

Legal Studies Paper No. 2007-25 April 2007

# Understanding the *U.S. News*Law School Rankings

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#### Theodore P. Seto\*

Much has been written on whether law schools can or should be ranked and on the *U.S. News & World Report* rankings in particular.<sup>1</sup>

\* Professor, Loyola Law School, Los Angeles. I am very grateful for the comments, too numerous to mention, given in response to my SSRN postings.

See, e.g., Paul L. Caron & Rafael Gely, Dead Poets and Academic Progenitors: The Next Generation of Law School Rankings, 81 Ind. L.J. 1 (2006); Richard Posner, Law School Rankings, 81 Ind. L.J. 13 (2006); Cass R. Sunstein, Ranking Law Schools: A Market Test?, 81 Ind. L.J. 25 (2006); Russell Korobkin, Harnessing the Positive Power of Rankings: A Response to Posner and Sunstein, 81 Ind. L.J. 35 (2006); Brian Leiter, How to Rank Law Schools, 81 Ind. L.J. 47 (2006); Scott Baker et al., The Rate Race as an Information-Forcing Device, 81 Ind. L.J. 53 (2006); Bernard S. Black & Paul L. Caron, Ranking Law Schools: Using SSRN to Measure Scholarly Performance, 81 Ind. L.J. 83 (2006); Tracy E. George, An Empirical Study of Empirical Legal Scholarship: The Top Law Schools, 81 Ind. L.J. 141 (2006); William P. Henderson & Andrew P. Morriss, Student Quality as Measured by LSAT Scores: Migration Patterns in the U.S. News Rankings Era, 81 Ind. L.J. 163 (2006); Michael Sauder & Wendy N. Espeland, Strength in Numbers? The Advantages of Multiple Rankings, 81 Ind. L.J. 205(2006); Jeffrey E. Stake, The Interplay Between Law School Rankings, Reputations, and Resource Allocation: Ways Rankings Mislead, 81 Ind. L.J. 229 (2006); Lawrence A. Cunningham, Scholarly Profit Margins: Reflections on the Web, 81 Ind. L.J. 271 (2006); Theodore Eisenberg, Assessing the SSRN-Based Law School Rankings, 81 Ind. L.J. 285 (2006); Rafael Gely, Segmented Rankings for Segmented Markets, 81 Ind. L.J. 293 (2006); Michael E. Solimine, Status Seeking and the Allure and Limits of Law School Rankings, 81 Ind. L.J. 299 (2006); Alex M. Johnson, Jr., The Destruction of the Holistic Approach to Admissions: The Pernicious Effects of Rankings, 81 Ind. L.J. 309 (2006); Nancy B. Rapoport, Eating Our Cake and Having It, Too: Why Real Change Is So Difficult in Law Schools, 81 Ind. L.J. 359 (2006); Sam Kamin, How the Blogs Saved Law School: Why a Diversity of Voices Will Undermine the U.S. News & World Report Rankings, 81 Ind. L.J. 375 (2006); Rachel F. Moran, Of Rankings and Regulation: Are the U.S. News & World Report Rankings Really a Subversive Voice in Legal Education?, 81 Ind. L.J. 383 (2006); Patrick T. O'Day & George D. Kuh, Assessing What Matters in Law School: The Law School Survey of Student Engagement, 81 Ind. L.J. 401, 403 (2006); Richard Morgan, Law School Rankings, 13-JUL Nev. Law. 36 (2005); David A. Thomas, The Law School Rankings Are Harmful Deceptions: A Response to Those Who Praise the Rankings and Suggestions for a Better Approach to Evaluating Law Schools, 40 Hous. L. Rev. 419 (2003); Paul D. Carrington, On Ranking: A Response to

Indeed, in 1997, 150 law school deans took the unusual step of signing a joint letter condemning the *U.S. News* rankings.<sup>2</sup> The following year, the Association of American Law Schools commissioned a study by Drs. Stephen Klein and Laura Hamilton (the "Klein-Hamilton report") calling the *U.S. News* rankings' validity into question.<sup>3</sup> Nevertheless, *U.S. News* has continued to compute and publish its rankings. This Article focuses on *U.S. News*' special issue entitled *America's Best Graduate Schools* published in spring 2006, posted on-line as "America's Best Graduate Schools 2007"<sup>4</sup> (the "2007 issue"). *U.S. News*' staff confirms, however,

Mitchell Berger, 53 J. Legal Educ. 301 (2003); Joanna L. Grossman, Feminist Law Journals and the Rankings Conundrum, 12 Colum. J. Gender & L. 522 (2003); Michael Ariens, Law School Branking and the Future of Legal Education, 34 St. Mary's L.J. 301 (2003); Francine Cullari, Law School Rankings Fail to Account for All Factors, 81 Mich. B.J. 52 (2003); Arthur Austin, The Postmodern Buzz in Law School Rankings, 27 Vt. L. Rev. 49 (2002); R. Lawrence Dessem, U.S. News U.: or, The Fighting Volunteer Hurricanes, 52 J. Legal Educ. 468 (2002); Mitchell Berger, Why the U.S. News & World Report Law School Rankings Are Both Useful and Important, 51 J. Legal Educ. 487 (2001); Ronald A. Cass, So, Why Do You Want To Be a Lawyer? What the ABA, the AALS, and U.S. News Don't Know That We Do, 31 U. Tol. L. Rev. 573 (2000); Brian Leiter, Measuring the Academic Distinction of Law Faculties, 29 J. Legal Stud. 451 (2000); Mark Lemley, Rank, 3 Green Bag 2d 457 (2000); Nancy B. Rapoport, Ratings, Not Rankings: Why U.S. News & World Report Shouldn't Want to be Compared to Time and Newsweek - or the New Yorker, 60 Ohio St. L.J. 1097 (1999); Russell Korobkin, In Praise of Law School Rankings: Solutions to Coordination and Collective Action Problems, 77 Tex. L. Rev. 403 (1998); Terry Carter, Rankled by the Rankings, 84 ABA J. 46 (1998); Richard Markovits, The Professional Assessment of Legal Academics: On the Shift from Evaluator Judgment to Market Evaluations, 48 J. Legal Educ. 417 (1998); Theodore Eisenberg & Martin Wells, Rankings and Explaining the Scholarly Impact of Law Schools, 27 J. Legal Stud. 373 (1998); David C. Yamada, Same Old, Same Old: Law School Rankings and the Affirmation of Hierarchy, 31 Suffolk U.L. Rev. 249 (1997); James Lindgren & Daniel Seltzer, The Most Prolific Law Professors and Faculty, 71 Chi.-Kent L. Rev. 781 (1996), Prof. Tom W. Bell has blogged extensively about his model of the U.S. News law school rankings. See, e.g., http://agoraphilia.blogspot.com/2006/08/reforming-usnwr-law-schoolrankings.html. To date, however, he has not made his model publicly available.

See Russell Korobkin, In Praise of Law School Rankings: Solutions to Coordination and Collective Action Problems, 77 Tex. L. Rev. 403, 403 (1998).

<sup>&</sup>lt;sup>3</sup> See Stephen P. Klein & Laura Hamilton, The Validity of the U.S. News & World Report Rankings of ABA Law Schools (1998), available at http://www.aals.org/reports/validity.html (visited June 6, 2006).

http://www.usnews.com/usnews/edu/grad/rankings/law/lawindex brief.php.

that its methodology has not changed in any respect in the past year.<sup>5</sup> While some of the numbers may have changed, therefore, the Article's analysis applies equally to the "2008" rankings issued on March 30, 2007.

Like many law professors, I have long found the *U.S. News* rankings perplexing. Although I generally focus on the school at which I teach – Loyola Law School, Los Angeles – and its ranking competitors, the nature of my difficulties is better illustrated by *U.S. News*' 2007 ranking of three of America's best-known law schools: Yale (ranked 1<sup>st</sup>), Stanford (ranked 2<sup>nd</sup>), and Harvard (ranked 3<sup>rd</sup>). As a Harvard graduate, I confess bias. I also want to assure readers that I hold both Yale and Stanford in very high regard. Nevertheless, I suggest that even impartial observers might perceive a need for further justification of *U.S. News*' bottom line with respect to these schools.

Consider the following Harvard-Stanford statistics. About 58% of Harvard's students had Law School Admission Test scores ("LSATs") of 172 or higher; in absolute numbers, about 980 students. Harvard's law library – the heart of any research institution – was without peer. Legal academics ranked Harvard with Yale as the best school in the country. Stanford, by contrast, reported that only about 25% of its much smaller student body had LSATs of 172 or higher; in absolute numbers, about 130 students (about 13% as many as Harvard). Its law library was about one-quarter the size of Harvard's – indeed, it was smaller than the library at the school at which I teach. Consistent with these objective indicators, legal academics ranked Stanford lower than Harvard; judges and lawyers ranked them the same. Yet *U.S. News* ranked Stanford over Harvard. Why?, I wondered. And what might that mean about *U.S. News*' relative ranking of less well-known schools?

U.S. News' conclusions with regard to Yale and Harvard were also puzzling. The two were ranked equally by law professors; judges and practitioners ranked Yale slightly higher. Yale reported that only about 50% of its students had LSATs of 172 or higher; in absolute numbers,

<sup>&</sup>lt;sup>5</sup> Telephone conversation with Mr. Samuel Flanagan, Deputy Director of Data Research, *U.S. News & World Report*, March 30, 2007.

<sup>&</sup>lt;sup>6</sup> Computed by interpolation based on Harvard's reported 75<sup>th</sup> percentile LSAT (176), 50<sup>th</sup> percentile LSAT (173), and 2004-2005 FTE JD student count (1,679).

Computed by interpolation based on Stanford's reported 75<sup>th</sup> percentile LSAT (172), 50<sup>th</sup> percentile LSAT (169). and 2004-2005 FTE JD student count (514).

about 290 students (about 30% as many as Harvard). Yale's graduates passed the New York bar examination at a lower rate than Harvard's – marginally lower, but lower nevertheless. Yale's law library was less than half the size of Harvard's. Yet *U.S. News* awarded Yale an "overall score" of 100, Harvard an "overall score" of only 91 – a nine-point difference. In the *U.S. News*' universe, a nine-point difference was huge – further down the scale, for example, it meant the difference between being ranked in the top 20 and being excluded from the top 40.

Indeed, as I began playing with a spreadsheet I had written to replicate the 2007 *U.S. News* computations, I discovered that even if Harvard had reported a perfect median LSAT of 180, it still would have been ranked third. And even if Yale had reported a median LSAT of just 153 (placing it in the "fourth tier" of law schools ranked by LSAT),<sup>9</sup> it still would have been ranked first. Indeed, Yale would have been ranked higher than Harvard even if both had been true – if Harvard had reported a perfect median LSAT and Yale a 153. I was stunned. Was Yale really that much better than Harvard in all other material respects? If not, what might the parts of *U.S. News*' methodology that led to these counterintuitive results tell us about the validity of *U.S. News*' ranking of other schools?

This Article reports the results of my explorations. Its descriptions, analyses, and conclusions are based primarily on *U.S. News*' published descriptions of its 2007 computations, telephone conversations with *U.S. News*' staff clarifying those descriptions, and a spreadsheet I have written that approximately replicates those computations. <sup>10</sup> The Article's goals are relatively modest: to help prospective students, employers, and other law school stakeholders read the *U.S. News* rankings more critically and to help law school administrators get a better handle on how to manage their schools' rankings. In addition, the Article suggests ways in which *U.S.* 

Computed by interpolation based on Yale's reported 75<sup>th</sup> percentile LSAT (175), 50<sup>th</sup> percentile LSAT (172), and 2004-2005 FTE JD student count (581).

Tied with 13 other schools for 147<sup>th</sup> out of 180.

A version of my spreadsheet can be downloaded from my website at http://www.lls.edu/academics/faculty/seto.html. Unfortunately, posting such a spreadsheet with data already entered would risk violating *U.S. News*' and the ABA's copyrights. The version posted on my website is therefore devoid of data; it assumes instead that readers have copies of the relevant *U.S. News* pages and ABA Take-Offs in hand. (Copies of the relevant *U.S. News* pages can be obtained at http://www.usnews.com.) Data from those pages and Take-Offs must then be entered manually into the spreadsheet provided. My apologies. Once the data is loaded, however, the spreadsheet computes "overall scores" using a methodology approximating that used by *U.S. News*. The result is a tool that permits users to explore variations on the 2007 *U.S. News* rankings to their hearts' content.

*News* methodology might be improved. It does not, however, purport to offer a systematic critique of either the *U.S. News* rankings or ranking in general.

Part I describes both *U.S. News*' 2007 methodology and problems involved in replicating it. Part II is intended to help prospective students, employers, and other law school stakeholders read *U.S. News*' results intelligently. Prospective students and others trying to understand how to use *U.S. News*' rankings in their decision-making may wish to focus on this part, although a reading of Part I may also be necessary to understand some of the technical details. Part III addresses the problem of managing rankings. Part IV, finally, suggests ways in which the rankings might be improved.

# Part I. Computing the Rankings

U.S. News' 2007 ranking process began with 12 input variables. According the methodological description published in the 2007 issue, those variables were "standardized," weighted, and totaled. The resulting raw combined scores were then "rescaled so that the top school received 100 and other schools received a percentage of the top score." U.S. News labeled the resulting figure the school's "overall score," reporting this score to the nearest integer for each of the 100 law schools with the highest such scores, in rank order. In addition, it classified the 36 law schools with the next highest overall scores as "third tier" and the remaining 44 as "fourth tier," listing the schools in each such tier alphabetically without reporting their overall scores or ranks within their respective tiers.

#### A. The Input Variables

1. Peer assessment scores.—U.S. News' first input variable reported the results of a survey administered by U.S. News in the fall of 2005, in which "the law school dean, dean of academic affairs, chair of faculty appointments, and the most recently tenured faculty member at each law school accredited by the American Bar Association" were asked to rate law schools on a 1 to 5 scale. "1" was to mean "marginal"; "5,"

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The letter soliciting participation in the survey stated that: "This survey is being sent to the law school dean, dean of academic affairs, chair of faculty appointments, and the most recently tenured faculty member at each law school accredited by the American Bar Association." Letter from Robert Morse, Director of Data Research, *U.S. News & World Report* to Richard Bales, Professor of Law, Chase School of Law (Sep. 29, 2005) (on file with the author).

outstanding. The 2007 issue reported that 67% of surveyed academics responded. The average score awarded to each law school was published in the 2007 issue itself; these average scores were apparently not further modified before being "standardized" and combined with *U.S. News* remaining input variables.

- 2. Assessment scores by lawyers/judges.—A second input variable reported the results of a similar survey of lawyers and judges in the fall of 2005. Again, U.S. News did not disclose how its respondents were chosen how they were distributed geographically, between large and small firms, or, in the case of judges, between state and federal or trial and appellate courts. The 2007 issue did report that only 26% of those to whom the survey was sent actually responded. It did not report whether members of the group that responded differed demographically from those to whom the survey had initially been sent. As was true of peer assessment scores, average scores for the various law schools were published in the 2007 issue and apparently not adjusted before being incorporated in U.S. News' further computations.
- 3. Median LSATs.—In computing its third variable, "median LSAT scores," U.S. News began with each school's median LSAT score for first-year full-time students entering in 2005. Scores for part-time students most importantly, scores for students in evening programs were omitted. Although the 2007 issue reported the 25th and 75th percentile LSATs for each school's full-time students, those figures were not actually used in computing the rankings; the medians reported by each school to U.S. News

"In order to obtain a complete picture of the admissions statistics of a law school, the school must include all persons in the particular category, regardless of whether that person was admitted through any special admissions program rather than through the normal admissions process. The admissions year is calculated from October 1 through September 30. Schools which admit in the spring and/or summer must include those students in the totals."

As a result of this error, Baylor was ranked 51<sup>st</sup> when in fact it should have been ranked 56<sup>th</sup>, Arizona State, Cardozo, Cincinnati, and Florida State were ranked 53<sup>rd</sup> when they should have been ranked 52<sup>nd</sup>, and Utah was ranked 57<sup>th</sup> when it should have been ranked 56<sup>th</sup>. All results reported in this Article assume that the Baylor error is corrected.

<sup>12</sup> It appears that *U.S. News* used median LSAT and UGPA figures for Baylor that reflected omitted students who had matriculated in the spring or summer of 2005. *See* Tom W. Bell, *Baylor Explains the Data it Reported on the USN&WR Rankings*, http://agoraphilia.blogspot.com/2006/06/baylor-explains-data-it-reported-for\_27.html. This was clearly incorrect. The ABA 2005 Annual Questionnaire Part II: Enrollment states:

were used instead. In creating my spreadsheet, I used the medians themselves, as published by the ABA.<sup>13</sup>

The next step was critical but not publicly disclosed: before being "standardized" and combined with other input variables, all median LSAT scores were first converted into percentile equivalents. In other words, a median LSAT of 150 became approximately 42.7%, 160 became approximately 79.7%, 170 became approximately 97.5%, and so on. This conversion significantly changed the effect of LSATs on overall scores. Differences in high LSAT scores are minimized when converted into percentiles; differences in lower LSAT scores are exaggerated. For example, the one-point difference between a 172 (98.6 percentile) and a 173 (98.9 percentile) converts to a .3 difference in percentile points; the same one-point difference between a 153 (54.6 percentile) and a 154 (59.3 percentile) converts into a 4.7 difference in percentile points – more than 15 times larger. Although differences in LSATs accounted for 12.5% of differences in overall scores on average, at the high end they accounted for much less, at the low end for more.

Unfortunately, there is no fixed way of converting LSAT scores into percentile equivalents. Because students sitting for a particular LSAT administration may do a little better or a little worse than those taking the test on a different date, percentile equivalents will not be identical across test administrations. Because the number of students who take the LSAT is large, however, fluctuations are likely to be small. *U.S. News* did not disclose which LSAT percentile conversion table it used. In my spreadsheet, I used the table for the combined June, October, and December 2005 administrations – the only table reported on LSAC's website. My conversions may therefore not be identical to *U.S. News'*, but are probably not significantly different.

4. *Median UGPAs*.—Like median LSATs, the median undergraduate grade point averages ("UGPAs") of first-year full-time students entering in 2005 were not actually reported in the 2007 issue. Instead, the 2007 issue reported the 25<sup>th</sup> and 75<sup>th</sup> percentile UGPAs, computed on a 4.0 scale, for each school. Again, in creating my spreadsheet, I used the actual medians for full-time students published by

See ABA•LSAC OFFICIAL GUIDE TO ABA-APPROVED LAW SCHOOLS 67 (2007 ed.) (LSAT and UGPA figures are for the 2005 entering class), *id.* at 70-829 (data for each school).

Telephone conversation with Mr. Samuel Flanagan, Deputy Director of Data Research, *U.S. News & World Report*, June 2, 2006.

The table is posted on a portion of the Law School Admissions Council website not accessible to the public.

the ABA.<sup>16</sup> Unlike median LSATs, however, median UGPAs were incorporated directly into *U.S. News*' final computation; they were not first restated in percentile terms. This meant that their effects on overall scores were uniform across the entire range of law schools. Because the effects of median LSATs were understated at the top and overstated at the bottom, median UGPAs ended up having a more significant effect on overall scores and therefore on relative rankings for top-ranked schools; for lower-ranked schools, the reverse was true.<sup>17</sup>

5. Acceptance rates.—U.S. News labeled its fifth variable "acceptance rate" or "proportion of applicants accepted." The number it reported for each school in its 2007 issue reflected the percentage of applicants for the 2005 entering class actually accepted by that school. Again, only applications and acceptances for each school's full-time program were taken into account; evening program applications and acceptances were omitted.

*U.S. News* faced a technical problem in combining the resulting variable with others. In the case of acceptance rates, lower is better; lower acceptance rates suggest greater selectivity. For the first four variables, by contrast, higher is better (*e.g.*, higher reputation scores, LSATs, or UGPAs). To combine acceptance rates with its other variables in a meaningful way, therefore, *U.S. News* had to invert the acceptance rate data set to make higher better. It accomplished this by subtracting all acceptance rates from 1 (or 100%). The effect was to convert acceptance rates into rejection rates. These rejection rates were then "standardized" and combined with *U.S. News*' remaining input variables.

6. Employment rates at graduation.—U.S. News reported employment rates at graduation for students graduating in 2004 for 132 schools; it did not report such rates for the remaining 48, apparently because the 48 in question had not reported such rates to U.S. News. With respect to the rates actually reported, the 2007 issue stated: "Employment rates include graduates reported as working or pursuing graduate degrees ... Those not seeking jobs are excluded." Graduates working part-time or working in non-law-related jobs were counted as employed for this purpose. For the 48 schools not reporting such rates, the 2007 issue noted "N/A" in its tables. For purposes of including this variable in its

<sup>&</sup>lt;sup>16</sup> See notes 12 & 13, supra.

The switch-over point appears to have been an LSAT of approximately 161. Above this point, LSATs had less of an effect on overall scores; below this point, more.

Telephone conversation with Mr. Samuel Flanagan, Deputy Director of Data Research, *U.S. News & World Report*, June 2, 2006.

computation of overall scores, however, it estimated employment rates at graduation (EG) for those schools based on their reported employment rates 9 months after graduation (E9), using the equation:

$$EG = (E9 * .996) - .294.$$

This was apparently intended to capture the relationship, on average, between the two variables for schools reporting both numbers.

- 7. Employment rates 9 months after graduation.—The 2007 issue also reported employment rates 9 months after graduation for students graduating in 2004. All schools reported the relevant rates; no estimation was therefore required. For purposes of this variable only, the issue stated, "25 percent of those whose status is unknown are also counted as working."
- 8. Bar passage rate indicators.—Each school's "bar passage ratio indicator" was based on first-time bar passage rates in the summer 2004 and winter 2005 bar examination administrations in the state in which the largest number of 2004 graduates of that school sat for the bar not necessarily the state in which the school was located. The 2007 issue reported each school's relevant first-time bar passage rate, the state for which the school's bar passage rate was measured, and the overall bar passage rate for that state, but did not report the "bar passage ratio indicator" itself. Each school's bar passage rate divided by the overall bar passage rate for the state in question. The resulting figures were then "standardized" and combined with the remaining input variables.
- 9. "Expenditures per student for instruction, library, and supporting services."—Law school financial data, collected separately by both the ABA and U.S. News, are not published by either. The ABA, however, provides law school deans with a compilation of computergenerated reports, called "take-offs," summarizing at least some of the collected data (the "Take-Offs"). There are several problems with using ABA Take-Off data in lieu of the unpublished numbers actually used by U.S. News. First, ABA Take-Offs are marked "confidential" and are not readily accessible, even to law school faculty members. Second, it is not

Telephone conversation with Mr. Samuel Flanagan, Deputy Director of Data Research, *U.S. News & World Report*, June 5, 2006.

See, e.g., Take-offs from the 2005-06 Annual ABA Law School Questionnaire (the "2005 Take-offs").

I had access to them by reason of the fact that my Dean had asked me to analyze them. Pursuant to the ABA's request, I have not disclosed any school-

clear that law schools report the same numbers to U.S. News that they report to the ABA. Discrepancies may arise simply by reason of the fact that U.S. News requests its numbers later, by which time at least some schools may have further refined their figures. In addition, it must be assumed that U.S. News seeks clarification from the relevant school if a particular number seems out of line. Such refinements or clarifications will not necessarily be reflected in the ABA Take-Offs. Third, the Take-Offs sometimes omit data entirely for one or more schools. Since the data set is "standardized" before being combined with other variables, even one omission can have significant effects on rankings, including the relative rankings of schools other than the one for which data is missing. Fourth, the Take-Offs contain a distressingly high number of either input or arithmetic errors. For example, the Take-Offs report that one "third tier" school increased its "direct" expenditures from under \$6 million in 2003-2004 (a number consistent with its ranking) to over \$65 million in 2004-2005 – a more than 10-fold jump. One assumes that the 2004-2005 figure reflected an input error. In any event, that school's U.S. News ranking did not move correspondingly, so it does not appear that U.S. News used the ABA number. Finally, if U.S. News had used numbers identical to those reported in the ABA Take-Offs, it ought to be possible to replicate U.S. News' analysis fairly closely by plugging those numbers into the methodology U.S. News says it used. It isn't. In sum, the ABA Take-Offs appear to approximate the numbers U.S. News actually used, but do not appear to be identical.

With these caveats, the variable entitled "average 2004 and 2005 expenditures per student for instruction, library, and supporting services" (hereafter "educational' expenses per student") used in computing the 2007 *U.S. News* rankings began with a number defined in the same way as "Total Direct Expenditures," reported in Table F-15 of the ABA Take-Offs, reduced by "Tuition Reimbursements, Grants, and Loan Forgiveness," also reported in that table. *U.S. News* divided the resulting number by the "full-time equivalent" (FTE) number of J.D. students – a number reported in Table C-9 of the ABA Take-Offs. The resulting expenditures-per-student figures for 2003-2004 and 2004-2005 for each school were then averaged.

