

HOW MUCH SHOULD JUDGES BE PAID? AN EMPIRICAL STUDY ON THE EFFECT OF JUDICIAL PAY ON THE STATE BENCH

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How much should judges be paid? We first survey the considerable history of the debate and identify the implicit causal claims made about the effect of judicial pay. We find that claims about the effect of pay on the composition and quality of the judiciary have remained remarkably similar over the past two hundred years. In contrast, claims about the effect of pay on judicial independence have changed as the meaning of judicial independence itself has shifted. We take advantage of the large variation in real salaries and opportunity costs for state appellate court judges across states from 1977 to 2007 to empirically test these claims. We find that judicial salaries have a small but significant effect on the likelihood of exit and thus the length of judicial tenure, and a small effect on the background of judges that join the appellate bench. A more limited analysis of California trial court judges finds far more sensitivity to pay, however, suggesting that trial and appellate court judges may behave differently.

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INTRODUCTION

How much should judges be paid? Policymakers have long struggled with the issue of appropriate pay for judges. Plato warned of paying public servants too much for fear of encouraging men of selfish motivations to seek public office.¹ The Framers of the Constitution debated the issue and thought judicial salaries important enough to include the Compensation Clause, preventing Congress from reducing the salaries of Article III judges.² Winston Churchill argued that judicial pay should be increased because “[t]he Bench must be the dominant attraction to the legal profession.”³ More recently, Chief Justice Roberts of the Supreme Court has argued that inadequate federal judicial salaries

1. See PLATO, *THE REPUBLIC* 184-87 (Desmond Lee trans., Penguin Books 2d ed. 1974).

2. See U.S. CONST. art. III, § 1 (“The Judges, both of the supreme and inferior Courts, shall hold their Offices during good Behaviour, and shall, at stated Times, receive for their Services a Compensation, which shall not be diminished during their Continuance in Office.”).

3. 8 WINSTON S. CHURCHILL, *HIS COMPLETE SPEECHES* 1897-1963, at 8548 (Robert Rhodes James ed., 1974). Churchill was speaking on the Judges’ Remuneration Bill in the House of Commons on March 23, 1954. *Id.* at 8544.

are precipitating a “constitutional crisis” which “threatens the viability of life tenure.”⁴

Others are less convinced. Dahlia Lithwick noted that commentators across the political spectrum were skeptical of Chief Justice Roberts’s claims that judicial salaries were causing a constitutional crisis.⁵ Economists have argued that it is optimal to pay judges less than they would make in the private sector.⁶

Almost all of the commentary on judicial pay has implicitly assumed something about the sensitivity of prospective or current judges to changes in pay. For example, the claim that low judicial pay harms the quality of the judiciary assumes that the composition of the bench is systematically influenced by pay. Claims about the effect of judicial pay are intuitively plausible—which is probably why they are so often made. But despite the ubiquity of claims about

4. John G. Roberts, Jr., *2006 Year-End Report on the Federal Judiciary*, THIRD BRANCH (Admin. Office of the U.S. Courts, Washington, D.C.), Jan. 2007, at 1, 1, 3, *available at* <http://www.uscourts.gov/uscourts/news/ttb/archive/2007-01%20Jan.pdf>. The controversy has led to litigation in both the state and federal courts. New York’s Chief Judge, Judith S. Kaye, actually sued the legislature for denying judges their constitutional right to an “adequate” salary. *See* Joel Stashenko & Daniel Wise, *Kaye Sues State over Judicial Salaries*, N.Y.L.J. (Apr. 11, 2008), <http://www.newyorklawjournal.com/PubArticleFriendlyNY.jsp?id=900005508366&slreturn=1>. On February 23, 2010, the New York Court of Appeals held that the legislature’s failure to raise salaries violated the separation of powers doctrine in the New York Constitution, but the court declined to order any specific remedy at that time and instead urged the legislature to act. *See* *Maron v. Silver*, 925 N.E. 2d 899, 903, 917 (N.Y. 2010). Federal judges have also pursued litigation. *See infra* notes 109-11 and accompanying text.

5. *See* Dahlia Lithwick, *O Mighty Crisis: The “Constitutional Collapse” over Judicial Pay*, SLATE (Jan. 2, 2007, 5:49 PM), <http://www.slate.com/id/2156781> (citing Sandy Levinson, *Constitutional Crises and the Eyes of Beholders*, BALKINIZATION (Jan. 2, 2007, 12:15 AM), <http://balkin.blogspot.com/2007/01/constitutional-crises-and-eyes-of.html>); *see also* Jess Bravin, *Constitutional Crisis, at Least at the Roberts Household*, WALL ST. J. WASH. WIRE (Jan. 1, 2007, 12:01 AM), <http://blogs.wsj.com/washwire/2007/01/01/constitutional-crisis-at-least-at-the-roberts-household>; Matthew J. Franck, *The Unpersuasive Chief*, NAT’L REV. ONLINE (Jan. 2, 2007, 7:00 AM), <http://www.nationalreview.com/articles/219622/unpersuasive-chief/matthew-j-franck>; Doug Powers, *Pay Raise for Federal Judges? First, a Performance Evaluation Is in Order*, MND (Jan. 2, 2007), <http://mensnewsdaily.com/2007/01/02/pay-raise-for-federal-judges-first-a-performance-evaluation-is-in-order>. Other scholars have expressed more general doubt that low pay is precipitating a judicial crisis. *See, e.g.*, Jonathan L. Entin, *Getting What You Pay For*, 2011 UTAH L. REV. 25, 41 (arguing that “we should not uncritically accept the diagnosis of impending doom” from low federal judicial salaries); Michael J. Frank, *Judge Not, Lest Yee Be Judged Unworthy of a Pay Raise: An Examination of the Federal Judicial Salary “Crisis,”* 87 MARQ. L. REV. 55, 59-67 (2003) (describing federal judges’ long history of complaints about salary); Paul M. Bator, *The Judicial Universe of Judge Richard Posner*, 52 U. CHI. L. REV. 1146, 1148 (1985) (reviewing RICHARD POSNER, *THE FEDERAL COURTS: CRISIS AND REFORM* (1985)) (“Federal judges, as a group, complain more about their pay than any other group I have ever encountered.”).

6. *See, e.g.*, Paul E. Greenberg & James A. Haley, *The Role of the Compensation Structure in Enhancing Judicial Quality*, 15 J. LEGAL STUD. 417, 418 (1986).

the effect of judicial pay, empirical examination of the effects of pay variation is still relatively new.⁷

In this Article, we first survey the history of the debate over judicial pay and its purported causal effects. We find that most of the hypothesized causal effects of changes in judicial pay appear to have remained remarkably similar (albeit contradictory) over the past two hundred years. Advocates of more pay continually warn of an imminent decline in the quality of the bench and recount fresh anecdotes of esteemed lawyers who refuse to become judges for their family's sake. Skeptics note that increasing pay may attract candidates with more selfish impulses, and that the qualities that make for a very successful lawyer are different from those that make a good judge.⁸ What has changed, however, is the debate over the effect of pay on judicial independence. As the meaning of "judicial independence" has shifted from the independence of the judicial *branch* from the other branches, to the independence of an *individual judge* to decide a case free from political pressure or pressure from litigants,

7. Notable recent efforts to empirically examine the effect of judicial pay include Scott Baker, *Should We Pay Federal Circuit Judges More?*, 88 B.U. L. REV. 63, 66 (2008) (using varying opportunity costs of serving as federal judge in different locations to conclude that there is no evidence of an association between estimated opportunity cost of serving as federal judge and measures of independence or quality); Stephen J. Choi et al., *Are Judges Overpaid? A Skeptical Response to the Judicial Salary Debate*, 1 J. LEGAL ANALYSIS 47, 83 (2009) (reviewing judicial pay and a measure of judicial quality in the state supreme courts to conclude that there is little relationship); Albert Yoon, *Love's Labor's Lost? Judicial Tenure Among Federal Court Judges: 1945-2000*, 91 CALIF. L. REV. 1029 (2003) (examining data on federal judges from 1945-2000 to conclude that tenure trends remained stable over this period despite increase in private sector salaries); Albert Yoon, *Pensions, Politics, and Judicial Tenure: An Empirical Study of Federal Judges, 1869-2002*, 8 AM. L. & ECON. REV. 143 (2006) [hereinafter Yoon, *Empirical Study*] (finding that pension vesting is a key determinant of retirement timing for federal judges); Christopher Zorn et al., *Working Class Judges*, 88 B.U. L. REV. 829 (2008) (reanalyzing Baker's data and finding evidence of greater partisanship by judges in the top five legal markets); Thomas J. Forr, Comment, *Want Less Ideology on the Federal Bench? Pay Judges More*, 158 U. PA. L. REV. 859 (2010) (arguing that Baker's study data reveal that federal judicial nominees from the top five legal markets are more ideological than other nominees); and Scott Duke Kominers, *Salary Erosion and Federal Judicial Resignation* (Sept. 25, 2008) (unpublished manuscript), available at <http://ssrn.com/abstract=1114432> (finding that low judicial salary is associated with exit for federal judges who resign and return to private practice).

8. Economic theory is indeterminate with respect to predictions about how salaries will affect the quality of judges. According to one theory, the reason that judicial salary will lower the quality of judges is that low judicial salaries will limit the pool of people who seek to become judges to those who do not have better options. They lack these options, in this theory, because they have poor legal skills. Consequently, they will make poor judges. In contrast, one could also argue that a low judicial salary will most attract those who are most eager to be judges and who derive the most nonpecuniary benefits from the position. These individuals may actually make better judges than those who are seeking purely pecuniary compensation. The indeterminacy of economic theory in this context is another reason that empirical testing is useful. We are indebted to Scott Baker for this point. See also Dhammika Dharmapala et al., *Punitive Police? Agency Costs, Law Enforcement, and Criminal Procedure* 3-4 (Feb. 15, 2011) (unpublished manuscript) (on file with authors) (making a similar point on the indeterminacy of economic theory in the context of police salaries).

efforts to tie increasing judicial pay to preserving judicial independence have required quite different arguments.

We empirically examine the impact of salary on the composition of the appellate bench by estimating the impact of salary on the background of entering judges and the likelihood that currently serving judges will exit the bench. We take advantage of the large variation in real salaries and opportunity costs for state appellate court judges across states from 1977 to 2007 to see how changes in real salary have actually affected the composition of the state court appellate bench and departure from the bench over those thirty years. The size of the dataset, the substantial variation in it, and the time period—one in which private sector legal salaries rose substantially⁹—allow us to test a number of hypotheses about the real-world effect of judicial salaries. For example, we examine whether growing private sector legal salaries have caused an increasing number of judges to leave the state court bench. We also examine the impact of salaries on the composition of the appellate bench.

We conclude that a comparatively low judicial salary slightly increases the chance that an appellate judge will leave the bench but that the effect is small. For judges under the age of sixty-five, the probability of exit is about 2.66% per year. A \$10,000 increase in real pay would reduce that probability by 0.00239—a change of about 8.97% from the baseline probability of exit. The effect is not trivial, but our estimates suggest that even large changes in real judicial salaries would not significantly alter the composition of the appellate bench.

Judicial salaries also have a small but significant effect on who becomes an appellate judge. Higher salaries appear to slightly increase the likelihood that appellate judges were formerly either district attorneys or lawyers in private practice, and decrease the chance that the judges were formerly academics, judges in other courts, or public defenders. They have no effect on the overall experience level of the judges or the ranking of the law schools that the judges attended.

Although we do find evidence that decreases in judicial pay change the composition of the bench and increase the likelihood that appellate judges will leave the bench, the effects are relatively small. It is difficult to reconcile our findings with claims that declines in judicial pay, either in actual amount or relative to outside opportunities, could so radically alter the composition of the appellate judiciary that they might prompt a “constitutional crisis.” There was a substantial growth in private sector legal salaries during our sample period, yet we observe no wholesale flight from the state appellate bench. Given the extent of variation in our data over fifty states and almost thirty years, we would have expected to observe any dramatic effect of salary on qualifications or departure from the appellate bench if one existed.

9. See Zorn et al., *supra* note 7, at 837 fig.1 (showing that between 1983 and 2003, average per-partner profits tripled at the fifty highest-grossing American law firms).

In order to determine if our findings were also applicable to the state trial court bench, we examined data on the trial court bench from one state (California). We found that trial court judges appear to be much more sensitive to pay in their decisions to exit than do appellate judges. This finding suggests that the behavior of trial court and appellate judges might be substantially different, but further research on this important point is required.

As with any empirical study, we are limited by our data. Much of the debate on judicial salaries has been about federal judges, and it is possible that changing federal judicial salaries would have different effects from changes in appellate state court salaries. We also offer no conclusions about the effect of an actual pay cut, which may have a very different effect from the failure to raise salaries.¹⁰

Finally, there may be important judicial-quality issues that are affected by salary but that we are unable to observe. Our survey of the history of the debate reveals an oft-expressed claim that salary will affect judicial quality. Yet there is no commonly accepted or observable measure of judicial quality, so we are unable to offer empirically grounded conclusions about the relationship between judicial salary and quality.¹¹

10. An anonymous judge with whom we discussed these findings emphasized that a pay cut would have very different psychological consequences than a failure to raise salaries.

11. We observe the ranking of the law school attended by each judge and find no relationship with salary, but this is obviously a highly imperfect proxy for the quality of a judge. There is a literature that tries to directly measure the quality of judges. *See, e.g.,* Gregory A. Caldeira, *On the Reputation of State Supreme Courts*, 5 POL. BEHAV. 83 (1983) (rating state supreme courts based on citation counts); Choi et al., *supra* note 7 (basing measure of quality on measure of independence, productivity, and citations); Stephen J. Choi & G. Mitu Gulati, *Choosing the Next Supreme Court Justice: An Empirical Ranking of Judge Performance*, 78 S. CAL. L. REV. 23 (2004) (measuring judicial quality by productivity, opinion quality, and judicial independence); Jake Dear & Edward W. Jessen, *"Followed Rates" and Leading State Cases, 1940-2005*, 41 U.C. DAVIS L. REV. 683 (2007) (using only opinions described as "followed" in Shepard's Citations Service as a measure of quality); Lawrence Friedman et al., *State Supreme Courts: A Century of Style and Citation*, 33 STAN. L. REV. 773, 804 (1981) (tracing the influence of different state courts using citations); Rodney L. Mott, *Judicial Influence*, 30 AM. POL. SCI. REV. 295 (1936) (relying on citation counts and surveys); Scott A. Comparato, *On the Reputation of State Supreme Courts Revisited* (Apr. 2002) (unpublished manuscript) (on file with authors) (assessing judicial reputation by using citation patterns). More subjectively, the U.S. Chamber of Commerce rates states on the overall quality of their judiciary based on a survey of general counsel at corporations with revenues of more than \$100 million per year. U.S. CHAMBER OF COMMERCE, 2010 STATE LIABILITY SYSTEMS RANKING SURVEY 7 (2010).

Some are skeptical of the feasibility or advisability of ranking judges according to objective metrics like citation counts or productivity. *See, e.g.,* Scott Baker et al., *The Continuing Search for a Meaningful Model of Judicial Rankings and Why It (Unfortunately) Matters*, 58 DUKE L.J. 1645, 1646-48 (2009) (critiquing Stephen J. Choi et al., *Judicial Evaluations and Information Forcing: Ranking State High Courts and Their Judges*, 58 DUKE L.J. 1313 (2009)); Steven Goldberg, *Federal Judges and the Heisman Trophy*, 32 FLA. ST. U. L. REV. 1237 (2005) (critiquing the proposals in Choi & Gulati, *supra*, on selecting Supreme Court Justices); Marin K. Levy et al., *The Costs of Judging Judges by the Numbers*, 28 YALE L. & POL'Y REV. 313, 314 (2010) ("By generating and then publicizing unreliable

I. BACKGROUND ON THE DEBATE ON JUDICIAL PAY

In this Part, we summarize the historic debate on the importance of judicial pay. Since the Framers' debate over the Compensation Clause, there has been a constant chorus of concern expressed over proper pay for judges and its relationship to the quality of judicial candidates, fairness to judges, different concepts of judicial independence, and exit from the bench. Here, we summarize this history and identify causal claims that can be tested. While proponents of judicial pay increases and decreases have often combined causal arguments about both the effect of judicial pay on the composition of the judiciary and the independence of judges, we separate these two strands of argument for clarity.

A. *Judicial Pay Affects the Composition of the Bench*

One strand of this debate presumes that judicial salary has a strong effect on the *composition* of the bench. Over the past two hundred years, here and abroad, three causal mechanisms have often been hypothesized: (1) judicial salary affects the quality of candidates attracted to the bench; (2) judicial salary affects the range of prior careers of candidates attracted to the bench; and (3) judicial salary affects judges' exit from the bench.

In contrast to a line of reasoning dating from Plato's *Republic* that prefers the character of rulers who eschew the material pleasures of a regular income,¹² some delegates to the Constitutional Convention argued that limiting judges' salaries would negatively affect the composition of the judiciary. According to Charles Pinckney, for example, the Compensation Clause ought to give Congress the power to raise judicial salaries because "[t]he importance of the Judiciary will require men of the first talents: large salaries will therefore be necessary, larger than the U.S. can allow in the first instance."¹³ For Pinckney, the

claims about the relative quality of judges, these studies mislead both decision-makers and the public, degrade discussion of judging, and could, if taken seriously, perniciously alter the behavior of judges themselves."); William P. Marshall, *Be Careful What You Wish For: The Problems with Using Empirical Rankings to Select Supreme Court Justices*, 78 S. CAL. L. REV. 119 (2004) (voicing concerns about the proposals made in Choi & Gulati, *supra*). Like Baker et al., we are sympathetic to the attempt to measure judicial quality but are doubtful that readily observable measures like citation counts and productivity capture more than "relatively minor aspects of judicial quality." Baker et al., *supra*, at 1647.

12. Compare Plato, *supra* note 1, at 184 (concluding that Guardians should have no private property beyond the barest essentials), with Choi et al., *supra* note 7, at 55 (arguing that low salaries may be preferable because higher salaries may attract types of judges that prefer leisure and status more than judges who are hard workers and who enjoy serving the public).

13. 2 THE RECORDS OF THE FEDERAL CONVENTION OF 1787, at 429 (Max Farrand ed., 1911).

feeble budget of the new republic justified permitting Congress to later increase salaries of judges to attract “men of first talents.”¹⁴

By the mid-1840s, arguments that echo those of contemporary advocates of increased judicial pay were raised. In an issue of *American Law Magazine* published in 1846, Harvard law professor Simon Greenleaf, in an admiring biography of Justice Story, discussed the concern about low salaries leading to the selection of “men of inferior abilities,” and recounted perhaps the first published anecdote of a qualified judge threatening to decline the post because the salary was inadequate to support his family.¹⁵

In 1844, a commentator sounded similar themes in arguing that state judicial salaries were too low:

The inadequacy, too, of the judges’ salaries is very prejudicial to the composition of the bench: it is impossible to expect first-rate lawyers to give up their business for such a paltry remuneration as is allowed in almost all the States. A gentleman belonging to the Maryland bar told me one or two curious anecdotes illustrative of this. One of the judges lately descended from the bench, and accepted the situation of *clerk in his own court!*—a situation in the gift of himself and his brother justices: his own salary had been 2500 dollars a-year; that of the clerk, whom he succeeded, amounted, with fees, to 5000. The late Chief Justice of New Hampshire, whose salary was 1300 dollars a-year, has also left his post, to become superintendent of one of the Lowell factories. When such is the emolument and dignity of the judicial office, it is only astonishing that it has not fallen into utter contempt, or become, as in Russia, a recognized system of bribery.¹⁶

Again, we see an early expression of the arguments that are raised today: (1) low salaries reduce the attraction of the bench to “first-rate lawyers”; (2) low salaries are prompting early exit from the bench; (3) judges’ clerks are being paid more than judges; and (4) the indignity of being paid so little may undermine respect for the judiciary or encourage corruption.

