.67
20	UMinn	10,315	1462	0.75	0.52	0.63
21	St. Thomas	11,487	1155	1.00	0.13	0.57
22	Illinois	10,927	1159	0.88	0.13	0.51
23	Texas-Austin	6611	1873	-0.04	1.03	0.50
24	Davis	10,805	1098	0.86	0.06	0.46
25	Arizona	9696	1058	0.62	0.01	0.31
26	Wash U St. Louis	7852	1266	0.23	0.27	0.25
27	Boston Univ	6669	1446	-0.03	0.49	0.23
28	Cardozo	7480	1282	0.15	0.29	0.22
29	Emory	7415	1264	0.13	0.27	0.20
30	Case Western	8200	1082	0.30	0.04	0.17
31	San Diego	8323	1022	0.33	-0.04	0.14
32	FSU	9837	760	0.65	-0.37	0.14
33	Pittsburgh	7483	1098	0.15	0.06	0.10
34	Fordham	6875	1132	0.02	0.10	0.06
35	Notre Dame	8139	899	0.29	-0.19	0.05
36	USC	5137	1260	-0.36	0.26	-0.05
37	Brooklyn	6546	976	-0.05	-0.10	-0.08
38	Temple	7945	727	0.25	-0.41	-0.08
39	Indiana Univ	6684	933	-0.02	-0.15	-0.09
40	Iowa	4786	1249	-0.43	0.25	-0.09
41	Wake Forest	6172	1003	-0.13	-0.06	-0.10
42	Colorado	5911	995	-0.19	-0.07	-0.13
43	Florida	6465	899	-0.07	-0.19	-0.13

Ranking the Academic Impact of 100 American Law Schools

Combined Ranking	School	Total SSRN Score	Hein Total Score	SSRN Z-score	Hein Z-score	Average Z-score
44	Alabama	4825	1158	-0.42	0.13	-0.15
45	Arizona State	6487	866	-0.07	-0.24	-0.15
46	Ohio State	5220	1067	-0.34	0.02	-0.16
47	San Francisco	6556	838	-0.05	-0.27	-0.16
48	Maryland	5723	963	-0.23	-0.11	-0.17
49	North Carolina	5813	924	-0.21	-0.16	-0.19
50	Utah	5880	855	-0.20	-0.25	-0.22
51	Boston College	5870	810	-0.20	-0.31	-0.25
52	Washington & Lee	5960	775	-0.18	-0.35	-0.27
53	William & Mary	5093	863	-0.37	-0.24	-0.30
54	Loyola LA	6385	567	-0.09	-0.61	-0.35
55	Chicago-Kent	3726	937	-0.66	-0.15	-0.40
56	Seton Hall	5115	695	-0.36	-0.45	-0.41
57	Loyola-Chicago	5707	569	-0.23	-0.61	-0.42
58	Chapman	5853	541	-0.20	-0.64	-0.42
59	Brigham Young	4938	687	-0.40	-0.46	-0.43
60	Penn State	5132	622	-0.36	-0.54	-0.45
61	Houston	3748	843	-0.65	-0.26	-0.46
62	Tennessee	5490	463	-0.28	-0.74	-0.51
63	Cincinnati	4251	661	-0.55	-0.49	-0.52
64	American	4254	651	-0.55	-0.51	-0.53
65	Hastings	3374	783	-0.73	-0.34	-0.54
66	Michigan State	4471	590	-0.50	-0.58	-0.54
67	Kansas	4020	665	-0.60	-0.49	-0.54
68	UNLV	3417	764	-0.72	-0.36	-0.54
69	Miami	3332	765	-0.74	-0.36	-0.55
70	Suffolk	5067	391	-0.37	-0.83	-0.60
71	Georgia	4081	553	-0.58	-0.63	-0.61
72	Thomas Jefferson	4719	429	-0.45	-0.79	-0.62
73	Hawaii	1500	975	-1.14	-0.10	-0.62