Three aspects of this computation deserve note here. First, although *U.S. News* called this variable "expenditures per student for instruction, library, and supporting services," because of the way the ABA defines "direct expenditures" the variable in fact included all current expenses

identifiable data in its Take-Offs in connection with this Article or the spreadsheet posted on my website.

charged to the law school's budget other than expenses in eleven narrowly defined categories and expenses of "auxiliary enterprises" – regardless of how directly such expenses related to the school's J.D. educational program. If a school's LLM programs were included in the school's budget, for example, all expenses of such programs were included in this U.S. News variable. If a school's clinics were included in the school's budget, their costs were similarly included; if they had their own budgets, they were not. If expenses were capital rather than current, they were excluded, although "capital" for this purpose was defined in a very peculiar way. I discuss what is included in this variable and what is not in greater detail in Part II.B(4) below.

Second, scholarships were explicitly disfavored in the computation. Although the ABA includes scholarships in "direct expenditures," *U.S. News* shifted them into its lower-weighted "expenditures per student on all other items including financial aid" category. As a result, schools that chose to allocate revenues to scholarships rather than to other purposes were down-rated.

Third, although all "expenditures ... for instruction, library, and supporting services" were counted, including expenditures on programs other than the J.D., only J.D. students were included in the "full-time equivalent" count.<sup>22</sup> This meant that schools with large LL.M. or other non-J.D. programs were credited with artificially high educational expenditures per student.

Before these two-year average expenditures-per-student numbers were "standardized" and combined with other variables, they were further modified in an important but undisclosed way: *U.S. News* applied cost-of-living-adjustments ("COLAs"), obtained from Runzheimer International, <sup>23</sup> to reflect different costs of living in different locations. Unfortunately, Runzheimer COLAs are not publicly available. In a telephone conversation with a Runzheimer executive, I was told that *U.S. News* had received those numbers on an accommodation basis because of its media status and that I would not be able to afford a comparable set. I therefore purchased a set of reasonably-priced COLAs from ACCRA, a not-for-profit source of COLAs, <sup>24</sup> instead.

Telephone conversation with Mr. Samuel Flanagan, Deputy Director of Data Research, *U.S. News & World Report*, June 27, 2006.

Telephone conversation with Mr. Samuel Flanagan, Deputy Director of Data Research, *U.S. News & World Report*, June 14, 2006. *See* http://www.runzheimer.com/web/gms/home.aspx.

See, e.g., Michael S. Knoll & Thomas D. Griffith, Taxing Sunny Days: Adjusting Taxes for Regional Living Costs and Amenities, 116 HARV. L. REV.

In attempting to use the ACCRA COLAs, however, I discovered two problems with using them in place of the COLAs U.S. News had used. First, the relative costs of living in different locations vary with profession and economic status. In some towns, law professors live at the top of the real estate market; in others (Los Angeles, for example), they live more modestly. Secretarial and janitorial staffs often face different cost of living issues than those faced by professors. The ACCRA COLAs were not broken out by socioeconomic status; the Runzheimer COLAs, I had been told, were. Second and more importantly, COLAs can vary markedly depending on how one draws the geographic boundaries of different COLA regions. Should Yale Law School data be adjusted to reflect New Haven COLAs? Or should average Connecticut COLAs be used instead? Or perhaps COLAs for the New York City metropolitan area? U.S. News' staff informed me that it had used "metropolitan area" COLAs for schools located in "metropolitan areas," but had otherwise used state averages. Since I lacked access to Runzheimer's definition of "metropolitan areas," it was often impossible to determine which COLA had been applied. The ACCRA data set was broken up geographically by reporting political units, not "metropolitan areas." Manhattan, for example, was separate from Queens. In addition, the ACCRA data set only included numbers for political units that had chosen to participate. Brooklyn and Minneapolis, for example, were omitted entirely. And the ACCRA data set did not include state average COLAs.

If I had had financial data I knew to be accurate, I could have computed the COLAs actually used. But the ABA Take-Off numbers appeared to be less than completely reliable. The COLAs I used in my spreadsheet were therefore plug numbers: I began with the most apparently relevant ACCRA COLAs, but adjusted them as necessary to force the spreadsheet to generate "overall scores" identical to those reported by *U.S. News* for the 100 schools for which such scores were reported. With some exceptions, the resulting COLA/error correction numbers seemed plausible as COLAs. This aspect of my analysis, however, was only approximately accurate. In any event, the COLA-adjusted average of each school's 2003-04 and 2004-05 "educational" expenditures per student became *U.S. News*' ninth variable.

987, 990 n.18 (2003) ("The best data on United States regional costs of living is compiled by ACCRA, a nonprofit organization comprising the research staffs of chambers of commerce and other organizations. ACCRA compiles data quarterly from local chambers of commerce that have volunteered to price a list of goods and services in their communities.").

10. Expenditures per student on all other items including financial aid.—U.S. News' tenth variable, entitled "average 2004 and 2005 expenditures per student on all other items including financial aid," began with an expenditure number defined in the same way as "Total Indirect Expenditures" reported in Table F-15 of the ABA Take-Offs. To this was added the school's "Tuition Reimbursements, Grants, and Loan Forgiveness," also reported in that table. (In effect, U.S. News took "Tuition Reimbursements, Grants, and Loan Forgiveness" and moved it from the ABA's direct expenditure category to the ABA's indirect expenditure category. Apart from this change, U.S. News' ninth variable corresponds to direct expenditures; its tenth, to indirect expenditures.) U.S. News divided the resulting number by the "full-time equivalent" number of J.D. students at the school. The resulting expenditures-per-student figures for 2003-2004 and 2004-2005 for each school were then averaged and adjusted for differences in cost of living before being "standardized" and combined with the remaining input variables. I refer to these hereafter as "other expenditures per student" and discuss what is included and what is not in greater detail in Part II.B(4) below.

11. Student/faculty ratios.—The 2007 issue also reported each school's student/faculty ratio as that ratio had been reported to U.S. News. Unfortunately, the ratio reported by U.S. News was different from the ratio reported in Table B-2 of the ABA Take-Offs for a majority of schools; the U.S. News-reported ratio was sometimes higher, sometimes lower. U.S. News' questionnaire merely requested that each school report its student/faculty ratio based on the data it had reported in response to Part 5 of the ABA Questionnaire. 25 That Part 5, however, did not actually require schools to compute such ratios; nor did it provide any guidance as to how to do so. Based solely on the U.S. News and ABA questionnaires, therefore, it was unclear whether respondents should compute the ratio based on actual faculty or FTE faculty, actual students or FTE students, JDs or all students. Different schools apparently resolved these questions in different ways. The student/teacher ratios reported in the 2007 issue and used in the 2007 rankings therefore do not appear to have been computed on a consistent basis from school to school.

This variable posed the same technical problem as acceptance rates: higher student/faculty ratios are worse, lower are better. Again, to combine student/faculty ratios with its other variables in a meaningful way, *U.S. News* had to invert the relevant data set to make higher better. It accomplished this by subtracting each school's student/faculty ratio from

Telephone conversation with Mr. Samuel Flanagan, Deputy Director of Data Research, *U.S. News & World Report*, January 31, 2007.

the highest reported student/faculty ratio, which in 2007 turned out to be 25.2.<sup>26</sup> (Because of the way it "standardized" the various data sets before combining them, the fact that it used different techniques for inverting the acceptance rate and student/faculty ratio data sets turned out to be mathematically irrelevant.) The resulting number then became each school's eleventh variable.

12. Total numbers of volumes and titles in library.—U.S. News added together the total number of volumes and the total number of titles in each school's library to produce its final variable. Although this had the effect of double-counting some volumes, it presumably reflected a compromise between two techniques it believed plausible for rating libraries. The 2007 issue did not report any of the library statistics actually used, presumably because the resulting numbers would not have communicated anything meaningful to readers. I obtained the relevant numbers from the Law Library Comprehensive Statistical Table, Columns 5c and 11c, in the 2005 ABA Take-Offs.

# B. Computing Overall Scores and Ranking the Schools

Because each of the twelve variables was measured on a different scale, those scales had to be "standardized" before the variables could be combined. *U.S. News* accomplished this by normalizing them, using a common forced mean and a common forced standard deviation.<sup>27</sup> Since the resulting raw overall scores were then to be rescaled, the forced mean and standard deviation actually used were irrelevant – any common forced mean and standard deviation would have produce the same rescaled results. In his analysis, parts of which he has published in his blog, Tom Bell uses "z-scores" <sup>28</sup> – which reflect a forced mean of zero and a forced standard deviation of one.<sup>29</sup> In mine, I used a forced mean and standard deviation similar to those of *U.S. News* reported "overall scores" so as to make the disaggregated normalized figures more intuitively meaningful.

In any event, after being normalized, the twelve input variables were weighted as follows:

Telephone conversation with Mr. Samuel Flanagan, Deputy Director of Data Research, *U.S. News & World Report*, June 2, 2006.

Telephone conversation with Mr. Samuel Flanagan, Deputy Director of Data Research, *U.S. News & World Report*, June 2, 2006.

http://agoraphilia.blogspot.com/2006/06/z-scores-in-model-of-usnwrs-law-school.html.

See http://www.animatedsoftware.com/statglos/sgzscore.htm.

25%
15%
14%
12.5%
10%
9.75%
4%
3%
2.5%
2%
1.5%
0.75%

The resulting numbers were then added together.

According to the 2007 issue, the resulting raw combined scores were then "rescaled so that the top school received 100 and other schools received a percentage of the top score." The *U.S. News* staff clarified this description for me: the raw scores were rescaled by setting the top score at 100, the bottom score at zero, and the remaining scores, rounded to the nearest integer, in a manner proportional to their respective distances from the top and bottom. Mathematically, my spreadsheet accomplished this by applying a forced mean and forced standard deviation to the raw combined scores, rounded to the nearest integer, and adjusting that mean and standard deviation until they produced the requisite top and bottom scores to two decimal points. The school of the resulting raw combined scores at 200 in the resulting raw combined scores, rounded to the nearest integer, and adjusting that mean and standard deviation until they produced the requisite top and bottom scores to two decimal points.

*U.S. News* labeled the resulting figure for each school the school's "overall score," reporting this score for each of the 100 schools with the highest such scores, in rank order. Schools that turned out to have identical overall scores after rounding to the nearest integer were reported as tied for the highest rank for which any of them might have qualified. Thus, schools that shared the 17<sup>th</sup> and 18<sup>th</sup> slots after rounding were reported as tied for 17<sup>th</sup> place. After ranking the schools with the 100 highest overall scores, *U.S. News* classified the 36 schools with the 101<sup>st</sup> through 136<sup>th</sup> highest overall scores as "third tier" and the remaining 44 as "fourth tier," listing

Telephone conversation with Mr. Samuel Flanagan, Deputy Director of Data Research, *U.S. News & World Report*, June 2, 2006.

Because of my problems with the raw data, this correspondence was never exact. In my spreadsheet, I used the forced mean and forced standard deviation that produced the requisite top and bottom scores and then adjusted COLAs until computed overall scores matched reported overall scores for the top 100 schools.

the schools in each such tier alphabetically without reporting their overall scores.

# Part II. Reading the Rankings Critically

What do *U.S. News*' ranks and overall scores mean and to what extent can we prudently rely on them in making decisions? Here, I need to distinguish between two concepts statisticians sometimes use to answer questions like these: reliability and validity.

Statisticians say a measure is "reliable" if repeated measurements of the same thing are likely to produce similar results. Another way of thinking about statistical reliability is that it describes the random error of the measure; a measure subject to significant random error is "unreliable"; a measure not subject to random error in significant amounts is "reliable." A measure is "valid," by contrast, if it measures what it is supposed to measure and "invalid" if it does not. A procedure that purports to measure the quality of law schools, for example, is "valid" if it is actually capable of measuring law school quality (whatever that means).

The two concepts are quite different. A valid measure may nevertheless be subject to significant random error. Or a perfectly reliable procedure may not actually measure what it purports to measure. Before we can prudently rely on any measure to make decisions, we should confirm that it is both reliable and valid. If Measurement A results in a rank of  $43^{\rm rd}$  and Measurement B of the same law school in a rank of  $49^{\rm th}$ , and if we care about differences of six ranks, then we cannot prudently rely on either measurement. But even if repeated measures produce constant results – that is, even if they are "reliable" – we should not use them in making decisions if they do not actually measure what we care about.

In addition, of course, a ranking system based on multiple inputs may be of questionable utility if some or all of the input data sets are themselves questionable, for whatever reason. I will discuss the reliability and validity of specific inputs in connection with my discussion of the validity of the ranking system as a whole. This Part II is therefore divided into two parts, addressing two questions: "Are the *U.S. News* rankings reliable?" and "Are they valid?"

## A. Reliability

I begin with my conclusions. First, *U.S. News*' law school "ranks" are unreliable – that is, they are subject to significant random error.<sup>32</sup> Second, its "overall scores," if read with a "±2" appended, appear to be relatively reliable – with caveats.<sup>33</sup>

My first conclusion can be illustrated by a simple example involving a change in the numbers of *U.S. News*' lowest-ranked school – which I will call the "bottom anchor" but otherwise leave unnamed. Assume that the reported 9-month employment rate for graduates of the bottom anchor falls by just 1 percentage point and nothing else changes at any school in the country. In a reliable ranking system, one would hope that such a change would not affect the rank of any other school. After all, this is a miniscule change in one statistic at a school that few lawyers, law professors, or law students have heard of.

As you might expect, nothing happens to the bottom anchor's overall score (by definition, zero) or rank (180<sup>th</sup>). But this tiny change wreaks havoc on the relative ranking of the top 100 law schools. Seattle and San Francisco jump six ranks, Fordham jumps from 32<sup>nd</sup> to 27<sup>th</sup>, and Rutgers Camden, San Diego, and Indiana Indianapolis each jump four. Houston, Kansas, Nebraska, and Oregon, by contrast, each drop three ranks. Overall, 41 of the top 100 schools change rank. Fordham's dean gets a bonus. Fingers are pointed and voices raised at Houston. All because of a trivial change in the employment statistics of a single school far away in the spreadsheet. Stranger still, if the bottom anchor's 9-month employment rate falls an additional 4 percentage points (that is, a total of 5 percentage points) – and nothing else changes at any school in the country – most of these effects disappear, but the reordering moves into the Top Ten. UC Berkeley and Virginia both drop from 8<sup>th</sup> to 9<sup>th</sup> place. At the other schools named above, it is as if nothing had ever happened.

Prospective students, employers, and faculty members, reading that UC Berkeley and Virginia have dropped to 9<sup>th</sup> place, may decide to go elsewhere. Regents, trustees, and university presidents, reading that Seattle, San Francisco, and Fordham have advanced dramatically in the rankings, may record this accomplishment in the apparently responsible deans' performance evaluations. What the foregoing example suggests,

By "significant" I mean simply that the errors are of a size that the average reader would care about.

By "relatively reliable," similarly, I mean that the errors are of a size that the average reader would not worry about.

however, is that basing decisions on this kind of difference or change in U.S. News ranks is unwarranted.

The same kind of random changes in rank can occur if small changes occur at the other end of the spreadsheet as well. Assume that Yale's reported 9-month employment rate rises by 1 percentage point and that nothing else changes at any school in the country. This relatively minor change has no effect, of course, on Yale's overall score (by definition, 100) or rank (1<sup>st</sup>). But it makes a big difference for Harvard, which now moves into a tie with Stanford for second place. Next, assume that Yale's 9-month employment rate rises by just 1/10<sup>th</sup> of a percentage point more, from 99.9% to 100%. Catastrophe! UC Hastings drops 6 ranks, from 43<sup>rd</sup> to 49<sup>th</sup>, almost losing its place in the top 50.

How can the rankings be so extraordinarily sensitive to tiny changes unrelated to the schools affected? Two aspects of the *U.S. News* system account for this sensitivity. First, the fact that *U.S. News* insists on assigning an overall score of 100 to the top-scoring school and an overall score of zero to the bottom-score school, no matter what, means that any change in one of those schools' numbers will shift the entire scale against which other schools are measured. If any Yale number changes, Yale's overall score cannot change. Instead, "100" is effectively redefined to mean something new. This, in turn, means that every other overall score (except zero) is redefined as well. Conversely, if a number at the bottom anchor changes, "zero" is effectively redefined to mean something new – as is every other overall score except 100. As a result, changes in input variables for Yale or the bottom anchor, particularly in higher-weighted variables, can trigger extensive random changes across the system.

The same is true of a change in the *identity* of the top or bottom anchor. Unless  $U.S.\ News$ ' methodology changes, Yale is unlikely to lose its position as top anchor any time soon. But the identity of the bottom anchor can change at any time. The 2007 issue noted that seven provisionally ABA-accredited law schools were not included in the rankings because they lacked full accreditation. In future rankings, one of those seven could displace the current bottom anchor, redefining "zero" in a significant way.  $^{34}$  Or the current bottom anchor could leave the rankings.

The 2007 issue identified the seven provisionally-accredited and therefore omitted law schools as Western State University, Barry University, Florida A&M University, Florida International University, John Marshall Law School (Atlanta), St. Thomas School of Law (Minnesota), and Appalachian School of Law. Since then, Barry, Florida International, St. Thomas, and Appalachian have received full accreditation and four new schools have been provisionally accredited: Charleston School of Law, Faulker University Thomas Goode Jones School of Law,

Another school's statistics would then be used to define the meaning of "zero" – and of every other overall score less than 100.

By itself, the foregoing problem might not produce the extreme sensitivity illustrated in the foregoing examples. Perfect Yale 9-month employment numbers move Hastings' unrounded overall score by only 0.02 (in my spreadsheet, from 51.50 to 51.48). A second aspect of *U.S. News*' system, however, magnifies this effect. Before ranking schools by overall scores, *U.S. News* rounds each overall score to the nearest integer. A school's unrounded overall score may be slightly above the midpoint between two integers. That score will be rounded up (from 51.50 to 52). A small change in the unrounded score, however, may push it below the midpoint. Thereafter, the score will be rounded down (from 51.48 to 51). As a result, a small change (here, 0.02) in the school's unrounded overall score can trigger a full one-point change (from 52 to 51) in the score upon which relative rankings are based.

*U.S. News* then lumps all schools with the same rounded overall score together and ranks them as tied. Hasting's rounded overall score of 52 puts it in 43<sup>rd</sup> place. The hypothetical Yale employment figure change, however, moves UC Hastings' unrounded score enough to cause it to be rounded down to 51 instead. Under *U.S. News*' methodology, it is now lumped together with schools with rounded overall scores of 51, which *U.S. News* declares to be tied for 49<sup>th</sup> place. UC Hastings has just fallen six ranks.

Before going any further, I need to make one thing clear. I am *not* predicting that if Yale's 9-month employment figure goes up by 1.1 percentage points, UC Hastings will fall by six ranks. My model, as I have noted, is only approximate. Because *U.S. News*' methodology is so sensitive to small changes, even minute imperfections in any model may trigger large changes in predicted rank. Every time I have made adjustments to my model and rerun the scenarios reported above, my spreadsheet has produced a different parade of ranking changes. My point is simply that *U.S. News*' reported ranks are extraordinarily sensitive to small changes in data or procedure – "unreliable," in the language of statisticians – for the reasons given above.

By contrast, the parts of the U.S. News system that produce the sensitivity illustrated above will generally not trigger apparently random changes in *overall scores* of more than  $\pm 2$ . In response to modest changes in input variables, most overall scores change by no more than one point,

University of La Verne College of Law, and Liberty University School of Law. *See* http://www.abanet.org/legaled/approvedlawschools/approved.html (visited Jan. 30, 2007).

none by more than two. When schools' overall scores shift by one or two points, they are merely shifting within that "±2" range. This, in turn, implies that overall scores are at least somewhat reliable – within a two-point margin of error. (Recall, please, that I am not asserting that they are "valid" – that is, I am not asserting that they measure anything we care about. I am merely asserting that they are less subject to random error.)

In reading the *U.S. News* rankings, therefore, it would seem to be prudent to focus on overall scores, not merely on ranks. When we turn to overall scores, however, we discover something peculiar: *U.S. News* only publishes scores for the 100 schools with the highest such scores; no scores are given for the remaining 80. Why? The reason is simple. After computing raw overall scores, *U.S. News* rescales all scores so that the highest score will always be 100 and the lowest score will always be zero. Were it to publish all of its rescaled overall scores, it would necessarily have to state in print that some school rates a "zero" – which undoubtedly would make that school very unhappy.

The fact that some school will always be assigned a score of "zero," however, is symptomatic of a much deeper problem: because of the way *U.S. News*' assigns them, its overall scores have no inherent meaning. In fact, the score assigned to a given school in any given computational run will depend entirely on the choice of schools to be ranked in that run. Applying exactly the same methodology to compute overall scores for Yale, Stanford, and Harvard and no others, for example, would result in the following overall scores:

Yale	100
Stanford	9
Harvard	0

Does Harvard deserve an "overall score" of zero? Probably not. Does any other ABA-accredited school? Probably not either.

As a result, when *U.S. News* awards Yale a 100 and Harvard a 91, the size of the difference has no inherent meaning. It does not mean that Harvard is only 91% as good as Yale. It does not mean that a Harvard legal education is only 91% as effective as a Yale legal education. It does not mean that a Harvard law graduate is only 91% as likely to meet employers' standards as a Yale law graduate. There is no way of determining, based solely on the size of the difference, whether the purported difference ought to affect any decision we are trying to make. Assume that a prospective student is trying to decide between Harvard and Yale. She prefers Boston to New Haven as a place to live, but notes that

Yale has an overall score of 100, Harvard an overall score of 91. Is this nine-point difference meaningful enough that she should choose Yale over Harvard because of the difference in the quality of the schools? Or is it small enough that she should make the decision based on location? We have no way of knowing.

The same is true of any other difference between overall scores. The school at which I teach, for example – Loyola Law School, Los Angeles – is awarded an overall score of 44. How much "better" is UCLA, which is awarded an overall score of 71? The difference between UCLA and Loyola is 27 overall score points, three times larger than the difference between Yale and Harvard. Does this mean we should take the amount by which Yale is "better" than Harvard and multiply it by three to determine how much "better" UCLA is than Loyola? Does such an operation have any meaning? Ultimately, overall scores tell us something about direction, but very little about magnitude. We need to delve into the disaggregated data – median LSATs, GPAs, reputations, or whatever it is we really care about – to figure out how schools are different and whether we think those differences are meaningful. Since *U.S. News* does not publish all of the data it uses in computing those scores, this can be a problem.

# B. Validity

Reliability (or lack thereof) is irrelevant if the ranks or overall scores do not actually measure anything we care about – that is, if the U.S. News scoring system is not "valid." I begin with a platitude: The U.S. News rankings are useful only to the extent that you value the same things the U.S. News methodology implicitly values, and give them the same weight. If you are an employer, for example, you may not care about student/teacher ratios or expenditures per student; your bottom-line question is more likely to be: "How many students of the quality my firm requires will I find at this school?" In deciding where to interview, you may find median LSATs more useful than U.S. News rank. The size of the school, and therefore the depth of the talent pool it offers, may also be relevant. Or perhaps you are a prospective law student. If so, again, the information you use to make your decision should depend on what you care about. Students who simply want to attend the most prestigious school possible should focus on reputation, not U.S. News "rank." Students who aim to become big firm partners in a particular city might be better off looking at the hiring and partnering histories of big firms in that city (I'll tell you how below).<sup>35</sup> Students who just want a law school where they can

<sup>&</sup>lt;sup>35</sup> See p. 41, infra.

learn and enjoy learning the law should probably set U.S. News aside; instead, they should sit in on classes at schools with good reputations for teaching.<sup>36</sup>

I am going to introduce my discussion of whether the *U.S. News* measures are "valid" by returning to the questions with which I began this article: Why is Yale given an overall score nine points higher than Harvard? And why is Stanford ranked above Harvard? If we understand the parts of the *U.S. News* system that account for these results, we may get a better sense of whether *U.S. News* correctly measures something of interest.

My spreadsheet allows me to determine which input factors give Yale and Stanford a scoring advantage, and by how much. In a Harvard-Yale match-up, the nine-point overall score difference is attributable to *U.S. News*' twelve input variables in the amounts set forth in Table 1. Each number is given in overall score points – that is, each number estimates how much of the nine-point overall score difference is attributable to differences in that variable.

1 Stanford Washington and Lee Chicago 7 **BYU** 3 Virginia 8 Michigan 9 4 Georgetown Pennsylvania Loyola Los Angeles 10 Northwestern

See http://www.princetonreview.com/law/research/rankings/rankings.asp.