However, echoing Plato’s arguments, concern was also sometimes expressed that judicial salaries might be too high. In 1878, for example, the *New York Times* was calling for state court judicial salaries to be *reduced*.¹⁷ After noting that salaries for New York judges exceeded those for federal judges and

14. *Id.* Pinckney acknowledged that under Madison’s proposal, salaries for judges that were appointed in the future could be raised, but he “did not think it would have a good effect or a good appearance, for new Judges to come in with higher salaries than the old ones.” *Id.* at 430. As discussed below in Part I.B, Madison argued in favor of a permanent salary for judges.

15. Simon Greenleaf, *Biographical Sketch of Joseph Story, LL.D.*, 6 AM. L. MAG. 241, 246-48 (1846).

16. 2 JOHN ROBERT GODLEY, LETTERS FROM AMERICA 163 n.* (1844); cf. William Glaberson, *Judges Quitting at Unusual Rate as Salaries Lag*, N.Y. TIMES, July 5, 2011, at A1 (noting that some law clerks make more than judges for whom they work).

17. *Salary Cost of Local Justice*, N.Y. TIMES, Mar. 16, 1878, at 4, available at <http://query.nytimes.com/mem/archive-free/pdf?res=FB0E10FC3F5A127B93C4A81788D85F4C8784F9>.

cabinet members, the writer argued that the resulting quality of justice was poor:

The quality of the justice dispensed in this City is, perhaps, as much below the standard of mediocrity as the cost of it is above that standard. To the higher-court Judges respectability may be conceded, but none of them can fairly claim eminence. As for the lower ones, their knowledge of law is as farcical as their administration of it; if not themselves graduates of grog-shops, they are the fruit of a low political system of which the grog shop is one of the foci; their very names bespeak their origin and their associations, and experience with them goes to convince decent people of the Scriptural warning against litigation.¹⁸

The reason for this appalling state of affairs was because judicial salaries were too *high*:

[T]he point is that the real evil is not in the loss of that money [from the salaries] directly, but in the demoralization of the entire public service and the consolidation of the party plundering-machine. Services not purely routine are bettered in quality by increasing their pay, up to a certain limit; beyond that, the rule reverses, and the quality of the service declines as the pay increases. Little reflection is needed to understand the reason for this fact, which experience has abundantly shown. The fatter the prize, the more ardor in getting it, the more exclusive the labor devoted to keeping it, and the wider the outward spread from it of corrupting and debauching influence.¹⁹

Major league baseball, improbably enough, also played a role in the debate. In 1921, federal district court Judge Kenesaw Mountain Landis accepted the position of Commissioner of Major League Baseball, which paid \$50,000—far more than his judicial salary. He continued his tenure as federal judge, however, and, as a result, incurred criticism and calls for his impeachment in Congress.²⁰ In the wake of this controversy, the *New York Times* called for increased judicial salaries. Otherwise, it warned, the low salaries “will tend to drive the best Judges from the bench, to prevent worthy successors from taking their places, to diminish in time the qualifications of Federal Judges.”²¹

18. *Id.*

19. *Id.*

20. He ultimately resigned in February of 1922. See *Landis Quits Bench for Baseball Job; Boomed for Mayor*, N.Y. TIMES, Feb. 19, 1922, at 1, available at <http://query.nytimes.com/mem/archive-free/pdf?res=F30C16FE355810738DDDA00994DA405B828EF1D3>. Prompted by Landis’ controversial moonlighting, the ABA created a commission on judicial ethics, chaired by Chief Justice William Howard Taft, to draft a code of judicial conduct in 1922. This resulted in the Canons of Judicial Ethics, approved in 1924. See Ctr. for Prof’l Responsibility, *Background Paper: ABA Activities in Judicial Ethics*, ABA, http://www.americanbar.org/groups/professional_responsibility/policy/judicial_code_revision_project/background.html (last visited May 15, 2012).

21. *Underpaid Federal Judges*, N.Y. TIMES, Feb. 25, 1921, at 10, available at <http://query.nytimes.com/mem/archive-free/pdf?res=F50B10FE385810738DDDAC0A94DA405B818EF1D3>. The *Times* called for an increase in the salary of Supreme Court Justices from \$14,500 (\$15,000 for the Chief Justice) to \$20,000 (\$25,000 for the Chief Justice):

In 1926, Congress considered a bill to increase federal judicial salaries.²² As Judge Richard Posner noted, the testimony has a “contemporary ring.”²³ Former U.S. Supreme Court Justice Charles Evans Hughes testified:

Consider the situation in the city of New York. The Federal district judge . . . receives \$7,500 a year—and he can not get an apartment of five rooms in even a moderately desirable neighborhood for less than \$3,000 a year.

How do you expect him to live? What right have you to suppose that a man worthy of a seat on that bench, when he can go out any day and pick up five or six times the amount of his salary, will stay there?²⁴

The ABA also advocated for the bill. According to Chester I. Long, former ABA president, “Federal Circuit and District Judges are not paid as high salaries as Municipal Judges in some States.”²⁵ The bill passed.

In 1945, Attorney General Tom Clark advocated in favor of a bill to *double* the salaries of federal judges. He testified to a Senate hearing on federal salaries: “We’re losing judges every day because we’re not paying them.”²⁶ Offering anecdotal evidence, Clark indicated that a man had turned down a judgeship earlier that week, telling Clark that he had made \$52,000 in the previous year.²⁷

Similar arguments regarding the effect of salary on state court judiciaries were also being made. In 1923, New York Supreme Court Justice Daniel F.

That the pay of Federal Judges is insufficient is evident. . . . For the Judge the bench is a career, a life work. He should be able to live comfortably, to provide, at least moderately, for his family and his old age. Very high salaries are not to be expected. The fees of a great, or even a successful, lawyer will always be much larger than the highest judicial salaries, those of Justices of the State Supreme Court in this judicial district for example. The best that can be hoped is to attract to the Federal bench that fine type of the judicial mind, that trained, acute intellect that finds more satisfaction in the studious chambers of the law, in the grasp and application of principles, in the solving of knotty questions, in luminous interpretation and exposition, than in the noisier conflicts of the bar; that is content to do the quiet cardinal work of justice and leave to other ambitions more splendid rewards.

. . . .

. . . The need for economy is instant. This petty niggardliness to Federal Judges is not economy but foolish wastefulness. If continued, it will tend to drive the best Judges from the bench, to prevent worthy successors from taking their places, to diminish in time the qualifications of Federal Judges. Give them at least a living wage, a sense of modern economic security, freedom from financial worry.

Id.

22. The bill proposed raising federal judicial salaries from \$15,000 to \$20,500 for the Chief Justice of the United States Supreme Court and from \$7500 to \$12,500 for federal district court judges. *See Salaries of Judges: J. Hearing on H.R. 7907 Before the Comms. on the Judiciary*, 69th Cong. 2, 14-15 (1926) [hereinafter *Salaries of Judges*]; RICHARD A. POSNER, *THE FEDERAL COURTS: CHALLENGE AND REFORM* 23-24 (1996).

23. POSNER, *supra* note 22, at 23-24.

24. *Salaries of Judges*, *supra* note 22, at 15 (statement of Hon. Charles E. Hughes).

25. *House to Pass Bill Raising Judges' Pay*, N.Y. TIMES, Dec. 7, 1926, at 2.

26. *Urges More Pay for Judges and Congressmen*, WARSAW DAILY UNION, Nov. 9, 1945, at 8.

27. *See Federal Wage Boosts Urged*, MILWAUKEE J., Nov. 7, 1945, at 3.

Cohalen resigned his position as justice and announced that he was unable to raise his family on the \$17,500 salary.²⁸ In 1949, Idaho Supreme Court Justice Paul Hyatt resigned, citing the salary: “[B]ecause of the inadequacy of the judicial salary scale in comparison with present-day living costs and the consequent out-of-pocket expenditure, I can not, in fairness to my family, remain on the court.”²⁹

President Eisenhower urged a pay raise for Congress and the federal judiciary in his State of the Union address in 1955.³⁰ In an article covering a bill to do that, Congressman Francis E. Walter argued that “[n]umerous judges and many valuable members of Congress have been forced to resign in recent years because of their inability to make ends meet.”³¹ Attorney General Herbert Brownell, Jr. urged passage of the bill and indicated that “a rather critical condition” had developed in filling the sixty judicial vacancies that had occurred in the previous two years of the administration as a result of the low pay for judges.³² Brownell said that the disparity was “shocking” between federal judges and higher-paid state judges,³³ that “[m]any men of real ability were unable to accept appointments,” and that, as a result, “the government suffered a great loss.”³⁴ Moreover, according to Brownell, some qualified judges had already left the bench as a result of inadequate pay.³⁵ Shortly thereafter, Congress raised federal judicial salaries.³⁶

In 1968, a presidential panel recommended substantial pay increases for many high-level federal officials. The panel recommended an increase in the President’s pay from \$100,000 to \$150,000, with federal judges due to receive comparably large increases. The *New York Times* editorialized in favor of such an increase and argued in favor of parity between private and public salaries:

Salaries for major public officials cannot be allowed to fall too far below salaries for corporate executives. If they do, they tend to restrict governmental

28. *See Cohalen Can’t Live on \$17,500 Salary*, BOS. DAILY GLOBE, Dec. 29, 1923, at 1.

29. *High Court Justice Quits His Position*, SPOKANE DAILY CHRON., Feb. 7, 1949, at 3. At the time, the state’s supreme court justices were paid \$6000. *Id.* A bill had been introduced to raise their salary to \$8000, while the Idaho Bar Association called for a salary of \$12,000. *See id.*

30. *See Congress Set to Vote Raise for Members*, LEWISTON DAILY SUN, Jan. 24, 1955, at 1.

31. *Id.*

32. Joe Hall, *Brownell Urges Pay Boosts for Federal Judges*, PARK CITY DAILY NEWS, Jan. 25, 1955, at 1.

33. *Pay Increase for Judges Is Sought*, NEWS & COURIER, Jan. 26, 1955, at 7B.

34. *Brownell Supports Pay Hike for Congressmen*, U.S. JUDGES, TUSCALOOSA NEWS, Jan. 26, 1955, at 5.

35. *See id.*; *see also* TASK FORCES OF THE COMM’N ON JUDICIAL & CONG. SALARIES, JUDICIAL AND CONGRESSIONAL SALARIES, S. DOC. NO. 83-97, at 56 (2d Sess. 1954).

36. *See* POSNER, *supra* note 22, at 22, 24.

service to the independently wealthy, which is bad, or to attract into government the less competent, which is worse.³⁷

The familiar causal effects of a low judicial salary were raised.

Beginning in approximately 1974, each Chief Justice of the Supreme Court has almost annually called for pay raises for the federal judiciary. In 1974, in his year-end statement, Chief Justice Warren E. Burger noted that the last raise for judges had occurred in 1969 and that judges' workloads had increased substantially in the interim. Unless salaries were raised, he warned, "the federal courts will continue to lose judges and fail to attract many promising young attorneys."³⁸ In 1975, Burger warned that "injury [to the courts] can come from freezing salaries of judges for more than six years in a period of drastic inflation."³⁹

According to Burger, stagnant pay had "brought on an alarming number of resignations of judges to return to private practice at a rate never before experienced since federal courts were created in 1789. . . . Six judges resigned in one year to return to private practice—as many resignations as in the preceding one-third of a century."⁴⁰

Burger also argued that the low salaries were reducing the pool of entrants:

Equally serious is the difficulty being experienced in persuading able lawyers in the 45 to 55 age brackets to accept appointment to the federal courts at the present salary scale. . . . [Q]ualified lawyers with children in school or college cannot meet their 1975 obligations on 1969 salaries—as they can do in private practice.⁴¹

In 2003, Paul Volcker chaired a commission to examine governmental salaries. The commission concluded that judicial salaries were too low:

The lag in judicial salaries has gone on too long, and the potential for diminished quality in American jurisprudence is now too large. Too many of America's best lawyers have declined judicial appointments. Too many senior judges have sought private sector employment—and compensation—rather than making the important contributions we have long received from judges in senior status.

Unless this is revised soon, the American people will pay a high price for the low salaries we impose on the men and women in whom we invest responsibility for the dispensation of justice.⁴²

The Commission had identified two risks. First, talented lawyers were declining judicial appointments and the quality of the judiciary was thereby at

37. Editorial, *For Services Rendered*, N.Y. TIMES, Dec. 9, 1968, at 46.

38. *Judicial Pay Hike Is Urged*, READING EAGLE, Dec. 29, 1974, at 2.

39. Richard Starnes, *Burger Enlists Judge Hike Aid*, PITT. PRESS, Apr. 19, 1975, at 3 (alteration in original), available at <http://news.google.com/newspapers?id=AXoqAAAAIBAJ&sjid=fVoEAAAAIBAJ&pg=7225,1062028&hl=en>.

40. *Id.*

41. *Id.*

42. NAT'L COMM'N ON THE PUB. SERV., URGENT BUSINESS FOR AMERICA: REVITALIZING THE FEDERAL GOVERNMENT FOR THE 21ST CENTURY 23 (2003).

risk. Secondly, senior judges were leaving judicial service and seeking jobs in the private sector and were therefore unable to help with the judicial workload.

Meanwhile, Chief Justices Rehnquist and then Roberts continued to raise the familiar arguments for an increase of pay for federal judges but also added a new argument—that it was important to attract lawyers from the private bar. Rehnquist framed the argument in terms of diversity: “Our judges will not continue to represent the diverse face of America if only the well-to-do or the mediocre are willing to become judges.”⁴³ Rehnquist argued that increases in salary were necessary to increase the judiciary’s “diversity”—defined by willingness to accept a particular salary. In the past, most arguments were about whether the prevailing judicial salary was high enough to attract high-quality lawyers to the bench. Instead of focusing on quality, Rehnquist argued that salary should be high enough to attract judges from the private sector.⁴⁴

Chief Justice John Roberts has raised very similar arguments, claiming that the failure to raise pay reduces the number of elite private lawyers willing to become judges. He contrasted the approximately 65% of federal judges that came from private practice during the Eisenhower Administration with the less than 40% of judges who came from private practice by 2006.⁴⁵ He argued that “[o]ur Judiciary will not properly serve its constitutional role if it is restricted to (1) persons so wealthy that they can afford to be indifferent to the level of judicial compensation, or (2) people for whom the judicial salary represents a pay increase.”⁴⁶ But it is not immediately clear why this is so, and Roberts does not develop this argument further.

B. *Other Common Law Countries*

Concern about judicial salaries is not a uniquely American problem. It has surfaced in other common law countries as well, including New Zealand, Great Britain, and India.

43. William H. Rehnquist, *2002 Year-End Report on the Federal Judiciary*, THIRD BRANCH (Admin. Office of the U.S. Courts, Washington, D.C.), Jan. 2003, at 1, 3, available at http://www.uscourts.gov/News/TheThirdBranch/03-01-01/2002_year-end_report_on_the_federal_judiciary.aspx.

44. *See id.*

45. Roberts, *supra* note 4, at 2; *see also* Larry D. Thompson & Charles J. Cooper, *The State of the Judiciary: A Corporate Perspective*, 95 GEO. L.J. 1107 (2007). *But see* KEVIN M. SCOTT, CONG. RESEARCH SERV., RL34281, JUDICIAL SALARY: CURRENT ISSUES AND OPTIONS FOR CONGRESS 6-7 (2007) (disputing the significance of Chief Justice Roberts’s statistics).

A slightly different take on the effect of pay on the composition of the judiciary was related by Ann Althouse. Ann Althouse, Op-Ed., *An Awkward Plea*, N.Y. TIMES, Feb. 17, 2007, at A15 (“If the pay is low, the judges will be the kind of people who don’t care that much about money. They might be monkish scholars, or they might be ideologues who see in the law whatever it is they think is good for us. . . . Low judicial pay should trouble us not because the judges will somehow lack ‘excellence.’ It should trouble us because the law will be articulated by ideologues and recluses.”).

46. Roberts, *supra* note 4, at 3.

For example, the nonpecuniary benefits of being a judge were recognized as a justification to reduce judicial salaries in 1851 in Great Britain:

It is manifest however, that the naked salary forms only one of the seductions of a judgeship in the superior courts; in addition, are the dignity, fixity, and independence of the appointment—its quietude, and exemption from the uncertainties, turmoil, and rivalries of forensic practice—with the further solace of patronage to some of the sages, and to all comfortable retiring pensions.⁴⁷

Like commentators today, the author emphasized the considerable nonsalary benefits of being a judge, including “patronage to some of the sages” and a “comfortable retiring pension.”⁴⁸ He noted that because of the desirability of judicial service, even at modest salary, there was no lack of judges: “In truth, there are scarcely any examples of refusals in our day; however much an advocate may be earning, he is always ready to retreat into the quiet haven of the judiciary.”⁴⁹

Interestingly, the commentator noted that the lawyers who became judges were not “the topping practitioners” for whom judicial service might involve a pay cut—instead they were mostly those for whom “elevation to the bench is a pecuniary acquisition.”⁵⁰ In contrast to modern commentators, like Chief Justice Roberts, this author did not treat the fact that “topping practitioners” do not become judges as necessarily an indictment of the existing judicial salaries.

This was because ultimately “the difficulty is not in finding fit men to be judges, or adequate salaries to remunerate them, but to discover the most fit.”⁵¹ One problem in identifying “the most fit” to be judges was that lawyers and judges require different skills; “[t]he intellectual qualities that make the great advocate and the great judge are as dissimilar as those which make the poet or philosopher.”⁵² The best lawyers, then, will not necessarily make the best judges, and the fact that salaries for judges are appreciably lower than salaries for lawyers may, counterintuitively, result in the best candidates being attracted to the judiciary.⁵³

In New Zealand in 1889, the more familiar concern that salaries were too low was raised:

47. *Emoluments of the Bar and Judicial Salaries*, in 30 LITTELL'S LIVING AGE 170, 170 (E. Littell ed., 1851).

48. *Id.*; cf. *infra* Part III.B.3 (finding that pension vesting is an important determinant of the length of judicial tenure).

49. *Emoluments of the Bar and Judicial Salaries*, *supra* note 47, at 172 (“[For example,] Sir Edward is an eminent lawyer, but, we believe, he took the first offer that was made to him, and though making 16,000*l.* a year in equity practice, became chancellor in Ireland for 8000*l.*—and a very good lord chancellor he made.”).

50. *Id.*

51. *Id.*

52. *Id.*

53. The argument is buttressed with examples of top lawyers who became indifferent judges and vice versa. See *id.*

[W]hile the Judges are so miserably paid, their salaries being so utterly disproportionate to the emoluments of an ordinarily successful leading practice, it would be extremely difficult, if not impossible, to get men qualified for the position to accept it. This, however is not an excuse which Parliament or the country will be inclined to receive, and if the present emoluments of the Bench are not sufficient to induce the best men in the profession to accept preferment, then they will have to be increased, for certainly the colony, however hard up it may be, cannot afford to have men of inferior qualifications occupying seats on the judicial Bench.⁵⁴

In 1954, Winston Churchill argued that raising judicial salaries was necessary in order to continue to attract “the best legal brains” to the peculiar rigors of the bench:

A form of life and conduct far more severe and restricted than that of ordinary people is required from judges and, though unwritten, has been most strictly observed. They are at once privileged and restricted. They have to present a continuous aspect of dignity and conduct.

