

Law School Rankings Churn

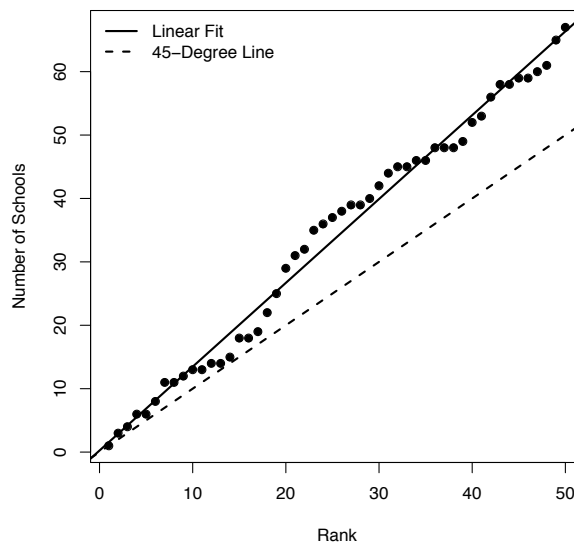
Christopher Zorn

A favorite topic of conversation at last week's [CELS meeting](#) (and, in fact, at every CELS meeting) was law school rankings. One conversation in particular, with IU's [Jeff Stake](#), got me thinking about the "Top N " phenomenon, where N = (variously) 5, or 10, or 14, or 15, or 20, or 25, or 50, or...

Probably the most common: "Top N " usage is "Top 14," denoted as such because — with the exception of one or two years in the late 2000s — the top 14 schools in U.S. News' annual law school rankings have been the same since its inception in 1987. That is a remarkable degree of stability, and it caused me to wonder if there was similar stability at any other "Top N " classification, and more generally about the degree of "churn" in the U.S. New rankings.

I assembled data on the top 50 law schools and their rankings from U.S. News, beginning in 1994 (the first year in which U.S. News ranked 50 schools) and continuing through 2014, and began with a question: Over those 21 years, how many schools have been represented among the "Top N ," where $N \in \{1, 2, 3, \dots, 50\}$. So for example, there has been one "Top 1" school (Yale) during that entire 21-year period; there have been three "Top 2" schools (schools that have been ranked either #1 or #2 at any point): Yale, Harvard, and Stanford; there have been four "Top 3" schools (the three listed above, plus the University of Chicago), and so forth.

**Schools Appearing in the Top 'N' of the USNWR
Law School Rankings, 1994–2014**



The first figure plots the number of schools appearing at each rank during the 1994-2014 period. If only *N* schools had ever appeared in the “Top *N*,” all the points would lie on the dotted (45-degree) line; this would be indicative of zero movement (what I’ll call “churn”) in the rankings from year to year. Of course, schools’ rankings do change; during those 21 years, 37 different schools were at one time or another in the “Top 25,” and 67 schools were in the “Top 50.” The solid line is the best linear fit, estimated as:

$$N \text{ Schools} = 0.24 + 1.32(\text{Rank})$$

We can think of deviations around that line as reflecting greater or lesser degrees of “churn” at that ranking. So, we would expect the (in) famous “Top 14” to have had about 18.5 schools appear in it, rather than the 15 we actually saw. Conversely, eleven schools have appeared in the “Top 7,” and 29 in the “Top 20;” expectations for these two ranks are 9.2 and 26.4 schools, respectively.

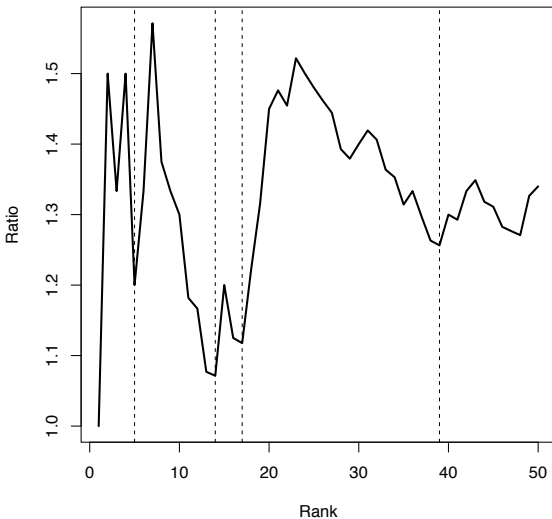
Another way to visualize the differences across ranks is to consider the ratio $\frac{N \text{ Schools}}{\text{Rank}}$,

which summarizes how much “churn” there was at any given value of “Top *N*.” Plotting that ratio for each value of *N* from 1 to 50 yields the graph here. We see relatively low ratios at ranks of 5, 14, 17, and 39 (indicated by the dotted lines). In fact, only 19 schools have appeared in the “Top 17” since 1994, making it a candidate for an alternative to “Top 14.” (Those schools are the traditional “Top 14” plus Texas, UCLA, Vanderbilt, USC, and Minnesota, with the latter appearing in the Top 17 only once, at #17 in 1994). Ranks with high levels of “churn” include #7 and the low-to-mid 20s.