Based on a survey of 17,000 students, The Princeton Review's 2007 Best 170 Law Schools ranks the following as the top ten law schools in the United States for "best overall academic experience":

Table 1: Harvard v. Yale: Harvard advantage (+) or shortfall (-)

Library	+0.8
Employment at nine months	+0.2
Median LSAT	+0.1
Bar pass ratio indicator	+0.1
Academic assessment	0.0
Employment at graduation	0.0
Other expenses per student	-0.3
Acceptance rate	-0.3
Lawyer assessment	-0.5
Student/faculty ratio	-0.7
Median UGPA	-0.9
"Educational" expenses per student	<u>-7.5</u>
Total overall score difference	-9.0

Table 1 thus tells us that 7.5 points of the 9.0 point overall score difference is attributable to differences in cost-of-living-adjusted "educational" expenses per student. Harvard gets a 0.1 bonus for its higher median LSAT (173 as opposed to 172) but loses 0.9 overall score points for its lower median UGPA (3.81 as opposed to 3.88). It gets a 0.8 bonus for the fact that its library is twice the size of Yale's and small bonuses for its slightly better 9-month employment and bar passage rates, but takes a cumulative 1.8 point hit for its lower COLA-adjusted other expenses per student, higher acceptance rate, lower lawyer reputational score, and higher student/faculty ratio.

These numbers raise obvious questions about the validity of the two overall scores. Do COLA-adjusted "educational" expenditures per student measure something important enough to give Yale such an edge? (Remember that as a result of this edge Yale would still be ranked first even if its median LSAT were to drop precipitously.) Do we think that a .07 difference in median UGPAs should be worth nine times as much as a one-point LSAT differential? Other such questions, I am sure, will occur to the reader.

The one-point (actually 0.8) overall score difference between Harvard and Stanford is attributable to differences in these same variables in the following amounts, again measured in overall score points:

Table 2: Harvard v. Stanford: Harvard advantage (+) or shortfall (-)

Library	+1.2
Academic assessment	+0.7
Other expenses per student	+0.6
Median LSAT	+0.4
Employment at nine months	+0.2
Lawyer assessment	0.0
Employment at graduation	-0.1
Acceptance rate	-0.2
Student/faculty ratio	-0.4
Bar pass ratio	-0.6
Median UGPA	-0.7
"Educational" expenses per student	-1.8
Total overall score difference <sup>37</sup>	-0.8

Again, differences in "educational" expenditures per student make the biggest difference in the two schools' relative U.S. News ranking. Interestingly, notwithstanding its much larger student body, Harvard actually spends more per student than Stanford. Because more of Harvard's expenditures are classified as "indirect," however, and because "indirect" expenditures are weighted lower in the U.S. News system than "direct" expenditures (1.5% as opposed to 9.75%), Harvard loses a net 1.2 overall score points by reason of expenditure differences. Harvard gets a 0.4 bonus for its four-point edge in median LSATs (173 as opposed to 169), while losing 0.7 overall score points for a .06 deficit in median UGPAs (3.81 as opposed to 3.87). Although Harvard's relevant bar pass rate is significantly higher than Stanford's (95.9% as opposed to 91.8%), for U.S. News purposes the California bar is treated as more difficult than the New York bar. As a result, Harvard loses 0.6 overall score points for its lower "bar pass ratio indicator." Indeed, Harvard would still lose points for its "inferior" bar pass rate even if it were to report a perfect (100%) New York pass rate. And so it goes.

Is this scoring valid? That is, does it correctly measure things we care about? The remainder of this Part II.B explores in greater detail some of the issues raised by specific input variables.

1. The reputational surveys.—U.S. News' reputational surveys are the bane of every law dean's existence. Collectively, law schools spend

Individual components do not add up to -.8 exactly because of rounding error.

millions each year on attempts to influence survey outcomes. Without question, the surveys matter. If the two surveys were to be dropped from *U.S. News*' ranking procedure and law schools were to be ranked solely on the remaining ten more-or-less objective variables, the dozen schools most helped (and the number of ranks each would rise) would be as follows:

Toledo	41
McGeorge	21
George Mason	18
Northeastern	17
BYU	16
Alabama	16
Mercer	16
Cincinnati	15
Denver	14
Seattle	14
Cardozo	13
New Mexico	11

In other words, based purely on U.S. News' non-reputational variables, Toledo would be ranked  $55^{th}$ , not  $96^{th}$  – a stunning difference.

Conversely, the dozen schools most helped by inclusion of the two reputational variables (and the number of ranks each would fall if those variables were omitted) are the following:

UC Davis	-10
San Diego	-10
Georgia State	-10
Florida	-11
Missouri Columbia	-11
Tulane	-13
Rutgers Newark	-13
North Carolina	-15
Miami	-20
Kansas	-20
UC Hastings	-24
Oregon	-28

I do not mean to suggest that schools in this second set are overranked or that schools in the first are underranked. It may well be that each deserves its reputation as measured by U.S. News. I mean only to suggest that these two variables, given an aggregate weight of 40%, really matter.

On the plus side, the surveys represent direct attempts to measure something about which many readers care a lot. So far as we know, the scores returned by deans, law professors, lawyers, and judges are not manipulated in any way by U.S. News before being averaged and reported. The academic survey seems methodologically more plausible, although more likely to be gamed by respondents; the response rate is quite high and we have some sense of who the respondents are: "the law school dean, dean of academic affairs, chair of faculty appointments, and the most recently tenured faculty member at each law school accredited by the American Bar Association."38 In the case of the survey of judges and practitioners, unfortunately, we do not know how respondents are chosen,<sup>39</sup> the response rate is a worrisomely low 26%, and we know nothing about the demographics of those who respond.

The basic problem with reputational surveys, however, is that they only work if the people or institutions being rated have reputations.<sup>40</sup> It is one thing to ask respondents to rate, for example, the President and Vice President of the United States. It is another thing entirely to ask them to rate the individual performances of each of 100 senators, many of whom are probably unknown even to well-read respondents, let alone 180 law schools. I have long worried that the U.S. News surveys might simply measure name recognition - that they might therefore be biased, for example, in favor of schools on the East Coast, 41 where a majority of respondents reside, or schools whose universities have well-known athletic teams.

I have developed a simple tool both for testing such hypotheses and for thinking more methodically about how properly to respond to U.S. News' reputational questionnaire. Assume that median LSATs of full-time

See note 11, supra.

Brian Leiter asserts that "one-third of the law firms surveyed by U.S. News are in New York City" See Brian Leiter. How the 2003-04 Results Differ from U.S. News, http://www.leiterrankings.com/faculty/2003differences usnews.shtml.

U.S. News asks respondents to rate the "reputation" of the law school as a whole. Brian Leiter states that the questionnaire mentions "faculty, programs, students, and alumni as possibly pertinent considerations." Id.

Brian Leiter has asserted that "Schools on the two coasts are usually at an advantage in opinion surveys, because schools are more tightly clustered, geographically, and faculty tend to know each other better, both professionally and socially." Brian Leiter, Faculty Quality Rankings: Scholarly Reputation, 2003-2004, http://www.leiterrankings.com/faculty/2003faculty reputation.shtml.

students are at least a rough indicator of the quality of law schools' student bodies. Assume further that a school that can attract a good student body can probably also attract a faculty with a comparably good scholarly reputation; a school that can attract an excellent student body, a faculty with a comparably excellent scholarly reputation; and so on. If these assumptions are approximately true, we can use median LSATs to generate a set of predicted reputational scores having the same means and standard deviations as those actually reported by *U.S. News*. These LSAT-predicted reputational scores are the scores survey respondents would presumably return if (1) respondents were fully informed, (2) each school's scholarly reputation and other reputational inputs were consistent with the quality of its student body, and (3) median LSATs of full-time students correctly measured student body quality. A table of LSAT-predicted reputational scores, both peer and practitioner, is given in Appendix A to this Article.

Using LSAT-predicted reputational scores to test for bias is roughly equivalent to using multiple regression to perform the same tests, controlling for median LSATs and creating a dummy variable for the characteristic being tested (*e.g.*, location in the Eastern time zone). LSAT-predicted reputational scores, however, are more intuitively accessible to the mathematically challenged. Using this tool, I have tested a number of hypotheses about survey bias and can report the following tentative results.<sup>44</sup>

(1) Law schools in the Eastern time zone do not appear to be systematically overranked. In fact, both academics and practitioners appear to evidence a slight bias against schools in the Eastern time zone, which ultimately costs law schools in that zone an average of 0.31 overall score points. (I want to emphasize that I am not asserting that survey

A prior posted draft of this Article used the median LSATs of all students, not merely full-time students, to generate LSAT-predicted reputational scores. Consistent with U.S. News' current practice, the scores reported and analyses in this version of the Article are based on the LSATs of full-time students only.

To generate "LSAT-predicted peer scores," the median LSATs of the various schools were normalized using a forced mean and standard deviation equal to the actual mean and standard deviation of *U.S. News*' reported peer assessments. A similar computation, using the actual mean and standard deviation of *U.S. News*' reported lawyer/judge assessments, was performed to generate "LSAT-predicted practitioner scores."

The method used to reach these conclusions is simple: take the group of schools being investigated (*e.g.*, law schools in the Eastern time zone), sum the apparent over- or underrankings for those schools, divide by the number of schools in question to determine their average over- or underranking, and use the conversion factors given in Part III to convert the results into overall score points.

respondents are wrong. Law schools in the Eastern time zone may, on average, be slightly worse than their median LSATs would indicate. I have no reason to think so; I merely note the possibility. The same warning should be read as accompanying each of my subsequent conclusions.)

- (2) Law schools in the Central time zone appear, as a group, to be significantly overranked, picking up an average of 0.92 overall score points as a result. For most such schools, this means a net pickup of about five ranks. What might explain this phenomenon? It is possible that law schools in the Central time zone are, on average, significantly better than their median LSATs would indicate. I have no reason to think so, but it is a possibility. My tentative hypothesis is rather that such schools are close enough to the East Coast (where a majority of survey respondents reside) to have name recognition, but not so close that familiarity breeds contempt.
- (3) The reputations of law schools within 100 miles of New York City exhibit a pattern that reinforces this hypothesis. The reputation leaders (Yale, Columbia, NYU, and Pennsylvania) are assigned actual scores close to their LSAT-predicted scores. The next group down, however, gets slammed: Fordham (-0.4, -0.5), Cardozo (-0.7, -1.0), Brooklyn (-0.7, -0.7), Temple (-0.4, -0.2), Villanova (-0.5, -0.6). On average, schools within 100 miles of New York lose 1.68 overall score points based on this apparent underranking of which 0.76 is attributable to academics and 0.92 to lawyers and judges. It would appear that good-but-not-top schools located in or near the City suffer seriously by comparison with reputation leaders in the same market. Respondents have heard of them, but judge them adversely in comparison to their better-known competitors.
- (4) Law schools in the Pacific and far western time zones appear to be systematically underranked by both academics and lawyers, losing an average of 0.88 overall score points as a result, of which about two-thirds is attributable to academics. Again, for most such schools, this means a net loss of about five ranks. My tentative hypothesis is that many such schools lack name recognition on the East Coast.

Each school's apparent underranking is given in reputational score points. Academics, for example, assign Cardozo a 2.7; its LSAT-predicted peer reputational score, by contrast, is 3.4. Lawyers and judges give Cardozo the same 2.7, a full 1.0 lower than its LSAT-predicted lawyer reputational score. Had Cardozo been rated 3.4 by academics and 3.7 by lawyers and judges, its overall score would have been 9 points higher, moving it from 52<sup>nd</sup> to 34<sup>th</sup> in the rankings.

(5) The possibility that name recognition is a factor in the reputational surveys is bolstered by yet another finding: that schools named after the state within which they are located, regardless of whether public or private, appear to be overranked nationwide, picking up an average of 1.26 overall score points as a result. Of the seven schools in the top 100 both of whose actual scores exceed LSAT-predicted scores by .4 or more, all but two are eponymically state schools:

	Apparent peer	Apparent lawyer/
	overranking	judge overranking
Florida	.5	.5
Indiana Indianapolis	.4	.6
Iowa	.5	.5
Miami	.5	.4
North Carolina	.6	.6
Stanford	.6	.4
UC Berkeley	.7	.5

It is possible that these schools have better faculty scholarship, on average, than their median LSATs would predict. Alternatively or perhaps in addition, it is possible that law schools named after states get a reputational boost because state names are immediately recognized.

By contrast, of the eleven schools in the top 100 both of whose actual scores are lower than LSAT-predicted scores by .4 or more, only one has a name that explicitly identifies it as a state school:

	Apparent peer	Apparent lawyer/
	underranking	judge underranking
Alabama	6	5
Brooklyn	7	7
BYU	6	4
Cardozo	7	-1.0
Fordham	4	5
George Mason	6	5
Loyola Los Angeles	5	4
Northeastern	7	8
Rutgers Camden	5	6
Toledo	7	6
Villanova	6	6

(6) Finally, if name recognition is a factor, athletic prowess is clearly not by itself enough, as the foregoing list demonstrates. Neither the Alabama Crimson Tide nor the Villanova Wildcats ensure their law schools reputational scores commensurate with their median LSATs.

I want to emphasize once more that I am not asserting that any of the schools listed above are actually over- or underranked. I am merely attempting to detect patterns. My conclusions are tentative, and I hope that others will analyze the data set forth in Appendix A more fully. I do suggest, however, that in completing U.S. News surveys it may be useful to look at LSAT-predicted reputational scores and be more conscious of why we deviate from them, up or down – particularly with respect to schools about which we have incomplete information. In other words, a conscientious respondent might begin with the relevant column in Appendix A and deviate from each school's LSAT-predicted score only for good reason.

Returning to Yale, Stanford, and Harvard, we find that Yale and Stanford are apparently overrated, and that Harvard is slightly overrated by academics but underrated by lawyers:

	Apparent peer	Apparent lawyer/
	misranking	judge misranking
Yale	+.2	+.1
Stanford	+.6	+.4
Harvard	+.1	1

What should we make of this? It is possible, of course, that Yale's and Stanford's student bodies are actually better than their median LSATs would indicate. I explore this issue in the next section. The more likely explanation, however, is that Yale's and Stanford's faculties are viewed as better than their student bodies, at least as measured by median LSATs, while Harvard's is not. Is such a view warranted? If one credits Brian Leiter's faculty quality rankings, "yes" with respect to Yale, "partially" with respect to Stanford. If one uses SSRN downloads as an indicator of current scholarly visibility, the answer is clearly "no" with respect to both. In any event, why practitioners would be influenced by scholarship in their survey responses is not clear.

See Brian Leiter, Faculty Quality Rankings: Scholarly Reputation, 2003-2004, http://www.leiterrankings.com/faculty/2003faculty\_reputation.shtml.

Many law professors post their papers in electronic format on the Social Science Research Network ("SSRN"). See http://www.ssrn.com. Interested readers can then read abstracts of the posted papers and download any they wish

Regardless, in reading the U.S. News rankings critically, we still need to decide whether whatever it is that causes reputational scores to deviate from LSAT-predicted scores is relevant to anything we care about. If we are academics, we generally do care about faculties' scholarly reputations. If we are employers, we may not – and certainly not to the same extent. If we are prospective students, our reactions may depend on what we are looking for in a law school. If the problem appears, at least partly, to be one of geographic bias or name recognition, we may want to discount it.

2. Student body quality.—The quality of the students a law school can attract is probably the single most important consideration for law firms making interviewing and hiring decisions. It should also be important to prospective students; the quality of one's legal education often depends as much on one's interactions with other students as it does on one's interactions with professors. For prospective faculty, student body quality affects the level at which one can effectively teach. Some academics care about this; others do not.

The *U.S. News* methodology includes three variables intended to measure student body quality, which *U.S. News* labels "selectivity": median LSATs, median UGPAs, and acceptance rates. What do these three variables tell us about the quality of the student bodies at Harvard, Yale, and Stanford?

	Harvard	Yale	Stanford
Median LSAT	173	172	169
Median UGPA	3.81	3.88	3.87
Acceptance rate	11.5%	6.2%	7.8%

Here are the same figures translated into overall score points with Harvard as the baseline:

to read in their entirety. As of February 1, 2007, Harvard ranked first in both total and "recent" (last 12 months) downloads. *See* http://hq.ssrn.com/Rankings/Ranking\_display.cfm?TRN\_gID=13&TMY\_gID=2 (visited Feb. 16, 2007). Stanford ranked fourth in total downloads, Yale seventh. *See id.* For a discussion of the use of SSRN downloads to measure scholarly performance, *see* Paul L. Caron, *Ranking Law Schools: Using SSRN to Measure Scholarly Performance*, 81 IND. L.J. 83 (2006).

	Yale	Stanford
Median LSAT	-0.1	-0.4
Median UGPA	+0.9	+0.7
Acceptance rate	+0.3	+0.2
Total	+1.1	+0.5

In other words, according to *U.S. News*, Yale's student body is sufficiently superior to Harvard's to warrant awarding Yale a full extra overall score point. Stanford's student body is sufficiently superior to Harvard's to warrant awarding Stanford half of an extra overall score point. Is this scoring valid?

The most obvious problem with *U.S. News*' methodology is that it gives almost no credit for higher LSATs at the top end. Although Harvard's entering class has a median LSAT *four points* higher than Stanford's, Harvard gets a grand total of 0.4 overall score points for the difference. By contrast, elsewhere in the spreadsheet the *one point* difference between a 153 and a 154 is worth 1.9 overall score points. This difference in treatment is impossible to justify. Either we believe that LSATs matter, or we don't.

I view this as a serious problem and assume that U.S. News will fix it – that is, that U.S. News will eventually use the median LSATs themselves, not their percentile equivalents, as its LSAT input variable. Applying this fix retroactively to the 2007 "selectivity" numbers and translating those numbers into overall score points with Harvard as the baseline, the immediately preceding table would look like this:

	Yale	Stanford
Median LSAT	-0.5	-2.0
Median UGPA	+0.8	+0.7
Acceptance rate	+0.3	<u>+0.2</u>
Total	+0.6	-1.1

With this change, Harvard's student body is deemed to be better than Stanford's, although still not as good as Yale's. Indeed, in my spreadsheet Harvard moves into second place overall ahead of Stanford. In the Top 10, NYU drops from fourth to fifth and UC Berkeley from eighth to tenth; Duke moves up to join UC Berkeley in a tie for tenth.

Fixing this problem and making no further changes in *U.S. News'* methodology results in the following ranking changes across the top 100 law schools:

Indiana Indianapolis, Louisiana State	+7
Seattle	+5
Fordham	+4
George Mason	+3
Brooklyn	+2
Cardozo, Duke, Emory, Harvard	+1
All other schools	0
Arizona State, BC, Cincinnati, Florida State, Hawaii, Lewis & Clark, Mercer, New Mexico, North Carolina, Northeastern, NYU, Pennsylvania State, Pepperdine, San Francisco, Santa Clara, Stanford, Temple, Toledo, U Washington, William & Mary, Wisconsin	-1
UC Berkeley	-2
Iowa, UC Davis	-3

Better. But are we now prepared to declare *U.S. News*' corrected measure to be a valid measure of student quality? I, for one, am not.

LSATs have many well-known problems. Nevertheless, they have three major virtues: (1) they are nationally uniform, (2) they are one of the best predictors of first-year law school grades (which means they measure at least some part of what law professors measure when they grade), and (3) they are statistically "reliable." When I was a hiring partner, I relied heavily on median LSAT figures in assessing law schools with which I was not familiar.

Like LSATs, UGPAs also measure something we care about. David Thomas has concluded that, at least at one school, UGPAs are almost as good a predictor of first-year law schools grades as LSATs. There are major problems, however, with using UGPAs to make national comparisons. First, undergraduate grading scales vary dramatically from school to school and major to major. In 2003, Dr. Stuart Rojstaczer of

<sup>&</sup>lt;sup>48</sup> See David A. Thomas, Predicting Law School Academic Performance from LSAT Scores and Undergraduate Grade Point Averages: A Comprehensive Study, 35 Ariz. St. L.J. 1007 (2003).

Duke University collected GPA data from 30 undergraduate institutions. <sup>49</sup> Recent mean GPAs at those schools ranged from 2.51 to 3.47 – an extraordinary variation. The mean GPA at the public undergraduate institutions he studied was only 2.97, while the mean GPA at private schools was 3.26 – .29 higher. Similarly, an article published in the *Virginia Pilot* in 2003 tabulated the percentage of "A" grades given at Virginia undergraduate schools broken out by major. <sup>50</sup> At each, the percentage of "A" grades varied radically from major to major: at the University of Virginia, from 24.8% to 75.5%; at William and Mary, from 27.0% to 87.4%; at Old Dominion, from 18.4% to 76.6%; at Norfolk State, from 7.4% to 76.8%.

What this means is that, all else being equal, law schools that draw primarily from private colleges are likely to be ranked higher by *U.S. News* than law schools that draw primarily from state schools. This is true even if median LSATs are identical. It also means that schools that are willing to take risks on applicants in easy majors and discriminate against applicants in tough majors will be higher-rated by *U.S. News*. And the problem is not a small one. As is discussed further in Part III below, each .097 bump in median UGPA gives a law school an additional overall score point. The fact that a school draws predominately from public schools may therefore cost a law school several overall score points. In the middle ranges, this may drop a law school by a dozen ranks or more. And this is true even if its median LSATs are identical to an otherwise comparable school that draws predominantly from private undergraduate institutions.

What does Yale's .07 median UGPA edge over Harvard mean? We do not know. It may reflect a superior student body. It may reflect a difference in admissions philosophies. Or it may merely mean that Yale draws more heavily from private schools. This might happen, for example, if Yale were to draw more heavily from the Northeast, where private schools predominate, and Harvard from a broader national pool, including states where public universities are the norm. Would this mean that Yale's student body is better than Harvard's? Not in my book.

There is a further problem with using UGPAs to make interschool comparisons. Even if we can correct for differences in grading scales – as *U.S. News* attempts in the case of bar passage rates – we still have to face the fact that a 90<sup>th</sup> percentile grade from Pasadena City College does not mean the same thing as a 90<sup>th</sup> percentile grade from UC Berkeley. By this I

<sup>49</sup> See Stuart Rojstaczer, Grade Inflation at American Colleges and Universities, http://gradeinflation.com.

See Grade Inflation at Virginia Universities, Virginian-Pilot, Feb. 9, 2003, at http://www.hamptonroads.com/pilotonline/special/grades/index.html.

mean no criticism of PCC; it is a very good school. But getting a 90<sup>th</sup> percentile grade at PCC is undeniably easier; the two schools' student bodies are simply not comparable.

I therefore conclude – as I did when I was a hiring partner – that GPAs can only be used to compare students from the same school. Using UGPAs as *U.S. News* does introduces a significant potential source of error into its rankings.

This brings me to the third variable U.S. News uses to measure student body quality: acceptance rates. If we already know LSATs and UGPAs, it is unclear what acceptance rates add. Assume that Schools A and B have identical median LSATs and UGPAs, are of equal size, and are identical in every other respect. Assume, however, that School A accepts 10% of its applicants, while School B accepts 15%. Is School A "better" than School B? It may simply be that School A is a very popular backup school, gets scads of applications, and only needs to accept 10% of them to fill its classes. Perhaps School B is more geographically isolated; only students that really want to go there apply. As a result, perhaps School B needs to accept 15% of its applicants to fill its classes. Or perhaps the reverse is true: School B, the backup school, needs to accept more of its applicants because it loses so many to other schools. Or perhaps School A advertises heavily to elicit more applications. Assuming, again, that the two schools end up with identical median LSATs and UGPAs, is it really the case that School A is "better" than School B in any meaningful sense? I think not.

If we drop UGPAs and acceptance rates out of the system, Harvard's student body appears to be slightly better than Yale's (173 median LSAT vs. 172) and significantly better than Stanford's (173 median LSAT vs. 169). Even this comparison, however, understates the attractiveness of Harvard's student body to employers, a major part of *U.S. News*' audience.

Harvard's student body is not merely good, it is enormous. Based on the publicly available data, Harvard is probably responsible for the legal education of more than half of all U.S. students with LSATs of 173 or higher. It dominates the high-end legal market nationwide. No other law school even comes close. In 2002, I researched which law schools supplied the most partners to the five then-largest law firms in Los Angeles.<sup>51</sup> Although Los Angeles is more than 2,500 miles from Boston, Harvard tied with USC for second, just slightly behind UCLA. Yale was a distant sixth, Stanford (a California school) an even more distant eighth.

The problem with median LSATs (or UGPAs) is that they completely obscure size differences. Larger schools have larger pools of talent out of

<sup>&</sup>lt;sup>51</sup> See p. 41, infra.

which to hire. Median LSATs are relevant for many purposes. To account for differences in size, however, a different statistic is needed. I propose either the 50<sup>th</sup> or the 100<sup>th</sup> LSAT. To compute a median LSAT, we line LSATs up in order and find the middle one. To compute a school's 100<sup>th</sup> LSAT, we do the same, but count down to number 100. What a school's 100<sup>th</sup> entering LSAT tells us is that the school's entering class contains at least 100 students with that LSAT or higher. This is the pool likely to be of greatest interest to large law firms. It is also the pool likely to supply a significant portion of that school's academic student leadership – its law review editors, moot court board members, and the like.