Combined Ranking	School	Total SSRN Score	Hein Total Score	SSRN Z-score	Hein Z-score	Average Z-score
74	Wisconsin	4006	527	-0.60	-0.66	-0.63
75	Buffalo	4450	446	-0.50	-0.77	-0.63
76	Pace	4027	508	-0.59	-0.69	-0.64
77	Baltimore	4326	444	-0.53	-0.77	-0.65
78	Univ of Washington	4461	409	-0.50	-0.81	-0.66
79	Missouri	3787	523	-0.65	-0.67	-0.66
80	Seattle	3834	490	-0.64	-0.71	-0.67
81	Santa Clara	3196	595	-0.77	-0.58	-0.67
82	Pepperdine	3394	534	-0.73	-0.65	-0.69
83	St. John's	3689	470	-0.67	-0.73	-0.70
84	Denver	3644	471	-0.68	-0.73	-0.70
85	SMU	2764	582	-0.86	-0.59	-0.73
86	Widener	3310	427	-0.75	-0.79	-0.77
87	Rutgers	2472	557	-0.93	-0.63	-0.78
88	Villanova	3072	438	-0.80	-0.77	-0.79
89	Richmond	1718	649	-1.09	-0.51	-0.80
90	Connecticut	2956	429	-0.82	-0.79	-0.81
91	U Kentucky	1933	570	-1.04	-0.61	-0.83
92	Tulane	1539	587	-1.13	-0.59	-0.86
93	Nebraska	1295	531	-1.18	-0.66	-0.92
94	Georgia State Univ	2270	317	-0.97	-0.93	-0.95
95	Oregon	2009	310	-1.03	-0.94	-0.98
96	Tulsa	1076	409	-1.23	-0.81	-1.02
97	New Mexico	1547	223	-1.13	-1.05	-1.09
98	Oklahoma Univ	619	268	-1.32	-0.99	-1.16
99	Arkansas	879	178	-1.27	-1.10	-1.19
100	Baylor	227	82	-1.41	-1.22	-1.32

III. IMPLICATIONS & CAVEATS

A. Implications of the Rankings

Here we examine some interesting implications of our rankings, including correlation of the SSRN-only, Hein-only, and combined rankings; correlation with other rankings; and the extreme variation of the highest ranked schools compared with milder variation at lower-ranked schools.

1. *Correlations within Our Rankings*

The first interesting finding from the rankings is that, although one may consider SSRN downloads and Hein citations to be quite different in nature, the overall correlation between the two sets of rankings was a high 0.84. (The correlation between the SSRN-only and the combined ranking was a very high 0.97 and the Hein-only and the combined ranking was also a very high 0.94.) Although some schools fared much better or worse in one ranking versus the other, to a substantial degree, schools that performed well in SSRN downloads also performed well in Hein citations. Given the high correlation between all-time and 12-month metrics,³⁰ as well as that between median and means, the precise combination of rankings is unlikely as a whole to produce substantial shifts in rankings (of course, individual schools may notice substantial shifts). For instance, it is striking that a ranking based wholly on the all-time SSRN means would have a correlation of 0.86 with a ranking based wholly on 12-month Hein citation medians.

On the other hand, certain schools certainly fare better than others depending on the nature of the rankings. For instance, while Yale consistently is ranked first across numerous citation metrics, it is ranked less highly in SSRN downloads—a mere fourth, for example, in all-time SSRN mean downloads. Yale's drop in the SSRN rankings is, in our view, likely an artifact of that school's relative emphasis on more theory-oriented fields such as constitutional law and jurisprudence rather than more practice-oriented fields such as corporate, intellectual property, and tax law, which tend to exhibit higher SSRN download counts. In contrast, Harvard, which has a higher percentage of faculty writing in practice-oriented fields than Yale, ranked first in all-time SSRN mean downloads. On the other hand, Harvard ranked second to Yale's first in Hein 12-month mean citations, and Harvard dropped to tenth in 12-month median citations, indicating that at Harvard, a much smaller proportion of the faculty accounts for the school's total citations than at other top ten schools. As one might expect, despite the high correlations among the various ranking metrics, these types of differences among schools exist at all levels of our rankings. Nonetheless, the general robustness of the rankings to differing methodologies indicates that in the scheme of things, these differences are more in the vein of nuances on an overarching theme.