....

The Bench must be the dominant attraction to the legal profession, yet it rather hangs in the balance now, and heavily will our society pay if it cannot command the finest characters and the best legal brains which we can produce⁵⁵

In contrast to the argument that the best lawyers were not necessarily the best judges and vice-versa, Churchill argued that the bench must attract the “best legal brains” for the good of society. More recently, in 2008, an op-ed in the *Hindu* made nearly the same points that are made in the U.S. debate:

Even taking into consideration the perquisites attached to the office of judge, judicial salaries have become unrewarding and unattractive to lawyers in good practice, leaving aside lawyers in top practice. In the past, lawyers in India as in the United Kingdom in good practice took judgeship as a career and as a matter of honour even though rewards at the Bar were higher. Today, judicial salaries, apart from becoming unreal with the passage of time, do not stand comparison with the average earnings at the Bar, resulting in fewer and fewer competent lawyers from the Bar taking judgeship.⁵⁶

The op-ed argued that the gulf “not only tends to detract talent from coming to the Bench but also creates in sitting judges a feeling that their work is not properly appreciated and rewarded.”⁵⁷

Thus, anxieties about the ways in which judicial salary shapes the composition of the bench are widespread and remarkably consistent over time and space. From India to New Zealand and from debates at the Founding to the present day, commentators have been concerned about the effect of pay on attract-

54. *Judicial Appointments*, SOUTHLAND TIMES (Invercargill, N.Z.), Jan. 7, 1889, at 3.

55. 8 CHURCHILL, *supra* note 3, at 8548.

56. T.R. Andhyarujina, *Frozen Judicial Salaries: A Crisis*, HINDU (May 29, 2008), <http://www.hindu.com/2008/05/29/stories/2008052955451000.htm>.

57. *Id.*

ing the right candidates and preventing good judges from leaving the bench. Three causal mechanisms are implicitly assumed: (1) judicial salary affects the quality of candidates attracted to the bench; (2) judicial salary affects the range of prior careers of candidates attracted to the bench; (3) judicial salary affects the exit of current judges.⁵⁸ We will empirically test these claims below.

C. *Judicial Pay Affects Judicial Independence*

In this section, we review the rich history of claims about the relationship between judicial pay and independence. While the causal mechanisms implicitly hypothesized in recurring debates about the effect of judicial pay on the composition of the judiciary have generally been very similar over time, the argument over the effect of judicial pay on judicial independence has evolved as the meaning of “judicial independence” has changed over time.⁵⁹ At the time of the Framing of the Constitution, and in the early years of the republic, protecting judicial pay was thought to be vital in order to ensure judicial independence from the other branches of government. In the colonial era and then in the early republic, there were several examples of other branches effectively punishing the entire judicial branch and overturning individual decisions. Protecting judicial compensation was necessary to preserve the independence of the *institution* of the judicial branch of government. The implicit concern was that the other branches would punish the judiciary; the remedy was protecting judges’ salaries from retaliatory diminutions.

Over time, however, the judiciary and judicial review became an established part of our government, and the old institutional concept of judicial independence was replaced by one that focused a judge’s independence in an individual case.⁶⁰ A new argument about the relationship between judicial pay

58. See Glaberson, *supra* note 16.

59. Several commentators have noted the slippery character of “judicial independence.” See Lewis A. Kornhauser, *Is Judicial Independence a Useful Concept?*, in JUDICIAL INDEPENDENCE AT THE CROSSROADS: AN INTERDISCIPLINARY APPROACH 45 (Stephen B. Burbank & Barry Friedman eds., 2002) (suggesting abandoning the concept entirely because of the significant confusion regarding the term and its lack of utility as an analytic concept); see also Lewis A. Kornhauser, *Judicial Organization and Administration*, in 5 ENCYCLOPEDIA OF LAW AND ECONOMICS 27, 33 (Boudewijn Bouckaert & Gerrit De Geest eds., 2000) (reviewing different conceptions of judicial independence); J. Mark Ramseyer, *The Puzzling (In)dependence of Courts: A Comparative Approach*, 23 J. LEGAL STUD. 721, 722 n.4 (1994) (defining an independent judiciary as a system “where politicians do not try to intervene in the courts to reward and punish sitting judges for the politics of their decisions,” but noting that other empirical studies have defined the term differently).

60. See John Ferejohn, *Independent Judges, Dependent Judiciary: Explaining Judicial Independence*, 72 S. CAL. L. REV. 353, 365 (1999) (“Understood traditionally, judicial independence concerns independence of judges from the interference of other governmental officials.”); William M. Landes & Richard A. Posner, *The Independent Judiciary in an Interest-Group Perspective*, 18 J.L. & ECON. 875, 875 (1975) (“We define an ‘independent’ judiciary as one that does not make decisions on the basis of the sorts of political factors (for

and independence emerged—judicial salaries were important to prevent corruption and to prevent judges from being influenced by litigants or possible future employers. The implicit causal hypothesis made in these arguments is that lower salaries will encourage corruption or persuade judges to take jobs with litigants and law firms. We test these hypotheses below.

Once again, the debate is an old one. Influenced by Montesquieu,⁶¹ the issue of judicial independence and compensation for judges was an important one for the Framers of the Constitution. English judges were guaranteed tenure during “good Behaviour” by the 1700 Act of Settlement.⁶² In contrast, colonial American judges were without this protection and could be fired by the King or his colonial representative.⁶³ In colonial Massachusetts, the English governor refused to permit judges to be paid by the Massachusetts legislature and instead insisted they be paid by the English government.⁶⁴

This lack of judicial independence was a problem acute enough to be specifically noted in the Declaration of Independence itself, which recited that the King “has made Judges dependent on his Will alone, for the tenure of their offices, and the amount and payment of their salaries.”⁶⁵ Benjamin Franklin also noted these arguments in his *Causes of American Discontent*, and stated: “[J]udges should be free from all influence, and, therefore, whenever govern-

example, the electoral strength of the people affected by a decision) that would influence and in most cases control the decision were it to be made by a legislative body . . .”).

Conceptually, there are (at least) two dimensions of judicial independence. The first dimension is: Independence from whom? Is the judge or judiciary supposed to be independent from the executive, the legislature, public opinion, political parties, litigants, or law firms? The second is the level of analysis: Who should be independent? Is the focus on the independence of a particular judge making a particular decision, the judge more generally, the court, or the judicial branch more generally?

61. The importance of judicial independence historically derives from Montesquieu’s conception of the importance of separation of powers. Montesquieu cautioned against a judicial power that was aligned with either the executive or the legislative powers:

Again, there is no liberty, if the judiciary power be not separated from the legislative and executive. Were it joined with the legislative, the life and liberty of the subject would be exposed to arbitrary control; for the judge would be then the legislator. Were it joined to the executive power, the judge might behave with violence and oppression.

1 BARON DE MONTESQUIEU, *THE SPIRIT OF LAWS* 152 (Thomas Nugent trans., Colonial Press rev. ed. 1900) (1748). This conception of judicial independence is one that is focused on the independence of the institution of the judiciary from the other branches rather than the independence of the judge in a particular case. See Charles Gardner Geyh & Emily Field Van Tassel, *The Independence of the Judicial Branch in the New Republic*, 74 CHL.-KENT L. REV. 31, 31 (1998) (distinguishing between “decisional” independence, which focuses on individual judges, and “‘branch’ (or institutional) independence”).

62. See Peter M. Shane, *Who May Discipline or Remove Federal Judges? A Constitutional Analysis*, 142 U. PA. L. REV. 209, 216 (1993).

63. See Joseph H. Smith, *An Independent Judiciary: The Colonial Background*, 124 U. PA. L. REV. 1104, 1112 (1976).

64. See EDWARD DUMBAULD, *THE DECLARATION OF INDEPENDENCE AND WHAT IT MEANS TODAY* 115 (1950).

65. THE DECLARATION OF INDEPENDENCE para. 11 (U.S. 1776).

ment here will grant commissions to able and honest judges during good behavior, the Assemblies will settle permanent and ample salaries on them during their commissions.”⁶⁶

While the Framers were primarily concerned with threats to the judiciary from the executive branch,⁶⁷ between 1776 and the passage of the Constitution in 1787, there were several incidents that highlighted potential conflict between the judiciary and the legislative branches. In 1784, the New York legislature attempted to remove a judge who authored an opinion striking down a statute as unconstitutional.⁶⁸ In Rhode Island in 1786, the legislature attempted to remove *all* judges who struck down a particular statute; the following year, all but one of these judges were not reelected.⁶⁹ In Virginia, the legislature increased the state high court’s workload and imposed upon it a duty “to attend the said courts, allotting among themselves the districts they shall respectively attend.”⁷⁰ The Virginia Court of Appeals declared the act unconstitutional, noting that it more than doubled its workload without adding any increase in salary.⁷¹ The court noted that if this were permitted, “the independence of the judiciary [would be] . . . annihilated.”⁷²

The state legislatures would also sometimes interfere in individual cases.⁷³ Gordon Wood noted that legislatures in this era would hear private petitions and make final judgments on these complaints, and “often granted appeals, new trials, and other kinds of relief.”⁷⁴ Madison wrote: “[C]ases belonging to the judiciary department frequently [were] drawn within legislative cognizance and determination.”⁷⁵

Perhaps as a result of these incidents, there was an increased appreciation of the need for the judiciary to be independent from the legislature as well as

66. Benjamin Franklin, *Causes of American Discontent*, LONDON CHRON., Jan. 9, 1768, reprinted in AMERICAN PATRIOTISM 16, 20 (Selim H. Peabody ed., 1880).

67. Geyh & Van Tassel, *supra* note 61, at 37; see also GORDON S. WOOD, THE CREATION OF THE AMERICAN REPUBLIC, 1776-1787, at 161 (2d ed. 1998) (citing Jefferson’s statement that the judiciary should be a “mere machine” with respect to the legislature).

68. JULIUS GOEBEL, JR., ANTECEDENTS AND BEGINNINGS TO 1801, in 1 HISTORY OF THE SUPREME COURT OF THE UNITED STATES 133-37 (Paul A. Freund ed., 1971).

69. *Id.* at 137-41.

70. *Cases of the Judges of the Court of Appeals*, 8 Va. (4 Call) 135, 138 (1788).

71. *Id.* at 145.

72. *Id.* at 146.

73. See HENRY STEELE COMMAGER, THE EMPIRE OF REASON: HOW EUROPE IMAGINED AND AMERICA REALIZED THE ENLIGHTENMENT 214 (1977) (explaining that state legislatures “played fast and loose with the very structure of the judiciary; meddled constantly in judicial affairs, nullified court verdicts, vacated judgments, remitted fines, dissolved marriages, and relieved debtors of their obligations almost with impunity”).

74. WOOD, *supra* note 67, at 154-55.

75. THE FEDERALIST NO. 48, at 312 (James Madison) (Clinton Rossiter ed., 1961).

the executive.⁷⁶ By the time of the debates leading up to the drafting of the Constitution in 1787, the importance of judicial independence from both the executive and the legislature was more generally recognized.⁷⁷

At first, drafts of the Constitution banned both decreases and *increases* in pay for sitting federal judges. The ninth resolution of the Virginia delegation proposed that judges receive a “compensation for their services, in which *no increase* or diminution shall be made so as to affect the persons actually in office at the time.”⁷⁸ This was modified at the convention to permit periodic increases in judicial salaries because “variations in the value of money”—that is, inflation—might make upward adjustments necessary.⁷⁹

James Madison opposed this amendment and argued that permitting the legislature to increase judges’ salaries would actually *reduce* judicial independence: “[I]t will be improper even so far to permit a dependence[.] Whenever an increase is wished by the Judges, or may be in agitation in the legislature, an undue complaisance in the former may be felt towards the latter.”⁸⁰ Instead of permitting the legislature to increase judicial salaries, Madison thought the concern over inflation could be accounted for by “taking for a standard wheat or some other thing of permanent value.”⁸¹ On Madison’s view, the independence of the judiciary could best be secured by providing a permanent, inflation-adjusted salary so that there could be no reason for the judiciary to be beholden to the legislature.

After the Constitution was drafted, the issue of the role of judicial independence arose in the debates over its ratification between the Federalists and the Antifederalists. Influenced by Montesquieu, the Federalists recognized the importance of judicial independence and the concern that the judiciary might

76. Jefferson shifted from believing that a judge should be “a mere machine” beholden to the legislature to recognizing the dangers of legislative encroachment on the judicial power and the need for independence of judges. He noted that in Virginia:

The judiciary . . . members were left dependant on the legislative, for their subsistence in office, and some of them for their continuance in it. If therefore the legislature assumes . . . judiciary powers, no opposition is likely to be made; nor, if made, can it be effectual; because in that case they may put their proceedings into the form of an act of assembly, which will render them obligatory on the other branches. They have accordingly, in many instances, decided rights which should have been left to judiciary controversy

THOMAS JEFFERSON, NOTES ON THE STATE OF VIRGINIA 120 (William Peden ed., Univ. of N.C. Press 1982) (1785). Later Jefferson espoused renewable six-year terms for federal judges with the approval of both houses of Congress, arguing that “it is a misnomer to call a government republican, in which a branch of the supreme power is independant of the nation.” Letter from Thomas Jefferson to James Pleasants (Dec. 26, 1821), *available at* <http://hdl.loc.gov/loc.mss/mtj.mtjbib024252>.

77. See Geyh & Van Tassel, *supra* note 61, at 37-38.

78. WILLIAM M. MEIGS, THE GROWTH OF THE CONSTITUTION IN THE FEDERAL CONVENTION OF 1787, at 234-35 (1900) (quoting the ninth Virginia Resolution) (emphasis added).

79. 2 THE RECORDS OF THE FEDERAL CONVENTION OF 1787, *supra* note 13, at 45.

80. *Id.*

81. *Id.*

tend to ally with one of the other branches. To ensure judicial independence, Alexander Hamilton defended permanency in judicial office,⁸² and also a guarantee of compensation. He argued that “[n]ext to permanency in office, nothing can contribute more to the independence of the judges than a fixed provision for their support,” because “a power over a man’s subsistence amounts to a power over his will.”⁸³ Hamilton also noted that attempts in some states to establish “permanent” salaries for judges by legislative means have failed because “such expressions are not sufficiently definite to preclude legislative evasions.”⁸⁴

Hamilton recognized the possibility of inflation, and noted: “[T]he fluctuations in the value of money and in the state of society rendered a fixed rate of compensation in the Constitution inadmissible. What might be extravagant to-day might in half a century become penurious and inadequate.”⁸⁵

In the end, of course, the Compensation Clause of the U.S. Constitution resulted. It provides Article III federal judges with “Compensation, which shall not be diminished during their Continuance in Office.”⁸⁶ No provision is made for inflation or cost-of-living increases.

Even after the Constitution was ratified, the independence of the judicial branch in the early republic remained in question. In the controversy around the Judiciary Act of 1801, the newly established federal circuit courts were eliminated by Congress and, by the Judiciary Act of 1802, the Supreme Court was prevented from meeting for fourteen months.⁸⁷

The independence of the state courts was even more tenuous. Initially, most state judges were appointed by the state legislatures, and courts had little

82. See THE FEDERALIST NO. 78 (Alexander Hamilton), *supra* note 75, at 472. It is interesting to note that Montesquieu, the source of Hamilton’s concern with judicial independence, took a very different tack in seeking to ensure it. Rather than lifetime appointments for judges, he advocated that the judicial power rest in “persons taken from the body of the people at certain times of the year.” He argued: “By this method the judicial power, so terrible to mankind, not being annexed to any particular state or profession, becomes, as it were, invisible. People have not then the judges continually present to their view; they fear the office, but not the magistrate.” MONTESQUIEU, *supra* note 61, at 153. This is a very different means of removing the dependence of the judiciary on the legislature or executive powers.

83. THE FEDERALIST NO. 79 (Alexander Hamilton), *supra* note 75, at 472. Hamilton also wrote:

In a monarchy [judicial tenure during good behavior is] an excellent barrier to the despotism of the prince; in a republic it is a no less excellent barrier to the encroachments and oppressions of the representative body. And it is the best expedient which can be devised in any government to secure a steady, upright, and impartial administration of the laws.

THE FEDERALIST NO. 78 (Alexander Hamilton), *supra* note 75, at 465.

84. THE FEDERALIST NO. 79 (Alexander Hamilton), *supra* note 75, at 472. Indeed, more recent federal efforts to ensure “permanent” judicial cost-of-living increases have met a similar fate. See *infra* text accompanying notes 104-08.

85. THE FEDERALIST NO. 79 (Alexander Hamilton), *supra* note 75, at 473.

86. U.S. CONST., art. III, § 1.

87. Geyh & Van Tassel, *supra* note 61, at 80 n.192.

institutional independence. For example, in Kentucky, the state supreme court was dissolved and temporarily replaced with an institution with significantly curtailed powers of review, in the wake of an unpopular decision to hold a particular statute unconstitutional.⁸⁸ The Missouri legislature also removed its Court of Chancery, apparently as a preemptive measure preventing the court from finding certain legislative proposals unconstitutional.⁸⁹

The story that emerges on the debate over compensation and its relationship to judicial independence is therefore complex. Guaranteed compensation and lifetime tenure were not adequate to ensure the judicial branch's institutional independence in the early republic. The suggestion that history supports the claim that judicial pay should be increased to preserve independence oversimplifies the complexities of the debate over the Compensation Clause and its subsequent interpretation.⁹⁰ The Framers were concerned with the institutional independence of the judicial branch from the executive and legislative branches, rather than the independence of judges in any particular case or from other actors. And, as Madison pointed out, permitting Congress to increase judicial salaries may actually *reduce* institutional independence by tempting the judiciary to curry favor with Congress.

To summarize, the Framers, influenced by Montesquieu, recognized the importance of judicial pay in attempting to provide independence to judges. The Compensation Clause was intended to prevent the judicial branch from being unduly beholden to either the executive or the legislature in order to preserve a particular form of *institutional* judicial independence.⁹¹ The general aim was to preserve the judiciary as an institution that could check the executive or the legislature. This general aim of the Framers was not always achieved; the institutional independence of both the federal and state judiciaries in the early republic was very limited. Much less attention was paid to the idea of individual judicial independence in a particular case—what we usually think of today as judicial independence—probably because the courts' status was so tenuous.

Gradually, however, we see the emergence of the new concern that would eventually be called judicial independence—the idea that a judge should not be influenced by any outside parties when making an individual decision, and that judicial pay was relevant to this issue. In 1902, the president of the Utah Bar

88. See Theodore W. Ruger, "*A Question Which Convulses a Nation*": *The Early Republic's Greatest Debate About the Judicial Review Power*, 117 HARV. L. REV. 826, 828 (2004).

89. See W.J. Hamilton, *The Relief Movement in Missouri, 1820-1822*, 22 MO. HIST. REV. 51, 89-90 (1927).

90. See, e.g., Blake Denton, *The Federal Judicial Salary Crisis*, 2 DREXEL L. REV. 152, 152, 155 (2009).

91. Cf. Geyh & Van Tassel, *supra* note 61, at 31 (distinguishing between "decisional" and "'branch' (or institutional)" independence).