Schools' 50<sup>th</sup> and 100<sup>th</sup> LSATs are not publicly available. They can be estimated by interpolation, however, using published 75<sup>th</sup> and 25<sup>th</sup> percentile LSATs and enrollment data. I have made such estimates for the top 100 U.S. schools, ranked by estimated 100<sup>th</sup> LSAT.<sup>52</sup> The results appear in Appendix B, which might be subtitled "Where to go to find large pools of good law graduates." For at least some employers, the data in Appendix B may be of greater relevance to decisions about where to interview than anything published by *U.S. News*. Interestingly, estimated 100<sup>th</sup> LSATs do a better job of predicting the source of Los Angeles big-firm partners as among Harvard, Yale, and Stanford – the top non-local suppliers – than any statistic currently published by *U.S. News*.

	Estimated 100 <sup>th</sup> LSAT	Partners in 5 largest LA firms
Harvard	177	34
Yale	171	16
Stanford	169	12

3. Placement success.—Prospective students often care a lot about a school's placement success. Employers probably care much less, prospective faculty, on average, very little. U.S. News uses three variables to measure placement success, weighted as follows: the percentage of graduates who have jobs at graduation (4%), the percentage who have jobs

The equation used to estimate 50<sup>th</sup> LSATs was:

Est  $50^{th}$  LSAT = 75%LSAT + (1/2 - 100/Enr.) \* <math>(75%LSAT -25%LSAT)

The data used to make these estimates were drawn from Table I-1, 2005 ABA Take-Offs. 75<sup>th</sup> percentile and 25<sup>th</sup> percentile LSATs for all students and total first year enrollment were used. Estimated 100<sup>th</sup> LSATs were computed using the equation:

Est  $100^{th}$  LSAT = 75%LSAT + (1/2 - 200/Enr.) \* <math>(75%LSAT - 25%LSAT)

nine months after graduation (14%), and "bar passage ratio indicators" (2%). The question, as always, is: Are these variables reliable and valid? That is, do they correctly measure something we care about and do they do so without significant random error? The short answer in each case is probably "No," for a variety of reasons.

I begin with the two employment variables. For prospective students, the most important thing to keep in mind is that neither measures law-related jobs. Flipping burgers counts. *U.S. News* necessarily uses the same 9-month employment data tracked by the ABA. Using any other numbers would require law schools to submit statistics they do not already compile; compliance would probably be low. The ABA's employment numbers, in turn, are not limited to law-related jobs – nor can they fairly be. Many students, particularly in evening programs, obtain law degrees to enhance their performance in non-legal careers. Counting them as unemployed would ignore the very reasons they went to law school. Counting non-legal jobs as employment, however, seriously limits the validity of the employment variables for ranking purposes.

Several additional factors tend to distort the first employment variable, employment rates at graduation. Three sets of students are likely to count as employed in these numbers: (1) students who have been offered full-time jobs out of big-firm summer programs, (2) evening students who already hold jobs, and (3) students who have worked parttime for smaller firms while in school and been invited to stay on after graduation. To the extent that employment-at-graduation figures measure big-firm offers, they measure something many prospective students do care about. But it is often impossible to determine the extent to which this is true. Schools with evening programs are likely to report higher employment-at-graduation rates, since evening students are generally already employed. In addition, more students are likely to have jobs at graduation if the school is located in a major legal center. On the other hand, to the extent a school's graduates go into public interest jobs, its employment-at-graduation numbers will probably be lower, since public interest organizations often prefer to wait until graduates have passed the bar before extending offers. Finally, graduates in states with tough bar examinations are generally advised to study full-time for the bar; graduates in states with easier bar examinations are more likely to begin work immediately. And, of course, more than a quarter of all schools do not report employment-at-graduation numbers at all; U.S. News simply makes up numbers for them. For all of these reasons, it is unclear how much useful information employment-at-graduation numbers actually contain.

Unfortunately, although they account for 14% of U.S. News' overall scores, the 9-month employment rates are even less meaningful. Federally guaranteed law school loans become payable six months after graduation. Typically, only graduates who have spouses or parents willing to support them or who are independently wealthy can afford to remain unemployed at this point. (Remember, flipping burgers counts as employment.) Not surprisingly, in the 2007 issue, the median reported 9-month employment figure was 93%. For most schools in the top 100, therefore, the entire game on this variable was played out in the remaining 7%. Harvard beat out both Yale and Stanford, reporting a 99.5% 9-month employment rate – 0.6% higher than the other schools' 98.9% rates. For this, Harvard got 0.2 of overall score credit – twice as much credit as it got for the fact that its median LSAT was 173 while Yale's was only 172. Why did Harvard perform slightly "better" on this variable? We do not know, but it seems unlikely that the reason would be relevant to anyone making any kind of decision about law schools.

Given the incredibly small differences among most top 100 schools on this variable, I suspect that the single biggest determinant of 9-month employment figures was probably the amount of time each law school devoted to managing this figure. From an educational perspective, such time was completely wasted. But schools that ignored the issue were penalized by *U.S. News*. As I discuss in greater detail in Part III, *schools gained or lost more points in the rankings by reason of the 9-month employment variable than by reason of any other*. And this is true even if one excludes an apparent clerical error which, by my computation, cost one school 18 overall score points.<sup>53</sup> Did these differences really measure anything of relevance to anyone? For the most part, no.

There is one further reason that *U.S. News*' employment variables do not tell a particular student much about her employment prospects if she attends a particular school: A student's employment prospects generally depend far more on the student than on the school she chooses. A really good student attending a mid-ranked school will probably graduate near the top of the class and get the big-firm job she wants. If the same student attends a top-ranked school, she is less likely to graduate near the top of the class; her chances of getting that big-firm job will therefore probably not be much different. Judicial clerkships and law teaching positions are exceptions to this general rule. School reputation matters a lot for these jobs; the *U.S. News* employment figures, however, are completely irrelevant. In addition, if a student wants to attend school in one part of the country but practice elsewhere, attending a school with higher name

The school has asked not to be identified.

recognition is likely to help getting the first job in that other part of the country. But again, employment figures do not tell us anything about name recognition.

By contrast, U.S. News' third "placement success" variable - bar passage - is clearly important. Like employment rates, however, bar passage rates generally tell us more about the quality of a school's student body than they do about the likelihood that a particular student will pass the bar. Stronger students tend to pass the bar regardless of where they go to school. Weaker students tend not to. Two further problems confound bar passage rate statistics. First, evening students commonly do not quit their jobs to study for the bar. As a result, at least at my school they tend to do worse than day students, pulling down the school's overall bar passage rate. Second, a common technique schools use to boost bar passage rates is to "academically disqualify" (that is, flunk out) a larger portion of their student body, typically after the first year. Academic disqualification rates are not published by U.S. News. The fact that Sink or Swim Law School does better than We See You Through in bar passage, however, may merely mean that Sink or Swim flunks out a larger portion of its class. If so, attending Sink or Swim will not necessarily boost a particular applicant's chances of passing the bar at all.

Finally, all three of U.S. News' "placement success" variables suffer from the same technical problem. We expect input variables to be normally distributed. Roughly speaking, we expect there to be a large number of schools in the middle, with tails extending above and below the middle. When one of the tails is truncated, odd things happen. I am going to call this a "ceiling" or "floor" effect – it arises whenever there is a line beyond which a school's numbers cannot rise or fall. In the case of the U.S. News "placement success" variables, that line is 100%; no school can report a rate greater than 100% on any of these variables. The data suggest that top schools clearly bump up against this ceiling and are penalized by it

In Part III, I introduce the concept of leading and lagging variables, input variables in the *U.S. News* system that pull a school's overall score up or down, respectively. For *U.S. News*' five top-ranked schools, the placement success variables are almost all lagging – that is, they almost invariably pull overall scores down. In the table that follows, the amounts by which they do so are given in overall score points.

	Employ.	Employ.	Bar pass
	at grad.	at 9 mos.	ratio ind
Columbia	-0.1	-3.3	-0.3
Harvard	-0.4	-3.9	-0.3
NYU	-0.3	-3.2	-0.1
Stanford	-0.4	-4.2	+0.3
Yale	-0.8	-5.4	-0.5

The reason for this is a ceiling effect: the top ranked schools are so close to 100% that they bump up against that ceiling. The one exception is Stanford's bar pass ratio indicator, which actually pulls Stanford's overall score up by 0.3. A school's bar pass ratio indicator measures how far the school's bar pass rate is from the average bar pass rate for its jurisdiction. The other four schools' bar pass rates are measured against the New York average, which is moderately high (75%). Their distances from that average therefore cannot get much larger than they already are. Stanford's, however, is measured against the California average (61%). Even though its reported bar pass rate is lower than any of the others', the ceiling in California is further away from the average. As a result, Stanford is not effectively constrained by that ceiling. In ranking the top five law schools, therefore, Stanford is deemed to have outperformed all four of the others in bar passage and, indeed, would still be deemed superior in this regard even if the other four were to report perfect (100%) New York bar pass rates.

I conclude that *U.S. News*' "placement success" variables do not really measure much that its three primary audiences – employers, prospective students, and prospective faculty members – actually care about. Inasmuch as they are accorded, in the aggregate, a weight of 20% in computing overall scores, this is a problem. I say this notwithstanding the fact that these variables boost my own school's overall score by a total of 2.1 points.

A prospective student whose goal is to become a big-firm partner in a particular city may wish to conduct her own research into the hiring and partnering patterns of firms in that city. The technique is simple: take a representative sample of firms in that city, then use Martindale-Hubble to count the number of partners from each school who graduated in or after some year, say 25 years ago. I did this for Los Angeles four years ago. My results:

Partners in the 5 largest LA firms (2002)

UCLA	36
Harvard	34
USC	34
UC Berkeley	31
Loyola Los Angeles	21
Yale	16
NYU	14
Stanford	12
Chicago	11
Columbia	11
UC Hastings	8
Virginia	6
Georgetown	6
Michigan	5
San Diego	5

The foregoing numbers do not mean, of course, that one's chances of making partner at a big Los Angeles firm are better if one attends Loyola than if one attends Stanford. They do suggest, however, that attending UC Hastings or UC Davis, both of which are higher *U.S.-News*-ranked than Loyola, will not necessarily give a student any advantage. The same kind of analysis can be done for any city in which a prospective student is interested.

4. Expenditures per student.—Expenditures per student make an enormous difference in the relative ranking of otherwise comparable schools. They comprise 7.8 of the 9.0 overall score difference between Yale and Harvard and by themselves push Stanford past Harvard in the U.S. News rankings. Indeed, if we were to drop the two expenditure variables out of the computation altogether, use median LSATs instead of their percentile equivalents, and make no further changes to U.S. News' methodology, the top 10 law schools would reorder as follows:

Rank		Overall Score
$1^{st}$	Yale	100
$2^{nd}$	Harvard	99
$3^{\rm rd}$	Stanford	97
$4^{th}$	Columbia	92
5 <sup>th</sup>	Chicago	91
	NYU	91
$7^{th}$	UC Berkeley	89
$8^{th}$	Virginia	88
9 <sup>th</sup>	Pennsylvania	87
$10^{th}$	Michigan	86

Yale would beat Harvard by 0.8 of an overall score point – still coming in first, but not by a nine-point margin; Harvard would move ahead of Stanford; Chicago would tie with NYU instead of coming in two ranks behind; and UC Berkeley would move ahead of Penn.<sup>54</sup>

This hypothetical scoring seems at least as plausible as *U.S. News*' actual scoring and ranking; it is certainly more consistent with Brian Leiter's rankings of faculty quality. This, in turn, raises at least two questions: (1) first, whether the reported figures actually reflect additional dollars spent on the J.D. programs *U.S. News* is ranking, and (2) second, whether any such additional dollars spent actually improve the quality of those programs in a meaningful way.

(a) Do higher reported amounts actually reflect additional dollars spent on J.D. programs?—As I have already noted, at least some of the expenditures-per-student numbers used by U.S. News appear to differ from those reported in the ABA Take-Offs. Some of these inconsistencies, my spreadsheet suggests, are quite significant. Unfortunately, the numbers used by U.S. News are not publicly available; it is therefore difficult to determine either the source of the problem or how widespread the problem is. I worry about rankings based on secret numbers apparently inconsistent with those reported to the law schools' accrediting authority. But there is little more I can say about this aspect of the problem; I therefore focus in the remainder of my discussion on how the ABA numbers themselves are computed.

U.S. universities and stand-alone law schools are commonly subject to generally accepted accounting principles ("GAAP") for financial reporting purposes. The expenditure numbers reported to the ABA, however, are not based on GAAP at all. They are based instead on the

55 See id.

<sup>54</sup> See id.

rules each school uses for internal budgeting purposes. Different schools use different rules.<sup>56</sup> Nor is there any requirement that the rules used by a given school remain consistent from year to year. We therefore begin with a serious problem. In comparing two schools' "expenditures" or even a single school's "expenditures" in one year with the same school's "expenditures" in another, we may be comparing apples to oranges.

Three problems usefully illustrate the possibility that serious inconsistencies may result from differences in accounting conventions. The first is the treatment of capital expenditures. A capital expenditure, roughly speaking, is an expenditure with a useful life of more than one year.<sup>57</sup> Examples include purchases of new buildings, new technology systems, new library books, and the like. (These can be very large numbers in legal education.) For budgeting purposes, one alternative is to treat capital expenditures as expenses. They are, after all, cash-out-of-pocket. A school that budgets on this basis and builds a new \$30 million building will report a \$30 million expenditure in the year of payment. A second possibility, available only if the school finances the acquisition with debt, is to treat the repayment of the debt as the expenditure. Now the \$30 million cost of the building will be reported as a series of expenditures over the life of the debt, whatever that might be, as the principal amount of the debt is paid off. A third possibility, which my school uses for buildings and equipment, is to depreciate capital assets on a straight-line basis over their useful lives. For budgeting purposes, schools can choose any useful life they want. For buildings, mine uses 60 years. Under such a budgeting rule, the cost of a \$30 million building would be reported as a \$500,000 expenditure each year for 60 years. A fourth possibility, common for state schools with respect to facility costs, is not to charge the law school budget at all. Our school uses this fourth convention for land acquisition costs. Each of these conventions results in very different reported law school expenditures – for the same \$30,000,000 building.

The ABA's reporting instructions constrain the use of these conventions to some extent. Use of the first – treating the entire cost as an expenditure up front – is prohibited for "major capital projects," <sup>58</sup> defined

See 2005 Questionnaire at 2 ("the questionnaire is designed for law schools with a wide variety of accounting and budgeting practices").

See, e.g., Theodore Seto, Drafting a Federal Balanced Budget Amendment That Does What It Is Supposed to Do (And No More), 106 YALE L.J. 1449, 1485 n.128 (1997).

See id. at 13 ("Includes Operating Funds Only. We are not seeking capital expenditures which are reported in Capital, Endowment, and Reserves later in this questionnaire."); id. at 35 (with regard to "Gifts, Endowment and Reserve Funds,"

as "substantial remodeling and new buildings, including architectural and engineering fees for those projects." The second, third, and fourth and fourth third, and fourth are all explicitly authorized, even though they lead to very different expenditure numbers. Equipment and library acquisitions, however, must be expensed up front – regardless of how they are treated in the school's actual budget. For this purpose, unfortunately, "equipment" is undefined. Does it include a new building's computer and communications infrastructure? Its plasma screens and Smartboards? Its elevators? Its heating and air conditioning systems? We do not know. It would not be surprising to discover that different schools interpret the ABA's instructions in different ways.

A related problem arises from the fact that for many older schools, the value of buildings is omitted entirely from the expenditure computation. A school that owns its buildings free and clear and has already amortized any associated costs gets no credit at all in the ABA and *U.S. News* figures for what may be a spectacular campus. A school that merely rents its buildings

Line F, "Please state actual expenditures during the year for major capital projects

<sup>60</sup> *Id.* at 12 ("Interest and Debt Service Payments. Report expenditures only if they are included in the law school budget directly or charged to the law school."); *id.* at 18.

Id. at 7 ("Funds designated for 'depreciation' should be included in Line K.1 if charged against the law school."). Presumably, the reference to Line "K.1" is a typographical error, intended as a reference to Line "J.1" in the current questionnaire.

Id. at 7 ("Many schools will have few of the categories in this section filled out. This will particularly be true of public institutions.").

Id. at 10 ("Library Equipment: Purchase, rental, repair, maintenance."); id. at 11 ("Indirect Expenditures: In this category, include all relevant personnel, fringe benefits, supplies and equipment expenditures."); id. at 16 ("Library equipment (purchase, rental, repair, maintenance ...)"); id. at 17 ("Equipment Purchase, Rental, Repair and Maintenance"); id. at 18 ("Indirect Expenditures and Overhead (In this category include all relevant personnel, fringe benefits, supplies and equipment expenditures)"); id. at 34 ("Line F. This question asks for the actual expenditures for major capital projects. Generally, equipment purchases should not be reported here, rather in the Expenditures section, line H-5."); id. at 35 ("Please state actual expenditures during the year for major capital projects .... Equipment purchases and the like should generally be reported on line H-5 of the Expenditure section.").

<sup>64</sup> *Id.* at 10 ("Acquisitions of Other Library Information Resources. Any non serial library information resources not reported in G.1 and G.2, including books, non-serial microfilms, CD-ROMS not reported above, audio-visual, and other.").

<sup>...&</sup>quot;).

or has purchased them but not yet paid off any associated debt, by contrast, may report its rent or debt service as expenditures, and thereby be treated as "better" for *U.S. News* ranking purposes than an otherwise identical school that owns its buildings free and clear. Whether a law school has adequate classroom space, space for faculty and student organization offices, and the like is obviously relevant to the quality of the experience it is able to offer its students. Because of the way "expenditures" are computed, however, *U.S. News* does not actually measure this educational input.

A third set of illustrative potential inconsistencies arises in accounting for expenditures made out of restricted or dedicated revenue sources. The purpose of budgeting is to make sure that a school does not spend more than it should. Reimbursed expenditures or expenditures made out of restricted revenues are therefore sometimes treated as off-budget – neither the revenues nor the associated expenditures show up in the budget at all. An example at our school is work/study funding. Only the portion of work/study payments contributed by the law school is treated as an "expenditure." An alternative way to account for exactly the same revenue and expenditure streams would be to include federal work/study subsidies as revenues and treat the full amount of all work/study payments as expenditures. Whether a school uses the first convention or the second will substantially affect its reported work/study expenditures for *U.S. News* purposes.

A similar anomaly arises in accounting for visiting faculty. Assume that a faculty member from School A visits at School B. School A therefore hires a visitor to fill the absent faculty member's slot in the interim. Quite commonly, the absent faculty member will remain on School A's payroll; School B will simply reimburse School A for her salary and benefits for the duration of the visit. School A will therefore continue to carry her salary and benefits as an expenditure, albeit fully reimbursed. But School A will also pay for the absent faculty member's replacement. In effect, for expenditure purposes School A double-counts the cost of the absent faculty member's slot. Schools with high volumes of visiting faculty are likely to have a correspondingly high incidence of double-counting of faculty salaries and benefits.

Similar problems arise in accounting for joint degree programs and joint appointments. In the typical joint J.D.-M.B.A. program, for example, the law school gets the tuition for law courses, the business school the tuition for business courses. This can be accounted for in either of two ways. The business school tuition can be treated as having been paid directly to the business school – that is, as not passing through the law

school budget at all. Alternatively, the student's tuition may be treated as having been paid first to the law school and then by the law school to the business school. In the latter case, the business school tuition payment will show up as a law school "expenditure," boosting the school's expenditures per student. Similarly, the compensation of a professor with a joint appointment can be paid separately by each school, in which case only part of her compensation will flow through the law school's budget. Alternatively, the second school can pay its portion of her compensation to the law school, which then makes the actual payments to the employee. In the latter event, her entire compensation will flow through the law school's budget.

My purpose here is not to offer a comprehensive guide to law school budgetary rules and practices. The foregoing examples are intended merely as illustrations of a larger problem: because budgeting conventions were never designed to facilitate interschool comparisons, even large differences in reported expenditures per student may merely reflect differences in accounting practices, not differences in actual dollars spent.

Setting aside the problem of accounting consistency, we still need to ask: Expenditures for what? For ABA reporting purposes, and therefore for *U.S. News* purposes, whether an expenditure is included as a "law school expenditure" is determined, in the first instance, simply by looking at whether it is included in the law school's budget. This, in turn, is an internal administrative question, resolved in different ways at different schools. For example, the largest on-campus clinic at our school – with a half-dozen faculty-like staff members whose principal function is to supervise students in their clinical work – is organized as a separate corporate entity. As a result, its expenditures do not appear in the law school's budget and its employees are not counted as "faculty"; the law school therefore gets no ranking credit for the educational opportunities it affords. If we were to operate the very same clinic within the university's corporate shell, by contrast, its expenditures and faculty would count, potentially boosting our ranking.

Law schools cannot be completely arbitrary about what they include in their reporting budgets. The ABA requires that they exclude expenditures for so-called "auxiliary" enterprises, which it defines by enumeration: "e.g., vending machines, bookstore, dining halls, and law

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See 2005 Questionnaire at 4 ("Expenditures are to be reported if they are in the law school budget regardless of the source of income that supports the expenditure").

school dorms."<sup>66</sup> The ABA questionnaire requires that schools report only *net* revenues from such enterprises and concludes: "Since you are reporting the net revenue, do not report any expenditures related to this category."<sup>67</sup> The questionnaire does not, however, exclude expenditures for academic programs other than the J.D. Many U.S. law schools offer extensive LL.M., S.J.D., certificate, and CLE programs; some offer M.B.T. programs for non-lawyers, some paralegal training programs. Such non-J.D. programs are not "auxiliary" enterprises for ABA reporting purposes. If the non-J.D. program is included in the law school's budget, *all* of that program's expenses are included in the expenditure figures reported to the ABA and *U.S. News*, even if the expenses are really being incurred, in whole or in part, to educate non-J.D. students.

The next step in computing expenditures per student is to divide "expenditures" by the number of students. We therefore need a definition of "student." In computing its expenditures-per-student numbers, the ABA includes FTE students in all of the law school's degree programs (e.g., LL.M.'s, S.J.D.'s, M.B.T.'s, paralegals). *U.S. News* computes expenditures per student differently, dividing each school's total "expenditures," including expenditures on non-J.D. programs, by the number of FTE J.D. students. This is clearly wrong; *U.S. News*' method significantly overstates J.D. expenditures per student at schools with large non-J.D. programs. A table of the percentage by which each school's J.D. expenditures per student are overstated as a result of this error is given in Appendix C to this Article. NYU's expenditures per student, for example, appear to be overstated by 44% in *U.S. News*' computations as a result.

U.S. News then breaks the resulting expenditures per student into two categories. The more heavily-weighted variable (9.75%), which U.S. News calls "expenditures per student for instruction, library, and supporting services," is based on the ABA "direct expenditure" numbers, with "tuition reimbursements, grants, and loan forgiveness" removed. The less heavily-weighted variable (1.5%), which it calls "expenditures per student on all other items including financial aid," includes ABA "indirect expenditures" plus "tuition reimbursements, grants, and loan forgiveness". The labels U.S. News uses imply that its more heavily weighted expenditure variable reflects educational inputs and that its less heavily weighted expenditure variable does not. Each is only partly true, and, again, the extent to which

See 2005 Questionnaire at 22. I want to thank Laurie Newitz, Chief Financial Officer of Brooklyn Law School, for correcting an error in a prior draft of this article with respect to the proper treatment of such expenses.

<sup>67</sup> See id.

See note 22, supra.

each is true is likely to vary significantly from school to school. To understand what each variable actually represents, we must first understand how the ABA differentiates between "direct" and "indirect" expenditures.

"Indirect" expenditures are defined as expenditures in eleven categories: (1) "building operation and maintenance," (2) "utilities (other than telephone)," (3) "security," (4) "interest and debt service payments," (5) "assessments by the university for specific university services," (6) "indirect or overhead charges by the university," (7) "overhead on grants/contracts or the like retained by the university," (8) "overhead or charges of any kind assessed by the university against private giving, endowment funds or the like," (9) "surplus retained by university," (10) "student fees retained by the university," and (11) "other overhead-type expenditures." All other expenses are treated as direct. U.S. News' "expenditures per student for instruction, library, and supporting services," therefore includes expenditures for, among other things, fundraising, public relations, alumni relations, career services, and computer infrastructure – not what we necessarily think of when we think of core educational expenditures.

It will be observed that indirect expenditures, thus defined, fall into three basic groups: (1) facility expenses (categories 1-4), (2) amounts paid to or retained by the parent university (categories 5-10), and (3) "other overhead-type expenditures" (category 11). *U.S. News* then adds a fourth group, "tuition reimbursements, grants, and loan forgiveness," to complete its less heavily weighted expenditure variable. Two questions suggest themselves with regard to this variable: first, whether it makes sense to give expenses in these four categories a lower weight (1.5%) in the ranking computation than other expenses (weighted at 9.75%); and second, whether it makes sense to give such expenses any weight at all.

