Response

Mismeasuring the Mismatch: A Response to Ho

Richard H. Sander†

Daniel Ho claims that if one tugs at a single strand of my analysis of affirmative action, *A Systemic Analysis of Affirmative Action in American Law Schools*,[1] the entire structure collapses.[2] As I explain briefly in this Response, Ho is wrong. Ho seems to miss the central analytical framework of my article, is vague in his claims of bias, and offers an alternative approach that violates the very methodological precepts he lays out.

I

Systemic Analysis documents that black law students are nearly two-and-one-half times as likely as white law students to not graduate from law school,[3] four times as likely to fail the bar on their first attempt,[4] and six times as likely to never pass the bar.[5] Around half of this disturbing black/white gap can be explained by differences in pre-law-school credentials, but no more than that.[6] None of my critics, including Ho, deny these basic facts, and none have proposed an alternative to my explanation, which I call the mismatch hypothesis.

I argue that large racial preferences in law school admissions elevate blacks to law schools where they labor under a significant academic

† Professor of Law, UCLA School of Law. The author would like to thank Joe Doherty, Fiona Harrison, Ed Johnson, James Lindgren, and Robert Sockloskie for their comments and input.

1. Richard H. Sander, *A Systemic Analysis of Affirmative Action in American Law Schools*, 57 STAN. L. REV. 367 (2004).

2. Daniel E. Ho, Scholarship Comment, *Why Affirmative Action Does Not Cause Black Students To Fail the Bar*, 114 YALE L.J. 1997 (2005).

3. Sander, *supra* note 1, at 436.

4. *Id.* at 443.

5. *Id*.

6. *Id.* at 479.

disadvantage. This disadvantage leads to low grades (roughly half of black law students are in the bottom tenth of their law school classes), and very low law school grades lead more often to academic dismissal, dropping out, and trouble on the bar.[7] I reach these conclusions by using white students as a control (i.e., a group of students who generally do not receive admissions preferences) and comparing the fortunes of blacks and whites in law school and beyond.

Ho's critique of my paper focuses on Tables 5.6 and 6.1, which present the results of two linear regressions that compare the role of law school GPA, law school eliteness (measured roughly by a variable I call "law school tier"), race, and a few other variables in predicting who successfully completes law school and passes the bar.[8] I offer the regressions to establish two points: First, law school grades shape these outcomes much more powerfully than does law school eliteness. Second, blacks and whites with similar law school grades (when controlling for school and entering credentials) have virtually identical graduation and bar outcomes. Blacks and whites, then, would have the same outcomes if persons of both races with the same credentials went to the same schools, but admissions preferences induce blacks to swap good grades for more prestige. Blacks suffer from that tradeoff and have worse outcomes—lower chances of graduating and passing the bar—than do similarly credentialed whites.

II

The first part of Ho's Comment purports to critique *Systemic Analysis* on methodological grounds. But each criticism is oddly detached from the article itself.

First, Ho suggests that my article is flawed because there is no "control" group—a group that has not received racial preferences to whom blacks can be compared.[9] Not so: The entire paper is organized around a comparison of "treatment" blacks (who generally receive preferences) and "control" whites (who generally do not).[10]

Second, Ho argues that including both law school GPA and law school prestige in the two regressions noted above is fatally flawed because prestige affects GPA, introducing "post-treatment bias."[11] But Ho does not run any of the standard tests to detect bias; he assumes that it exists and that

7. *Id.* at 478-79.

8. *Id.* at 439 tbl.5.6, 444 tbl.6.1.

9. Ho, *supra* note 2, at 1998.

10. Using two comparison groups who experience a treatment (in this case racial preferences) in systematically different ways, and then comparing group outcomes, is one of the classic quasi-experimental designs outlined by education researchers Donald Campbell and Julian Stanley in their authoritative work, DONALD T. CAMPBELL & JULIAN C. STANLEY, EXPERIMENTAL AND QUASI-EXPERIMENTAL DESIGNS FOR RESEARCH (1963).

11. Ho, *supra* note 2, at 2000.

it is fatal to the model.[12]

Nevertheless, Ho's critique has inspired me to run more than a dozen different tests to examine the degree to which bias affecting my "law school tier" or "law school GPA" variables might exist, including running Tables 5.6 and 6.1 with categorical rather than continuous tier variables, omitting law school GPA to assess how the coefficient on tier changes, and using interaction terms to examine the joint influence of pairs of independent variables. Each of these tests found zero evidence of bias.[13] Under no formulation does law school GPA somehow suppress a positive effect of prestige, and in all formulations law school GPA is a far more powerful predictor of outcomes than is prestige. The only dynamic between law school GPA and prestige that these tests reveal is the obvious one—a core thesis of my argument—that going to a more elite school lowers one's expected GPA.