Association, C.S. Varian, argued that judges' salaries should be increased to avoid any conflicts of interest:

The insufficiency of the compensation given to our judges is so apparent, that there should be no further delay in providing for an increase. . . . [A judge's] entire time and energy should be given to the performance of the duties of his high station. He has no right to engage in business, since, by doing so, in more or less degree, he disqualifies himself in the administration of the great trust reposed in him. No suitor before a judge who has engaged in business transactions, can ever be fully assured that the interest or preconceived opinion of the judge may not unconsciously bias his judgment. Indeed, such are the infirmities of men that no judge in such situation can be certain of himself. It is the duty of the state to provide a proper compensation for its judges, so they may be relieved of any necessity of engaging in commerce or business of any kind, and public opinion should restrict them to the legitimate duties of their offices.⁹²

Here we see the emergence of the new concept of the relationship between judicial salary and judicial independence: the independence of a judge from his or her personal business interests, in contrast to independence from the legislature or executive.

The relationship between judicial salary and independence also arose in litigation regarding whether the federal income tax could be applied to federal judges without violating the Compensation Clause. In *Evans v. Gore*,⁹³ the Court held that Congress could not apply an income tax to federal judges. The Court's opinion suggests that the ruling was meant not to benefit judges but rather to benefit the public:

With what purpose does the Constitution provide that the compensation of the judges "shall not be diminished during their continuance in office"? Is it primarily to benefit the judges, or rather to promote the public weal by giving them that independence which makes for an impartial and courageous discharge of the judicial function? Does the provision merely forbid direct diminution, such as expressly reducing the compensation from a greater to a less sum per year, and thereby leave the way open for indirect, yet effective, diminution, such as withholding or calling back a part as a tax on the whole? Or, does it mean that the judge shall have a sure and continuing right to the compensation, whereon he confidently may rely for his support during his continuance in office, so that he need have no apprehension lest his situation in this regard may be changed to his disadvantage?⁹⁴

According to the Court, "the primary purpose of the prohibition against diminution was not to benefit the judges, but, like the clause in respect of ten-

92. C.S. Varian, President, Utah Bar Ass'n, Annual Address (Jan. 13, 1902), in *Supreme Court Scored at Annual Bar Meeting*, DESERET EVENING NEWS, Jan. 14, 1902, at 5. Varian lamented the failure of a bill to increase judges' salaries to \$4000 per year. He also argued that the state's appellate court judges should receive higher salaries than the state's district court judges; at the time, they were receiving the same salary. *Id.*

93. 253 U.S. 245 (1920).

94. *Id.* at 248-49.

ure, to attract good and competent men to the bench and to promote . . . independence of action and judgment.”⁹⁵ Such independence was “essential to the maintenance of the guaranties, limitations and pervading principles of the Constitution and to the administration of justice without respect to persons and with equal concern for the poor and the rich.”⁹⁶ Given the purpose of this tax exemption, it should be construed “not as a private grant, but as a limitation imposed in the public interest; in other words, not restrictively, but in accord with its spirit and the principle on which it proceeds.”⁹⁷

The Court held, as a matter of constitutional law, that paying income tax would diminish judges’ “independence of action and judgment,” but did so without explaining the causal link. There was no suggestion, for example, that the income tax, which did effect a diminution in judges’ salaries, was an effort to retaliate against the judicial branch.

Justice Holmes dissented and pointed out the non sequitur of the Court’s position:

To require a man to pay the taxes that all other men have to pay cannot possibly be made an instrument to attack his independence as a judge. I see nothing in the purpose of this clause of the Constitution to indicate that the judges were to be a privileged class, free from bearing their share of the cost of the institutions upon which their well-being if not their life depends.⁹⁸

In 1939, the New Deal Court in *O’Malley v. Woodrough* upheld an effort to apply the income tax prospectively to judges who were appointed after the date of the applicable statute.⁹⁹ In response to the dissent, which heavily cited *Evans v. Gore*, the majority was tersely dismissive:

To suggest that it makes inroads upon the independence of judges who took office after Congress had thus charged them with the common duties of citizenship, by making them bear their aliquot share of the cost of maintaining the Government, is to trivialize the great historic experience on which the framers based the safeguards of Article III, § 1.¹⁰⁰

More recent efforts to increase judicial pay have also cited judicial independence as a goal. In 1975, Congress passed a bill to provide automatic cost-of-living adjustments for members of Congress, the executive, and the judiciary.¹⁰¹ Once again, probably motivated by the political sensitivity of permitting themselves a pay raise, Congress usually cancelled the automatic pay increases

95. *Id.* at 253.

96. *Id.*

97. *Id.* at 253-54.

98. *Id.* at 265 (Holmes, J., dissenting).

99. 307 U.S. 277 (1939).

100. *Id.* at 282.

101. Executive Salary Cost-of-Living Adjustment Act, Pub. L. No. 94-82, 89 Stat. 419 (1975) (codified as amended in scattered sections of the U.S. Code).

for all three branches.¹⁰² In 1980, a group of federal district court judges sued, arguing that Congress violated the Compensation Clause by failing to provide the cost-of-living adjustments that had been promised. In *United States v. Will*, the Supreme Court held that it violated the Compensation Clause only if a cost-of-living increase had already vested, but that Congress was free to repeal cost-of-living increases that were merely promised to judges.¹⁰³

In 1989, Congress passed the Ethics Reform Act, which among other things provided for a twenty-five percent increase in judicial pay.¹⁰⁴ Passed partly in response to the concern over stagnating government salaries, the Act also provided that the salaries of federal judges would automatically be increased each year along with a similar increase in the salaries of federal civil servants, thus reversing a previous freeze on judicial salaries.¹⁰⁵ This adjustment was to occur automatically unless the President determined there was “a national emergency” or “serious economic conditions affecting the general welfare.”¹⁰⁶

At first, these adjustments to federal judicial salaries took place as expected in fiscal years 1991, 1992, and 1993. In fiscal year 1994, President Clinton, citing the huge budget deficits, denied all automatic raises for federal employees.¹⁰⁷ In fiscal years 1995, 1996, 1997, and 1999, the automatic adjustment in the federal pay scale occurred, but Congress specifically exempted federal judges, members of Congress, and certain high-level executive branch employees.¹⁰⁸

In 1997, a group of judges filed a lawsuit arguing that these laws that prevented them from receiving raises violated the Compensation Clause of the

102. See ABA & FED. BAR ASS'N, FEDERAL JUDICIAL PAY EROSION: A REPORT ON THE NEED FOR REFORM 5 (2001), available at http://www.americanbar.org/content/dam/aba/migrated/poladv/priorities/judicial_pay/fedjudreport.authcheckdam.pdf; Baker, *supra* note 7, at 68 (noting that, as a result of inflation, real judicial salaries fell nearly thirty percent during this period).

103. 449 U.S. 200, 229 (1980).

104. Ethics Reform Act of 1989, Pub. L. No. 101-194, § 703(a)(3), 103 Stat. 1716, 1768 (codified as amended at 5 U.S.C. § 5318 note (2006)).

105. *Id.* § 702 (codified as amended at 5 U.S.C. § 5303 note).

106. 5 U.S.C. § 5303. The Ethics Reform Act also restricted outside activities by judges and capped outside earned income (from teaching, etc.) to fifteen percent of the judge's salary. Ethics Reform Act of 1989, §§ 501-502.

107. See *Williams v. United States*, 535 U.S. 911, 913 (2002) (Breyer, J., dissenting from denial of certiorari).

108. See Treasury, Postal Service and General Government Appropriations Act, 1995, Pub. L. No. 103-329, § 630, 108 Stat. 2382, 2424 (1994); Treasury, Postal Service, and General Government Appropriations Act, 1996, Pub. L. No. 104-52, § 633, 109 Stat. 468, 507 (1995); Omnibus Consolidated Appropriations Act, 1997, Pub. L. No. 104-208, § 637, 110 Stat. 3009, 3009-364 (1996); Omnibus Consolidated and Emergency Supplemental Appropriations Act, 1999, Pub. L. No. 105-277, § 621, 112 Stat. 2681, 2681-518 (1998). Hamilton anticipated this development when he noted that efforts to establish “*permanent*” salaries for judges had been undermined by “legislative evasions.” THE FEDERALIST NO. 79 (Alexander Hamilton), *supra* note 75, at 472.

Constitution. The District Court agreed and granted summary judgment for the judges.¹⁰⁹ The United States appealed, and the Court of Appeals reversed in a two-to-one panel decision.¹¹⁰ The plaintiff judges sought certiorari, which was denied, with Justices Scalia, Kennedy, and Breyer dissenting from the denial of certiorari. Justice Breyer, writing for the three Justices, explained that the Compensation Clause was important to protect judicial independence that was necessary to judging:

That enterprise, Chief Justice Marshall explained, may call upon a judge to decide “between the Government and the man whom that Government is prosecuting; between the most powerful individual in the community, and the poorest and most unpopular.” Independence of conscience, freedom from subservience to other Government authorities, is necessary to the enterprise. The Compensation Clause helps to secure that judicial independence.¹¹¹

Four years later, Chief Justice Roberts argued that low salaries undermine judicial independence because judges might seek to curry favor with future employers: “If judicial appointment ceases to be the capstone of a distinguished career and instead becomes a stepping stone to a lucrative position in private practice, the Framers’ goal of a truly independent Judiciary will be placed in serious jeopardy.”¹¹² Other Justices have echoed these arguments. Justice Kennedy has recently argued that the problem of low judicial salaries “has become a threat to judicial independence,” and recounted numerous anecdotes of good judges leaving the bench because of compensation.¹¹³ Law school deans have also supported Chief Justice Roberts’s call for increased salary for the federal judiciary.¹¹⁴ Similarly, the ABA has long supported an increase in judicial salaries, arguing that erosion of federal judicial salaries threatens the quality and independence of the judiciary.¹¹⁵

109. *Williams v. United States*, 48 F. Supp. 2d 52, 65 (D.D.C. 1999).

110. *Williams v. United States*, 240 F.3d 1019 (Fed. Cir. 2001).

111. *Williams*, 535 U.S. at 921 (Breyer, J., dissenting from denial of certiorari) (citation omitted) (quoting PROCEEDINGS AND DEBATES OF THE VIRGINIA STATE CONVENTION OF 1829-1830, at 616 (1830)).

112. Roberts, *supra* note 4, at 3.

113. See *Judicial Security and Independence: Hearing Before the S. Comm. on the Judiciary*, 110th Cong. 73, 77-78 (2007) (statement of Justice Anthony M. Kennedy). But see Frank, *supra* note 5, at 57 n.8 (noting that one judge whose departure Kennedy cited denied that salary was primary motivation). Other Justices have also sounded the alarm. Justice Alito has stated that “[w]ithout serious [judicial] salary reform, the country faces a very real threat to its judiciary.” *Federal Judicial Compensation: Hearing Before the Subcomm. on Courts, the Internet, and Intellectual Property of the H. Comm. on the Judiciary*, 110th Cong. 72 (2007) (statement of Justice Samuel Alito). Justice Breyer noted that “something has gone seriously wrong with the judicial compensation system.” *Id.* at 13 (statement of Justice Stephen Breyer).

114. See Letter from Law School Deans to Senator Patrick J. Leahy, Chairman, Senate Comm. on the Judiciary (Feb. 14, 2007), available at <http://www.uscourts.gov/uscourts/News/2008/docs/DeansLetter.pdf>.

115. See ABA, STATEMENT OF THE ABA ON EXECUTIVE AND JUDICIAL COMPENSATION IN THE FEDERAL GOVERNMENT 2 (2006); see also ABA & FED. BAR ASS’N, *supra* note 102;

Overall, we see a shift in the meaning of judicial independence from the independence of the judicial branch from the executive and legislative branches to the independence of the individual judge from any outside influences. Judicial pay was originally relevant to prevent the other branches from penalizing judges. As the judicial branch became more established at both the federal and state levels and that threat diminished, that justification for the need to guarantee judicial pay diminished. But as a new concept of individual judicial independence from outside influences emerged, another argument for increased judicial pay emerged—that it was necessary to prevent judges from being beholden to outside influences.

The implicit causal relationship between judicial salary and independence depends upon which sense of “independence” one is concerned about. Judicial independence from the other branches may be protected by depriving the other branches of the power to affect judges’ salary. In this respect, Madison was surely right that permitting the legislature to raise judges’ salaries actually decreases their independence from the legislature. In contrast, if we are concerned about judicial independence from outside parties, we might be more worried about low or decreasing judicial salaries tempting judges to become demoralized, accept bribes, or be unduly influenced by possible future employers.

D. *Conclusion and Identification of Testable Hypotheses*

What themes emerge from this survey of the long debate over judicial pay? First, perhaps because of collective anxiety about their elite status, the appropriate pay for judges has long been a controversial topic in many jurisdictions, both here and abroad. While Chief Justice Roberts’s claim that pay for federal judges has reached the point of “constitutional crisis” is particularly dramatic, the issue of judges’ pay, state and federal, here and abroad, has been debated since before the nation was born.

Second, from Plato to Chief Justice Roberts, the implicit causal arguments have been remarkably stable over time. We can divide these arguments into two groups: arguments about the effect of judicial pay on the composition of the judiciary, and arguments about the effect of judicial pay on the behavior of judges. These categories are not entirely discrete—the composition of the bench may affect the behavior of judges (and vice versa)—but they are a means of organizing the many arguments about the effect of judicial pay, and they will aid us in identifying testable hypotheses.

ABA, IN SUPPORT OF A FAIR AND IMPARTIAL JUDICIARY 6-8 (2008), *available at* www.abanet.org/poladv/transition/2008dec_judiciary.pdf. At least fifteen ABA policy statements, beginning in 1963, have called for increased judicial pay. *See* Brief of the ABA as Amicus Curiae Supporting Petitioners at 3, *Beer v. United States*, 131 S. Ct. 2865 (2011) (No. 09-1395), 2010 WL 2502673.

1. *Composition*

First, low salaries are said to harm the *recruitment* of judges. Numerous commentators have argued that the failure to raise salaries will lead to the most qualified individuals refusing to become judges.¹¹⁶ Others have argued that the failure to raise salaries will affect the composition of the judiciary in ways that will harm the judiciary even if the quality of individual judges remains the same.¹¹⁷ Conversely, some commentators have argued that judicial salaries that are too high could negatively affect recruitment by attracting greedy, corrupt, or less public-minded judges.¹¹⁸

Second, low judicial salaries may affect *exit* from the bench in ways that harm the judiciary. Judges may leave the bench for higher paying jobs. We may believe that judges' skills in judging improve over time. More experienced judges may also provide institutional memory that strengthens the overall independence of the judicial branch from other institutions and pressures.¹¹⁹ Longer-serving judges may have sufficient political power to resist short-term public pressures against unpopular legal rulings. On the other hand, judicial salaries that are low enough to prompt occasional exit may actually improve the judiciary, if those who exit are those who are dissatisfied with judicial service.¹²⁰

2. *Behavior (including independence)*

Judicial salaries are also said to affect the behavior of judges, including their independence. Low or stagnant judicial salaries are said to harm the work of the existing members of the bench. This can occur because judges simply become discouraged.¹²¹ Others are concerned that low salaries might lead to a loss of institutional or decisional independence (or both). Different versions of this argument contend that low salaries may result in a desire to seek favor

116. See, e.g., 8 CHURCHILL, *supra* note 3, at 8548-49 (arguing that a judicial pay raise is necessary to "command the finest characters and the best legal brains"); POSNER, *supra* note 36, at 171 ("If relative judicial incomes took a big tumble, the applicant pool would become increasingly dominated by single, independently wealthy, older, dual-career, unsuccessful, power-hungry, publicity-seeking, and lazy lawyers."); Rehnquist, *supra* note 43, at 3 (suggesting that only "the well-to-do or the mediocre" will become federal judges absent a pay increase).

117. See, e.g., Roberts, *supra* note 4, at 3 (arguing that continuing failures to increase judicial salaries will restrict the diversity of the judiciary); Starnes, *supra* note 39 (reporting on a speech in which Chief Justice Burger argued that the diversity of judiciary was harmed by low salaries); Thompson & Cooper, *supra* note 45 (arguing that stagnating salaries led to more judges with public sector backgrounds, to the detriment of the judiciary).

118. See, e.g., PLATO, *supra* note 1, at 184-87; Greenberg & Haley, *supra* note 6, at 418; *Salary Cost of Local Justice*, *supra* note 17.

119. See POSNER, *supra* note 36, at 170 (noting that we may value experienced judges).

120. See *id.*

121. See *id.* at 171 (noting the possibility that as high-discretion workers, judges might underperform in reaction to a sense of being underpaid).

from potential future employers like law firms or litigants, or a desire to curry favor with legislative or executive branches in the hopes of receiving a raise.

Finally, there is the argument that through its effects on entry, service, and exit, low judicial salaries lead to a loss of respect for the judiciary itself. If the bench is filled with “the mediocre” who cannot find jobs elsewhere, or with lawyers who view a stint on the bench as a stepping stone to a more lucrative position, the role of the judiciary itself may be demystified and seen as simply a second-tier political job. If this were to occur, judges would lose their unique role and perhaps much of their informal power, both as individual judges and collectively as a branch of government.

Ideally, we would like to be able to test all of these implicit arguments empirically. Unfortunately, our data do not allow us to do so. Many of the arguments, particularly about the way that judicial salaries may affect the behavior of judges, are not easily tested. We now turn to what we can learn from the available data.

II. OVERVIEW OF EMPIRICAL STRATEGY AND DISCUSSION OF DATA

Our primary dataset includes a sample of judges who served on state appellate courts between 1977 and 2007. The data allow us to examine: (1) the impact of judicial pay on when an appellate judge joins and leaves the bench; (2) the impact of judicial pay on several measures of qualifications; and (3) the effect of pay of non-judicial legal opportunities on entry and exit. We also collected a smaller sample of data on California state trial court judges to determine whether judicial salary affects trial judges differently from appellate judges. In this section, we discuss the data we use and how the data were collected.

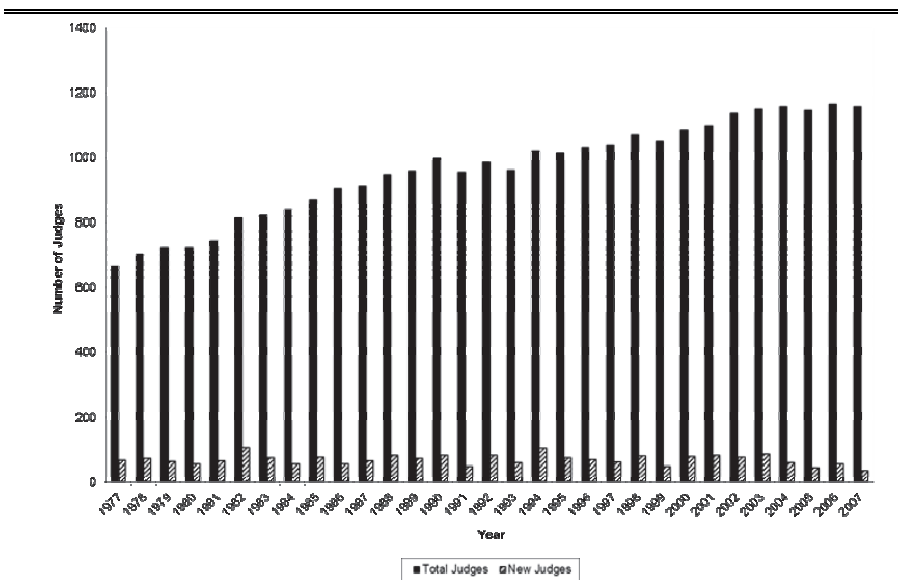
Studying the state bench has several advantages compared to the federal bench. First, these judges preside over the vast majority of litigation in the United States. In that respect, understanding how salaries affect state court behavior may be more important than studying federal court behavior. Second, there is wide variation in state judges’ salaries—far wider than the variation in purchasing power upon which previous studies of federal judges have relied. This variation helps us see how much difference salaries make—both within states and among states.