I begin with facility expenses. One might colorably argue that the quality of a law school's physical plant merits more than a 1.5% weight. Anecdotal evidence suggests that many ABA accreditation issues relate to physical plant. An inadequate building limits course offerings, new faculty hiring, library resources, high-tech teaching methods, student organizations, study facilities – the list goes on and on.

The problem with giving facility expenses any greater weight – or indeed any weight at all – is that the numbers themselves are so inherently problematic. Because of the accounting consistency problems I have already discussed, the numbers are simply not comparable from school to school. On the other hand, these very accounting consistency problems may argue in favor of not attempting to distinguish between the two types

of expenditures for ranking purposes. Is classroom technology part of the "building"? If so, its costs will be low-weighted. If not, they will be given full ranking credit. As I have noted, different schools may well report such costs differently. And if the accounting consistency problems were not bad enough on their own, ABA's instructions with regard to such expenses are so vague as to leave schools great leeway in reporting. Is the receptionist at the front desk "security"? If so, his salary and benefits are low-weighted. If not, they are given the same credit for ranking purposes as a full professor's.

The second group of indirect expenditures – amounts paid to or retained by the law school's parent university – raises equally serious interschool comparability problems. First, stand-alone law schools do not report any such expenditures. Such schools instead report expenditures on the same real inputs in some other category – direct or indirect. If direct, stand-alone law schools may receive substantially greater credit (9.75% as opposed to 1.5%) than university-affiliated law schools for identical real inputs. Second, schools differ in the extent to which law school revenues are used to subsidize other university programs. There is no reason to treat a law school that pays a heavy annual subsidy to its university as "better" for ranking purposes than an otherwise identical school that pays no such subsidy – but *U.S. News*' methodology does.

Third, even if we can get past the comparability problems created by stand-alone schools and the use of law schools as funding sources for other parts of a university, we still face major comparability problems in assessing amounts paid to or retained by parent universities for services actually provided to their law schools. Admissions, alumni relations, development, grant management, information technology, payroll, placement, public relations, recordkeeping, registration, and student accounts are all functions sometimes provided by the law school, sometimes by the parent university. If they are provided by the law school, the relevant expenditures will be "direct" and will be counted in *U.S. News*' formula at 9.75%. If they are provided instead by the university in return for a fixed or formulaic amount paid to or retained by the university, that amount will be "indirect," and therefore counted at only 1.5%. Identical inputs, different treatments.

The ABA questionnaire partially addresses this problem by authorizing recategorization of indirect expenses as "direct" in limited circumstances. It states:

"Ordinarily, include expenditures as direct law school expenditures only if they are included in the law school 'budget' or under the control of the law school. Exceptions are rare, but

may be made where it is clear that the failure to include an item would be misleading. ... [I]f the university ... funds central services to the law school that are, in most law schools, funded within the law school budget, it might be misleading not to include those costs as direct law school expenditures. Thus if development and alumni relations services are provided to the law school by personnel paid by central university funds but dedicated to providing services to the law school, the reasonably allocated costs of those dedicated personnel (whether physically located in the law school or in a central university office) should be included as a direct expense ... Similarly, if financial aid services are provided to the law school and law students by personnel paid by central university funds but dedicated to providing services to the law school, the reasonably allocated costs of those dedicated personnel (whether physically located in the law school or in a central university office) should be included as a direct expense ..."

Exactly what portion of any formulary amount paid to or retained by a university is paid or retained in exchange for any such services, however, is commonly very unclear. Recategorization would typically require significant extra work of a sophisticated nature by the person – often a clerical employee – filling out the questionnaire. One wonders how much such recategorization actually occurs, and on how principled a basis. A law school seeking to maximize its *U.S. News* ranking, of course, can renegotiate its deal with its university – recharacterizing the very same sums it has always paid as payments for direct services. It is unclear how many law schools have done so.

The ABA's final category of indirect expenses consists of "other overhead-type expenditures," which, the questionnaire states, should include "corporate taxes, profits or dividends distributed, or the like." It is difficult to understand why a law school that pays high taxes or distributes large dividends to its shareholders should be treated as "better" than an otherwise identical law school that does not, but that is what *U.S. News*' methodology does.

In any event, in 2004-2005 the percentage that "indirect expenditures" comprised of "total expenditures" varied markedly across U.S. law schools, ranging from zero to a high of 50%. <sup>69</sup> Five law schools reported no indirect expenses whatever; fifty-five law schools reported

<sup>&</sup>lt;sup>69</sup> For purposes of the computations reported in this paragraph, "tuition reimbursements, grants, and loan forgiveness" were excluded from both numerator and denominator.

indirect expenses of less than 10%. Eight law schools, by contrast, reported indirect expenses in excess of 30%. Given these dramatic variations – which seem very unlikely to reflect comparable variations in real inputs – and the likelihood that such variations result instead from inconsistencies in accounting or reporting, the division of expenses into direct and indirect categories seems largely arbitrary. I conclude that the assignment of different weights to the two categories probably introduces substantial random error into *U.S. News*' rankings.

As an example, recall that Harvard actually spent *more* per student in 2003-2004 and 2004-2005 than Stanford. Nevertheless, because a larger percentage of Harvard's expenditures (21.87% as opposed to 11.02%) were reported as "indirect," Harvard lost a net 1.2 overall score points to Stanford by reason of its "inferior" expenditures per student. This factor by itself moved Stanford past Harvard into second place. There is no evidence that Harvard's "inferior" numbers reflected any meaningful inferiority.

The final group of expenses that *U.S. News* (but not the ABA) includes in its lower-weighted expenditure variable consists of "tuition reimbursements, grants, and loan forgiveness." The argument, presumably, is that scholarships reflect tuition foregone, not real educational inputs. At the extreme, a school could increase its tuition substantially while rebating the entire increase to its students in the form of scholarships. The effect would be to boost the school's reported expenditures per student without changing the amount actually spent on education by a single penny. In addition, it appears that a significant portion of all law school scholarships are now awarded to help manage schools' LSATs and UGPAs for ranking purposes, not for reasons having anything to do with legal education. Lowering the weight given scholarships minimizes the impact of such games.

A counter-argument is that at least some expenditures in this category do affect student opportunities in significant ways. Our school, for example, has a grant program that funds students in summer public interest jobs. As a result, many students who otherwise could not afford to do so receive supervised public interest legal experience. Similarly, our school offers public interest loan forgiveness for students who go into lower-paying public interest jobs upon graduation. While this program is not "educational" in the curricular sense, it is certainly as educational as expenditures incurred to place graduates in big firms – to which *U.S. News* accords its higher 9.75% weight. The ABA treats these as "direct" expenditures; *U.S. News* does not.

(b) Do higher reported expenditures significantly improve program quality?—At the beginning of my expenditure discussion, I posed two questions. The first was whether higher reported figures actually reflected additional dollars spent on the J.D. programs U.S. News was ranking. Because the data in question was of such poor quality, I suggested, the answer was at best "in many situations, it's very hard to tell." I turn now to the second question: whether additional dollars spent actually improve the quality of those programs in meaningful ways.

The assumption, of course, is that more money means a commensurately better program. Three preliminary observations about this assumption may be useful. First, extensive studies of K-12 public schools have failed to establish any systematic relationship between perstudent expenditures and student achievement. There is no obvious reason to believe that a stronger relationship exists in the context of legal education. Second, U.S. News-ranked schools all meet the ABA's relatively high standards for accreditation, which effectively require expenditures per student more than twice those of non-ABA-accredited law schools. The question, therefore, is not whether ranked schools are spending enough, as it sometime is in the context of public elementary or secondary schools; the question is rather whether more is always better – indeed, proportionately better. Third, a number of law schools, including many with unexceptional expenditure-per-student numbers, regularly run operating surpluses.<sup>72</sup> In other words, they do not spend all that they take in, saving instead for the future. Presumably, they believe their levels of current expenditure to be adequate.

Summaries of the literature can be found at W. Lance Conn, *Funding Fundamentals: The Cost/Quality Debate in School Finance Reform*, 94 Ed. L. Rep. 9 (1994), and Eric Hanushek, *When School Finance "Reform" May Not Be Good Policy*, 28 HARV. J. ON LEGIS. 423 (1991).

According to the 2005 ABA Take-Offs, Table F-6, average 2004-2005 direct expenditures per FTE for all ABA-approved law schools were \$25,449. It can be inferred that average total expenditures per FTE were therefore about \$29,874. See 2005 ABA Take-Offs, Table F-15 (average direct expenditures = \$20,107,927; average total expenditures = \$23,603,114). By contrast, a sample of four California-accredited law schools (Cal Northern School of Law, San Francisco Law School, Empire College School of Law, and Glendale University College of Law) charge an average full-time tuition rate for 2006-2007 of \$12,395. It is unlikely that these schools spend substantially more than per student than they receive in tuition. This suggests that ABA-accredited schools spend, on average, more than twice as much per student as California-accredited schools.

<sup>&</sup>lt;sup>2</sup> See 2003, 2004, 2005 ABA Take-Offs, Table F-19.

It may be useful to begin by framing this second question more concretely. Recall that largely because of the expenditure variables, Yale outranked Harvard by nine overall score points, Stanford moved past Harvard, NYU moved past Chicago, and Pennsylvania moved past UC Berkeley. The concrete question, therefore, is whether tangible educational opportunities are available at Yale and Stanford but not at Harvard, at NYU but not at Chicago, and at Pennsylvania but not at UC Berkeley that might justify these scorings. If real educational opportunities are available at the schools with higher reported expenditures but not at those with lower, and if those opportunities are sufficiently important, then perhaps *U.S. News*' use of its expenditure variables is valid. If not, then use of those variables is harder to justify.

At least four possibilities suggest themselves. First, it is possible that schools with higher "educational" expenditures per student have lower student/faculty ratios, and that this in turn justifies higher scores. A simple response is that higher "educational" expenditures per student do not necessarily translate into lower student/faculty ratios: Chicago, for example, has a lower student/faculty ratio than NYU, even though it reportedly spends less per student. In any event, if what we are really interested in is student/faculty ratios, we should focus instead on student/faculty ratios, not on expenditures per student. I explore the issue of student/faculty ratios separately below.

An important variation of this first possibility, however, is that higher "educational" expenditures per student signal that a school sponsors more in-house clinics. The McCrate Report, issued in 1992, evidenced a belief on the part of many that hands-on, practical legal training should become an important part of the American law school experience. Law schools now use both externship programs and in-house clinics to provide such training. In-house clinics, however, are much more expensive, in part because they require more faculty and low student/faculty ratios. Perhaps the use of expenditure-per-student data in rankings can be justified on the ground that they reflect superior practical legal training. Three questions suggest themselves in this regard: (1) Are clinics superior to externships?

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ABA Section of Legal Educ. & Admission to the Bar, LEGAL EDUCATION AND THE PROFESSIONAL DEVELOPMENT – AN EDUCATIONAL CONTINUUM 3 (1992).

See, e.g., William R. Trail & William D. Underwood, The Decline of Professional Legal Training and a Proposal for its Revitalization in Professional Law Schools, 48 Baylor L. Rev. 201, 240 (1996) ("Effective skills training tends to be more expensive than other aspects of legal education because of the lower faculty-student ratios generally required to provide necessary supervision and feedback.").

(2) How are clinics and externships credited for ranking purposes? And finally, (3) given the answers to questions (1) and (2), are expenditures an appropriate measure of the quality of a school's clinical education?

A thorough evaluation of the relative merits of externships and inhouse clinics is beyond the scope of this article; a brief summary, however, may be useful. <sup>75</sup> Externships can offer practical training in a much wider variety of contexts than in-house clinics. As a result, externs can often get practical training more directly related to their personal career goals. On the other hand, students are often given greater responsibility for individual client matters in in-house clinics. Moreover, clinics can be offered in subject areas in which externships may not be locally available; this is particularly important for law schools not located in major metropolitan areas. J.P. Ogilvie states:

"Externships share many of the teaching goals of in-house, live-client clinics. Some high credit-hour, closely supervised externships closely resemble in-house, live-client clinics. In most externship programs, however, students are given far less responsibility for client representation than is available through an in-house clinic. On the other hand, externships may provide students with unparalleled opportunities to define and pursue learning goals, to explore career interests in a variety of legal jobs, and to build a professional network."

Colorable arguments can be made that the average in-house clinic is superior to the average externship in important regards. Nevertheless, a well-designed externship program can provide many of the same educational benefits and in some contexts can do so more effectively. As Deborah Maranville notes: "An uneasy truce persists ... between proponents of 'in-house' clinics and externships programs."

The *U.S. News* rankings do not reflect any such truce. *U.S. News* gives full rankings credit for clinics, no credit whatever for externship programs. At least two *U.S. News*' input factors capture the benefits of clinics operated within the university's corporate shell: "expenditures per student for instruction, library, and supporting services" and

See, e.g., Deborah Maranville, Passion, Context, and Lawyering Skills: Choosing Among Simulated and Real Clinical Experiences, 7 CLINICAL L. REV. 123 (2000); Symposium, Developments in Legal Externship Pedagogy, 5 Clinical L. Rev. 337 (1999); Robert F. Seibel & Linda H. Morton, Field Placement Programs: Practices, Problems and Possibilities, 2 CLINICAL L. REV. 413 (1996).

J.P. Ogilvy, Guidelines with Commentary for the Evaluation of Legal Externship Programs, 38 GONZ. L. REV. 155, 160 (2002-2003).

Maranville, *supra* note 75, at 124.

"student/faculty ratio." Neither captures any of the benefits of externships. The costs of externship training are borne by the organization with which a student is placed; in exchange that organization receives the student's services. As a result, those costs are not included in the law school's budget and are not credited to the law school for ranking purposes. Similarly, the extern's on-site supervisor is not counted in computing the school's student/faculty ratio, even on a fractional basis. Some 230 lawyers, each expert in a specialized field, supervise and train our school's externs each year, typically one-on-one. Although these lawyers provide important practical legal training, they are completely ignored for ranking purposes. In effect, *U.S. News* takes an extreme position in the ongoing pedagogic debate: clinics valuable, externships worthless.

Given the foregoing, can the inclusion of expenditures per student be justified, in part, on the ground that they measure the quality of a school's clinical education? I think not. One would need significantly more evidence, for example, to conclude that Yale should be awarded 7.5 more overall score points than Harvard because of the supposed superiority of the practical legal training it offers. The numbers are simply too indirect to permit any such inference.

A second possibility is that schools with higher "educational" expenditures per student pay their faculty members higher average salaries. Higher-paid faculty members, the argument goes, are on average "better." Setting aside for a moment the question of how such faculty members are "better," I find this argument persuasive when comparing mid-ranked with top-ranked schools. Top-ranked schools tend to acquire a much larger portion of their faculties through lateral hiring. Lateral hiring often involves significant pay hikes for the professors involved. Schools that routinely engage in lateral hiring must presumably adjust their pay scales for home-grown faculty members so as to avoid major disparities between their home-grown and laterally-hired faculties. Although comprehensive law school salary data is not available, it seems likely that higher-ranked schools do tend to pay their faculty members significantly higher salaries, on average, than lower-ranked schools.

There are at least two problems with justifying use of "educational" expenditures per student figures in law school rankings on this ground. First, most readers do not use *U.S. News* merely to determine whether a school is in the bottom, middle, or top of the pack; most use it to compare

56

Compare, for example, average University of Michigan Law School professorial salaries, see http://apps.michigandaily.com/salary/200607.xls, with salaries of lower-ranked law schools participating in the Society of American Law Teachers annual survey, see http://www.saltlaw.org/EQ-March2006.pdf.

closely ranked schools – e.g., Yale vs. Harvard or NYU vs. Chicago. As noted in my introduction to this topic, in such close comparisons expenditure per student figures have an enormous impact. Do they have comparable validity? Can we really suppose that NYU pays its professors 75% more, on average, than Chicago, as their relative "educational" expenditures per student might be read to imply? To me, this seems utterly improbable.

A second problem has to do with what we mean when we assert that higher-paid faculty members are, on average, "better." Top-ranked schools higher laterally for scholarship, not for teaching. The inference must therefore be that higher "educational" expenditures per student signal faculties with higher scholarly reputations. Again, it is not clear that the signal is valid; one would be hard-pressed to justify any such inference, for example, in comparing NYU with Chicago. Even assuming validity, however, the question remains whether prospective students or employers should care. In physics or chemistry, cutting-edge scholarship matters. In law, by contrast, cutting-edge legal scholarship often has no relevance whatever to actual practice. Indeed, some top-ranked professors have been accused of not teaching law at all. In any event, academic reputation is already captured by *U.S. News*' peer assessment input variable.

A third and very real possibility is that many additional "educational" dollars per student tend to be spent on functions and projects not at the core of legal education – centers, institutes, conferences, fundraising, alumni relations, public relations, and the like. Apart from student/faculty ratios, clinical offerings, and faculty salaries, I have been unable to identify any significant differences in the real educational inputs available at the schools named in the concrete question posed at the beginning of this discussion. If important such differences exist, one would expect the higher-spending schools to advertise them. They do not.<sup>79</sup>

Yale's website characterizes its core advantages in the following terms: "[O]ur unmatched faculty-student ratio allows us to offer a vast array of courses, an average class size of under 25 students, and countless opportunities for independent research, writing, and student-organized discussion groups. With almost 200 courses taught by more than 60 full-time faculty and dozens of visiting faculty, lecturers, and adjunct professors, the choices for the study of law at Yale Law School are only as limited as your imagination." See http://www.law.yale.edu/academics/academics.htm (visited Dec. 20, 2006).

Stanford's website states: "Our programs — intensive curriculum, hands—on legal clinics, high-profile academic centers — cultivate professional skills and values, inspire new ideas, and engage leaders in developing solutions. And our resources — from cutting-edge facilities to the diverse advantages of Stanford University — make the Stanford Law campus an ideal environment for exploring

It is also easy to understand why deans might not focus additional dollars on improving educational performance. Once a not-for-profit law school has met the benchmarks necessary for accreditation, it faces almost no further pressure to provide the best possible service at the lowest possible cost. Unlike a for-profit business, if additional dollars become available, it will likely spend them. But because the quality of legal education is almost impossible to measure directly, such further expenditures will not necessarily be used to improve an educational program that is has already been declared adequate. As a result, at least in the non-profit educational world, there is no obvious reason to expect that more dollars will necessarily translate into higher educational quality. It may simply be that deans with tighter budgets run more efficient ships.

A fourth possibility, of course, is that differences in reported amounts, at least within tiers, are primarily evidence of differences in accounting or reporting conventions.

My discussion to this point can be viewed, in significant part, as addressing a basic technical question in law school economics: Are there diminishing marginal returns to expenditures on legal education? The *U.S. News* methodology assumes there are not. Most economists, I suspect, would find this assumption deeply problematic. Two further technical problems compound the difficulty of assessing whether higher reported expenditures improve program quality.

The first is the problem of economies of scale. The *U.S. News* methodology assumes that it costs twice as much to educate an incoming class of 200 as it does to educate one of 100, and four times as much to educate a class of 400 – in other words, that legal education involves no economies of scale. Although I am unaware of any studies of the issue,

and mastering the law." See http://www.law.stanford.edu/school/ (visited Feb. 7, 2007)

NYU's website advertises, first and foremost: "our truly outstanding faculty—a group that values the chance to teach, in addition to producing cutting-edge scholarship that is often directly tied to the big issues of the day—and ... an extraordinary peer group." Subsidiarily, it advertises clinical opportunities: "Please be sure to take a look at our hands-on offerings, including the Root Tilden Kern Program, the Furman Academic Program, the An Bryce Scholarship Program and the Institute for International Law and Justice." See http://www.law.nyu.edu/prospective/welcome.html (visited Dec. 20, 2006).

Pennsylvania advertises (1) "an outstanding group of leading scholars in every major area of law," (2) "a cross-disciplinary program that is unrivaled among the leading law schools," and (3) the fact that it ranks "third in a national survey in student satisfaction." See http://www.law.upenn.edu/about/index.html (visited Dec. 20, 2006).

U.S. News' assumption seems inherently implausible. Every law school must maintain much of the same basic infrastructure regardless of its size: a computerized recordkeeping system, a library with one copy of each of the standard reference series and texts, a web and hard-copy publicity presence, an employer-relations function, and so on. Similarly, although the size of the first-year faculty is typically proportional to the size of the first-year class, the number of upper division specialists commonly is not. Every well-rounded law faculty arguably needs at least one expert in antitrust law, one in labor law, one in environmental law, one in comparative law, and so on; rarely is there sufficient demand, however, even at large law schools, to force the hiring of more than one. Intuitively, therefore, one would expect significant economies of scale in legal education. But if this is so, then U.S. News' use of expenditure-per-student numbers systematically biases its rankings against larger law schools.

The second technical problem is the problem of adjustments for "cost of living." The proper adjustment, of course, would not be for "cost of living" at all; it would be for "cost of legal education." A school in a region with a lower "cost of legal education" should be able to offer the same real inputs while spending less money. Unfortunately, no such index exists; U.S. News therefore substitutes "cost of living" adjustments. Because the Runzheimer COLAs are not publicly available, we do not know how big the U.S. News adjustments are. The ACCRA COLAS, however, usefully illustrate some of the problems created by making this substitution. According to ACCRA, the cost of living in Washington, DC, is 43% higher than the cost of living in Durham, North Carolina. This seems intuitively plausible. But assuming this to be true, can one properly then infer that Georgetown pays its law professors, on average, 43% more than similarly qualified professors at Duke? Does it mean that Georgetown pays 43% more for books and 43% more for computer and communications systems than Duke? The answer to both questions is almost certainly "no." But U.S. News' methodology assumes that the answer is "yes." This assumption clearly affects its relative rankings of the two schools.81

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One major cost of legal education that does probably vary, more or less, with conventional cost-of-living is land. But, as I have already noted, land is not accounted for in any consistent way in *U.S. News*' expenditure data.

Because of problems in the ABA Take-Off expenditure data, it is difficult to isolate the effect of the cost-of-living adjustment. If the expenditure variables are eliminated from the computation entirely, Georgetown moves up from 14<sup>th</sup> to 12<sup>th</sup>; Duke remains in 11<sup>th</sup> place.

It is probably even the case that some law school costs are *lower* in major metropolitan areas, where costs of living are high, than they are elsewhere – in other words, that "cost of legal education" is sometimes *inversely* related to "cost of living." Adjunct professors with extraordinary qualifications can be retained in major legal centers for embarrassingly small sums; <sup>82</sup> to replicate their expertise at a school not located in a major legal center would often be cost-prohibitive. Similarly, externship programs providing valuable practical legal training in a wide variety of contexts are inexpensive to operate in major legal centers; law schools not located in such centers may be forced to substitute much higher cost inhouse clinics.

In sum, the quality of *U.S. News*' expenditures-per-student data is poor and evidence that each additional COLA-adjusted dollar spent produces a commensurate increase in educational quality scanty, particularly in comparing schools within tiers. I conclude that use of the two expenditure variables in *U.S. News*' methodology probably adds significantly more error than information to its ultimate rankings.

5. Student/faculty ratios.—Use of student/faculty ratios in a law school ranking system might, at first blush, appear to be unproblematic. After all, in grade schools, student/teacher ratios are viewed as critical to educational quality. A lower student/teacher ratio almost always means smaller class sizes and more teacher attention per pupil.

At law schools, however, the same does not hold true. Most obviously, at many higher-ranked schools (or schools that aspire to higher rank), teaching is not necessarily perceived to be a professor's primary function. Scholarship is. At such schools, professors generally teach fewer hours per year. At the 10 highest-ranked law schools, for example, the average annual teaching load is 7.94 hours; in *U.S. News*' third and fourth

Our school's current tax adjunct professors, for example, include the Deputy Area Counsel, Office of Chief Counsel of the IRS, the Deputy Controller (Taxation) for the State of California, the National Director of Entertainment Tax Services at Ernst & Young, a former Chief of the Tax Division of the U.S. Attorney's Office in Los Angeles, a former IRS Western Regional Professor-in-Residence, a former partner in charge of nationwide tax training for the KPMG International Services Practice group, the former national Director of Insurance Tax Services at Price Waterhouse, a Fellow of the American College of Tax Counsel, a Fellow of the American College of Trust and Estate Counsel and Academician of the International Academy of Estate and Trust Law, a BNA Tax Management portfolio author, five Chairs or former Chairs of Los Angeles area bar association Tax Sections, and a former US Supreme Court clerk. The cost of the expertise they collectively bring to our tax program is less than that of a single full-time professor.

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tier, it is 11.13 hours – 40% higher. 83 As a result, the lower student/faculty ratios associated with higher rank do not necessarily result in smaller class sizes – they may merely free up faculty time to write. This is great for faculty, but not particularly helpful for students or employers.