³⁰ For instance, the correlation between the 12-month and blended Hein-only rankings is a very high 0.95.

2. Correlations with Other Popular Faculty Impact Rankings

Another immediate question of interest is how our rankings compare to previous scholarly rankings as well as the *U.S. News* rankings. First, we compared our rankings to the most recent Sisk et al. rankings, finding a very high correlation of 0.88.³¹ This is quite remarkable, because the Sisk et al. rankings rely solely on Westlaw citations from the period 2013–2017 (excluding all-time citations) and do not rely whatsoever on article downloads. The Sisk et al. rankings also include certain citations we omit (such as citations to books and treatises), while our data includes certain citations the Sisk et al. data omits (such as certain citations to articles with three or more authors). Finally, the Sisk et al. rankings exclude pre-tenured faculty whereas we do not. Thus, one can infer that despite these notable differences in methodology and data, quantitative rankings are quite robust to changes in approach. This finding is very comforting, because it provides a strong indication of reliability for the use of quantitative measures of faculty impact as a ranking methodology more generally.³²

Second, we compared our rankings to the *U.S. News* peer assessment rankings from 2016, finding a much lower correlation of 0.63. Unlike the comparison to the Sisk et al. rankings, there were many outlier schools with very different rankings between the two sets (indeed, three sets). For instance, Vanderbilt was a very high 5th in our rankings (10th in Sisk et al.), but a much lower 17th in *U.S. News* peer assessment. Similarly, UC Irvine was also a very high 9th in our rankings (12th in Sisk et al.), but a much lower 43rd in *U.S. News* peer assessment. Perhaps most divergent was St. Thomas, ranking 21st in our results (23rd in Sisk et al.), but a whopping 139th in *U.S. News* peer assessment. Conversely, the University of Washington was 78th in our rankings (unranked by Sisk et al.), but a much higher 44th in *U.S. News*, and the University of Wisconsin was 74th in our rankings (unranked by Sisk et al.), but 30th in *U.S. News*. Similarly, Alabama was just 44th in our rankings (49th in Sisk et al.), but 28th in *U.S. News* peer assessment, and Iowa was 40th in our rankings (58th in Sisk et al.), but 29th in *U.S. News* peer assessment.

Some more investigation provides an immediate explanation for these stark differences—namely, that the *U.S. News* peer assessment score largely tracks the overall ranking, which of course relies heavily on factors other than faculty reputation. Specifically, in 2016, the correlation between the *U.S. News* peer assessment and overall ranking was a startling 0.96. In other words, the *U.S. News* peer assessment ranking is hardly an independent ranking of faculty reputation. Rather, it appears that the respondents for the *U.S. News* peer assessment survey—the Dean, Academic Dean (or equivalent), hiring chair, and most junior tenured faculty member—are mainly relying upon the overall ranking

31. As expected, there were some outliers with strong differences between the two rankings, including Cal-Berkeley, USC, William & Mary, Illinois, Iowa, Pittsburgh, Temple, Florida, and Richmond.