To examine the impact of judicial pay on tenure, probability of exit, and diversity, we constructed a database of all the judges serving on the state appellate courts (including state supreme courts). The data come from the *American Bench*, an annual directory that provides biographical information on all judges currently serving in state and federal courts.¹²² We supplemented the data from the *American Bench* with information directly from the states, the majority of

122. See, e.g., *THE AMERICAN BENCH: JUDGES OF THE NATION* (Marie T. Finn et al. eds., 17th ed. 2007).

which keep detailed biographical information on appellate court judges (although not on trial court judges, as discussed below¹²³). The biographical information includes data on the judges' names, the courts on which they serve, the positions held on those courts (Chief Justice, Associate Justice, etc.), and the years when the judges began those positions. It typically also contains information on each judge's age, education, and careers prior to joining the court.

FIGURE 1
Number of Judges by Year



The *American Bench* typically does not contain information on race or sex. We determined sex using each judge's name.¹²⁴ Information on the race of judges was collected from the American Bar Association¹²⁵ and directly from the state

123. See *infra* pp. 1330-31.

124. A cross-check of our coding accuracy was done using photographs of the judges for those states that provide pictures of the judges. The correlation between sex derived from names and judges' sex as seen in photographs was one hundred percent, so we are confident that our attributions of sex are correct.

125. See GEORGE W. CROCKETT, JR. ET AL., NATIONAL ROSTER OF BLACK JUDICIAL OFFICERS (1980); JOINT CTR. FOR POLITICAL & ECON. STUDIES & THE JUDICIAL COUNCIL OF THE NAT'L BAR ASS'N, ELECTED AND APPOINTED BLACK JUDGES IN THE UNITED STATES (2d ed. 1991); JOINT CTR. FOR POLITICAL & ECON. STUDIES & THE JUDICIAL COUNCIL OF THE NAT'L BAR ASS'N, ELECTED AND APPOINTED BLACK JUDGES IN THE UNITED STATES (1st ed. 1986); STANDING COMM. ON MINORITIES IN THE JUDICIARY, ABA, THE DIRECTORY OF MINORITY JUDGES OF THE UNITED STATES (4th ed. 2008); STANDING COMM. ON MINORITIES IN THE JUDICIARY, ABA, THE DIRECTORY OF MINORITY JUDGES OF THE UNITED STATES (3d ed. 2001); TASK FORCE ON MINORITIES IN THE JUDICIARY, ABA, THE DIRECTORY OF MINORITY JUDGES OF THE UNITED STATES (2d ed. 1997); TASK FORCE ON OPPORTUNITIES FOR

courts. Data on African-American judges are available for the full time period, but information on other races is not included in earlier minority directories. Moreover, unlike sex, we could not determine the race of all the judges studied, and including controls for African-American judges substantially reduces sample size. As a result, such controls are not included in all the analyses below.

Figure 1 provides an annual breakdown of the sample. For 1977, the *American Bench* has information on 665 state appellate court judges. The number rises to 1165 in 2006. The number of new judges joining an appellate court in a given year ranges from a high of 108 in 1982 to a low of 38 in 2007.

A. *Measuring Exit*

We measure exit from the bench by treating a judge who does not appear in the next edition of the *American Bench* as having left the court. This information is supplemented with data from the individual state courts. The *American Bench* generally removes judges from the directory published in the next full year after the judge exits. Thus, a judge who served for part of 2002 would appear in the 2002 edition but not the 2003 edition. Although we have data from the state courts that are more exact about the timing of exit, the data are often missing for judges who exit early in the sample, as a number of state courts do not have the complete history of their judges back to 1977. For this reason, we treat exit as an annual “event” and estimate the probability of exit by year rather than attempting to measure the exact duration of tenure.

We lack information on why each judge left the bench. Thus, we cannot differentiate exit due to death, retirement, or taking another job. We address this by examining all exits from the bench and then exits by judges who are under sixty-five, as a proxy for exits by judges who leave the bench for another job.¹²⁶ The summary statistics describing the sample are presented in Table 1.

MINORITIES IN THE JUDICIARY, ABA, DIRECTORY OF MINORITY JUDGES IN THE UNITED STATES (1st ed. 1994).

126. See *infra* Table 7 and accompanying text.

TABLE 1
Descriptive Statistics of Sample (Annual Observations)

	Mean	SD	Min	Max
Exit from the Bench*	0.0553	0.23	0.0	1
Exit from the Bench (Judges Under 65)*	0.0266	0.16	0.0	1
Real Salary (in \$10,000 of 1982 dollars)	6.65	0.97	3.9	11
Judge's Age**	57.26	8.63	23.0	94
Eligible for Retirement [†]	0.27	0.45	0.0	1
Percent of Salary on Retirement	0.31	0.30	0.0	1
Portion of Pension Vested	0.70	0.46	0.0	1
Within Five Years of Retirement Age [†]	0.09	0.29	0.0	1
Average Salary of Local First-Year Associates (in \$10,000 of 1982 dollars)	4.53	1.02	2.6	7
Average Salary of Local Partners (in \$10,000 of 1982 dollars)	28.74	13.04	11.4	91
Cases Filed Annually per Judge	195.74	130.41	3.6	1296
Number of Judges on Relevant Court	24.65	24.80	3.0	105
Number of Support Attorneys per Judge	2.68	2.53	0.0	33
Male [†]	0.84	0.37	0.0	1
African-American [†]	0.01	0.11	0.0	1
Percent of Salary on Retirement	0.24	0.23	0.0	1
Current Term Ending This Year [†]	0.08	0.27	0.0	1
Entry Method				
Gubernatorial Appointment	0.50	0.50	0.0	1
Legislative Election	0.03	0.16	0.0	1
Nonpartisan Election	0.26	0.44	0.0	1
Partisan Election	0.22	0.41	0.0	1
Retention Method				
Governor Renominates	0.07	0.25	0.0	1
Legislative Reelection	0.03	0.18	0.0	1
Nominating Commission Retains	0.01	0.10	0.0	1
Reelection	0.44	0.50	0.0	1
Retention Election	0.43	0.49	0.0	1
Total Number of Observations	29,870			

* For each judge, we recorded a value of 0 if the judge did not exit the bench in the year observed, and a value of 1 if the judge did exit the bench in that year.

** The judge's age was not available for 11% of the observations. We included an indicator variable equal to 1 for all missing observations and 0 if the age was available.

† For these binary statistics, we recorded a value of 0 if the judge did not have the relevant characteristic in the year observed, and a value of 1 if the judge did have the relevant characteristic in that year.

B. *Measures of Career Background*

To measure previous careers, we sorted judges' past employment into nine categories that occurred with at least some frequency in the judges' biographies. Since judges may have multiple jobs prior to becoming a judge, the categories are not mutually exclusive.¹²⁷ The categories include whether the judge has held an academic position; whether the judge has worked in a district attorney's office or has been a district attorney; whether the judge has been a politician (defined as someone holding elected office at the state or federal level); whether the judge has been an officer in the military; whether the judge has worked as a private attorney; whether the judge has been a judge for a lower court; whether the judge has worked for the state attorney general's office or has been the attorney general; whether the judge has worked for a public defender's office; and finally whether the judge has either worked for a U.S. Attorney's office or been a U.S. Attorney.

TABLE 2
Judicial Qualifications/Background in Sample

	Proportion
African-American*	0.02
Male*	0.79
Judge Had Been an Academic	0.08
Judge Had Worked in a District Attorney's Office	0.20
Judge Had Been a Politician	0.12
Judge Had Been an Officer in the Military	0.07
Judge Had Been a Private Attorney	0.47
Judge Had Been a Judge on a Lower Court	0.60
Judge Had Worked in a State Attorney General's Office	0.07
Judge Had Worked in a Public Defender's Office	0.03
Judge Had Worked in a U.S. Attorney's Office	0.04
Judge Had Been a Judicial Law Clerk	0.11
Judge Attended a Law School Ranked in the Top 10	0.19
Total Number of Judges	2207

* These statistics differ from Table 1 because Table 1 is based on annual observations of the sitting judges each year, whereas this Table is based on the total number of judges.

127. Ideally, we would like to have the judge's occupation immediately prior to joining the bench. Unfortunately, the *American Bench* biographies do not consistently report data on the order in which each judge held his or her previous jobs.

Finally, we also measure each judge's educational background using two measures: first, whether judge was a judicial law clerk, and second, whether the judge attended a top-ten law school. To rank the law schools we utilize either the *U.S. News & World Report* rankings, if available, for the year the judge would have started law school, or the *Gourman Report*, which began ranking law schools in 1967. Given the limited turnover for top-ten ranked schools, we simply used the rankings from 1967 for judges who attended law school prior to 1967.¹²⁸ Table 2 provides the breakdown of judicial backgrounds.

C. *Measures of Judicial Compensation*

The salary data come from the *Survey of Judicial Salaries* by the National Center for State Courts, which contains salary information on state court judges by court, position held, and year.¹²⁹ We match these data to the data collected from the *American Bench*. As with all dollar values in the study, we convert judicial salaries to real 1982 dollars. Judges' pay varies widely both across states and through time. Figure 2 breaks down the 2007 pay (again in 1982 dollars) for all fifty states for associate justices of state supreme courts (or courts of last appeal).¹³⁰

Figure 2 shows the range of judicial salaries in 2007, adjusted for the sake of comparison to 1982 equivalent salaries. The highest-paid appellate judges are California Supreme Court justices, who earn the 1982 equivalent of \$100,101. This is actually more than federal judges, who in 2007 earned the equivalent of \$97,906 in 1982 dollars (\$203,000 in 2007 dollars). The lowest-paid judges are associate justices in Montana, who earn \$50,750 in 1982 dollars, or about half of the California salary.¹³¹

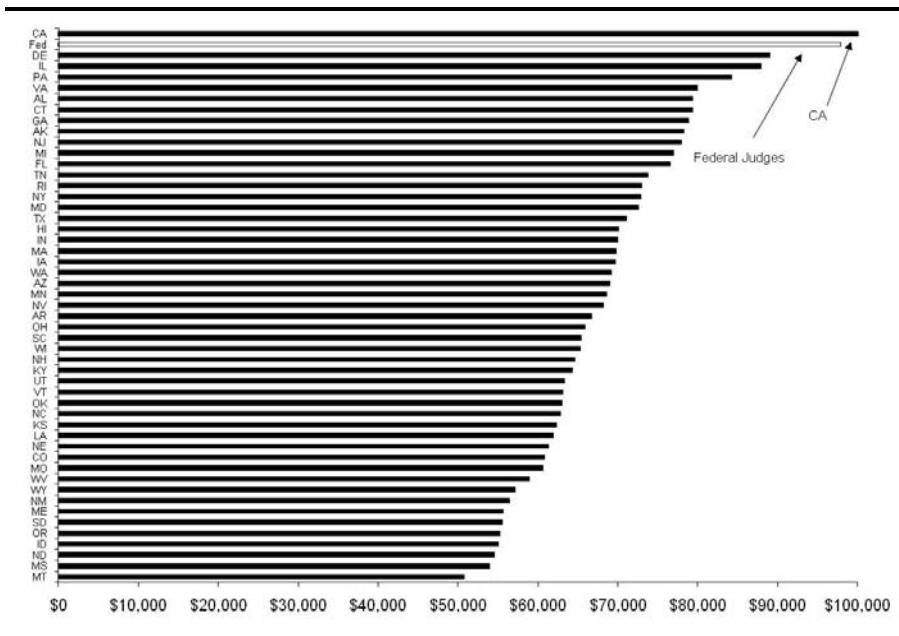
128. The law schools ranked in the top ten that have a graduate serving as a judge on a state appellate or state supreme court between 1977 and 2007 are Berkeley, Columbia, Cornell, Duke, Georgetown, Harvard, New York University, Northwestern, Stanford, Chicago, Michigan, Pennsylvania, Virginia, and Yale. Fourteen schools are included, rather than ten, because the rankings shifted over the time period studied.

129. See *Survey of Judicial Salaries: Archive Editions*, NAT'L CENTER FOR ST. CTS., http://www.ncsconline.org/WC/Publications/KIS_JudComJudSalArchives.html (last visited May 15, 2012) (providing links to past issues of the *Survey of Judicial Salaries*).

130. To provide some perspective, \$1.00 in 1982 is equivalent to approximately \$2.33 in 2011 terms. *Consumer Price Index*, BUREAU LAB. STAT. (Feb. 17, 2012), <ftp://ftp.bls.gov/pub/special.requests/cpi/cpiiai.txt> (reporting the normalized annual average Consumer Price Index as 96.5 in 1982 and 224.939 in 2011, which translates to a 2.33-fold change over this time period).

131. These apparent differences in salary ignore differences in cost of living among the states. We control for this by using state-fixed effects in the regressions that follow.

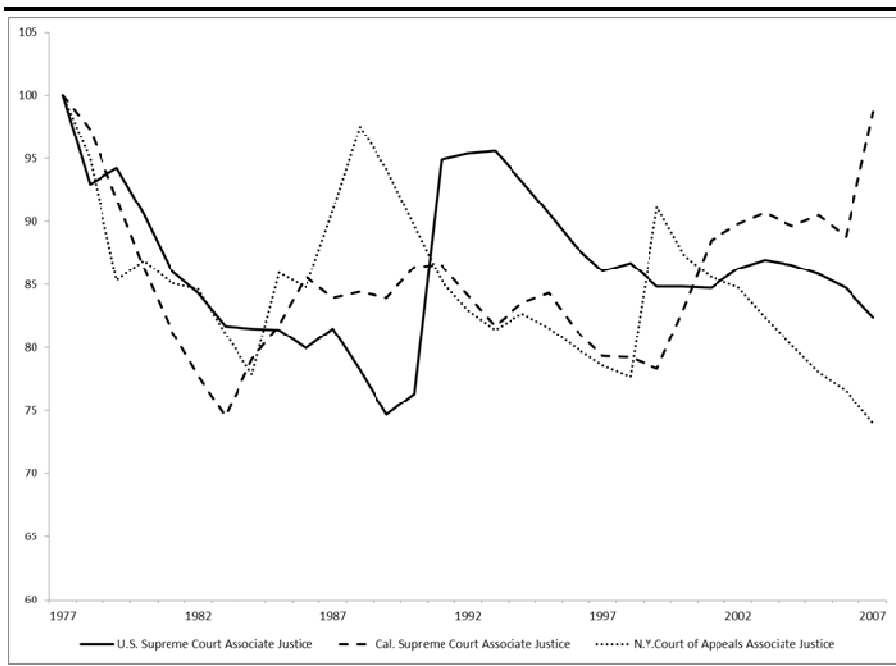
FIGURE 2
Judicial Salaries by State in 2007



The salaries also vary substantially through time. Consider the real salaries over time for United States Supreme Court Associate Justices, New York Court of Appeals associate justices, and California Supreme Court associate justices, shown in Figure 3.

For Associate Justices of the Supreme Court of the United States, the salaries decreased in real terms from 1977 until 1990, when the Ethics Reform Act of 1989 effected nominal pay increases of twenty-five to thirty percent over a two-year period. Since then, the fall in pay has been more gradual. By contrast, California Supreme Court associate justices have experienced a gradual real increase since 1982. For associate justices of the New York Court of Appeals, the picture is even more dramatic, with increases in pay being eroded by inflation several times during the sample period.

FIGURE 3
Judicial Salaries as a Percentage of 1977 Real Salary



D. Pensions

Apart from salary, another important source of judicial compensation is a judge's pension. We examined the pensions for state court judges in all states and found a wide variety of pension mechanisms. Using the National Center for State Courts data on judicial pensions,¹³² we construct two measures of judicial pensions. The first is the percentage of the judge's current salary she would receive upon retirement if she left the bench in the current year (described in Table 1 as "Percent of Salary on Retirement"). This is zero if the judge's pension is not vested, and a percentage once it is vested. The second variable is whether, at the judge's current age for a given year, the judge is eligible to retire and begin receiving his or her pension. This cutoff varies widely by state and is typically a function of both time on the bench and age.¹³³

132. For information about judicial pensions in thirty-seven states and the District of Columbia as of spring 2008, see *Judicial Salary Resource Center*, NAT'L CENTER FOR ST. CTS., http://www.ncsconline.org/D_KIS/Salary_Survey/retirement.asp (last visited May 15, 2012).

133. Consider the pension systems of two states in our sample: Arkansas and Nevada. An appeals court judge in Arkansas has a pension that is immediately vested, and receives 3.2% of her salary for every year on the bench, up to a maximum of 80% of her salary. She

One other issue requires mention on our pension variables. We do not know for all judges how long the judge served on a lower court (or if they served at all) before joining the appeals court, and hence we will underestimate the salary percentages for these judges. To avoid systematic bias, we base our pension calculations only on time served as an appellate judge, since this information is consistent across our data.

E. *Judicial Workload*

Judicial workload is another potentially important variable that might impact decisions to become a judge or retire. To capture judicial workload, we include the National Center for State Courts data on civil and criminal appeals to the relevant court.¹³⁴ The hypothesis is that increases in workload will make exit more likely. We divide total caseload by the number of judges on the relevant court to capture average workload per judge. Because this number is only available for the court as a whole, average caseload is clearly an imprecise measure of judicial workload and does not tell us the caseload any specific judge is facing.

F. *Opportunity Costs of Serving as a Judge*

As discussed in Part I.A above, many have argued that relatively low judicial salaries make it harder to convince qualified attorneys to become judges because of the salaries these lawyers can earn in the private sector. This is relevant to claims about the effect of judicial salary both on quality and on diversity of background. But what a lawyer can earn in the private sector varies by region. Highly qualified lawyers may earn more in New York or Washington, D.C., than in smaller cities. This will affect the “opportunity cost” of becoming a judge—the cost of the forgone opportunity to earn more money.

Following Scott Baker,¹³⁵ we utilize Altman Weil’s *Survey of Law Firm Economics*, which provides information on law firm compensation, including average salaries for both partners and associates.¹³⁶ Baker argues that this is a proxy for the opportunity cost of being a judge, since the judge could exit the

is eligible to receive her pension if she has served nine years and is over sixty-four when she leaves the bench. An appeals court judge in Nevada has a pension that vests after five years on the bench, and he receives 3.4091% of his salary each year up to a maximum of 100% of his salary. He is eligible to receive his pension if he has served more than ten years and is over sixty-five, or has served more than thirty years and is over sixty.

134. See COURT STATISTICS PROJECT, NAT’L CTR. FOR STATE COURTS, EXAMINING THE WORK OF STATE COURTS: AN ANALYSIS OF 2009 STATE COURT CASELOADS (2011), available at <http://www.courtstatistics.org/Other-Pages/CSP2009.aspx>.

135. See Baker, *supra* note 7, at 78 n.53 (citing ALTMAN WEIL PUBL’NS, INC., THE SURVEY OF LAW FIRM ECONOMICS (2005)).

136. The survey is discussed in some depth by Baker. See *id.*

bench to practice law.¹³⁷ This measure is also limited, however, since we are forced by the nature of our data to treat the relevant opportunity cost for the judge according to state rather than according to a narrower geographic area.¹³⁸

It is also unclear whether the typical state court appellate judge could leave the bench and earn the same salary as a partner at a top law firm. For this reason, we also estimate the model using the salary of a first-year associate as a rough proxy for compensation in the private legal market. The underlying assumption is that, although first-year salaries are clearly less than the salary that a judge would make entering the firm, the first-year salaries provide a useful, standardized figure that reflects meaningful information about general compensation levels throughout the relevant market. We aggregate this information to the state level. Although the survey covers a number of lawyers and law firms, some states are omitted in the sample. Including either of our proxies for opportunity cost results in the loss of several smaller states from the sample and a reduction in sample size. For this reason, we estimate the model both including and excluding the private salary measures. Figure 4 presents the ratios of average judicial salary, for all judges in our sample in 2007, relative to the average partner salary in each available state. The implication of the chart is that New York judges have the largest opportunity cost in our sample, while judges in Tennessee have the lowest.