Nor do lower student/faculty ratios necessarily imply more faculty attention to students outside of class. According to *The Princeton Review*'s student surveys, the ten law schools that rank highest in terms of "accessible and interesting" professors are, in order:

	Student/faculty ratio
Washington & Lee	10.5
Boston University	12.1
Loyola Los Angeles	16.1
Ave Maria	14.0
Kentucky	16.3
Samford	18.2
Chicago	9.9
Chapman	17.7
Mercer	13.5
St. Thomas	20.2
Median ratio for all ranked schools	15.7

Thus, of the ten U.S. law schools that score highest on faculty-student interaction, five fall in the lower half of all schools ranked by student/faculty ratio. Student/faculty ratios appear to be very poor predictors of faculty accessibility.

I have already discussed two further reasons that student/faculty ratios might mean less than might first appear. First is the fact that a low student/faculty ratio often means merely that the law school in question sponsors more in-house clinics. A school with multiple in-house clinics may report a low student/faculty ratio even if class sizes in its substantive curriculum remain large. As I have noted, in-house clinics are plusses. But U.S. News' methodology is heavily biased in favor of in-house clinics and

basis." *Id*.

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Annual teaching loads for full-time law faculty at *U.S. News*-rated schools range from 6.2 to 15.2 hours for schools on the semester system and from 8.2 to 16.7 hours for schools on the quarter system. 2005 ABA Take-Offs, Table B-2. According to the Take-Offs, "Annual Teaching Load is derived by dividing total contact hours by the number of faculty FTE and then doubling the quotient for schools on the semester basis and tripling the quotient for schools on the quarter

against externship programs; its use of student/faculty ratios in ranking is one of the principal sources of that bias. Second is the fact that a majority of the student/faculty ratios reported to *U.S. News* are different from those reported in the ABA Take-Offs. The quality of the numbers reported to *U.S. News*, it can be inferred, is low.

Finally, in reading student/faculty ratios, it is important to keep in mind that the ABA's formula for computing such ratios does not count all faculty members equally. An unwary reader may therefore misinterpret the results. ABA Standard 402 provides that in computing student/faculty ratios, each full-time teacher on tenure track "or its equivalent" shall be counted as one. ABA Interpretation 405-6 explains that "[a] form of security of position reasonably similar to tenure includes ... a program of renewable long-term contracts. ... For the purposes of this Interpretation, 'long-term contract' means at least a five-year contract that is presumptively renewable or other arrangement sufficient to ensure academic freedom." Typically, most of a law school's clinical faculty will meet this requirement and be fully counted in the tally.

The Standard then allows the employment of "additional teaching resources," but provides that each such additional instructor shall be counted as the equivalent of less than one full-time tenure-track teacher. Each clinician and legal writing instructor not on tenure track or its equivalent is counted as 70% of a faculty member; each adjunct professor as 20% of a faculty member. The Standard allows such "additional teaching resources" to constitute up to 20% of the full-time-equivalent faculty for purposes of computing student/faculty ratios. Thus, a school with 40 tenured or tenure-track professors can count up to 50 adjuncts in computing that ratio. Such a school, with 90 actual professors, is treated for student/faculty ratio and teaching load purposes as having only 50 FTE faculty members (40 x 1 plus 50 x .2 = 50).

As I have noted, schools in major metropolitan areas are more likely to be able to attract qualified adjuncts. Since adjuncts typically teach more than 20% of a full load, 84 this means that student/faculty ratios and ABA-reported average teaching loads at schools in major metropolitan areas are likely to be overstated. Similarly, schools outside of major metropolitan areas often have a harder time offering significant externship programs and are sometimes therefore forced to sponsor more in-house clinics. The resulting clinical faculty members lower both reported student/faculty

The mean average teaching load at U.S. News-ranked law schools is 10.41 hours. Id. A single three-hour course would therefore constitute 29% of a full load at the average ranked school.

ratios and reported average teaching loads, without changing in any way the nature of the school's substantive legal instruction.

6. Library.—Volume and title counts reflect, although sometimes imperfectly, a law school's past commitment to its library. A library's current acquisition budget, by contrast, reflects the school's current commitment. U.S. News combines volume and title counts in its library variable, which is then given a weight of only 0.75%.

My own school's history makes me suspicious of volume and title counts even as measures of past commitment. Some two decades ago, our library director undertook a radical purge of our collection, cutting it approximately in half. Out went the free Department of Agriculture manuals on pig farming and 49 of the 50 copies of Prosser on Torts. He then persuaded our dean to give him an acquisitions budget that has since remained, on average, one of the top dozen in the country. As I have already noted, the result is a collection that now surpasses Stanford's in size. Because of our library's larger acquisitions budget, si it is probably also more current than Stanford's. Given the very low weight accorded law libraries in *U.S. News*' methodology, however, two paragraphs is probably about as much discussion as this final input variable merits.

For all of the foregoing reasons, I conclude that *U.S. News*' rankings and overall scores should be taken with a serious grain of salt. The input variables *U.S. News*' has selected are facially plausible. Upon closer examination, however, many of them turn out to be of questionable validity, and important parts of the data appear to be of poor quality. The ultimate rankings are then computed using procedures that are extremely sensitive to small changes in data or method – unreliable, in the language of statistics.

Certainly, the resulting rankings may be useful in separating top from middle from bottom. That is not, however, how readers typically use them. Prospective students, faculty members, employers, and other stakeholders in the legal educational enterprise often give small differences or changes in reported rank significant weight. This, I suggest, is a mistake. There may well be material differences between a law school ranked 30<sup>th</sup> and one ranked 60<sup>th</sup>, but those differences are probably not accurately or reliably captured by *U.S. News*' methodology. Caveat emptor.

According to the 2005 ABA Take-Offs, Law Library Comprehensive Statistical Table, variable 50a, Loyola LA's library acquisition budget was 30% larger than Stanford's.

## Part III. Managing Your School's Rankings

Law school administrators sometimes assume that LSATs have an effect on the *U.S. News*' rankings greater than the 12.5% weight they are ostensibly assigned.<sup>86</sup> How this "fact" came to pervade the literature is obscure, although some blame must probably be assigned to two widely-quoted sentences in the 1998 Klein-Hamilton study:

"[A]bout 90% of the overall differences in ranks among schools can be explained solely by the median LSAT score of their entering classes and essentially all of the differences can be explained by the combination of LSAT and Academic reputation ratings. Consequently, all of the other 10 factors US News measures ... have virtually no effect on the overall ranks ..."<sup>87</sup>

Drs. Klein and Hamilton should have written more carefully. Many read the quoted sentences as statements about causation. They are not. They are statements about correlation. As I have already noted, at the top end differences in LSATs have almost no causal effect on either overall scores or ranks.

The weights are the weights are the weights. Except as I have noted in Part I, I have no reason to believe that U.S. News departs from its publicly disclosed methodology in any regard. I have replicated that methodology, at least approximately, and my replication produces the results that U.S. News says it should produce — again, at least approximately. If a law school focuses exclusively on LSATs and fails to manage its UGPAs or 9-month employment figures, it will likely fall in the rankings — probably by a significant amount.

See, e.g., Alex M. Johnson, Jr., The Destruction of the Holistic Approach to Admissions: The Pernicious Effects of Rankings, 81 Ind. L.J. 309, 312 ("Given the near-perfect correlation between the median LSAT score and the school's ranking, a school may raise its median LSAT score and presumably ranking by rejecting students with lower LSAT scores"); William D. Henderson & Andrew P. Morriss, Student Quality as Measured by LSAT Scores: Migration Patterns in the U.S. News Rankings Era, 81 Ind. L.J. 163, 165 ("Although U.S. News relies upon a methodology that encompasses a variety of substantive factors, ... student [LSAT] scores have assumed ... an importance far greater than their current, direct 12.5% weighting").

Stephen P. Klein & Laura Hamilton, Ass'n of Am. Law Sch., *The Validity of the U.S. News and World Report Ranking of ABA Law Schools* (1998).

I do not propose to discuss specific techniques for managing this variable or that. Others have already done so;<sup>88</sup> further techniques will undoubtedly occur to careful readers of Parts I and II above. What I do propose to offer instead are two sets of possibly useful insights based on my numerical analysis.

The first is a table of leading and lagging input variables, set forth in Appendix D. For the most part, schools' input variable values are roughly the same number of standard deviations away from the means of those input variables as their overall scores are from the mean overall score. Sometimes, however, a school does especially well or poorly with respect to a particular input variable. Appendix D identifies, for each school, the variables with respect to which that school does better or worse (in terms of standard deviations away from the mean) than the school's overall score. Amounts are given in overall score points. In other words, each entry in the table indicates the approximate amount by which a particular variable pulls the school's overall score up or down.

It may be useful to walk through one school's results to assist the reader in interpreting results for other schools. With apologies, I will use the school that heads the list alphabetically – Akron. As is set forth in Appendix D, Akron's 2007 leading and lagging input variables were as follows:

Peer assessment score	-1.4
Lawyer assessment score	-2.6
Median LSAT	0.9
Median UGPA	0.5
Acceptance rate	0.2
Employment at graduation	0.4
Employment at 9 months	1.1
Bar pass	0.1
"Educational" expenses per student	0.0
Other expenses per student	0.1
Student/faculty ratio	0.8
Library	0.0
Total	0.0

What these figures indicate is that Akron's "educational" expenses per student and library collection are exactly what one would expect for a

See, e.g., Jeffrey Evans Stake, The Interplay Between Law School Rankings, Reputations, and Resource Allocation: Ways Rankings Mislead, 81 Ind. L.J. 229, 232-243 (2006).

school with Akron's overall score. Its two reputational scores pull it down by a total of four overall score points. Its remaining variables pull it back up by the same four overall score points. (Indeed, the sum of all leading and lagging indicators for any given school should always equal zero.)

Based on its leading and lagging indicators, Akron appears to be the classic overachieving, underappreciated law school – with better students than its *U.S. News* score would indicate, a better student/faculty ratio, and a better placement record. Looking solely at these numbers, one might hypothesize that Akron's faculty is comparatively less productive, thereby perhaps justifying the school's lower reputational scores. A review of Akron's SSRN download statistics, however, suggests that in terms of posted scholarship the school's faculty significantly *outperforms* its *U.S. News* ranking. <sup>89</sup> The bottom line seems to be that Akron is pulled down primarily by the fact that none of us can keep the relative qualifications of 180 law faculties straight when it comes time to fill out the *U.S. News* questionnaire.

Leading and lagging indicators can also be used to measure how much influence each variable has on overall scores. As a computational matter, of course, the weights are the weights. But a variable that is closely correlated with the remaining eleven could actually be dropped from the calculation with relatively little effect on ultimate rankings. The influence a particular variable has on overall scores therefore depends not merely on its weight, but also on the extent to which that variable is *not* correlated with the other eleven – in lay terms, the extent to which the variable in question is out of step with other indicators used by *U.S. News*. The next table gives such a measure; the number given for each variable represents the average of the absolute values of the amounts (in overall score points) by which that variable leads or lags overall score for each of the 180 ranked schools.

I estimate that Akron ranks 130<sup>th</sup> by overall score using *U.S. News*' methodology. By contrast, as of February 1, 2007, it ranked 108<sup>th</sup> by all-time SSRN downloads and 112<sup>th</sup> by recent SSRN downloads (that is, downloads within the past 12 months). *See* http://hq.ssrn.com/Rankings/Ranking\_display.cfm?TMY\_gID=2&TRN\_gID=13 (visited Feb. 21, 2007).

Peer assessment score	1.29
Lawyer assessment score	.97
Median LSAT	.95
Median UGPA	.91
Acceptance rate	.34
Employment at graduation	.35
Employment at 9 months	$1.42^{-90}$
Bar pass	.21
"Educational" expenses per student	1.11
Other expenses per student	.27
Student/faculty ratio	.45
Library	.09

The influence of peer assessment scores should not be surprising given the fact that this first variable is weighted more heavily (25%) than any other. What jumps out from the table, however, is the extraordinary influence of 9-month employment figures and "educational" expenses per student. Law schools gain or lose more overall score points – an average of 1.42 such points – by reason of their 9-month employment numbers than by reason of any other variable. Similarly, they gain or lose an average of 1.11 overall score points by reason of "educational" expenses per student, despite the fact that that variable is only the sixth most heavily weighted out of twelve. Why? Because these two variables are significantly out-of-step with *U.S. News*' other indicators of law school quality. This fact both reinforces my conclusion that their use may be inappropriate and suggests that an administrator seeking to manage her school's ranking might well begin with them.

A second set of numbers administrators may find useful is a table of what I call "overall score equivalents," given immediately below. Each overall score equivalent indicates how much a school would have to move with respect to a given input variable to move the school's overall score by just one point – assuming no other changes at that or any other school. In effect, the table tells us how sensitive a law school's overall score is to changes in particular variables. Obviously, less movement should be required with respect to higher-weighted variables, more with respect to lower-weighted variables to effect the same one-point movement of the school's overall score. But because all variables are normalized before being combined, the sensitivity of overall score to a given variable also

This number is corrected for an apparent clerical error that by my calculation cost the school in question 18 overall score points. Without this correction, the number would be 1.52.

depends on the distribution of the other 179 schools' data with respect that variable.

## Overall Score Equivalents

Peer assessment score	0.179
Lawyer/judge assessment score	0.258
Median LSAT percentile equivalents	6.8 percentile points
Median undergraduate GPAs	0.0965 on a 4.0 scale
Acceptance rate	20 percentage points
Employment rate at graduation	22 percentage points
Employment rate at nine months	3.1 percentage points
Bar passage ratio	0.417
"Educational" expenditures per student\$2,	949
Other expenditures per student	\$14,995
Student/faculty ratio	5.54 students/faculty
Library volumes and titles	2,237,366

Let me use my own school's numbers in explaining how to read and use this table. Beginning at the top, the table tells us that Loyola Los Angeles could boost its overall score by one point (and therefore move up five ranks) simply by moving its academic reputation number up by 0.179 (from 2.5 to 2.7). Alternatively, it could boost its overall score by one point by moving its practitioner reputation number up by .258 (from 2.9 to 3.2), and making no further changes. It could accomplish the same thing by improving its median LSAT the equivalent of 6.8 percentile points (more on this below and in Appendix E) or its median UGPA by 0.0965 (from 3.28 to 3.38). Achieving the same one-point jump by changing its acceptance rate would be almost impossible; a school like Loyola Los Angeles, which currently accepts 23.4% of its applicants, would have to shift that figure by 20 percentage points – to 3.4% – to move a single overall score point. Similarly, it would take a difficult 22 percentage point improvement in employment rates at graduation (from 73.7% to 95.7%) to effect the same one-point improvement. By contrast, it would take only a 3.1 percentage point improvement in employment rates nine months out to move the same overall score point. Because the school is already at 97.6%, however, to do so would require that it boost its 9-month employment rate to 100.7% – mathematically impossible.

Interpreting the bar passage ratio "overall score equivalent" is complicated because of the way bar passage ratios are computed. The table tells us that a school must boost its bar passage ratio by .417 to move its

*U.S. News* overall score by a single point. To make practical use of this figure, one must first compute a school's current bar passage ratio: in Loyola Los Angeles's case, 1.074 (65.5% school pass rate divided by the 61% average California pass rate). Add .417 to produce, in Loyola Los Angeles's case, 1.491. Then multiply the result by the average state pass rate; for Loyola Los Angeles, we multiply the result by 61% (California's average pass rate) to produce 91%. Conclusion: Loyola Los Angeles would have to move its California bar pass rate from 65.5% to 91% to move its overall score up by a single point. I have done the relevant computations for all *U.S. News*-ranked schools; the results are given in Appendix E.

Hopefully, the expenditure-per-student overall score equivalents are more self-explanatory. To move up one overall score point, Loyola Los Angeles would need to raise its COLA-adjusted "educational" expenditures per student by \$2,949 or its COLA-adjusted other expenditures per student by \$14,995. Alternatively, it could reclassify \$3,671 of COLA-adjusted "indirect" expenditures per student as "direct" without changing its total expenditures at all. The one problem, of course, is that the relevant Runzheimer COLAs are not publicly available. Finally, Loyola Los Angeles could achieve the same one-overall-score point movement upward by lowering its student/faculty ratio by 5.54, from 16.0 to 10.46;<sup>91</sup> this would require increasing its full-time-equivalent faculty by 40, from 75.6 to 115.6. Or it could increase the total title/volume count of its library by 2,237,366 - from 827,863 to 3,065,229 - that is, by more than tripling its library's size to surpass Harvard's. Neither of these latter two approaches to rank management is likely to be cost-effective for most schools.

All but two entries in the table given above can be applied with relative ease to any given law school's numbers. Two, however, require computations of some complexity to be of practical use: median LSATs and bar pass rates. I have therefore performed the relevant calculations myself; the results for all *U.S. News*-ranked schools appear in Appendix E. Again, let me use my own school in explaining how to use the results published in that Appendix. The first two columns indicate how far the school's median LSAT would have to move in order to move the school's overall score one point up or one point down; the last two columns give the same information with regard to bar passage. The Appendix therefore tells us that if Loyola Los Angeles's median LSAT were to move up to

The numbers given are the ABA numbers, not the U.S. News numbers. As has been noted, the U.S. News student/faculty ratio numbers are generally different from those reported in the ABA Take-Offs.

164 and nothing else were to change, its overall score would move up one point; conversely, if its median LSAT were to drop to 158, its overall score would move down one point. Similarly, if its California bar pass rate were to move up to 91%, its overall score would move up one point; and if that rate were to drop to 40%, its overall score would drop one point.

Two warnings are in order. First, the overall score equivalents given above depend on the means and standard deviations of all the input data sets. They will therefore change somewhat from year to year. Unless *U.S. News*' methodology changes or significant changes occur in the data itself, however, these changes should not be large. Second, the numbers given are average numbers. For example, the table tells us that a one-point shift in a school's overall score should require *on average* a .179 change in a school's peer assessment score. For some schools the required change will be greater, for some less. Obviously, the closer a school already is to transitioning to the next overall score before the change, the smaller the change required to effect that transition.

## Part IV. Improving the U.S. News Ranking System

This Part IV is addressed to several audiences. The first is *U.S. News* itself; I would be delighted if *U.S. News* were to find any of my suggestions helpful. Second is an audience made up of potential data sources, most importantly the ABA's Section of Legal Education and Admissions to the Bar. As a practical matter, *U.S. News* must base its rankings on information that is relatively easy to collect. The ABA's decisions as to what information to force law schools to compile, therefore, have a profound impact on *U.S. News*' methodology. But the ABA is not the only potentially relevant player in this regard. One of the recommendations given below, for example, is addressed to the National Board of Bar Examiners, which administers the Multistate Bar Examination. Finally, this Part IV is addressed to scholars interested in the objective assessment of legal education.

I would remind the reader that this Article does not purport to offer a systematic critique of *U.S. News*' methodology. Most importantly, it does not generally address the issue of weights other than to point out that the rankings are useful only to the extent that reader values the same things the *U.S. News* methodology implicitly values, and gives them the same weight. This Part IV, therefore, merely identifies possible improvements to *U.S. News*' methodology based on the analysis I have actually undertaken. Other improvements undoubtedly are possible.

## A. Improving the Input Variables

1. The reputational surveys.—Unlike some, I am of the view that U.S. News' reputational surveys provide valuable if flawed information about law schools and that U.S. News performs a useful service in conducting them. In the real world, reputations matter, even if they are not "objective." I would, however, suggest several changes in the way the surveys are conducted.

First, respondents should be permitted to return fractional answers – that is, a 4.2 or 4.7 rather than merely a 4 or 5. To assess 180 law schools on a 5 interval scale is unrealistically crude. Does UC Berkeley deserve a "4" or a "5"? Probably neither. Were *U.S. News* to make this change, the reputational survey information in its annual publication would become correspondingly more reliable. Since *U.S. News* already reports survey results to one decimal place, the change would also make its published numbers more consistent with the raw data it purports to be summarizing.

Second, *U.S. News* should reframe the questions posed to maximize the utility of the responses. Academic respondents should be asked to rate each school's scholarly reputation. This would ask academic respondents a question as to which they might actually be able to provide informed answers. It would also add to the information *U.S. News* provides its readers; currently, no input variable unambiguously measures scholarship. Judge and lawyer respondents, by contrast, should be asked to rate the quality of each school's graduates. Again, this is a question as to which judges and lawyers might actually be able to provide informed answers; the responses could be of great value to readers. Both changes would reduce the role of name recognition and increase the overall validity of the rankings.

Third, *U.S. News* should discard the 10% highest and 10% lowest responses with respect to each school before averaging the remainder. Some believe that academic respondents, in particular, complete *U.S. News*' questionnaire strategically rather than honestly. Discarding the high and low extremes would reduce the effect of strategic responses, presumably therefore reduce the amount of such strategizing, and in any event increase the validity of the resulting scores.

2. Student body quality.—As is discussed in Part II above, U.S. News' UGPA and acceptance rate variables appear to add at least as much error as information to its rankings. Acceptance rates, which are highly manipulable and vary widely for reasons having nothing to do with the quality of a school's student body, should be omitted as an input factor. I am ambivalent, however, about UGPAs. On the one hand, UGPAs from

different undergraduate institutions and different majors are not reliably comparable; the inclusion of UGPAs as an input factor therefore adds significant random error to the rankings. On the other, omitting both UGPAs and acceptance rates from *U.S. News'* computation would leave LSATs as the sole measure of student quality; this, in turn, would place pressure on schools to make admissions decisions based solely on LSATs – not a desirable result. One possible compromise might be to retain UGPAs in the formula but weight them less heavily.

I also urge the ABA to make two changes in the LSAT and UGPA statistics it requires law schools to compile. First, all such statistics should include transfer students, not merely first year students. A widespread practice has recently developed to game these numbers: the school reduces the size of its entering class so as to be able to report higher numbers; it then accepts an offsetting number of transfer students (whose LSATs and UGPAs are never reported) to avoid revenue losses. This practice is highly disruptive to both students and schools. There may be good reasons for law schools to accept transfer students. But an ABA reporting rule that incentivizes the practice, leading schools to accept more transfers than they would in the absence of such a rule, is pedagogically unsound. In addition, I urge the ABA to require law schools to compile 50<sup>th</sup> and 100<sup>th</sup> LSAT statistics. Such statistics would be of great benefit to legal employers. They would also help offset the bias in favor of smaller schools that the ABA's data collection effort currently exhibits.

Regardless of whether any of the foregoing recommendations are accepted, however, one change must clearly be made: median LSATs should not be converted to percentile equivalents before being combined with the remaining variables. *U.S. News*' current practice in this regard is indefensible and seriously compromises the credibility of its rankings.

3. Placement success.—Both of U.S. News' employment variables are problematic. Neither carries much useful information. Both are highly manipulable and vary widely for reasons having nothing to do with the quality of the school. I would drop them. Bar passage rates, by contrast, are important and relatively objective measures of educational output. Unfortunately, bar passage rates vary significantly from state to state. This fact undermines the utility of bar passage statistics in making national comparisons. The computational manipulations U.S. News undertakes to make passage rates nationally comparable are not ultimately successful, particularly for schools with pass rates close to 100%. I suggest two changes.

The first would be to change the way the bar passage input variable ("BPIV") is computed. Recall that that variable is currently computed as follows:

$$BPIV_{School} = (School's rate)/(State average rate)$$

This formula measures the distance of a particular school's bar passage rate above or below the relevant state average. Unfortunately, as discussed in Part II, it also produces different state-to-state ceiling effects that distort the rankings of schools with high pass rates. An alternative would be to measure how far a school's bar passage rate is from 100% relative to how far the state' average bar passage rate is from 100%. In other words:

$$BPIV_{School} = (100\% - School's rate)/(100\% - State average rate)$$

This would capture much of what U.S. News' current formula attempts to capture while avoiding the state-to-state ceiling disparity problem. The resulting data set would need to be inverted before being combined with other inputs. More mathematically sophisticated manipulations would be required to eliminate ceiling effects altogether.  $^{92}$ 

A more informative change would require that the National Board of Bar Examiners agree to compile and release average scores and other performance statistics, by law school, of graduates sitting for the Multistate Bar Exam. The MBE is a nationally uniform measure of legal educational success; no computational manipulation would be required to make such school averages nationally comparable. In addition, average scores would provide more information about educational success than mere pass rates. Finally, the performance of all of a law school's graduates, not merely those sitting for the bar in a single state, would then count in measuring the school's performance.

4. Expenditures per student.—Because of the extensive and irremediable problems with U.S. News' expenditure-per-student variables detailed in Part II above, I see no way of reforming those variables to make them reliable and valid indicators of law school quality. The interschool accounting comparability problems are profound. There is no audit process. Because the variables themselves are not published, there is not even a public shaming incentive for schools to be honest in their reporting. U.S. New's necessary assumption that there are no diminishing

E.g., BPIV<sub>School</sub> = log(100% - School's rate)/log(100% - State average rate).