32. The correlation is an even higher, 0.91, if we simply compare our 12-month Hein-only rankings to the Sisk et al. rankings.

from previous years to make their assessment, resulting in an “echo effect” that has been documented by previous scholars.³³

Thus, although peer assessment nominally accounts for 25 percent of the overall *U.S. News* ranking, because peer assessment essentially tracks that ranking, its effective weight in the overall ranking is very low. The same holds true for the “Bench & Bar” ranking (accounting for 15 percent of the overall ranking), which is very highly correlated with the peer assessment ranking (correlation of 0.97 in 2016), which again is very highly correlated with the overall ranking (0.96 in 2016). Because the peer assessment and bench & bar rankings change little each year, the upshot is that shifts in student credentials, such as undergraduate GPA and LSAT become, as a practical matter, a much greater driver of overall rankings. Thus, schools that enroll stronger students but retain arguably weaker faculties are comparatively driven up substantially in the *U.S. News* peer assessment rankings, whereas schools that retain stronger faculty but enroll relatively weaker students are comparatively driven down in the *U.S. News* peer assessment rankings.

Indeed, the 25 or so schools in our rankings that exhibited the largest differentials between the two sets of categories mainly fell into three categories: (1) schools in relatively dense urban areas with higher-ranked schools in *U.S. News* in the same geographic area; (2) schools in college towns or other geographic areas with no higher-ranked schools in *U.S. News* nearby (or schools that were so highly ranked that they were not competing for the same students); and (3) schools with outsized budgets that could “purchase” high quality students with substantial scholarships.

The schools that showed the most improvement in our rankings relative to *U.S. News* are Thomas Jefferson, St. Thomas, Chapman, USF, Widener, Suffolk, Pace, Baltimore, George Mason, Case Western, Brooklyn, and Irvine. All of them compete for student talent with many top-quality schools in the same geographic region. For instance, Irvine competes with nearby USC and UCLA, and within California, Stanford, Berkeley, and Davis. Brooklyn competes with Columbia, NYU, Fordham, and not much further away, Yale. George Mason competes with Virginia, Georgetown, and George Washington. And so on. In this regard, nearly all of these schools are in dense urban areas, which are arguably much more desirable for faculty members than more remote college towns, particularly given working spouses. Thus, on average, more high quality faculty—of course, measuring “quality” by citations—are likely to be willing to work at lower-ranked (on the *U.S. News* metric) schools in urban areas than in college towns, which could explain the stronger faculty impact and reputation metrics at schools like these relative to their *U.S. News* ranking.

Contrast these schools with those who were the worst performers in our rankings relative to their *U.S. News* peer assessment ranking, which includes Wisconsin, Tulane, University of Washington, Connecticut, Oregon, Georgia State, Baylor, Southern Methodist, Alabama, Pepperdine, William & Mary,

33. See, e.g., Robert L. Jones, *A Longitudinal Analysis of the U.S. News Law School Academic Reputation Scores Between 1998 and 2013*, 40 FLA. ST. U. L. REV. 721, 786–87 (2013).

University of North Carolina, and Richmond. Many of these schools fit the second and third categories—with the crucial factor that there is relatively lower geographic competition for student talent. For instance, Wisconsin, Tulane, University of Washington, Connecticut, Oregon, and Alabama all arguably face low competition in their geographic regions of interest. Other schools, such as Pepperdine, William & Mary, and Richmond, which are known to have large endowments and other funds to support large numbers of scholarships, are able to “purchase” high quality students in relatively greater numbers to boost their overall ranking.³⁴ North Carolina offers in-state residents a low tuition of \$24,480 per year, which in essence is providing a very large scholarship, which again attracts top quality students.³⁵

3. Variation Among the Top- & Lower-Ranked Schools

Another interesting implication of our study is that citation and download counts exhibit much more variation among the most highly ranked schools than among lower ranked schools. In other words, the distribution of downloads and citations is not a normal bell curve, with much more “extremal” activity at the highest ranked institutions.

Specifically, when examining citation counts, a total of 13 schools were greater than one standard deviation from the mean, but only 3 schools were less than one standard deviation from the mean. Of the 13 schools above the mean, many were far beyond one standard deviation (Yale—5.25 standard deviations from the mean; Harvard—3.53; NYU—2.60; Columbia—2.55; Stanford—2.25; Chicago—1.71; Penn—1.65), while of the three schools at the bottom, all were very close to one standard deviation (Baylor—(-1.22); Arkansas—(-1.10); New Mexico—(-1.05). Similarly, when examining SSRN downloads, there were no schools more than 1.5 standard deviations below the average, but there were eight schools above 1.5 standard deviations (Vanderbilt, Harvard, Chicago, Yale, Irvine, Penn, Columbia, and GW).