Because of the limitations of the Altman Weil data, we also examine the regional legal market using data on legal professional salaries from the U.S. Census.¹³⁹ This number, which includes all lawyers, likely underestimates what a judge could make in the private sector but provides a broader measure of opportunity cost and includes all states.

Finally, we measure one common expense that some lawyers have cited when explaining their decision to leave the bench or not to join it—the cost of a private college education. We measure the average real private college tuition for six regions of the country (Middle States, Midwest, New England, South, Southwest, and West). The data come from the College Board and cover the years 1988 to 2007.¹⁴⁰ There is regional variation in the data, mostly due to the mix of schools in each region. Tuition costs during this period rose significantly faster than inflation.

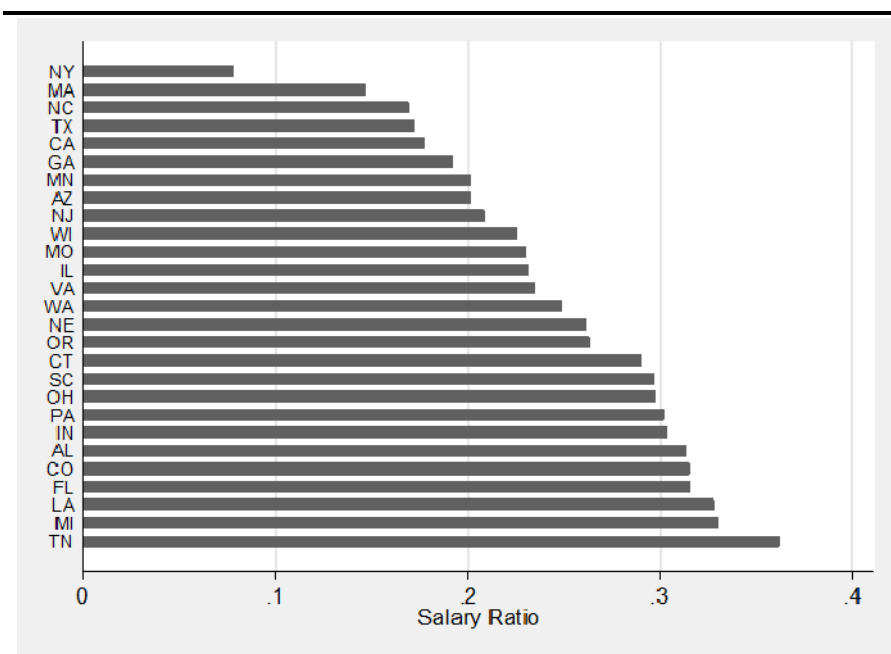
137. *Id.* at 78.

138. Thus, for example, our measure is likely to overstate the opportunity cost for a judge in upstate New York and understate it for a judge in Manhattan.

139. See *Current Population Survey (CPS)*, U.S. CENSUS BUREAU, <http://www.census.gov/cps> (last visited May 15, 2012).

140. See, e.g., COLL. BD. ADVOCACY & POLICY CTR., *TRENDS IN COLLEGE PRICING 2007* (2007), available at http://www.collegeboard.com/prod_downloads/about/news_info/trends/trends_pricing_07.pdf. Our data are derived from the editions of this report published from 1988 and 2007, all of which are available on College Board's website.

FIGURE 4
Ratio of Judicial Salary to Partner Salary



III. THE EFFECTS OF JUDICIAL SALARY

As discussed above, the implicit causal arguments made about the effects of judicial salary can be loosely divided into claims about its effect on the composition of the judiciary and claims about its effect on the behavior of judges. We first empirically examine the effects of judicial salary on the composition of the bench.

Our primary independent variable is the salary of state appellate court judges. Our hypothesis is that increases in salary are associated with decreases in the likelihood of exit.

Finally, we estimate the impact of both the method used to select judges and the method of determining if judges are retained on the bench. Table 1A in the Appendix provides the 2007 data for judicial selection and retention methods. The methods of selecting judges change very little during the sample period, with only a handful of states adjusting the retirement ages. For this reason, the method of selection is subsumed in the state controls.

We include an indicator variable equal to one if the current year is the end of the judge's current term. We also include control variables for judges chosen by gubernatorial appointments, legislative vote, or partisan or nonpartisan elections. The omitted category is nominating commissions. We also include con-

trols for the method of retention: governor reappointment, legislative vote, a vote of the nominating commission, or another partisan or nonpartisan election. We further interact the end-of-term variable with method of retention under the assumption that the incentive to retire from the bench to avoid an election, for example, may be different from the incentives to avoid renomination.

A. *Specification*

1. *The impact of pay on entry into the judiciary*

The impact of judicial salary on the likelihood that a judge has undertaken a specific occupation prior to joining the bench is estimated using a probit model. The specification is similar to the specification for exit, discussed below, although the unit of observation is the judge, and the salary and opportunity cost variables are for the year in which the judge was appointed. The model uses the following formula:

$$Occupation_{it} = \beta_1 real\ salary_i + \beta_2 X_2 + \gamma_i + \theta_i + \varphi_i$$

Occupation is an indicator variable, set equal to one if the judge had experience in that specific occupation prior to joining the relevant court. The nine occupations, discussed above, are employment in academia, politics, military service, private practice, a district attorney's office (including being the district attorney), the state attorney general's office (including being the attorney general), a public defender's office, a U.S. Attorney's office (including being a U.S. Attorney), or judging on a lower court. Thus, someone who was a faculty member at a law school but had not worked in a district attorney's office would have the variable "academic" set equal to one, but the variable for employment in the district attorney's office set equal to zero. In this formula, *real salary_i* is the real judicial salary discussed above, and *X_i* are judicial characteristics that do not vary through time (such as race and gender). We also include year-fixed effects (γ_i), state-fixed effects (θ_i), and court-type-fixed effects (φ_i).

It is important to recognize the limitations of this approach. Ideally, we would like to examine the willingness of attorneys in private practice to join the bench. We do not have data on the population of attorneys in private practice who might be considered for a judgeship (or might consider running), but who do not actually serve as judges. Absent data on this population, we examine the population who join the bench. If we are willing to assume that the changes in the unobserved population of attorneys willing to be considered map directly onto the changes in the population that become judges, we can make statements about the willingness of private attorneys to take judgeships depending on salaries.

It is easy to see how this could go wrong. If changes in salaries also change the types of backgrounds selected by governors, for example, we could not determine with our data the impact of salary on willingness to serve, since it would be confounded with which backgrounds make a lawyer more likely to be asked to become judges. For this reason, we interpret the background results with caution. This is not a problem for the results on exit, for which we have the complete population of judges.

2. *Specification for likelihood of exit*

We estimate the probability of exit with a discrete hazard model. Since we are interested in the probability that any given judge will depart in a given year, we estimate a survival model. Since our age variable is observed only at yearly intervals, we estimate a discrete time version of the proportional hazard model. These models are typically estimated using a complementary log-log (cloglog) regression, which is functionally equivalent to a Cox proportional hazard model.¹⁴¹ H_k is the discrete hazard function and is captured by an indicator variable for each year on the bench (that is, $H_1=1$ in the judge's first year on the bench and zero otherwise). We arrive at the following formula:

$$exit_{it} = \beta_1 real\ salary_{it} + \beta_2 X_i + \beta_a Z_{it} + \gamma_t + \theta_i + \varphi_i + \sum_{k=1}^k H_k$$

where Z_{it} are characteristics that vary by judge and time (such as our opportunity cost measures, retirement value, age, current terms ending, and term end interacted with retention method), H_k are the hazard rates estimated by using control variables equal to one for each year the judge has been on the bench (i.e., year 1 equals one for the first year and zero otherwise, year 2 equals one for the second year and zero otherwise, etc.), and the other variables retain their meanings from above.

B. *Results and Discussion on the Composition of the Judiciary*

1. *The impact of pay on entry into the judiciary*

As we discussed above, numerous commentators have hypothesized that judicial pay affects the kinds of lawyers who will join the bench. In particular, Chief Justice Roberts has expressed the concern that absent pay raises, the per-

141. See Bruce D. Meyer, *Unemployment Insurance and Unemployment Spells*, 58 *ECONOMETRICA* 757 (1990) (examining unemployment duration using a semiparametric duration model); Stephen P. Jenkins, *Survival Analysis* (July 18, 2005) (unpublished manuscript), available at <http://www.iser.essex.ac.uk/files/teaching/stephenj/ec968/pdfs/ec968lnotesv6.pdf> (providing estimation methods and theoretical background on duration analysis).

centage of the bench that consists of lawyers with private sector experience will fall dramatically.¹⁴² Another recurring theme expressed in numerous contexts is that with low judicial salaries, new judges joining the bench will be less capable than the judges they are replacing.

Table 3 presents the results of our background estimates. The unit of observation is the judge in the year in which he or she joined the bench.

Our results generally suggest that higher salaries reduce the likelihood that a judge has been an academic, has been a public defender, has previously served as a judge, or has worked in a U.S. Attorney's office. For example, for every \$10,000 of increase in salary, there is an 0.179 decrease in the chance that a new judge would have previous experience judging. This is consistent with the hypothesis that low judicial salaries tend to attract those who are already earning comparatively low salaries in public service or as academics. Similarly, as judicial pay increases in a state, the likelihood that judges will have experience in private practice also increases. For every increase of \$10,000 in salary, the chance of a new judge having private sector experience increases by 0.0661. In this respect, our data are consistent with Chief Justice Roberts's concern that low judicial salaries will lead to judges with less private sector experience.

Interestingly, and somewhat counterintuitively, increasing judicial salaries are also associated with more judges having district attorney experience. This result is somewhat surprising, because one might have expected this category of experience to be similar to public defender experience or previous judging experience.

We do not find a statistically significant impact of real starting salary on the probability that a judge has been a politician, has been a military officer, or has served in the state attorney general's office.

2. *Incorporating opportunity costs*

As noted by many, the ratio of judicial salaries to private sector legal salaries has shrunk substantially over the last thirty years. Many first-year associates at large firms are paid over \$150,000 per year, while partners can make several million dollars. Some have hypothesized that this has led to a decrease in the willingness of private sector lawyers to become judges.

142. Roberts, *supra* note 4, at 2.

TABLE 3
Impact of Salary on Judicial Backgrounds

Variable	Academic	District Attorney	Politician	Military	Private Practice	Judge	State Attorney General	Public Defender	U.S. Attorney
Real Salary in \$10,000	-0.539** (0.215)	0.324*** (0.115)	-0.0361 (0.152)	-0.604 (0.410)	0.169* (0.0880)	-0.472*** (0.161)	0.103 (0.159)	-0.572** (0.283)	-0.362* (0.191)
Judge's Age	-0.0166 (0.0113)	-0.000400 (0.00702)	-0.000884 (0.00679)	0.0253 (0.0165)	-0.0119 (0.00860)	-0.000610 (0.0102)	-0.0167 (0.0106)	-0.0549*** (0.0147)	-0.00719 (0.0146)
First-Year Associate Salary, Interpolated	0.268 (0.280)	0.303 (0.205)	0.383 (0.281)	0.428 (0.466)	-0.134 (0.229)	0.355** (0.164)	0.514 (0.379)	-0.313 (0.345)	0.570 (0.455)
Partner Salary, Interpolated	-0.0165 (0.0123)	-0.0116 (0.00927)	-0.0280*** (0.00682)	0.0254* (0.0141)	-0.00181 (0.0158)	-0.0105** (0.00508)	-0.0125 (0.0117)	-0.0256* (0.0145)	0.00585 (0.00756)
Observations	869	947	879	651	996	963	805	401	509
Marginal Effect of \$10,000	-0.0436	0.0847	-0.00482	-0.0226	0.0661	-0.179	0.0125	-0.0471	-0.0343
Percentage Change in Probability	-57.35%	41.4%	-4.71%	-3.87%	15.4%	-29.8%	13.7%	-6.52%	-48.5%

Robust standard errors in parentheses. Statistically significant results in italics.

* $p < 0.1$. ** $p < 0.05$. *** $p < 0.01$. Includes year, court, and state fixed effects.

As one can see in the fourth row of Table 3, we find that an increase in partner salaries in the state decreases the likelihood that a new appellate judge has prior judicial experience or prior political experience. One interpretation of this finding is that in states where partner salaries are higher, trial court judges are not joining appellate courts but are instead pursuing private practice. Combined with our finding that increases in judicial salary increase the likelihood that those with private sector legal experience will join the bench, the evidence is consistent with some competition between the appellate judicial labor market and the market for private sector attorneys.

TABLE 4
Impact of Salary on Educational Backgrounds

Variable	Clerk	Top-Ten Law School
Real Salary in \$10,000	-0.210 (0.176)	<i>-0.379***</i> (0.129)
Judge's Age	<i>-0.0419***</i> (0.0110)	0.0149 (0.0136)
First-Year Associate Salary, Interpolated	0.269 (0.301)	-0.00479 (0.239)
Partner Salary, Interpolated	-0.0104 (0.00838)	<i>-0.0230**</i> (0.0114)
Observations	949	773
Marginal Effect of \$10,000	-0.0322	-0.0890
Percentage Change in Probability	-25.7%	-4.59%

Robust standard errors in parentheses. Statistically significant results in italics.

* $p < 0.1$. ** $p < 0.05$. *** $p < 0.01$. Includes year, court, and state fixed effects.

We now turn to quality measures. We cannot directly measure the quality of a lawyer or a judge. However, we do have information about where a judge went to law school. In Table 4 we estimate the impact of starting salary on the education of those who become appellate judges. Interestingly, the impact of starting salary on the likelihood that an appellate judge attended a top-ten law school is *negative* and significant. Higher judicial salaries are actually associated with fewer graduates from top law schools joining the appellate bench. Or, in other words, lower judicial salaries are associated with more top-ten law school graduates joining the appellate bench. For every additional \$10,000 in salary, the chance of a judge having a degree from a top-ten law school declines by 0.089.

Given that clerkships at the federal level are highly selective and often a prerequisite for academic positions, we also include them as a possible indicator of quality. Nevertheless, we find no statistically significant impact of real starting salary on the likelihood that a judge was a judicial law clerk. Taken to-

gether, this evidence regarding law school and clerkships does not support the argument that low judicial salaries will lead to a lower quality appellate bench—at least as measured by the imperfect proxies of law school ranking or federal judicial clerkship experience.

Interestingly, the impact of law firm associate salaries on the chance of a judge having graduated from a top-ten law school is also negative. This is consistent with the possibility that top law school graduates with more lucrative outside options are less likely to join the appellate bench when judicial salaries are low relative to starting salaries for associates.

In Table 5 we examine certain aspects of diversity—namely the race, sex, and prior experience of new judges—to determine whether any groups sharing these characteristics are particularly sensitive to salary levels.

TABLE 5
Impact of Salary on Gender, Race, and Experience of Entering Judges

Variable	Male	African-American	Experience
Real Salary in \$10,000	-0.140 (0.118)	0.0353 (0.705)	-0.109 (0.506)
Judge's Age	<i>-0.0481***</i> (0.00980)	-0.0249 (0.0539)	
First-Year Associate Salary, Interpolated	0.0571 (0.148)	2.783* (1.440)	1.187 (1.883)
Partner Salary, Interpolated	0.00449 (0.00575)	0.159 (0.103)	-0.0341 (0.0464)
Observations	980	200	754
Marginal Effect of \$10,000	-0.0434	0.000475	
Percentage Change in Probability	-5.99%	5.94%	

Robust standard errors in parentheses. Statistically significant results in italics.

* $p < 0.1$. ** $p < 0.05$. *** $p < 0.01$. Includes year, court, and state fixed effects.

In general, we find no statistically significant impact of judicial salary on the likelihood that individuals of a given race, sex, or career background will serve as judges. Interestingly, however, we do find that increases in associate starting salaries increase the likelihood of finding African-American judges—but this is likely because states with large urban centers have both more African-Americans (and African-American judges) and also higher legal salaries than rural states.

As discussed above in Part I.A, some commentators, building on a line of argument that started with Plato, have suggested that high judicial salaries

would attract greedy judges who were not dedicated to the public interest. Unfortunately, we have no way of measuring these qualities.¹⁴³

3. *Exit*

To understand how salary affects the composition of the appellate bench, understanding who joins the bench is not enough. The other key process to model is the decision by sitting judges to leave the bench, and how salary and other forms of compensation may affect this decision. This is also relevant to understanding how judicial salary affects judicial independence. We turn to that process now.

The results of our estimation of the probability of exit are presented in Table 6.

Columns one through nine add in additional control variables, with each additional control reducing the sample size due to missing data. In the specification with the smallest number of missing observations, we include the real salary for the current year, the judge's age, whether the judge is eligible for retirement, the percentage of the judge's annual salary that he or she will receive upon retirement, and the method of retention interacted with the indicator variable for the end of the judge's term.

The impact of judicial salary is negative and significant in the first two columns, indicating that an increase in judicial real pay reduces the probability that a judge will exit the appellate bench. The impact is relatively modest: an increase of \$10,000 in pay causes a 0.00263 decrease in the probability of exit in a given year. Since the average probability for any judge to exit the bench is 5.53% for the estimation sample, a \$10,000 increase in pay reduces the likelihood of exit by about 4.76% ($0.00263 \div 0.0553 = 0.0476$). Figure 5 presents the probability of exit (the hazard rate), conditional on having continued to serve on the relevant court up to the year in question.

143. Future research might examine the relationship between judicial salary and corruption convictions. *Cf.* Frank, *supra* note 5, at 75-76 (comparing judicial salary and reputation for judicial corruption in Brazil with United States).