At least some number of states would have to consent to such compilation and reporting.

marginal returns in legal education is unlikely to be even approximately true. Its assumption that there are no economies of scale is equally problematic. Its substitution of "cost of living" as a proxy for "cost of legal education" is highly questionable. Although dollars may well make a difference, the data *U.S. News* actually uses and the manipulations it performs before using these data make these two variables profoundly and uncorrectably unreliable and invalid. I would omit them, and would not credit any rankings that include them.

5. Student/faculty ratios.—The first and most obvious suggestion I would make with regard to student/faculty ratios is that U.S. News provide law schools with detailed and specific instructions as to how to compute them. The ABA does not do so in its questionnaire; those charged with filling out the U.S. News questionnaire therefore typically have no guidance as to how to perform the computation. The result, as I have noted, is a set of published U.S. News numbers that does not match the corresponding ABA numbers. To the extent that U.S. News implicitly represents that it is publishing comparable data, its publication is misleading.

Even if *U.S. News* were to bring its numbers into line with the ABA's, however, I would still have problems. I disagree with the ABA's decision to compute student/faculty ratios based solely on schools' JD enrollments. The ABA's ratios misrepresent the true number of students with a claim on faculty time for schools with large non-JD populations. The extent of this misrepresentation is given in Appendix C.

More fundamentally, readers are likely to interpret student/faculty ratios as proxies for class size and student-faculty interaction. Because of the problems identified in Part II, they are not valid proxies for either. Nor are they valid proxies for the quality of a school's clinical program. Finally, as is true of expenditures per student, linear use of student/faculty ratios in a ranking algorithm necessarily assumes that legal education involves no significant economies of scale. This cannot be true. To provide the same subject-matter coverage the faculty at a small school must be larger, relative to its student body, than the faculty at a large school. I conclude that *U.S. News*' current use of student/faculty ratios is more likely to mislead than inform.

6. Library.—As discussed in Part II, current acquisitions budgets are far more indicative of institutions' current commitments to their libraries than volume or title counts. At the very least, I suggest that U.S. News add such budgets to its computations. I also feel compelled to note astonishment that the quality of a law school's library should count less than one percent in assessing the quality of the law school as a whole. A

law school is, among other things, a research institution. The quality of its research facilities is certainly more relevant to me than it appears to be to *U.S. News*.

### B. Computing the Rankings

In Part II.A, I suggested that, because of the way *U.S. News* computes overall scores and ranks, very small changes in data or methodology could produce large changes in rank – or at least changes likely to be perceived as large by the typical reader. In other words, I suggested that *U.S. News*' ranks were "unreliable" in a statistical sense. Here, I suggest changes in the way *U.S. News* computes overall scores and ranks that would minimize their unreliability.

1. Use a consistent forced mean and standard deviation in computing overall scores.—One of the major problems with U.S. News' current rescaling algorithm is that U.S. News forces the score of its top-ranked school to equal 100 and that of its bottom-ranked school to equal zero. This causes its overall scores to be unusually sensitive to small changes in the reported data of those two schools. It also makes reporting the overall scores of the bottom-ranked 80 school unpalatable. This, in turn, makes the rankings much less useful for prospective students and faculty making choices among third and fourth tier schools. By my computation, for example, U.S. News' fourth tier includes schools with overall scores ranging from zero to 27. That is a large spread. The same difference further up the rankings would determine whether a school is in the top 20 or just barely in the top 100. By lumping these schools together in a single "fourth tier," U.S. News effectively pretends they are indistinguishable.

All of these problems could be solved by rescaling the raw combined scores using a consistent forced mean and forced standard deviation. I suggest a mean of 75 and a standard deviation of 10, although any other mean and standard deviation would work consistent forced mathematically. My proposed change would result in overall scores ranging from 101.48 for Yale down to 56.59 for the bottom-ranked school. One of the principal consequences would be that changes in the data for Yale or the bottom-ranked school would have no more effect on the relative ranks of other schools than changes in the data of any other school. In addition, however, U.S. News would be able to report overall scores for all ranked schools, making the rankings useful for prospective students and faculty attempting to decide among schools that are now merely lumped together as third or fourth tier.

- 2. Report overall scores to two decimal places.—A second feature that contributes to the unreliability of U.S. News' current algorithm is that overall scores are rounded to the nearest integer and then lumped together by integer for ranking purposes. As has been noted, this can cause major ranking shifts by reason of very small changes in data or method. Reporting overall scores to two decimal places and ranking accordingly would solve this problem.
- 3. Eliminate the third and fourth tiers and report overall scores and ranks for all law schools.—The single most damaging feature of U.S. News' current ranking practice is the fact that it lumps some number of schools into tiers. Moving down a rank, or even ten ranks, is unpleasant but not a disaster. Moving down a tier can be catastrophic. Applicants stop applying. Employers stop interviewing. Students transfer out. Faculty members shop their resumes. The damage can be permanent. If anyone were ever to have a plausible cause of action against U.S. News, it would probably be a school pushed into a lower tier by some arbitrary change in U.S. News' method, or students at such a school.

Not only is this aspect of *U.S. News*' current practice reprehensible, hurting large numbers of students and staff each year, it is unnecessary. If *U.S. News* were to use a consistent forced mean and standard deviation in computing its overall scores, as I have recommended, it could report overall scores and ranks for all law school and eliminate tiers altogether.

### Conclusion

What I have found most interesting in analyzing U.S. News' rankings are the surprises in the nitty-gritty details. It would be impossible to summarize even a small portion of those surprises here. I came to this project with the assumption that there was probably some core of validity and reliability to the rankings, despite all of our complaints. I leave concluding that that core is very small, if indeed it exists at all.

Law school deans know that rankings management is a red queen's race – one must sprint just to stay in place. In the U.S. News world, the race sometimes goes to the school with the greatest flexibility to manage its numbers and the will to do so. This is not necessarily the school that provides the best education for its students, the best working environment for its faculty, or the best graduates for prospective employers. But that is the world in which we currently live.

I have made a number of recommendations as to how to improve the validity and reliability of *U.S. News*' rankings. I am not optimistic they will be followed. I conclude, therefore, by pointing out what many others

have said before me: The situation will likely improve significantly only when multiple widely-read ranking systems come to compete.

Currently, in my view, the ABA contributes significantly to *U.S. News*' monopoly. The ABA requires compilation of great amounts of information, thereby making *U.S. News*' rankings possible. But it keeps most of that information secret, at least within the time frames relevant to possible entrants to the law school ranking business. This secrecy, in turn, raises significant barriers to entry for possible *U.S. News* competitors. My ultimate recommendation to the ABA would be to post the most relevant variables it collects promptly and publicly on the internet and waive copyright protection with respect to that posting. Competitor rankings would inevitably spring up. Students, faculty, and employers would be much better served. And the world of legal education would cease to be forced to dance to a single piper's tune.

Appendix A: LSAT-Predicted Reputational Scores

	LSAT- Predicted	Apparent Peer	LSAT- Predicted	Apparent Lawyer
	Peer	Mis-	Lawyer	Mis-
Law School	Score	Ranking	Score	Ranking
Law School	Score	Runking	Score	Runking
Akron	2.5	-0.7	2.9	-1.0
Alabama	3.3	-0.6	3.5	-0.5
Albany	2.0	0.1	2.5	-0.1
American	3.0	-0.1	3.3	-0.2
Arizona	3.0	0.1	3.3	-0.2
Arizona State	2.6	0.3	3.0	0.0
Arkansas Fayetteville	e 2.0	0.2	2.5	0.4
Arkansas Little Rock	1.9	0.2	2.3	0.3
Ave Maria	2.0	-0.5	2.5	-0.6
Baltimore	1.9	0.0	2.3	0.0
Baylor	2.8	-0.5	3.1	-0.2
BC	3.4	-0.1	3.7	0.0
Brooklyn	3.3	-0.7	3.5	-0.7
BU	3.4	0.0	3.7	-0.2
BYU	3.4	-0.6	3.7	-0.4
California Western	1.7	0.0	2.2	0.3
Campbell	2.2	-0.7	2.6	-0.4
Capital	1.7	0.0	2.2	-0.1
Cardozo	3.4	-0.7	3.7	-1.0
Case Western	2.6	0.2	3.0	0.1
Catholic	2.5	-0.1	2.9	0.0
Chapman	2.2	-0.7	2.6	-0.8
Chicago	4.4	0.3	4.5	0.1
Chi-Kent	3.0	-0.3	3.3	-0.7
Cincinnati	2.8	-0.3	3.1	-0.2
Cleveland-Marshall	2.0	0.0	2.5	-0.4
Colorado	3.1	-0.1	3.4	-0.1
Columbia	4.5	0.2	4.6	0.0
Connecticut	3.0	-0.1	3.3	-0.2
Cornell	3.9	0.3	4.1	0.0
Creighton	1.7	0.3	2.2	1.0
CUNY	1.4	0.4	1.9	0.2
Dayton	1.9	0.0	2.3	0.1
Denver	2.6	-0.2	3.0	-0.3

DePaul	2.8	-0.5	3.1	-0.3
Detroit Mercy	1.1	0.4	1.7	0.1
District of Columbia	1.4	-0.1	1.9	-0.5
Drake	1.9	0.1	2.3	0.5
Duke	4.0	0.2	4.2	0.1
Duquesne	1.9	-0.1	2.3	0.3
Emory	3.3	0.1	3.5	0.3
Florida	2.6	0.6	3.0	0.5
Florida Coastal	1.5	-0.2	2.1	-0.3
Florida State	2.6	0.2	3.0	-0.1
Fordham	3.6	-0.4	3.8	-0.5
Franklin Pierce	1.9	0.0	2.3	0.1
George Mason	3.4	-0.6	3.7	-0.5
George Washington	3.6	-0.1	3.8	0.0
Georgetown	4.2	0.0	4.4	-0.1
Georgia	3.3	-0.2	3.5	-0.1
Georgia State	2.6	-0.3	3.0	-0.2
Golden Gate	1.7	0.0	2.2	-0.4
Gonzaga	1.9	0.2	2.3	0.4
Hamline	2.2	-0.4	2.6	-0.4
Harvard	4.8	0.1	4.9	-0.1
Hawaii	2.5	-0.2	2.9	-0.2
Hofstra	2.3	0.1	2.7	-0.2
Houston	2.8	-0.1	3.1	-0.7
Howard	1.5	0.6	2.1	0.7
Idaho	2.2	-0.2	2.6	0.1
Illinois	3.7	-0.3	3.9	-0.2
Indiana Bloomington	3.3	-0.1	3.5	0.2
Indiana Indianapolis	2.0	0.5	2.5	0.6
Iowa	3.0	0.5	3.3	0.5
John Marshall Chicago	1.9	-0.1	2.3	0.1
Kansas	2.5	0.1	2.9	0.4
Kentucky	2.8	-0.3	3.1	-0.3
Lewis & Clark	3.0	-0.7	3.3	-0.2
Louisiana State	2.2	0.1	2.6	0.3
Louisville (Brandeis)	2.3	-0.1	2.7	-0.3
Loyola Chicago	2.8	-0.5	3.1	0.0
Loyola Los Angeles	3.0	-0.5	3.3	-0.4
Loyola New Orleans	1.9	0.2	2.3	0.5
Maine	2.2	0.0	2.6	0.3
Marquette	2.3	0.0	2.7	0.1

Maryland	3.0	-0.1	3.3	-0.2
McGeorge	2.5	-0.4	2.9	-0.3
Memphis (Humphreys)	2.2	-0.4	2.6	-0.5
Mercer	2.2	-0.2	2.6	0.4
Miami	2.3	0.5	2.7	0.4
Michigan	4.0	0.6	4.2	0.3
Michigan State	2.5	-0.4	2.9	-0.1
Minnesota	3.4	0.2	3.7	0.0
Mississippi	2.0	0.2	2.5	0.3
Mississippi College	1.2	0.3	1.8	0.6
Missouri Columbia	2.5	0.2	2.9	0.2
Missouri Kansas City	1.9	0.3	2.3	0.6
Montana	1.9	0.1	2.3	0.4
Nebraska	2.2	0.2	2.6	0.5
Nevada	2.5	-0.4	2.9	-0.7
New England	1.4	0.3	1.9	-0.1
New Mexico	2.0	0.4	2.5	0.2
New York	2.2	-0.1	2.6	-0.1
North Carolina	3.0	0.6	3.3	0.6
North Carolina Central	0.8	0.7	1.4	0.5
North Dakota	1.2	0.7	1.8	0.9
Northeastern	3.0	-0.7	3.3	-0.8
Northern Illinois	2.2	-0.5	2.6	-0.4
Northern Kentucky	2.0	-0.4	2.5	-0.5
Northwestern	4.2	-0.1	4.4	-0.3
Notre Dame	3.6	-0.3	3.8	-0.1
Nova Southeastern	1.4	0.4	1.9	-0.4
NYU	4.4	0.2	4.5	0.0
Ohio Northern	1.5	0.0	2.1	0.3
Ohio State	3.0	0.2	3.3	0.3
Oklahoma	2.3	0.1	2.7	0.4
Oklahoma City	1.1	0.5	1.7	0.5
Oregon	2.6	0.2	3.0	0.2
Pace	1.9	0.2	2.3	0.0
Pennsylvania	4.2	0.2	4.4	0.0
Pennsylvania State	2.0	0.2	2.5	0.7
Pepperdine	2.6	-0.4	3.0	0.1
Pittsburgh	2.6	0.2	3.0	-0.2
Quinnipiac	2.2	-0.3	2.6	-0.4
Regent	1.7	-0.3	2.2	-0.5
Richmond	3.0	-0.8	3.3	-0.2

Roger Williams	1.5	0.2	2.1	-0.2
Rutgers Camden	3.0	-0.5	3.3	-0.4
Rutgers Newark	2.5	0.1	2.9	0.0
Samford	2.2	-0.4	2.6	-0.1
San Diego	3.1	-0.3	3.4	-0.5
San Francisco	2.6	-0.4	3.0	-0.1
Santa Clara	2.6	-0.2	3.0	-0.1
Seattle	2.2	0.0	2.6	0.1
Seton Hall	2.8	-0.4	3.1	-0.3
SMU (Dedman)	3.1	-0.5	3.4	-0.2
South Carolina	2.3	0.0	2.7	0.1
South Dakota	1.7	0.1	2.2	0.7
South Texas	1.7	0.0	2.2	-0.3
Southern	0.6	0.7	1.2	0.4
Southern Illinois	1.9	0.1	2.3	0.3
Southwestern	2.2	-0.4	2.6	-0.6
St. John's	2.8	-0.5	3.1	-0.3
St. Louis	2.3	0.1	2.7	0.4
St. Mary's	1.7	0.0	2.2	0.1
St. Thomas	1.1	0.3	1.7	0.1
Stanford	4.2	0.6	4.4	0.4
Stetson	1.9	0.2	2.3	0.2
Suffolk	2.2	-0.3	2.6	-0.5
SUNY Buffalo	2.0	0.5	2.5	0.2
Syracuse	1.9	0.5	2.3	0.8
Temple	3.0	-0.4	3.3	-0.2
Tennessee	2.8	-0.1	3.1	-0.3
Texas	3.7	0.4	3.9	0.2
Texas Southern	0.8	0.7	1.4	0.5
Texas Tech	1.9	0.1	2.3	0.1
Texas Wesleyan	2.0	-0.4	2.5	-0.5
Thomas Jefferson	1.7	-0.3	2.2	0.2
Thomas M. Cooley	1.1	0.2	1.7	0.2
Toledo	2.6	-0.7	3.0	-0.6
Touro	1.4	0.3	1.9	-0.1
Tulane	3.0	0.2	3.3	0.2
Tulsa	1.5	0.5	2.1	0.4
U Washington	3.1	0.1	3.4	-0.1
UC Berkeley	3.7	0.8	3.9	0.6
UC Davis	3.0	0.4	3.3	0.3
UC Hastings	3.3	0.0	3.5	0.2

UCLA	3.7	0.3	3.9	0.0
USC (Gould)	3.7	0.1	3.9	-0.4
Utah	2.8	0.0	3.1	-0.4
Valparaiso	1.5	0.4	2.1	0.6
Vanderbilt	3.6	0.2	3.8	0.2
Vermont	1.9	0.3	2.3	0.3
Villanova	3.1	-0.5	3.4	-0.6
Virginia	4.2	0.3	4.4	0.2
Wake Forest	3.4	-0.4	3.7	-0.2
Washburn	1.7	0.2	2.2	0.5
Washington & Lee	3.3	0.1	3.5	0.3
Washington U	3.7	-0.2	3.9	-0.2
Wayne State	2.2	0.1	2.6	0.2
West Virginia	1.4	0.6	1.9	0.6
Western New England	1.9	-0.4	2.3	-0.7
Whittier	1.9	-0.5	2.3	-0.4
Widener Delaware	1.7	0.1	2.2	0.0
Willamette	2.0	0.1	2.5	0.2
William & Mary	3.4	-0.1	3.7	-0.1
William Mitchell	1.9	0.0	2.3	0.5
Wisconsin	3.0	0.5	3.3	0.2
Wyoming	1.7	0.3	2.2	0.6
Yale	4.7	0.2	4.8	0.1

# Appendix B: Top 100 Schools Ranked by Estimated 100th LSATs

Rank	Law School	Estimated 100th LSAT	Estimated 50th LSAT
1	Harvard	177	178
2	Columbia	173	174
3	NYU	172	173
4	Virginia	171	172
4	Yale	171	175
6	Chicago	170	172
6	Georgetown	170	170
6	Northwestern	170	171
9	Michigan	169	170

9 Stanford 169	172
	<del></del>
12 Texas 168	170
12 UC Berkeley 168	170
12 UCLA 168	170
15 Duke 167	169
15 George Washington 167	168
17 Cornell 166	168
Fordham 166	167
17 Minnesota 166	168
17 USC (Gould) 166	167
21 BC 165	167
21 BU 165	166
Vanderbilt 165	167
21 Washington U 165	167
25 Cardozo 164	166
25 Emory 164	165
25 Illinois 164	167
Notre Dame 164	167
UC Hastings 164	165
30 American 163	164
30 Brooklyn 163	164
30 Loyola Los Angeles 163	164
30 San Diego 163	164
Wake Forest 163	165
30 William & Mary 163	165
36 BYU 162	165
36 Florida 162	164
George Mason 162	165
36 Indiana Bloomington 162	164
36 Lewis & Clark 162	164
36 Maryland 162	165
North Carolina 162	164
36 Temple 162	164
36 Tulane 162	164
36 Villanova 162	163
Washington & Lee 162	165
36 Wisconsin 162	164
48 Alabama 161	163
48 Chi-Kent 161	163
48 Colorado 161	164

48	Georgia	161	164
48	Houston	161	163
48	Iowa	161	163
48	Northeastern	161	163
48	Ohio State	161	164
48	Richmond	161	163
48	SMU (Dedman)	161	164
48	U Washington	161	165
48	UC Davis	161	164
60	Arizona	160	163
60	Baylor	160	163
60	Denver	160	163
60	DePaul	160	162
60	Florida State	160	161
60	Loyola Chicago	160	163
60	Miami	160	161
60	Pepperdine	160	161
60	Pittsburgh	160	161
60	Rutgers Camden	160	163
60	San Francisco	160	162
60	Santa Clara	160	162
60	Seattle	160	162
60	Seton Hall	160	161
60	St. John's	160	162
75	Arizona State	159	162
75	Case Western	159	161
75	Catholic	159	160
75	Connecticut	159	162
75	Georgia State	159	160
75	Hofstra	159	160
75	Kentucky	159	163
75	McGeorge	159	160
75	Suffolk	159	160
84	Indiana Indianapolis	158	159
84	Michigan State	158	161
84	New York	158	158
84	Oregon	158	160
84	Rutgers Newark	158	161
84	South Carolina	158	160
84	St. Louis	158	160
84	Utah	158	161

92	Louisiana State	157	159
92	Marquette	157	159
92	Missouri Columbia	157	159
92	South Texas	157	158
92	Southwestern	157	159
92	Texas Tech	157	159
92	Toledo	157	159
92	Wayne State	157	159
92	William Mitchell	157	159

## Appendix C: Inflation Effect of Computing Expenditures Per Student and Student/Faculty Ratios Based Solely on FTE J.D. Enrollment

School	Inflation Effect
NYU	44%
Georgetown	27%
BU	26%
Northwestern	22%
Temple	22%
Golden Gate	22%
U Washington	22%
Harvard	18%
Columbia	18%
Indiana Bloomington	18%
Franklin Pierce	17%
George Washington	17%
Vermont	17%
Duke	14%
St. Thomas	14%
Washington U	13%
American	12%
Cornell	12%
Pepperdine	11%
Loyola Chicago	11%
John Marshall Chicago	11%
Miami	11%
Wayne State	11%

Pennsylvania	11%
Washington & Lee	11%
Villanova	11%
UC Berkeley	10%
Chicago	10%
SMU (Dedman)	9%
Chi-Kent	9%
Florida	8%
San Diego	8%
Capital	7%
Houston	7%
Arizona	7%
Connecticut	7%
Baltimore	7%
Denver	7%
USC (Gould)	7%
Yale	6%
Stanford	6%
Touro	6%
Nova Southeastern	6%
Pittsburgh	6%
Notre Dame	6%
Fordham	6%
Regent	6%
Case Western	6%
Indiana Indianapolis	6%
Alabama	5%
George Mason	5%
Illinois	5%
Missouri Kansas City	5%
Cardozo	5%
Minnesota	5%
California Western	4%
Michigan	4%
Loyola Los Angeles	4%
Virginia	4%
Seton Hall	4%
Louisville (Brandeis)	4%
McGeorge	3%
Tulsa	3%
San Francisco	3%

Lauria & Clark	20/
Lewis & Clark	3%
Texas	3%
Emory	3%
Louisiana State	3%
Santa Clara	3%
Southwestern	3%
Pace	3%
Vanderbilt	3%
UC Hastings	2%
Wake Forest	2%
Arkansas Fayetteville	2%
Hawaii	2%
UC Davis	2%
Pennsylvania State	2%
Howard	2%
St. Mary's	2%
DePaul	2%
Widener Delaware	2%
Hofstra	2%
New York	2%
SUNY Buffalo	2%
Georgia	2%
Colorado	2%
William & Mary	2%
Nevada	2%
UCLA	2%
Stetson	2%
Albany	2%
Iowa	1%
St. John's	1%
St. Louis	1%
Akron	1%
BYU	1%
Suffolk	1%
Utah	1%
Valparaiso	1%
Maine	1%
Nebraska	1%
Cleveland-Marshall	1%
Northern Illinois	1%
Whittier	1%
** 11100101	1 / 0

Michigan State	1%
Idaho	1%
Hamline	1%
South Texas	1%
Maryland	1%
Thomas M. Cooley	1%
Rutgers Camden	1%
All other schools	0%

### Appendix D: Leading and Lagging Input Variables: Extent to Which Variables Pull Overall Score Up or Down, Measured in Overall Score Points