Thus, like some sports, in which the top teams are substantially stronger than all other teams, it appears that our rankings are not linear in scale. Rather, it appears there is a top handful of schools that are many times stronger than the others, after which the overall scores descend in a more linear fashion. In this regard, perhaps not surprisingly, Yale and Harvard (but not Stanford) truly dominate our overall rankings.

34. See NAT'L ASS'N OF COLL. & UNIV. BUS. OFFICERS, U.S. AND CANADIAN INSTITUTIONS LISTED BY FISCAL YEAR (FY) 2018 ENDOWMENT MARKET VALUE AND CHANGE* IN ENDOWMENT MARKET VALUE FROM FY17 TO FY18 2, 4–5 (2019), <https://www.nacubo.org/-/media/Nacubo/Documents/research/2018-Endowment-Market-Values--Final.ashx?la=en&hash=31CF91E74EAA91288E53E2BCD629C35710C1C03> [<https://perma.cc/B7HS-88D>] (reporting that of 809 educational institutions ranked by endowment size in 2018, Pepperdine ranked 124th, William & Mary 116th, and Richmond 40th).

35. See *Tuition and Fees*, UNC SCH. L., <https://law.unc.edu/admissions/financing-your-legal-education/tuition-and-fees/> [<https://perma.cc/F8YV-GBWM>].

B. Some Caveats of Our Rankings and Findings

Here, we describe some notable limitations to our dataset and methodology, which provide important qualifications and caveats to our findings. With that said, we believe none of these limitations is likely to substantially affect our overall rankings or findings. First, as noted earlier, neither citation counts nor article downloads are a perfect proxy for faculty quality. There are very likely many articles of outstanding quality with low citation counts, because they are in fields with few scholars, were not well marketed, did not place in a “top” journal, and the like. Conversely, there are very likely some highly cited articles that many in the field would consider not to be of the highest quality—indeed, these articles may be cited as examples of what is clearly incorrect. Yet, in order to provide a stronger metric of quality along these lines that is comprehensive, one would need teams of experts reading scores of articles to assess them for quality. Although this occurs indirectly in the sciences and social sciences through peer review, U.S. law journal article selection is primarily driven by student editors, and there is no wide-scale alternative to peer-level review. Thus, citations and downloads remain in law the only quantitative proxy for publication quality. This is so even at the school-level, because surveys such as those used by *U.S. News*—as we showed—often descend merely into views about school reputation more generally (i.e., taking into account student quality and other factors).

Second, although we endeavored to construct a complete and accurate list of all tenured and tenure-track voting faculty at each law school, including all the variations in names used for each faculty member as an author on HeinOnline, our list may be incomplete. For instance, of the 100 schools we contacted to provide alternate names, only 60 responded (including after multiple follow-up emails). Although we used automated algorithms as well as manual review to identify each and every alternate author name in HeinOnline for these schools, we are likely missing names, which might result in too low a citation count for that school. However, as we noted earlier, these omissions could have been easily corrected if those schools had responded to our multiple requests.