TABLE 6
Annual Probability of Exit

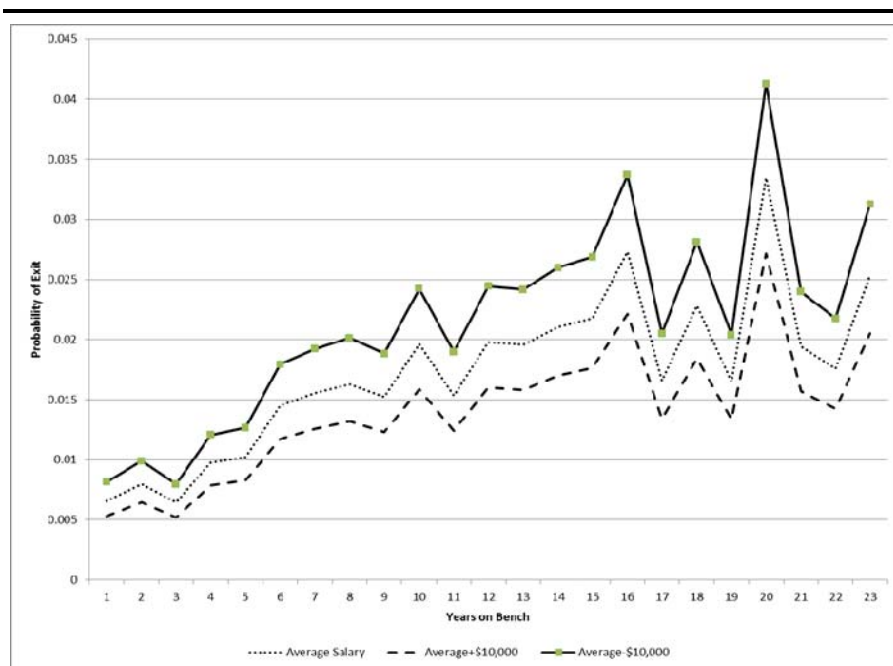
Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Real Salary in \$10,000	-0.214*** (0.0572)	-0.205*** (0.0716)	-0.0722 (0.0880)	-0.176 (0.113)	-0.178 (0.113)	-0.214 (0.170)	-0.178 (0.113)	-0.171 (0.113)	-0.180 (0.113)
Judge's Age	0.0789*** (0.00469)	0.0792*** (0.00523)	0.0856***	0.0873*** (0.00615)	0.0875*** (0.00729)	0.0875*** (0.00728)	0.0873*** (0.00725)	0.0874*** (0.00726)	0.0874*** (0.00729)
Eligible for Retirement	0.190** (0.0753)	0.142* (0.0827)	0.112 (0.0964)	0.0592 (0.117)	0.0513 (0.117)	0.0521 (0.118)	0.0592 (0.117)	0.0562 (0.118)	0.0514 (0.118)
Filed Cases by Judge		3.46×10^{-7} (0.000307)	8.34×10^{-5} (0.000326)	0.000179 (0.000356)	0.000183 (0.000357)	0.000185 (0.000357)	0.000181 (0.000355)	0.000188 (0.000355)	0.000186 (0.000357)
Percent of Salary on Retirement	-0.173 (0.185)	-0.0916 (0.201)	-0.167 (0.243)	-0.0799 (0.286)	-0.0703 (0.286)	-0.0658 (0.287)	-0.0838 (0.287)	-0.0795 (0.286)	-0.0741 (0.287)
Governor Renominates × Term Ends	-17.54*** (0.329)	-17.62*** (0.351)							
Legislative Reelection × Term Ends	-17.26*** (0.368)	-17.36*** (0.407)	-17.30*** (0.424)	-17.15*** (0.453)	-17.10*** (0.462)	-17.10*** (0.462)	-17.16*** (0.452)	-17.16*** (0.452)	-17.10*** (0.461)
Nominating Commission Retains × Term Ends	-18.00*** (0.320)	-17.85*** (0.394)	0.180 (1.076)						
Reelection × Term Ends	-0.589*** (0.170)	-0.709*** (0.195)	-0.851*** (0.217)	-1.238*** (0.289)	-1.233*** (0.289)	-1.233*** (0.289)	-1.239*** (0.289)	-1.243*** (0.289)	-1.234*** (0.289)
Retention Election × Term Ends	-0.237 (0.163)	-0.216 (0.176)	0.0851 (0.184)	0.257 (0.212)	0.258 (0.212)	0.258 (0.212)	0.255 (0.212)	0.258 (0.212)	0.257 (0.212)
First-Year Assoc. Salary, Interpolated			-0.107 (0.133)	-0.0280 (0.190)	-0.0275 (0.191)	-0.0285 (0.191)	-0.0281 (0.190)	-0.0348 (0.190)	-0.0279 (0.191)

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Partner Salary, Interpolated				0.00329 (0.00786)	0.00352 (0.00791)	0.00361 (0.00789)	0.00327 (0.00786)	0.00326 (0.00787)	0.00351 (0.00791)
Male					0.00587 (0.120)	-0.284 (1.043)			0.00327 (0.120)
Male × Real Salary						0.0418 (0.150)			
African-American								4.491 (3.354)	0.101 (0.462)
African-American × Real Salary								-0.601 (0.426)	
Observations	29,700	24,883	19,055	13,986	13,971	13,971	13,971	13,986	13,971
Number of Judges	2798	2529	2004	1652	1650	1650	1650	1652	1650
Marginal Effect of \$10,000	-0.00263	-0.00251	-0.000728	-0.00103	-0.00104	-0.00125	-0.00104	-0.00100	-0.00105
Marginal Effect of \$10,000 (Male)						0.000244			
Marginal Effect of \$10,000 (African-American)								-0.00352	
Percentage Change in Exit Rate	-4.76%	-4.53%	-1.35%	-1.97%	-2%	-2.39%	-2%	-1.92%	-2.02%

Robust standard errors in parentheses. Statistically significant results in italics.

* $p < 0.1$. ** $p < 0.05$. *** $p < 0.01$. Includes year, court, and state fixed effects.

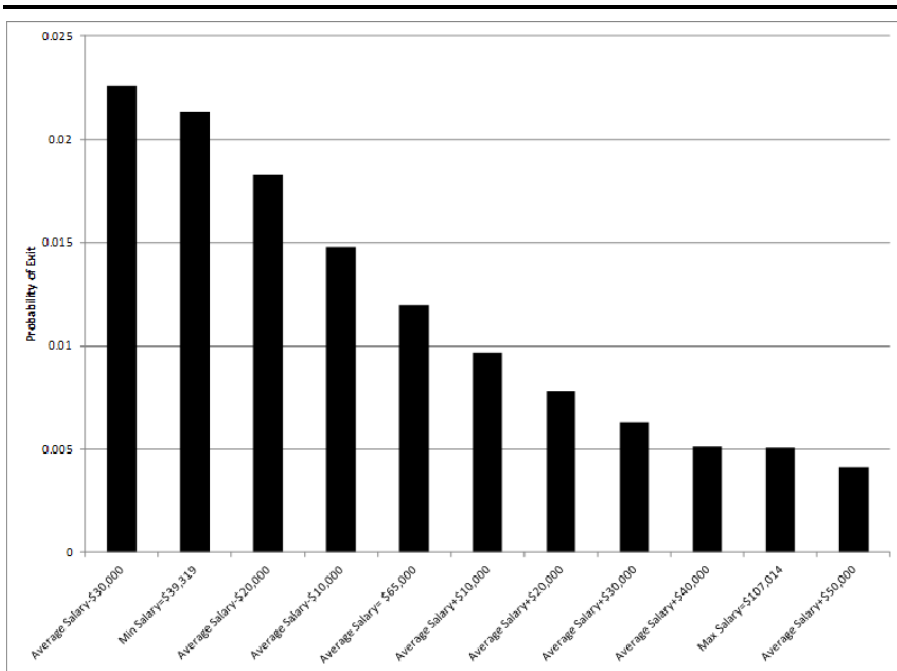
FIGURE 5
Probability of Judicial Exit, by Years on Bench



The probability of exit by years on the bench (the hazard rate) in Figure 5 is the predicted probability of exit for each year of experience, evaluating all other characteristics except judicial salary at their means (for example, the prediction is made for a fifty-one-year-old judge). The probability of exit is estimated nonparametrically by allowing each year of experience to have its own intercept. That is, we impose no functional form on the likelihood of exit. Interestingly, we find an upward trend in the likelihood of exit as tenure increases. We also graph the impact of salary by varying the real judicial salary by \$10,000 either above or below the mean. We see that decreased salary slightly increases the chance of exit, but much less than more years on the bench does.

Figure 6 presents the predicted probability of exit resulting from changes in the real judicial salary, holding constant average tenure on the bench. The probability of exit in Figure 6 can thus be thought of as the impact of judicial salary on average annual probability of exit. Starting in the center of the graph with the average real salary of \$65,000 (in 1982 purchasing power), we increase (right) or decrease (left) the salary by \$10,000. We also include the sample minimum and maximum to show the limits of our policy experiment.

FIGURE 6
The Impact of Real Judicial Salary on the Probability of Exit



A number of the control variables are also statistically significant predictors of exit. Not surprisingly, increases in age increase the likelihood of exit. Judges who are eligible for retirement are also more likely to retire.

Figure 7 presents the exit rate and percentage of salary available at retirement by age. The graph provides two important details regarding pensions. First, in contrast to federal judicial pensions, the impact of pensions at the state level is far more gradual.¹⁴⁴ The likelihood of exit rises with age but makes a large jump between ages sixty-five and seventy, when a number of states have mandatory retirement.

Interestingly, Table 6 shows that both (1) judges who are in their last year of a term and must be reappointed by a nominating commission and (2) judges who are in their last year of a term and must face reelection are less likely to exit. We would have expected that those facing the uncertainty of reelection or reappointment might have been more likely to exit. This apparently counterin-

144. See Yoon, *Empirical Study*, *supra* note 7 (examining the impact of pensions on exit from the federal bench and noting a sharp increase in exit once federal judges are eligible for their pension).

tuitive finding might be explained by the lack of precision in our measure of the exact year of exit.

FIGURE 7
Percentage Salary and Turnover



In column two of Table 6, we add in the average caseload per judge. This factor is not significant in any of our specifications, suggesting that caseload is not a significant factor affecting exit from the bench.

Column three adds the first-year associate salary, and column four includes partner salary. Neither is significant on its own, although judicial salary loses its significance in column three when associate salary is included, but returns to significance in specifications that include partner salary.

In columns five through nine, we break down the impact of judicial salary by race and sex, but find no statistically significant difference between men and women in the likelihood that they will exit the bench and no significant differences in the impact of salary on the probability of exit by race or sex. Sex and race, therefore, do not appear to affect judges' sensitivity to salary.

One plausible hypothesis is that judicial salary might have more of an impact on judges who leave the bench prior to conventional retirement age. In Table 7 we re-estimate our models using only exits by judges who are less than sixty-five years old, with our assumption being that these exits are less likely to be retirements.

TABLE 7
Impact of Salary on Exit by Judges Under Age of 65

	(1)	(2)	(3)	(4)
Real Salary in \$10,000	<i>-0.398***</i> (0.0820)	<i>-0.403***</i> (0.106)	<i>-0.281**</i> (0.129)	<i>-0.458***</i> (0.176)
First-Year Associate Salary, Interpolated			-0.0126 (0.193)	-0.147 (0.316)
Partner Salary, Interpolated				-0.000924 (0.0114)
Observations	29,700	24,883	19,078	13,986
Number of Judges	2798	2529	2005	1652
Marginal Effect of \$10,000	-0.00239	-0.00219	-0.00124	-0.00112
Percentage Change in Exit Rate	-8.97%	-8.25%	-4.86%	-4.79%

Robust standard errors in parentheses. Statistically significant results in italics.

* $p < 0.1$. ** $p < 0.05$. *** $p < 0.01$. Includes year, court, state, and hazard fixed effects.

The results indicate that an increase in real judicial pay reduces the likelihood of exit before age sixty-five. The impact on exit before age sixty-five is slightly larger than the impact on overall exit results, but the difference is not statistically significant. For judges under the age of sixty-five, the probability of exit is approximately 2.66% per year. A \$10,000 increase in real pay would reduce the probability of exit for judges under sixty-five by 0.00239, a decrease of about 8.97% per year. As a percentage of the average exit rate, the impact of salary on exit before age sixty-five is larger than the 4.76% reduction in exit probability overall, but the decrease is still relatively small.

When we include the opportunity cost measures, the results are very similar: the impact of real judicial salary falls in magnitude, and neither associate nor partner salary is statistically significant. Moreover, in both cases, increases in the outside opportunity cost measures actually reduce the likelihood of exit, although the impact is very small.

It is possible that lawyers with more varied experience are less likely to join the bench, but also less likely to exit once they join, perhaps because they have accumulated assets earlier in their careers or because they are more familiar with the alternatives to the bench. We test this hypothesis in Table 8 by estimating the annual probability of exit conditional on the number of different “careers” a judge has experienced prior to joining the bench. We define “experience” as a simple count of the number of different categories in our classification system found in a judge’s biography (i.e., academia, district attorney’s of-

fice, politics, military, private practice, lower court judgeship, attorney general's office, public defender's office, or U.S. Attorney's office).

We find that judges that have experience in fewer than three areas are more likely to exit when real salaries decrease. For judges with experience in more than three areas, we find real salary has no statistically significant impact on likelihood of exit; and although the coefficient is positive, the marginal impact of a \$10,000 change in salary has a marginal effect near zero. This result is consistent with the theory that those with more varied legal backgrounds are less sensitive to pay, either because they have accumulated assets earlier in their legal careers or because they are more satisfied with their jobs for some other reason.

TABLE 8
Impact of Pay on Exit by Probability of Diversity of Prior Experience

	Experience = 0	= 1	= 2	= 3	= 4	= 4 or 5
Real Salary in \$10,000	-0.213 (0.148)	<i>-0.314***</i> (0.119)	<i>-0.276***</i> (0.104)	0.0779 (0.129)	0.109 (0.323)	0.149 (0.325)
Observations	3849	8963	9692	5821	1287	1375
Number of Judges	404	825	905	530	128	134
Marginal Effect of \$10,000	-0.00135	-0.00179	-0.00112	0.00075	4.2×10^{-5}	0.000101
Percentage Change in Exit Rate	-1.181%	-4.1%	-2%	1.31%	0.0614%	1.51%

Robust standard errors in parentheses. Statistically significant results in italics.

* $p < 0.1$. ** $p < 0.05$. *** $p < 0.01$. Includes year, court, state, and hazard fixed effects.

As noted above, the Altman Weil data on partner or associate salary, which we use as our measure of opportunity cost, have several important limitations. The most important is that the data are unlikely to reflect a random sample of partner and associate salaries, given how the data are collected.¹⁴⁵ For this reason, we use the Current Population Survey (CPS) from the U.S. Census for all salaried lawyers.¹⁴⁶ We run the model again, using three different CPS-based measures of opportunity cost. The first measure is the average attorney salary reported by CPS for each state and year. The second utilizes age, gender, and

145. For a more complete discussion of how the survey is conducted, see Baker, *supra* note 7, at 78 n.53.

146. See *Current Population Survey (CPS)*, *supra* note 139.

employer-size information in addition to the state and year to create a “predicted CPS.” Because the CPS has different populations over time, small states may have higher variability simply due to the smaller population that was sampled. The predicted CPS attempts to mitigate this problem. The third measure interpolates the predicted CPS for those state years in which there are insufficient data to estimate the salary measure. The results are presented in Table 9. Although none of the CPS measures show statistically significant effects, the effect of the raw CPS salary is negative, consistent with our finding that a higher salary slightly reduces the chance of exit.

It is also possible that the relative salary, not the absolute dollar amount, is what leads to exit. In order to test this hypothesis, we include the ratio of the Altman Weil partner salary to judicial salary (column four of Table 9). Although the effect of this measure is negative, it is not statistically significant and it appears to be of similar magnitude to the earlier estimated impact on exit.

Finally, we include one other measure of consumption that is sometimes anecdotally cited as the reason a judge leaves the bench—the real private college tuition for six regions of the country (Middle States, Midwest, New England, South, Southwest, and West), as measured by the College Board data described above.

Interestingly, this measure is highly significant and has a larger impact on exit from the appellate bench than salary directly. A \$10,000 per year increase in private school tuition increases the likelihood of exit in a given year by 0.0438. Because we do not have data on whether any given judge has children, we cannot examine this result in greater depth. However, we view it as suggestive that, as the cost of goods consumed by the upper middle class rises, judges are more likely to exit the bench. It is possible that this variable simply captures the increased cost of goods consumed by judges. If these goods increase in cost at levels in excess of inflation, this variable may simply reflect a rise in the judges’ cost of living rather than college in particular.

We have focused thus far on the impact of real salary on the composition of the state appellate bench. While it is outside our primary research focus, we also wanted to gauge how generalizable our findings were likely to be to the trial court bench. In order to do so, we collected data on judges on the California Superior Court (which is the trial court of general jurisdiction in California) from the *American Bench*. We examined California because it has the largest number of judges, and the information is more complete than other states. The chief limitation of examining only one state is that the salary data do not vary within each year, necessitating that we estimate the model without year-fixed effects. If we include data on the 2811 judges for whom we can identify entry and exit dates, we have over 11,000 judge-years. If we confine the analysis to judges with identifiable ages, the number of judges falls to 650.

TABLE 9
Alternative Measures of Opportunity Cost

Variable	(1)	(2)	(3)	(4)	(5)
Real Salary in \$10,000	<i>-0.198**</i> (0.0965)	-0.195 (0)	<i>-0.171*</i> (0.0961)		<i>-0.190**</i> (0.0966)
CPS Salary	-0.00932 (0.00922)				
CPS Predicted Salary		0.0108 (0)			
CPS Predicted/Interpolated Salary			0.0189 (0.0209)		
Ratio of Judicial Salary to Partner Salary				-0.291 (1.013)	
Private College Tuition					<i>4.951**</i> (2.171)
Observations	19,971	19,971	20,379	12,777	19,971
Number of Judges	2257	2257	2257	1585	2257
Marginal Effect of \$10,000 CS Salary	-8.26×10^{-5}	9.58×10^{-5}	0.000171		
Marginal Effect of 1% Increase in Judicial Salary Relative to Partner Salary				-.00147	
Marginal Effect of \$10,000 Rise in Private School Tuition					0.0438
Percentage Change in Exit Rate	-0.151%	0.175%	0.314%	-2.83%	79.9%

Robust standard errors in parentheses. Statistically significant results in italics.

* $p < 0.1$. ** $p < 0.05$. *** $p < 0.01$.

There are two potential problems with using the *American Bench* to collect trial court data. First, *American Bench* only has trial court data at two-year intervals. Our exit rate for trial judges is thus biannual rather than annual. Second, *American Bench*'s biographical information on trial court judges is typically just a stub. In over half the cases it contains no more information than the judge's name and the court on which he or she serves—hence the significant

drop-off in the number of judges for which we can identify ages. In the cases in which there is biographical information, the judges' previous occupations are far more likely to be missing than in the case of appellate court judges. For this reason, we confine our analysis to exit from the trial court and do not attempt to replicate our strategy of examining the impact of pay on judicial background.

The descriptive statistics for the California Superior Court data are found in Table 10. The exit rates, age, and pension information are similar to the appellate court data. The main difference in the samples is that the exit rate from the trial court for judges younger than sixty-five is 4.5%, as compared to 2.66% in the higher court data.

TABLE 10

Descriptive Statistics on Exit from the California Superior Court, 1985-2007

	Mean	SD	Min	Max
Biannual Exit from the Bench*	0.10	0.31	0.0	1
Biannual Exit from the Bench* (Judges Under Age 65)	0.09	0.29	0.0	1
Real Salary in \$10,000	7.34	0.53	6.4	8
Judge's Age**	56.26	7.15	34.0	83
Percent of Salary on Retirement	0.06	0.16	0.0	1
Portion of Pension Vested	0.68	0.47	0.0	1
Average Salary of Local First-Year Associates in \$10,000	5.76	1.06	3.8	7
Average Salary of Local Partners in \$10,000	37.02	10.44	24.3	57
Total Number of Observations	23,672			

* For each judge, we recorded a value of 0 if the judge did not exit the bench in the year observed, and a value of 1 if the judge did exit the bench in that year.

** The judge's age was not available for 71% of the observations.

We again estimated the probability of exit with a discrete hazard model. H_k is the discrete hazard function for years of service between one and twenty-five years with the handful of judge-years with over twenty-five years of service being included in the twenty-five year intercept. The model used the following formula:

$$exit_{it} = \beta_1 real\ salary_{it} + \beta_2 Z_{it} + \sum_{k=1}^k H_k$$

where *real salary* is the real judicial salary, and Z_{it} are characteristics that vary by judge and time, such as our opportunity cost measures, retirement value, and age. Exit is again defined as the year in which the judge no longer appears in the *American Bench* guides. Thus, a judge found in the 1985 edition who does not appear in the 1987 edition would be considered as having exited the bench.