Law School	Peer Assess	Lawyer Assess	Median LSAT	Median UGPA	Acc Rate Inv	Empl Grad	Empl 9 Months	Bar Pass Ratio	Educ Exp/Stud	Noneduc Exp/Stud	Fac/Stud Ratio	Library
Akron	-1.4	-2.6	0.9	0.5	0.2	0.4	1.1	0.1	0.0	0.1	0.8	0.0
Alabama	-1.6	-1.2	1.5	-0.5	-0.1	-0.7	0.9	0.3	1.2	-0.6	0.8	0.0
Albany	-0.7	-1.1	-0.3	-1.6	-0.5	-0.5	2.8	0.2	0.9	0.1	0.4	0.1
American	-0.2	-0.7	0.7	-0.8	0.0	0.4	0.7	0.2	0.2	-0.4	0.0	0.0
Arizona	1.1	-0.7	0.7	0.1	0.0	-0.3	-0.9	0.1	-0.1	-0.3	0.3	-0.1
Arizona State	0.8	-0.6	0.2	-0.4	-0.1	-0.5	0.1	-0.2	0.5	-0.5	0.8	-0.1
Arkansas Fayetteville	-1.3	0.5	-0.9	0.2	0.3	-0.2	0.6	0.1	0.3	-0.3	0.6	0.0
Arkansas Little Rock	-1.1	-0.4	-1.9	0.1	0.9	0.2	2.8	-0.1	-0.3	0.1	-0.1	-0.1
Ave Maria	-2.4	-2.0	0.8	-0.9	-1.8	-0.9	0.0	1.3	4.0	1.0	0.9	0.1
Baltimore	0.7	0.1	0.5	-0.5	0.4	0.1	0.2	-0.3	-0.7	0.2	-0.7	0.0
Baylor	-2.8	-0.8	0.9	2.0	0.3	-0.2	1.7	0.3	-1.1	0.4	-0.4	-0.2
BC	0.8	1.0	1.0	0.7	0.1	-0.5	-0.3	-0.1	-2.4	0.1	-0.1	-0.2
Brooklyn	-0.6	-1.2	1.5	-0.9	0.1	0.0	2.0	0.2	0.1	0.1	-1.2	0.0
BU	0.6	-0.4	0.7	0.2	-0.3	0.2	0.1	-0.1	-1.3	0.1	0.2	0.0
BYU	-2.2	-0.6	1.2	2.0	-0.3	0.2	0.5	-0.4	0.5	0.2	-1.2	-0.1
California Western	3.2	3.4	1.6	2.3	0.4	-1.6	-13.7	0.5	2.9	0.5	0.4	0.2
Campbell	-2.8	-0.8	1.2	-0.2	0.9	1.4	-0.4	0.3	0.0	0.2	0.2	-0.1
Capital	-0.7	-0.8	-0.4	-0.6	-0.1	0.2	1.4	0.1	0.3	0.2	0.4	0.0
Cardozo	-0.5	-2.0	1.7	0.3	0.1	0.0	1.2	0.0	-0.8	0.2	-0.2	-0.1
Case Western	-0.2	-0.3	-0.6	-1.5	0.0	-0.1	1.4	0.0	1.2	0.2	0.0	-0.1
Catholic	0.7	0.9	0.7	-0.8	0.0	0.0	0.4	0.0	-2.0	0.0	0.1	0.0
Chapman	-2.5	-2.5	1.4	0.6	0.3	-0.1	2.3	0.5	-0.6	0.4	0.1	0.0
Chicago	4.4	1.8	-0.4	-1.1	-0.2	0.1	-2.5	-0.4	-1.6	-0.1	0.1	-0.1
Chi-Kent	0.2	-2.0	1.1	0.1	0.0	0.1	-0.3	-0.1	0.2	0.2	0.6	0.0
Cincinnati	-1.9	-1.1	0.7	2.2	-0.7	-0.1	0.9	0.1	-0.3	-0.3	0.6	-0.1
Cleveland-Marshall	-0.8	-2.1	-0.6	1.0	0.1	0.2	1.3	-0.1	0.1	-0.2	1.0	0.1
Colorado	0.4	0.2	1.2	1.8	-0.1	-0.2	-2.2	0.2	-1.0	-0.6	0.3	0.0
Columbia	3.2	1.1	-0.9	-1.5	-0.3	-0.1	-3.3	-0.3	2.1	0.3	-0.5	0.1

Connecticut	0.0	-0.6 0.3	-0.8	0.4 -0.7	0.5	0.1 0.6	-0.3 0.5	0.0
Cornell	2.9	0.6 0.0	-0.3	-0.4 0.2	-2.0	-0.1 -0.7	-0.4 0.2	-0.1
Creighton	-2.8	1.8 -2.4	1.6	-0.4 0.3	2.7	-0.1 -1.2	0.3 0.1	-0.1
CUNY	0.7	-0.4 -1.4	-0.2	1.0 -1.2	-3.6	-0.1 3.9	-0.1 1.3	0.0
Dayton	-0.5	-0.1 -0.1	-0.9	0.4 -0.1	-0.1	0.0 0.7	0.2 0.5	0.0
Denver	-1.1	-1.1 0.3	-1.6	0.2 1.0	1.9	-0.5 0.4	0.2 0.3	-0.1
DePaul	-1.4	-0.4 1.1	-0.3	0.2 0.7	1.1	-0.1 -0.7	0.4 -0.5	-0.1
Detroit Mercy	-0.2	-1.1 -2.2	0.0	-0.4 0.6	3.1	0.3 -0.7	0.2 0.3	0.1
District of Columbia	-0.1	-2.1 -0.1	-1.7	1.1 0.2	-0.7	-0.8 2.2	0.1 1.9	0.1
Drake	-1.9	0.4 -1.2	0.9	-0.7 0.1	2.3	0.0 0.1	0.3 -0.3	-0.1
Duke	2.1	1.0 -0.2	0.0	-0.5 0.0	-1.8	0.0 - 0.2	-0.1 -0.4	-0.2
Duquesne	-1.5	0.6 -0.3	1.6	-0.6 1.1	-0.1	0.1 -1.2	0.1 0.3	0.0
Emory	0.9	1.2 0.4	-1.4	-0.5 -0.1	0.0	-0.3 0.3	-0.3 -0.1	-0.2
Florida	1.3	0.9 -0.6	0.8	0.0 -0.6	0.0	-0.1 -0.7	-0.7 -0.3	0.0
Florida Coastal	-2.6	-1.8 -0.7	-0.2	0.1 0.6	3.4	0.3 0.3	0.5 0.2	0.0
Florida State	0.1	-1.1 0.1	-0.5	0.2 0.6	1.9	-0.1 -1.3	-0.1 0.2	0.0
Fordham	0.3	-0.7 1.1	-0.5	0.0 0.3	0.3	0.1 -0.3	-0.1 -0.5	0.0
Franklin Pierce	-0.4	-0.1 -0.1	-1.2	-0.2 0.0	0.2	0.1 1.6	0.1 -0.1	0.0
George Mason	-1.8	-0.8 1.1	-0.6	0.4 1.0	1.1	-0.2 1.1	-0.5 -0.6	-0.1
George Washington	1.1	0.9 0.9	-0.3	0.0 0.5	-0.5	0.0 -2.1	0.0 -0.5	-0.1
Georgetown	3.1	1.6 0.3	-0.2	-0.2 -0.1	-1.9	-0.1 -2.2	0.0 -0.7	0.2
Georgia	-0.1	0.0 1.0	0.0	-0.1 -0.2	0.7	-0.1 -0.1	-0.6 -0.4	-0.1
Georgia State	-0.6	0.1 1.5	-0.4	0.5 -0.2	0.7	0.2 -1.3	-0.4 0.0	-0.1
Golden Gate	2.8	-0.1 1.4	0.6	0.4 -0.3	-4.3	-0.6 0.1	0.5 -0.4	0.1
Gonzaga	-0.4	0.5 -0.8	0.0	-0.2 0.1	2.1	0.0 -1.2	0.3 -0.2	-0.1
Hamline	0.1	-0.3 1.1	1.1	-0.2 -0.4	-1.2	0.1 -0.7	0.4 0.0	0.0
Harvard	3.3	1.3 -1.4	-0.3	-0.2 -0.4	-3.9	-0.3 1.5	0.1 -0.5	0.9
Hawaii	-0.9	-0.6 0.7	0.3	0.6 0.1	1.1	-0.1 -1.2	-0.5 0.5	-0.1
Hofstra	1.0	-0.8 0.1	-0.2	-0.4 0.0	1.2	-0.2 -0.9	0.3 -0.2	0.1
Houston	0.7	-2.6 1.3	0.7	0.2 -0.2	1.3	0.1 0.0	-0.4 -1.1	0.0
Howard	0.4	1.4 -1.9	-0.8	0.6 1.2	-0.3	-0.6 -1.3	0.2 1.0	0.1
Idaho	-1.2	0.4 0.3	0.6	0.1 -0.9	0.1	0.1 0.5	0.1 0.0	-0.1
Illinois	1.3	1.0 1.6	-3.0	0.3 -0.5	0.5	-0.3 -1.2	0.0 0.1	0.1
Indiana Bloomington	0.7	1.4 1.0	-1.0	-0.9 0.4	-0.5	-0.1 -1.2	0.2 -0.1	0.1
Indiana Indianapolis	-0.4	0.8 -1.5	1.0	-0.1 0.8	0.8	-0.2 -0.4	-0.2 -0.5	0.1
Iowa	1.3	1.0 -0.5	0.0	-1.1 0.3	-0.1	-0.4 -0.5	-0.4 0.1	0.3
John Marshall Chicago	-0.3	0.4 0.3	-2.1	0.0 0.0	1.7	-0.1 0.7	0.0 -0.8	0.1
Kansas	0.1	1.6 0.2	1.7	0.1 -0.8	-1.4	-0.1 -1.3	-0.5 0.4	-0.1
Kentucky	-0.9	-0.9 1.2	1.5	-0.4 -0.3	1.9	0.0 -1.3	-0.4 -0.2	-0.1
Lewis & Clark	-1.7	0.8 2.0	-0.7	-0.6 -0.3	0.8	-0.2 -0.4	0.1 0.3	0.0
Louisiana State	-1.3	0.1 -0.7	0.9	0.1 0.5	0.1	-0.4 0.7	-0.2 -0.2	0.2
Louisville (Brandeis)	-1.1	-1.7 0.5	0.1	0.1 -0.2	0.4	0.1 1.9	-0.4 0.3	0.0
Loyola Chicago	-1.9	0.7 1.3	-0.5	0.1 0.5	2.4	0.1 - 2.4	0.2 -0.3	-0.1
Loyola Los Angeles	-0.8	-0.4 1.7	-2.0	0.2 0.2	1.8	0.1 -0.6	-0.1 -0.2	0.1
Loyola New Orleans	-1.4	0.3 -1.3	0.3	-0.2 0.9	3.5	-0.9 -1.2	0.2 -0.2	-0.1
Maine	-0.3	1.1 0.2	-0.6	-0.5 -0.1	0.6	-0.2 -0.1	-0.3 0.3	-0.1
Marquette	-0.6	0.0 0.4	0.2	-0.6 -0.2	1.5	0.5 -1.0	0.1 -0.2	-0.1
Maryland	-0.5	-0.9 0.6	0.3	0.4 0.1	0.5	-0.1 -0.7	0.0 0.5	-0.1
McGeorge	-2.1	-1.0 0.3	-2.0	-0.1 0.0	2.2	0.3 1.9	0.3 0.0	0.0
Memphis (Humphreys)	-1.8	-1.9 0.1	0.2	0.6 -0.3	3.6	0.3 -1.0	-0.3 0.7	-0.1
Mercer	-3.2	0.6 -0.6	0.1	-0.1 -0.4	2.8	0.2 -0.3	0.4 0.5	-0.1
Miami	1.1	0.5 -0.4	-0.3	-0.6 0.2	0.2	0.2 -0.2	0.1 -0.9	0.0
Michigan	4.5	1.8 -0.3	-1.0	-0.4 0.0	-2.3	0.0 -0.6	-0.3 -1.4	0.1
Michigan State	0.8	1.7 1.0	0.5	0.0 -0.5	-2.8	0.0 -0.3	0.2 -0.6	0.1
Minnesota	1.6	0.4 0.5	-0.7	-0.5 0.7	-0.4	-0.3 -1.1	-0.4 0.0	0.2
Mississippi	-1.4	0.0 -1.0	1.4	0.2 0.4	1.6	0.0 -0.5	-0.4 -0.2	-0.1

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Mississippi College
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Missouri Columbia
Missouri Kansas City
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Montana
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Nebraska
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Nevada
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New England
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New Mexico
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New York
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North Carolina
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North Carolina Central
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North Dakota
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Northeastern
                         -1.1
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Northern Illinois
Northern Kentucky
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Notre Dame
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Nova Southeastern
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Pennsylvania
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Regent
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Richmond
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Roger Williams
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Rutgers Camden
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Rutgers Newark
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Samford
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San Francisco
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Southern Illinois
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Southwestern
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St. John's
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St. Louis
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St. Marv's
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St. Thomas
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Stanford
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Stetson
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Suffolk
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SUNY Buffalo
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Syracuse	-0.2	1.3 -1.6	-0.9	-0.2 0.1	0.9	0.0 0.0	0.7 0.1	0.0
Temple	-0.6	0.2 1.5	-1.3	-0.1 -0.1	1.0	0.0 0.0	0.1 0.1	0.0
Tennessee	0.2	-1.0 1.1	2.2	0.4 -0.6	-2.8	0.0 0.3	-0.4 0.7	0.0
Texas	3.5	1.3 0.4	-0.2	-0.1 0.3	-1.6	-0.2 -2.5	-0.1 -1.1	0.2
Texas Southern	1.4	0.3 -2.7	-2.9	1.2 1.6	-1.6	-0.3 1.7	0.1 0.9	0.3
Texas Tech	-2.1	-1.5 -1.3	2.0	-0.2 0.7	2.5	0.3 -0.3	0.0 0.0	-0.1
Texas Wesleyan	-0.6	-0.8 0.8	-0.9	0.5 -0.5	-0.1	-0.1 1.4	0.1 0.2	0.0
Thomas Jefferson	-0.7	1.7 0.6	-1.5	0.9 0.3	0.5	-0.7 -1.0	0.4 -0.5	0.1
Thomas M. Cooley	1.6	1.2 -2.0	-1.1	-1.4 0.1	-2.2	0.0 3.2	0.7 -0.5	0.3
Toledo	-3.6	-2.0 -0.5	-1.7	0.6 1.1	0.7	0.3 4.4	0.2 0.6	-0.1
Touro	2.7	-0.2 -0.1	-0.1	0.5 -0.4	-5.2	0.2 1.7	0.3 0.6	0.2
Tulane	1.7	1.1 0.7	0.0	-0.1 0.0	-0.3	-0.9 -1.7	0.4 -1.0	0.0
Tulsa	0.1	0.3 -1.7	-1.2	0.0 -0.3	0.5	-0.1 1.7	0.2 0.3	0.1
U Washington	0.0	-0.9 0.3	1.2	0.0 0.4	0.5	-0.1 -1.3	-0.7 0.5	-0.1
UC Berkeley	3.9	1.8 -0.8	1.0	0.2 0.1	-2.0	0.2 -3.0	-0.7 -0.8	0.0
UC Davis	1.9	0.9 0.1	1.0	-0.1 0.1	-2.2	0.3 -2.0	0.1 0.0	-0.2
UC Hastings	2.5	2.1 1.6	0.5	0.0 -1.0	-1.4	0.6 -3.5	-0.3 -1.3	0.1
UCLA	2.3	0.1 0.1	0.2	0.0 0.2	-1.0	0.5 -1.6	-0.5 -0.1	-0.1
USC (Gould)	1.9	-1.2 0.6	0.2	-0.2 0.0	-0.8	0.3 -0.1	-0.3 -0.2	-0.2
Utah	0.3	-1.4 0.8	2.4	-0.3 -0.2	-1.0	-0.2 -0.4	-0.6 0.7	-0.1
Valparaiso	0.4	1.8 -1.2	0.6	0.9 -1.2	-1.6	0.2 -0.8	0.3 0.6	0.0
Vanderbilt	1.8	1.0 0.3	0.6	-0.3 0.2	-1.6	-0.3 -0.6	0.0 -1.0	-0.1
Vermont	-0.4	-0.4 -1.1	-2.2	-1.1 0.1	2.0	-0.3 2.9	0.0 0.7	-0.1
Villanova	-0.4	-1.0 2.1	0.7	-0.3 -0.2	1.8	-0.2 -1.5	-0.4 -0.5	0.0
Virginia	3.9	2.3 -0.1	-0.7	-0.4 0.1	-2.3	-0.2 -2.0	-0.1 -0.5	0.0
Wake Forest	-0.3	0.7 1.5	-1.1	0.0 -0.1	-1.7	0.1 0.4	-0.2 0.8	-0.1
Washburn	-1.7	0.5 -1.5	0.0	-0.2 0.1	1.7	-0.2 0.8	-0.2 0.6	0.1
Washington & Lee	0.6	1.0 0.3	-0.3	-0.1 -0.4	-3.0	0.0 1.7	-0.1 0.5	-0.2
Washington U	1.0	0.4 1.1	0.0	-0.3 0.2	-0.2	-0.3 -1.8	0.1 -0.1	-0.1
Wayne State	0.8	0.9 0.4	2.4	-0.4 -0.4	-1.5	0.5 -1.9	-0.4 -0.6	0.2
West Virginia	1.2	0.9 -1.8	3.0	-0.1 -0.3	-2.0	0.4 -0.2	0.0 -1.0	0.0
Western New England	0.2	-1.8 0.0	-0.8	-0.1 0.4	-0.6	0.0 1.3	0.5 0.7	0.2
Whittier	-1.5	-1.0 0.2	-1.3	0.5 0.2	3.3	-0.6 -1.0	0.3 0.5	0.2
Widener Delaware	0.0	-0.3 -1.1	-1.5	0.0 0.0	1.1	0.0 1.2	0.3 0.2	0.1
Willamette	-0.3	0.5 -0.1	1.2	-0.1 -0.3	-1.2	0.5 -0.7	0.3 0.3	-0.1
William & Mary	0.7	0.5 1.0	0.8	-0.1 0.2	-0.7	0.0 -1.4	-0.3 -0.5	-0.2
William Mitchell	-0.1	2.0 -0.7	1.3	-0.7 -0.1	-0.5	0.2 -0.2	0.1 -1.2	0.1
Wisconsin	2.2	0.2 0.0	0.1	-0.1 -0.4	-0.1	0.1 -1.5	-0.5 0.0	0.0
Wyoming	0.1	1.7 -1.0	0.3	0.5 -0.3	-1.4	0.3 -0.1	-0.3 0.1	-0.1
Yale	1.1	0.4 -2.6	-0.3	-0.1 -0.8	-5.4	-0.5 8.1	0.3 -0.1	0.0

Appendix E: How Far Median LSATs or Bar Pass Rates Would Need to Move to Move a School's Overall Score By One Point Up or Down

Law School	Median LSATs		Bar pass rates		
(	One OS	One OS	One OS	One OS	
	Point	Point	Point	Point	
	Up	Down	Up	Down	
Akron	160	156	N/A	45%	
Alabama	166	160	N/A	63%	
Albany	156	153	N/A	46%	
American	164	158	N/A	55%	
Arizona	164	158	N/A	53%	
Arizona State	161	156	N/A	44%	
Arkansas Fayetteville	e 156	153	N/A	51%	
Arkansas Little Rock	156	152	N/A	43%	
Ave Maria	156	153	N/A	69%	
Baltimore	156	152	87%	27%	
Baylor	162	157	N/A	58%	
BC	168	160	N/A	58%	
Brooklyn	166	160	N/A	52%	
BU	168	160	N/A	60%	
BYU	168	160	N/A	54%	
California Western	154	151	84%	33%	
Campbell	157	153	N/A	46%	
Capital	154	151	N/A	41%	
Cardozo	168	160	N/A	48%	
Case Western	161	156	N/A	54%	
Catholic	160	156	N/A	42%	
Chapman	157	153	92%	41%	
Chicago	N/A	164	N/A	63%	
Chi-Kent	164	158	N/A	51%	
Cincinnati	162	157	N/A	56%	
Cleveland-Marshall	156	153	N/A	39%	
Colorado	165	159	N/A	56%	
Columbia	N/A	164	N/A	63%	
Connecticut	164	158	N/A	60%	
Cornell	N/A	163	N/A	61%	
Creighton	154	151	N/A	48%	
CUNY	152	149	95%	33%	

Dayton	156	152	N/A	41%
Denver	161	156	95%	33%
DePaul	162	157	N/A	48%
Detroit Mercy	150	147	N/A	38%
District of Columbia	152	149	66%	6%
Drake	156	152	N/A	50%
Duke	N/A	163	N/A	64%
Duquesne	156	152	N/A	46%
Emory	166	160	N/A	55%
Florida	161	156	N/A	49%
Florida Coastal	153	150	N/A	41%
Florida State	161	156	N/A	47%
Fordham	172	161	N/A	56%
Franklin Pierce	156	152	88%	35%
George Mason	168	160	N/A	49%
George Washington	172	161	N/A	56%
Georgetown	N/A	164	N/A	61%
Georgia	166	160	N/A	57%
Georgia State	161	156	N/A	57%
Golden Gate	154	151	60%	9%
Gonzaga	156	152	N/A	43%
Hamline	157	153	N/A	48%
Harvard	N/A	165	N/A	65%
Hawaii	160	156	N/A	44%
Hofstra	159	155	100%	37%
Houston	162	157	N/A	52%
Howard	153	150	82%	22%
Idaho	157	153	N/A	44%
Illinois	180	162	N/A	54%
Indiana Bloomington	166	160	N/A	57%
Indiana Indianapolis	156	153	N/A	45%
Iowa	164	158	N/A	53%
John Marshall Chicago		152	N/A	39%
Kansas	160	156	N/A	48%
Kentucky	162	157	N/A	50%
Lewis & Clark	164	158	98%	38%
Louisiana State	157	153	N/A	41%
Louisville (Brandeis)	159	155	N/A	47%
Loyola Chicago	162	157	N/A	56%
Loyola Los Angeles	164	158	91%	40%
Loyola New Orleans	156	152	97%	23%

Maine	157	153	N/A	38%
Marquette	159	155	N/A	65%
Maryland	164	158	N/A	48%
McGeorge	160	156	94%	43%
Memphis (Humphreys)	) 157	153	N/A	52%
Mercer	157	153	N/A	57%
Miami	159	155	N/A	52%
Michigan	N/A	163	N/A	64%
Michigan State	160	156	98%	37%
Minnesota	168	160	N/A	61%
Mississippi	156	153	N/A	52%
Mississippi College	151	148	N/A	46%
Missouri Columbia	160	156	N/A	52%
Missouri Kansas City	156	152	N/A	48%
Montana	156	152	N/A	51%
Nebraska	157	153	N/A	54%
Nevada	160	156	96%	35%
New England	152	149	N/A	39%
New Mexico	156	153	N/A	46%
New York	157	153	96%	33%
North Carolina	164	158	N/A	53%
North Carolina Central	148	144	N/A	40%
North Dakota	151	148	N/A	49%
Northeastern	164	158	N/A	47%
Northern Illinois	157	153	N/A	51%
Northern Kentucky	156	153	N/A	47%
Northwestern	N/A	164	N/A	62%
Notre Dame	172	161	N/A	60%
Nova Southeastern	152	149	92%	31%
NYU	N/A	164	N/A	66%
Ohio Northern	153	150	N/A	38%
Ohio State	164	158	N/A	58%
Oklahoma	159	155	N/A	61%
Oklahoma City	150	147	N/A	37%
Oregon	161	156	N/A	45%
Pace	156	152	N/A	42%
Pennsylvania	N/A	164	N/A	62%
Pennsylvania State	156	153	N/A	44%
Pepperdine	161	156	100%	49%
Pittsburgh	161	156	N/A	48%
Quinnipiac	157	153	N/A	40%

Regent	154	151	92%	30%
Richmond	164	158	N/A	44%
Roger Williams	153	150	N/A	39%
Rutgers Camden	164	158	N/A	48%
Rutgers Newark	160	156	N/A	39%
Samford	157	153	N/A	51%
San Diego	165	159	96%	45%
San Francisco	161	156	91%	40%
Santa Clara	161	156	93%	42%
Seattle	157	153	N/A	47%
Seton Hall	162	157	N/A	49%
SMU (Dedman)	165	159	N/A	55%
South Carolina	159	155	N/A	52%
South Dakota	154	151	N/A	39%
South Texas	154	151	N/A	37%
Southern	147	143	71%	-3%
Southern Illinois	156	152	N/A	48%
Southwestern	157	153	84%	33%
St. John's	162	157	N/A	55%
St. Louis	159	155	N/A	49%
St. Mary's	154	151	N/A	46%
St. Thomas	150	147	92%	31%
Stanford	N/A	164	N/A	66%
Stetson	156	152	N/A	44%
Suffolk	157	153	N/A	44%
SUNY Buffalo	156	153	N/A	48%
Syracuse	156	152	N/A	45%
Temple	164	158	N/A	54%
Tennessee	162	157	N/A	53%
Texas	N/A	162	N/A	59%
Texas Southern	148	144	87%	22%
Texas Tech	156	152	N/A	52%
Texas Wesleyan	156	153	98%	33%
Thomas Jefferson	154	151	61%	10%
Thomas M. Cooley	150	147	86%	24%
Toledo	161	156	N/A	57%
Touro	152	149	97%	34%
Tulane	164	158	N/A	33%
Tulsa	153	150	N/A	40%
U Washington	165	159	N/A	56%
UC Berkeley	N/A	162	N/A	58%

UC Davis	164	158	N/A	50%
UC Hastings	166	160	N/A	55%
UCLA	N/A	162	N/A	61%
USC (Gould)	N/A	162	N/A	55%
Utah	162	157	N/A	51%
Valparaiso	153	150	N/A	48%
Vanderbilt	172	161	N/A	56%
Vermont	156	152	N/A	38%
Villanova	165	159	N/A	45%
Virginia	N/A	164	N/A	60%
Wake Forest	168	160	N/A	57%
Washburn	154	151	N/A	38%
Washington & Lee	166	160	N/A	55%
Washington U	180	162	N/A	59%
Wayne State	157	153	N/A	53%
West Virginia	152	149	N/A	48%
Western New England	156	152	N/A	34%
Whittier	156	152	65%	14%
Widener Delaware	154	151	N/A	38%
Willamette	156	153	N/A	53%
William & Mary	168	160	N/A	54%
William Mitchell	156	152	N/A	51%
Wisconsin	164	158	N/A	65%
Wyoming	154	151	99%	42%
Yale	N/A	164	N/A	63%