One of the most elegant ways to show this point is with a structural equation model—a type of analysis specifically developed to deal with situations in which one is concerned about independent variables indirectly affecting one another.[14] Structural equation models allow us to directly measure those indirect effects. Figure 1 shows the results of a structural equation model examining the influences of several variables on first-time bar passage for all blacks in the Bar Passage Study ("BPS") data set.[15]

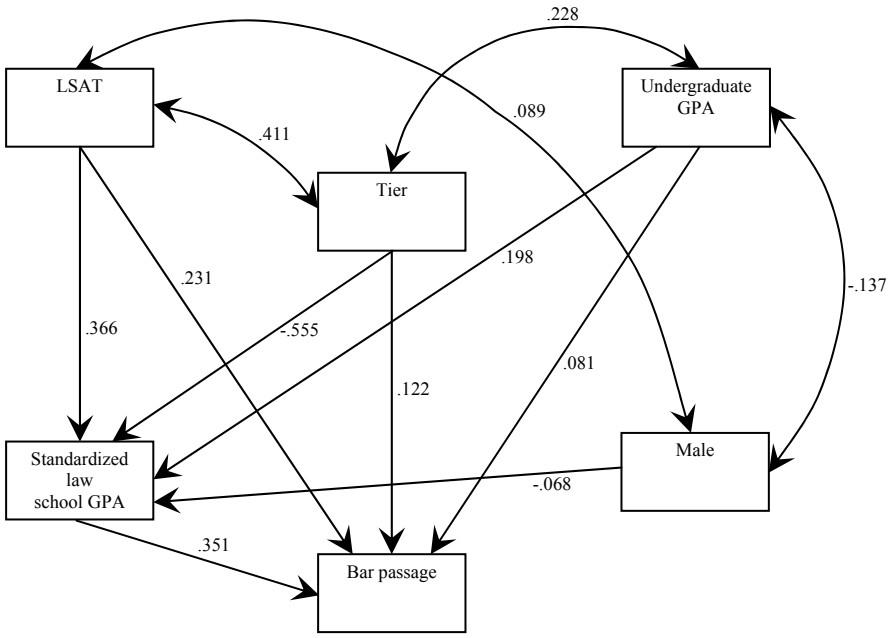
12. Ho's claim of bias would make sense if the actual measurement of GPA was contaminated by prestige (e.g., because more elite schools tend to grade more generously). But all of the data sets I use standardize grades within each individual school. The "grade" variable is thus more of an indicator of class rank.

13. I discuss these tests in Richard H. Sander & Joseph W. Doherty, Supplemental Notes on the Relative Effect of Law School Grades and Law School Prestige upon Bar Passage (Apr. 27, 2005) (unpublished manuscript), *available at* http://www.yalelawjournal.org.

14. *See generally* James C. Anderson & David W. Gerbing, *Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach*, 103 PSYCHOL. BULL. 411 (1988).

15. The BPS data set is used for several key analyses in *Systemic Analysis* and is used by Ho in his critique. For a description of the data set, see LINDA F. WIGHTMAN, LSAC NATIONAL LONGITUDINAL BAR PASSAGE STUDY (1998). In the model I describe here, I confine analysis to blacks to eliminate the need for separate "race" boxes, simplifying the model considerably while making the relevant points.

FIGURE 1. STRUCTURAL EQUATION MODEL PREDICTING FIRST-TIME BAR PASSAGE FOR BLACKS IN THE BPS DATA SET[16]



Note: n = 1255. Bentler-Bonett Normed Fit Index = .998. All coefficients are standardized and significant at $p < .01$.

This model illustrates three points that bear out my original regressions and undercut any claim of bias: (1) Law school GPA predicts bar passage far more powerfully than tier does (note the higher coefficient), and (2) law school GPA is not suppressing a positive, indirect effect of tier on bar passage, because (3) going to a higher-tier school has a negative, not a positive, effect on law school GPA.

Instead of exploring any of these tests to assess the real (rather than hypothetical) existence of bias, Ho simply declares the regressions invalid and concludes that, without these regressions, all of *Systemic Analysis*

16. Structural equation modeling is a methodology for specifying and estimating the interrelationships among independent variables by modeling them as a "process" in which the variables interact with one another as they shape the eventual outcome. This model is specified to estimate whether law school grades "suppress" the impact of law school tier on bar passage among African-American students, controlling for the influence of other variables. Estimates from the model (all coefficients are standardized) indicate that the direct effect of tier on bar passage is positive (.122). From the coefficients on the other paths (tier → grades = -.555; grades → bar passage = .351), I estimate that the indirect effect of tier on bar passage is negative (-.195, calculated by multiplying the coefficients of the indirect paths). Under the assumptions of this model the total net effect is negative (-.195 + .122 = -.073).

collapses.[17] These claims are draped in such elaborate language that the reader might not notice that the rest of Ho's discussion completely ignores law school performance. Stated formally, Ho's implicit assumption that graduation and bar passage are unrelated to classroom success sounds absurd, but for Ho's story to work it must be true.