Because exits were recorded only every two years, in this hypothetical we cannot determine if the judge left the bench in 1985 or 1986.

The results are presented in Table 11. In each case, an increase in real judicial salary is associated with a decrease in the likelihood of exit. The impact of a \$10,000 change in salary at the trial court level, however, is much larger than the impact of the same change in salary for appellate court judges. A \$10,000 increase in salary decreases the probability of exit by over 0.08, which is over an 80% decrease in the likelihood of exit. If we assume that this is simply two times the annual impact on the exit rate, this suggests that at \$10,000 increase in salary would reduce the annual exit rate by about 0.04, over fifteen times the impact for higher court judges!

There are several problems with this comparison, however. The most important is the possibility that California judges are more sensitive to changes in pay than judges in other states. Ideally, we would like to be able to compare trial and appellate court judges in California. Unfortunately, we simply do not have enough data on appellate judges in California to estimate the model for appellate judges with California alone. Moreover, the models involve different specifications, making any comparisons suspect. The most we can confidently say is that our estimate of sensitivity of exit to pay is much larger and more robust for California trial court judges than our estimate of sensitivity to pay for appellate court judges in all fifty states.

The results are similarly large and robust for exit before age sixty-five, found in the lower panel of Table 11. Because the dependent variable for exit before age sixty-five requires us to know the age of the judge, our sample is considerably smaller. Again, the estimates are larger and more precise, suggesting, with the above caveats, that California trial court judges are more sensitive to pay than national appellate judges.

Based on this finding of increased sensitivity to pay, one might expect to find that trial court judges would be more sensitive to the opportunity costs of serving as a judge. For both exit overall and exit before age sixty-five, however, we find mixed results on the impact of private attorney salaries on the probability of exit. When we include only first-year associate salary in our regression, we find no impact on the likelihood of exit from the trial court. When we include partner salary (which has a negative and significant impact on exit), higher associate salary increases the likelihood of exit. Given the inconsistent nature of the impact estimate, we are limited in the conclusions we can draw regarding the impact of private attorney salaries on the likelihood of exit of trial court judges, but they do not appear to have a strong effect.

TABLE 11
California Superior Court (Trial Court), 1985-2007 (Biannual)

Variable	(1)	(2)	(3)
Exit from the Bench			
Real Salary in \$10,000	<i>-0.915***</i> (0.0563)	<i>-0.888***</i> (0.0772)	<i>-0.629***</i> (0.0893)
First-Year Associate Salary, Interpolated		-0.000451 (0.0489)	<i>0.402***</i> (0.0618)
Partner Salary, Interpolated			<i>-0.0698***</i> (0.00761)
Judge's Age	<i>0.110***</i> (0.0138)	<i>0.110***</i> (0.0137)	<i>0.108***</i> (0.0141)
Percent of Salary on Retirement	0.135 (0.262)	0.112 (0.263)	0.290 (0.261)
Portion of Pension Vested	<i>19.07***</i> (0.430)	<i>18.99***</i> (0.388)	<i>19.67***</i> (0.384)
Observations	12,240	12,049	12,049
Number of Judges	2702	2702	2702
Marginal Effect of \$10,000	-0.0807	-0.0796	-0.0561
Percentage Change in Exit Rate	-0.814	-0.790	-0.557
Exit from the Bench for Judges Under Age 65			
Real Salary in \$10,000	<i>-0.883***</i> (0.153)	<i>-1.266***</i> (0.213)	<i>-0.452***</i> (0.0983)
First-Year Associate Salary, Interpolated		<i>0.506***</i> (0.155)	<i>0.194***</i> (0.0657)
Partner Salary, Interpolated			<i>-0.0531***</i> (0.00792)
Judge's Age	<i>0.0407***</i> (0.0133)	<i>0.0397***</i> (0.0135)	<i>0.0462***</i> (0.0113)
Percent of Salary on Retirement	<i>-2.809***</i> (0.541)	<i>-2.968***</i> (0.572)	<i>-2.665***</i> (0.446)
Portion of Pension Vested	17.62 (1,105)	16.53 (1,371)	17.71 (429.5)
Observations	3,337	3,224	12,121
Number of Judges	650	650	650
Marginal Effect of \$10,000	-0.0545	-.08	-.039
Percentage Change in Exit Rate	-0.511	-0.725	-0.366

Robust standard errors in parentheses. Statistically significant results in italics.

* $p < 0.1$. ** $p < 0.05$. *** $p < 0.01$.

Overall, our results suggest that real judicial salary does have a small but significant impact on the likelihood of exit for appellate judges. The marginal impact is similar for both exit prior to age sixty-five and exit overall. We do not find statistically significant differences in the impact of salary either by race or gender or by the different methods used to select appellate judges. Our results suggest that appellate judges, like other professionals, are more likely to leave their profession when their real pay falls, either to retire or to pursue another career.

We find a much larger effect of salary on the exit of California trial court judges, though these tentative findings must be interpreted cautiously.

Although any comparison of the results for appellate and trial court judges is tenuous for all of the reasons mentioned above, it is worth pointing out that if further research on trial court judges from other states confirms our finding that trial court judges are more sensitive to changes in pay than appellate judges, we may have partially answered the question in our title, and have provided some guidance on how much judges should be paid, at least as a matter of labor economics.

Consider a very simple economic model of job exit. If all individuals are paid just slightly more than their next best opportunity, we would expect job exits to be very sensitive to pay changes, as a drop in pay would push far more people over the threshold to choosing their next best career opportunity. By contrast, if people are paid considerably more than their next best alternative (i.e. more than economically necessary), we would expect them to be far less sensitive to pay changes, since it would take far more dramatic reductions in pay to cause them to switch occupations.

Our results suggest that trial court judges in California are paid a salary that is much closer to their opportunity cost, while appellate court judges across the country appear to be less sensitive to pay changes, suggesting they are further away from the pay of their next best alternative. If one wanted to set judges' pay as low as possible, there might be room to reduce the pay of appellate judges.

There are a number of speculative reasons why this might be the case. Trial court judges are typically paid less than appellate court judges, and thus if both had the same opportunity cost in terms of their next best occupation, we would expect trial judges to be more sensitive to changes in pay. This explanation is not, however, completely satisfying. California trial court judges are paid more than many of the appellate court judges in other states. (Of course, it is also true that the cost of living is higher in California.)

There are other possible reasons. Several judges have suggested to us that an appellate court is simply a more pleasant work environment than a trial court. For many lawyers, the life of an appellate judge is more attractive. Without trials and hearings, appellate judges have far more control over their day-to-day schedules. Many lawyers may prefer to address the more analytical legal questions raised in an appellate court than to focus on the factfinding that the

trial court judge necessarily undertakes. Similarly, the leap back into the daily practice of law may be smaller for trial court judges than for appellate court judges, and thus more tempting.

Overall, our results do not suggest that the salary of private attorneys, which has risen much faster than judicial pay, is driving judicial exit. In fact, our evidence suggests that judges' pensions are far more important in determining exit from the bench than are the salaries of private attorneys. Although we did not study other possible alternative careers for judges (such as judging arbitration cases), to the extent that salaries for these alternative careers are correlated with private attorneys' pay, these alternative career salaries do not appear to be driving judicial exit. We do find that as the costs rise on one good consumed by the upper middle class, specifically private college tuition, judges are more likely to exit the bench.

In one sense our overall results are not surprising. Appellate judges, unlike other professionals, typically choose their judicial careers in middle age. Thus, the fact that exit is driven more by retirement income than outside opportunities is consistent with judges having evaluated those outside options at the time they joined the bench.

CONCLUSION

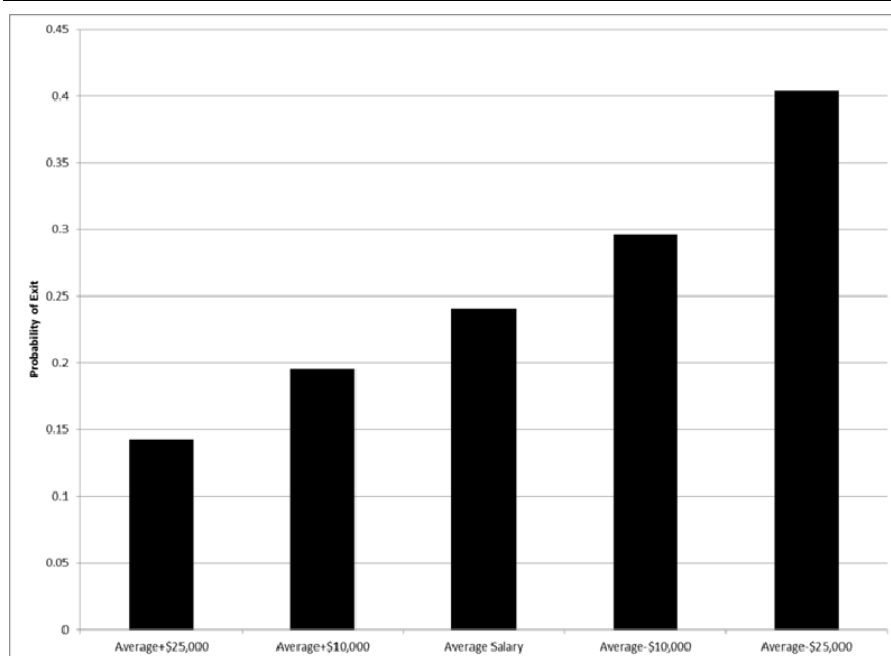
How much should judges be paid? We offer no clear answer. We document the constancy of the concern about the effects of judicial pay and identify the implicit causal hypotheses that have driven much of the rhetoric on the topic over the past two hundred years. These hypotheses can be roughly divided into concerns about judicial salary's effects on the composition of the judiciary and its effects on the behavior of judges. We then test some of these hypotheses and estimate the impact of judicial salary on the background of new appellate judges, their experience, and the likelihood that they will exit the bench.

A. Effects of Salary on Composition of the Bench

Although salary has an impact on the types of legal experiences of entering appellate judges, we find no dramatic effect on the qualifications of those joining the bench. Instead, we find that higher salaries make it slightly more likely that state appellate judges will have private sector experience and district attorney experience, and slightly less likely that they will have public defender experience, prior judicial experience, or academic experience. Despite the dramatic rise in private sector legal salaries over the last thirty years, we find no impact on the composition of the bench, at least by our measures. Thus, our findings do not support claims that judicial pay dramatically affects the composition of the bench, at least along dimensions that we are able to measure. It is possible that judicial salary affects judicial quality, but if so, that quality is not correlated with law school ranking or past clerkship experience. Other com-

mentators have suggested that high judicial salaries will attract judges who are greedy or not devoted to public service. We are unable to measure this quality, so we cannot empirically test it.¹⁴⁷

FIGURE 8
Cumulative Probability of Exit After Twenty Years, by Varying Judicial Salary



Judicial salaries do affect the likelihood that a judge will leave the bench. The effect, however, is small—for every additional \$10,000 in salary, the chance that a given judge will exit is reduced by 0.00263. Over time, however, this effect meaningfully alters the average tenure of an appellate judge—not dramatically, but at a statistically significant level. Consider Figure 8, in which we plot the cumulative estimated probability of exit over twenty years. In that respect, a lower judicial salary results in slightly less experienced appellate judges.

Our results for California trial court judges suggest a much higher sensitivity to pay for these judges, and thus changes in pay might have a much more meaningful impact on the average tenure of a judge, at least at the trial court level.

147. Future researchers might be able to use the rate of impeachment or removal as a rough measure of corruption.

B. Effects of Salary on Judicial Behavior

As explained in Part I.C above, many commentators have also implicitly made causal arguments about the effect of judicial salary on the behavior of judges and their independence. The Framers were concerned with direct assaults on the pay of judges. Since nothing like this occurred during our study period, we have no empirical data on what might occur if a legislature wholly eliminated pay for judges or plausibly threatened to do so. We do note that the effect of pay on judicial exit at the appellate level is relatively small. A legislator or executive who wished to reduce judicial independence by encouraging exit, and who was able to reduce the salary of appellate judges by \$25,000 in the first year of service, would only find a forty percent probability that the judge would leave the bench after twenty years of service. Given that twenty years is far longer than the typical service of any executive or legislator in the United States, this seems an unpromising avenue for reducing appellate judicial independence.¹⁴⁸

More recently, proponents of increased judicial pay have argued that low pay might cause a reduction in judicial independence because judges might be influenced by litigants or future employers. Unfortunately, we have no way of measuring whether judges who are paid less are more influenced by litigants than judges who are paid more. We also lack a satisfactory measure of whether judges are influenced by future employers, so we cannot offer strong conclusions on this important issue.

However, one criterion that we have already discussed, judicial exit, is relevant to whether judges are influenced by future employers. Some have expressed concern that instead of being the capstone of one's career, becoming a judge has become a mere waystation on the road to a more lucrative position in the private sector. On this theory, due to low salaries, judges are more concerned with currying favor with future employers than with the public good.

If this theory is correct, we should see judges exiting the bench more quickly in states with lower judicial salaries. And, in fact, we do observe this—but as explained above, the effect is quite small, at least for appellate judges. The small effect of salaries on exit appears inconsistent with claims that judges' independence is threatened by their departure for more lucrative employment, or at least the role of salary appears to be small.

148. If the executive wanted to dramatically increase the likelihood of exit, we have identified several ways to do this. The most effective mechanisms would be to appoint older judges who are both more likely to exit and more likely to run into state-mandated retirement ages, or to simply allow earlier vesting of pensions. Of course, states, unlike the federal government, have found other more effective ways to limit judicial independence through elections or reappointments. But to the extent that our results generalize from state judges to federal judges, pay does not seem to be a good avenue for a legislature or executive to reshape the bench.

Other versions of judicial independence might be increased by longer judicial terms. The craft of judging has its own internal norms that resist outside influence and that help promote judicial independence from other branches, political parties, litigants, and law firms. But the craft of judging takes time to learn. Similarly, the institutional memory and informal power of longer-serving judges may be greater than that of shorter-serving judges.¹⁴⁹

Since the time of Plato, philosophers, constitutional framers, and policy-makers have struggled with the appropriate salary for judges. Anecdotes and logically plausible (but unsupported) theories about the effects of salary on the types of people that would become judges have been the exclusive currency of the debate until very recently, when modern empirical methods have been used to test some of these hypotheses. Our contribution to this effort finds no dramatic effect of increasing private sector law salaries on appellate court judges. We do find that salary has a small but significant effect on judicial tenure among state appellate judges, and slightly affects the career background of judges on the bench. However, our limited analysis of California state trial court judges suggests that trial court judges may be more sensitive to pay than appellate court judges.

Many have argued that judges should be paid more for a wide variety of reasons. We find little empirical support for the implicit causal claims embodied in many of these arguments, at least with respect to appellate court judges. But we also recognize that, as in many empirical projects, our data are limited.¹⁵⁰ Ultimately, the “unanalysed experience of the human race”¹⁵¹ exhibited in the ancient debate over judicial pay may be just as important as our imperfect empirical measures.

149. Nonetheless, this assumes that society’s best use of judges is to keep them judging. That is far from clear. Because judicial salaries are not set by the market, we have no way of knowing what fraction of judges who exit the bench for alternative employment would still do so if judicial salaries reflected the social value of their contribution to the legal process. While we suspect that the observed turnover is higher than optimal, given the significant variation in observed salary and the fact that the salary is below other salaries for legal professionals, the reverse could also be true, and judges might be paid too much.

150. *Cf.* Levy et al., *supra* note 11, at 314-15 (describing the harms of imperfectly measuring judicial quality).

151. JOHN STUART MILL, *Bentham*, in 1 DISSERTATIONS AND DISCUSSIONS: POLITICAL, PHILOSOPHICAL, AND HISTORICAL 330, 351 (London, John W. Parker & Son 1859) (criticizing Bentham’s dismissal of nonempirical knowledge and noting that “these [vague] generalities [that Bentham dismissed] contained the whole unanalysed experience of the human race”).

APPENDIX

TABLE 1A Selection and Retention Methods as of 2007

State	Entry Method	Retention Method	Length of Supreme Court Term	Length of Appellate Court Term	Length of First Term	Retirement Age
AK	Gubernatorial Appointment	Retention Election	10	8	3	70
AL	Partisan Election	Reelection	6	6	1	70
AR	Nonpartisan Election	Reelection	8	6	0	
AZ	Gubernatorial Appointment	Retention Election	6	6	2	70
CA	Gubernatorial Appointment	Retention Election	12	12		
CO	Gubernatorial Appointment	Retention Election	10	8	2	72
CT	Gubernatorial Appointment	Governor Renominates	8	8	8	70
DE	Gubernatorial Appointment	Governor Renominates	12	12	12	
FL	Gubernatorial Appointment	Retention Election	6	6	1	70
GA	Nonpartisan Election	Reelection	6	6		
HI	Gubernatorial Appointment	Nominating Commission Retains	10	10	10	70
IA	Gubernatorial Appointment	Retention Election	8	6	1	72
ID	Nonpartisan Election	Reelection	6	6	6	
IL	Partisan Election	Retention Election	10	10	10	
IN	Gubernatorial Appointment	Retention Election	10	10	2	75

State	Entry Method	Retention Method	Length of Supreme Court Term	Length of Appellate Court Term	Length of First Term	Retirement Age
KS	Gubernatorial Appointment	Retention Election	6	4	1	70
KY	Nonpartisan Election	Reelection	8	8	8	
LA	Partisan Election	Reelection	10	10	10	70
MA	Gubernatorial Appointment					70
MD	Appointment	Retention Election	10	10	1	70
ME	Gubernatorial Appointment	Governor Renominates	7	7	7	
MI	Nonpartisan Election	Reelection	8	6		70
MN	Nonpartisan Election	Reelection	6	6	6	70
MO	Gubernatorial Appointment	Retention Election	12	12	3	70
MS	Nonpartisan Election	Reelection	8	8	8	
MT	Nonpartisan Election	Reelection	8	6		
NC	Nonpartisan Election	Reelection	8	8	8	72
ND	Nonpartisan Election	Reelection	10	6		
NE	Gubernatorial Appointment	Retention Election	6	6	3	
NH	Gubernatorial Appointment					70
NJ	Gubernatorial Appointment	Governor Renominates	7	7	7	70
NM	Partisan Election	Retention Election	8	8		
NV	Nonpartisan Election	Reelection	6	6	6	
NY	Gubernatorial Appointment	Reelection	14	14		70

State	Entry Method	Retention Method	Length of Supreme Court Term	Length of Appellate Court Term	Length of First Term	Retirement Age
OH	Nonpartisan Election Gubernatorial	Reelection	6	6	6	70
OK	Appointment	Retention Election	6	6	6	
OR	Nonpartisan Election	Reelection	6	6	6	75
PA	Partisan Election	Retention Election	10	10	10	70
RI	Gubernatorial Appointment					
SC	Legislative Election	Legislative Reelection	10	6		72
SD	Gubernatorial Appointment	Retention Election	8	8	8	70
TN	Gubernatorial Appointment	Retention Election	8	8	8	
TX	Partisan Election	Reelection	6	6	6	74
UT	Gubernatorial Appointment	Retention Election	10	6	3	75
VA	Legislative Election	Legislative Reelection	12	8		70
WA	Nonpartisan Election	Reelection	6	6		75
WI	Nonpartisan Election	Reelection	10	6		70
WV	Partisan Election	Reelection	12	8		
WY	Gubernatorial Appointment	Retention Election	8	6	1	70