Third, there are limitations with respect to SSRN and Hein that do not make these sources entirely complete or accurate for downloads and citations, respectively. As we noted earlier, SSRN is not the sole source for the downloading of articles. Bepress, Westlaw, Lexis, and Hein also provide for article downloads, and we could not access all of this download data. Although Hein is the most complete source for citation counts, Hein currently does not track citations within law articles to books and treatises, which in our view should be included in overall counts.³⁶ However, given our high correlation with the Sisk et al. study, we believe this limitation is likely to be of minimal impact at the school-

³⁶ Hein does track citations in court opinions to law journal articles, but we did not count them given their low numbers—that is, they would have little to no effect on school-level rankings. However, we will include these counts in the data we release publicly in the event others want to use this metric.

level. Also, as we noted, Hein does not contain some law journals in its database as well as journals purely in other fields (it does contain most “law &” journals), which could differentially affect some schools, though given the small number of articles in these journals, we think these effects are likely to be small.³⁷ Moreover, it is unclear to us that citations out-of-field—for instance, in a political science journal—are indicative of reputation and impact among *law schools*. Nonetheless, we plan to expand our data sources for citations in future iterations and hope to compare our rankings with and without “out-of-field” sources.

Fourth, our measure of Hein and SSRN “recent” counts was only one 12-month window, which mostly covered 2016. If this year was anomalous for any given school, then that school could be ranked higher or lower than it would have been if we had used a longer window, such as three years. Similarly, some schools would have been ranked higher or lower if we had used a different weighting of means and medians, all-time vs. recent counts, and SSRN vs. Hein counts. However, given the high correlations between all of the various metrics, we think it is unlikely that these issues present major limitations for our rankings. Of course, a single school may think otherwise, and for this reason, we will provide all of our data for others to suggest alternative weightings and rankings.

Fifth, our means and medians include pre-tenure faculty. Because pre-tenure faculty have not had much time to develop their scholarship, their downloads and citation counts in general are relatively low to more senior faculty. Because we did not adjust for years in service, our metric thus penalizes schools with high numbers of pre-tenure (and other relative junior) faculty compared to those schools with more senior faculties. With that said, other than for a small number of schools with very high numbers of pre-tenure faculty (and a small number with very senior faculties), we do not think this limitation substantially affected our rankings. Nonetheless, we plan to correct for this issue in future iterations by including data that removes pre-tenure faculty members.

Sixth, Hein and SSRN could be subject to gaming. As we noted above, we believe that gaming considerations on SSRN are now minimal given a variety of security mechanisms employed on that site. Nonetheless, we have Winsorized our data to remove the top-two most downloaded faculty members to compensate for potential gaming and other concerns. As for Hein citation counts, we do not believe there is any gaming of note. Self-citations are a potential concern, but based on our review, removing them would not result in any material changes in our rankings. Ultimately, especially since *U.S. News* will be constructing a citation-based ranking, schools and faculty may attempt to game Hein citations. However, there are a variety of techniques used in the sciences and social sciences to account for such gaming and not merely to measure raw

37. Additionally, Hein misses certain citations because it uses Bluebook and related formats to count citations. In some situations, citing sources use other formats. Again, since this limitation affects all schools equally, we do not believe it materially contributes to any skew in the rankings.

citation counts, but the importance of articles more generally.³⁸ We plan to incorporate these techniques in later iterations of our rankings.

Last, some believe that faculty impact rankings are by their very nature pernicious, and that rankings should focus on what is of most interest to students, such as employment and bar passage rates, teaching quality, and the like. Our response is three-fold. First, our rankings are not meant to be a general guide to students deciding on law schools. Rather, they are simply meant to provide an indication beyond the *U.S. News* peer assessment score of faculty reputation and to improve upon previous scholarly rankings. Second, we believe our rankings are useful to entry-level and lateral academic job candidates when making decisions about whether to accept offers from a particular law school. Third, we believe there is a certain set of students who care about the scholarly reputation and quality of their professors—particularly those students who seek to become law professors, but also those students who are simply interested in learning from a professor with a scholarly bent and interest.

Because *U.S. News* plans to construct a citation-based ranking and potentially incorporate it into its overall ranking, and its project is partly based on our research, we briefly address some concerns regarding this endeavor. First, some opine that well-known and highly cited professors are typically immersed in their research and are generally poor professors, providing a perverse incentive to law schools to preference research at the expense of teaching quality. Second, others contend the type of research that law professors conduct has little relevance to the real world, much less to law students, who are mainly concerned about getting high-quality jobs. Rankings that incorporate faculty impact therefore distort or mask the types of information students should care about most.