III

It might seem impossible to study the mismatch hypothesis while omitting the single most important explanatory variable—law school performance—but Ho has a suggestion. His idea is to match students who are similar along a number of characteristics (race, gender, LSAT score, and undergraduate GPA) except for their school tier and then see whether students in higher tiers have more trouble passing the bar than students in lower tiers. He finds in almost all cases that "tier" has no effect at all on bar passage for either blacks or whites.[18]

There are two fundamental problems with Ho's analysis. First, he assumes that the "tier" variable in the BPS data set is a perfect hierarchical measure of school prestige. That is, he behaves as though all Tier One schools are more elite than all Tier Two schools, all Tier Two schools are more elite than all Tier Three schools, and so on. This is false. As the BPS data manual notes,[19] law schools were "clustered" into six broad groups based on seven characteristics: size, cost, selectivity, faculty-student ratio, percentage minority, median LSAT score, and median undergraduate GPA. Several of these characteristics correlate strongly with prestige, and the clustered tiers *as a whole* are a reasonable proxy for prestige, if one takes their limitations into account.[20] Ho's methodology does not. Suppose, hypothetically, that we had an exact cardinal ranking of each school's true prestige. Suppose that Tier 1 includes schools with "true rank" 1-6, 8, 10, 12, 15, and 20, and that Tier 2 includes schools with rank 7, 9, 11, 13, 16-19, and 22-28. Ho compares students in adjacent tiers with matching credentials. Only about half of the black students in BPS Tiers 1 and 2 match one another by Ho's criteria. Which students are most likely to match? Students in School 8 (from Tier 1) will tend to match students in Schools 7 and 9 (from Tier 2), students from School 12 (from Tier 1) will tend to match students from Schools 11 and 13 (from Tier 2), and so on. It is not surprising—indeed, it is inevitable—that such a comparison will show no effect of "tier" on bar passage or on any other outcome. Ho has

17. Ho, *supra* note 2, at 1997.

18. *Id.* at 2004.

19. WIGHTMAN, *supra* note 15, at 8-9.

20. These limitations explain why *Systemic Analysis* never treats "tier" as an exact measure of prestige but at most as an approximate proxy; the only part of the article that relies on exact coefficients of prestige is part seven, which uses a school-by-school hierarchical measure.

devised a method that singles out those pairs of students for whom "tier" is least meaningful and most biased. This, by itself, is a fatal problem.

But let's assume that the BPS tiers correspond perfectly to "actual" prestige rankings. We then confront a second problem: unobservable characteristics. Suppose we match a black student at the twentieth-ranked school against a black student at the thirtieth-ranked school by LSAT score, undergraduate GPA, and gender—the variables used by Ho. We still don't know key information about these students—in particular, their undergraduate college, their major, and their other skills and achievements. Because large majorities of law school applicants go to the most elite school that accepts them, it is very likely that the blacks at our twentieth-ranked school have stronger "unobservable" characteristics than do their counterparts at the thirtieth-ranked school. If so, Ho is comparing an academically stronger student with a weaker one. Thus, Ho is wrong when he suggests that we can view his matched students as experimental subjects "randomly assigned to a tier in an experiment."[21] There are systematic, biasing reasons why one student is at the University of North Carolina and another with similar numbers is at Duke.

Ho advertises his matching approach as a way to avoid bias. But in fact, because the BPS tiers overlap and because of the problem of unobservables, his method tends to *maximize*, rather than eliminate, bias. His technique and conclusions are thus invalid.

IV

The idea that racial preferences in legal education are both good social policy and the embodiment of our most noble, generous impulses has become deeply ingrained in establishment thinking. Yet it is now undeniable that this system—for some reason—is producing grossly unequal results. *Systemic Analysis* provides an empirically supported explanation for the enormous racial disparities generated by the legal education system. The mismatch hypothesis may not be the only explanation, but it is surely part of the story. Criticism is vital, but critics who wish to reject the mismatch theory outright have a responsibility to offer their own explanation and cures for the disparate harm our current system inflicts on blacks.

21. Ho, *supra* note 2, at 2002.