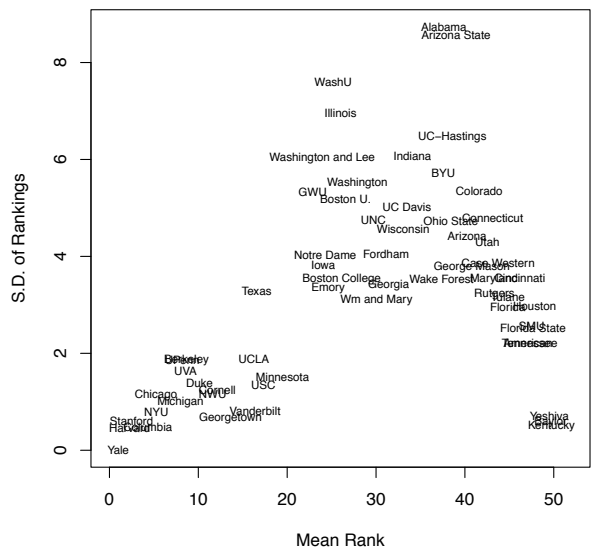
More generally, the second graphic shows a pattern longtime observers of the U.S. News rankings are probably familiar with: Little year-to-year variation at the very top of the rankings; somewhat more variability within the Top 14 / Top 17, but little or no movement into or out of those groups; and substantial annual variability in the 20-50 range, especially among schools ranked 20-35.

We can see this more graphically by considering how the year-to-year variability of each

Ratio of Number of Schools to Rank Position, by Rank Position,



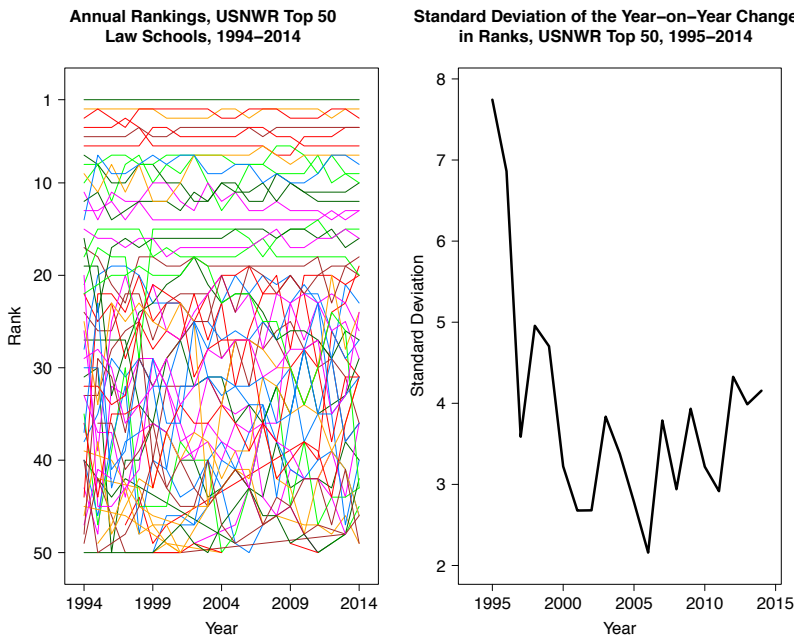
Standard Deviation of Rankings vs. Mean Rank, 1994–2014



school's ranking is related to its average position in the rankings. That figure shows that the schools with the most variability in their rankings have average rankings in the 20-40 range; many of these are schools that either have seen large systematic changes in their rankings over the 21 years (e.g., Alabama), or that have substantial year-to-year variations around their means (e.g., University of Washington). (Note that there is a "bounds" effect near #50, since schools that move into

rankings, both at different levels and across time. For example, one can clearly see the variation in the schools ranked 8-14, and the high variability in the 20-40 range. There was also significantly more of the latter early in the rankings (especially 1994-1996) than we observe more recently.

The plot on the right illustrates this graphically. It takes the year-by-year changes in each school's ranking (so, the difference between



and out of the Top 50 may appear only a few times in the rankings; similarly, six schools that appeared in the "Top 50" only once have no year-to-year variability, and so do not appear in the graph.)

The school-specific plot masks some interesting over-time variation. If we plot each "Top 50" school's annual ranking over time, we get the "spaghetti plot" in the left panel below. With a few exceptions (like Yale at the top) it is impossible to track any particular school's changes over time. What the plot does show, however, is the degree of variability in the

1995 and 1994, 1996 and 1995, and so forth) and then calculates the standard deviation of the changes for each year. The number thus reflects something like "How much a typical school moved in the rankings between that year and the previous one." For the past 15 years or so, it is typical for schools in the Top 50 move between three and four spots each year. Prior to 2000, however, the year-to-year variation in the rankings was, on average, much greater, likely due to the changing methods by which the ranking was calculated.