As to the first argument, the empirical evidence points in the opposite direction, showing that highly cited professors are at least the same or better than average at teaching.³⁹ This is sensible because professors who are usually highly cited and well known are usually strong speakers, keep up on their subjects, and think creatively about the important issues they teach.

As to the second argument, again, the best evidence is largely to the contrary, showing that legal scholarship is frequently relevant to attorneys, judges, and others.⁴⁰ In addition, in our experience, those scholars who are well known

38. See e.g., Jevin D. West et al., *Author-Level Eigenfactor Metrics: Evaluating the Influence of Authors, Institutions, and Countries Within the Social Science Research Network Community*, 64 J. AM. SOC'Y INFO. SCI. & TECH. 787 (2013).

39. See Benjamin Barton, *Is There a Correlation Between Law Professor Publication Counts, Law Review Citation Counts, and Teaching Evaluations? An Empirical Study*, 5 J. EMPIRICAL LEGAL STUD. 619, 619 (2008); James Lindgren & Allison Nagelberg, *Are Scholars Better Teachers?*, 73 CHI.-KENT L. REV. 823, 823 (1998).

40. See Lee Petherbridge & David L. Schwartz, *An Empirical Assessment of the Supreme Court's Use of Legal Scholarship*, 106 NW. U. L. REV. 995, 1016–19 (2012); David L. Schwartz & Lee Petherbridge, *The Use of Legal Scholarship by the Federal Courts of Appeals: An Empirical Study*, 96 CORNELL L. REV. 1345, 1359–64 (2011). An older study finds that among top law reviews, “articles by young, female, or minority authors are more heavily cited.” See Ian Ayres & Fredrick E. Vars, *Determinants of Citations to Articles in Elite Law Reviews*, 29 J. LEGAL STUD. 427, 427–29 (2000). Specifically, this study found that “[a]rticles by minority women were the most heavily

and highly cited are often well connected to the judiciary, law firms, governments, nonprofits and the like, and can even play a substantial role in helping their students land high-quality jobs. Certainly, there are counterexamples, but again, it is important in our view to focus on trends, not singular examples.

Moreover, as noted, there is an important value of legal scholarship to the academic and legal community beyond the interests of prospective students. Ranking schools on this basis helps the academic and legal community better understand these contributions. This is especially so at top research institutions, where schools are vigorously competing for funding, professors, and other important inputs to a school's overall faculty reputation.

Finally, there is a concern that citation-based rankings may unfairly discriminate against women and minorities. As an initial matter, we know of no recent study showing as much in the legal academy; rather, the only one we are aware of shows that law articles authored by women generate more citations on average.⁴¹ With that said, there are studies in the sciences and social sciences indicating that the most-cited scholars are predominantly men,⁴² and it certainly could be the case that there is a similar skew in legal citations. We believe this is a potentially serious limitation of citation-based methodologies, but that overall—at least based on our current knowledge—the benefits of citation-based rankings outweigh the costs.

As noted earlier, the *U.S. News* peer assessment score largely tracks the overall rankings. This makes it much easier for schools that have been ranked highly historically to remain entrenched in their positions regardless of the efforts at lower-ranked schools to improve the quality of their faculties. Citation-based rankings potentially allow for more movement in overall rankings, which we think is a very positive result.

Moreover, we think law schools and appointments committees take many factors into account when making hiring decisions, including actually reading

cited, with 164 percent more citations than articles by white men.” *Id.* at 439. Another older study determines that “female and minority scholars still lag somewhat behind white men in average citation counts” but that the differences were “small—especially when compared to other variations in citation rates, including those associated with subject matter specialties or religious background.” Deborah Jones Merritt, *Scholarly Influence in a Diverse Legal Academy: Race, Sex, and Citation Counts*, 29 J. LEGAL STUD. 345, 347 (2000). When controlling for other variables, these differences were exceedingly small. *See id.* at 363. Specifically, “[i]n regression analyses, variables reflecting sex and race never explained more than 2.4 percent of the variance in logged citation counts. After controlling for all factors other than productivity, sex and race explained only 0.9 percent of that variance; after adding productivity to the equation, sex and race explained a minute 0.4 percent of the variance in citation counts.” *Id.*

41. Christopher A. Cotropia & Lee Petherbridge, *Gender Disparity in Law Review Citation Rates*, 59 WM. & MARY L. REV. 771, 771 (2018). *See generally* Adam Chilton et al., *Affirmative Action in Law Reviews* (Dec. 3, 2018) (unnumbered working paper), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3295334 [<https://perma.cc/A7C9-4RPX>]. We also plan to undertake gender-based citation analysis in future iterations of our rankings.

42. *See, e.g.*, Daniel Maliniak et al., *Research Note, The Gender Citation Gap in International Relations*, 67 INT’L ORG. 889, 892 (2013). *See generally* María Bordons et al., *One Step Further in the Production of Bibliometric Indicators at the Micro Level: Differences by Gender and Professional Category of Scientists*, 57 SCIENTOMETRICS 159 (2003).

articles to determine quality (rather than merely relying on citation and/or download count), diversity considerations, and many other important factors. In this sense, we do not intend our rankings to be a “draft” guide for law schools. Rather, they are merely another useful data point in determining faculty impact. In sum, faculty reputation and impact is important to students and to the academic and legal community at-large. Again, while it would be “perfect” to have exhaustive qualitative evaluations of each and every law school professor, we must strive for the “good” rather than the perfect, and in our view, faculty impact rankings help contribute to the good.

Thus, despite some important limitations, we think our rankings are beneficial overall and the quantitative results are very likely to be stable in the aggregate, even if these limitations were wholly eliminated. As such, we believe our rankings are a very useful alternative to the *U.S. News* peer assessment rankings, which as noted largely track the overall rankings. At the same time, because we use a somewhat different methodology and set of underlying data than Sisk et al., our rankings provide an important comparison to that widely used ranking. Given the high correlation between the two rankings, and the much lower correlation between these rankings and the *U.S. News* peer assessment score, this indicates that reliable and reproducible quantitative rankings can fairly accurately provide measures of faculty impact at the school-level.⁴³



Citations-based rankings of law schools have become increasingly prominent in recent years. This trend has perhaps culminated with *U.S. News & World Report*'s recent announcement that it will construct a similar ranking, which very likely will become a definitive quantitative measure of law school faculty impact. Our study provides notable insight into the value and potential pitfalls of such a ranking, generally offering an optimistic outlook—at least to the extent one is convinced that quantitative rankings of faculty impact are valuable to the scholarly endeavor. Moreover, we show that mere publication downloads, particularly by those beyond legal academia, can be used effectively to rank faculties, and somewhat surprisingly, these rankings largely mirror those solely constructed with citations. Although we expect more sophisticated and comprehensive quantitative approaches to ranking law school faculties to appear soon, we hope we have shown that even our comparatively crude measure provides many advantages beyond the qualitative surveys that have been pervasive in legal academia.

43. Providing “rankings” of faculty at the individual level is fraught with much more difficulty, and we hope to address such rankings using our dataset in future work. See, e.g., Brian Leiter, *Fifteen Most-Cited Faculty in Law & Economics (Incl. Behavioral Law & Economics) 2010–2014 (Inclusive)*, BRIAN LEITER'S L. SCH. REP. (May 26, 2016), <http://leiterlawschool.typepad.com/leiter/2016/05/15-most-cited-faculty-in-law-economics-incl-behavioral-economics-2010-2014-inclusive.html> [<https://perma.cc/M9GB-6P4Q>].