JUDGING UNDER PRESSURE: A BEHAVIORAL EXAMINATION OF THE RELATIONSHIP BETWEEN LEGAL DECISIONMAKING AND TIME
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The long-running debate about whether judges have adequate resources has begun to boil. State and federal legislatures are slashing court budgets, with many courts receiving up to 20 percent reductions. In recent years, judges have been resigning or retiring in droves. The remaining judicial vacancies are often left unfilled. Those judges that remain will be forced to spend considerably less time on each case.

In response to this impending crisis, scholars have just begun systematically and empirically to consider how resource limitation affects judging. These studies are of vital importance, not only because they are so topical, but also because they have found evidence of a potential link between the amount of resources that appellate judges have and the likelihood that they will be deferential to the lower courts or to their colleagues. For example, a reduction in available resources correlates with lower reversal rates.

Because this academic movement is in its infancy, however, its techniques and findings leave plenty of room for growth. No one has yet analyzed how the availability of resources affects the accuracy of judicial decisions. The answer is a pivotal concern for those in control of court budgets and personnel. If judges are able to do their jobs as well or better with less and they are willing to accept less, then cutting budgets could very well be a wise savings measure. If judges make more errors or become so dissatisfied that they no longer want to continue, then stripping courts of resources could be very dangerous, if not destructive.

Here, I use behavioral experimentation to elucidate how the amount of time available to decide a case could affect the likelihood that the judge in that case will straightforwardly apply the law. Using a judicial simulation with law students at three law schools, I uncover evidence that reducing resources will increase the likelihood that judges will follow the law. Before budget cutters rejoice, however, it appears that enhancing legal constraint in this way comes with a cost—namely, a significant reduction in the judges’ satisfaction that they have reached righteous outcomes. The results here support the idea that boosting legal

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constraint in this way might increase judge discontent, perhaps exacerbating the problem of bench vacancies.

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INTRODUCTION

This is an era of austerity for the courts. Last year, 40 state court budgets were cut, some receiving 20 percent reductions.¹ Twenty-nine state court systems have had their budgets slashed so far this year.² Over a dozen courts have shortened hours of operation.³ Judicial pay is frozen or lagging.⁴ As a result, many judges are seeking greener pastures. The NEW YORK TIMES recently reported that, “[n]ow, for the first time in memory, judges are leaving the bench in relatively large numbers—not to retire, but to return to being practicing lawyers.”⁵ The state court of New York has been among the hardest hit: nearly 1 in 10 judges are now leaving annually, twice the number from a decade earlier.⁶ Compounding the strains caused by these absences are failures to fill empty seats. Vacancies have reached “crisis” levels in the federal courts.⁷ Specifically, one-half of the federal bench will be unoccupied within 10 years if confirmation rates do not improve.⁸ Judges have more to do, and they must do it with less.

³ Id.
⁵ Id.
⁶ Id.
⁸ Id.
We must now answer a grave question: what happens to judging when the judges are stripped of resources?

The relationship between resources and judging has been considered before, most often by the judges, themselves. Unsurprisingly, they paint an unflattering portrait of resource restriction, one of ideological influence, limited access, and dwindling justice. Chief Justice of the California Supreme Court, Tani Cantil-Sakauye, recently claimed that proposed budget cuts would “strike[a] blow against justice” and endanger their ability to provide “fundamental services.” Similarly, Chief Justice of the Massachusetts Supreme Judicial Court, Margaret Marshall, recently claimed that inadequate funding could eliminate judicial “independence.” Federal judges echo this sentiment. In 2006, Chief Justice Roberts contended that, if judicial appointment “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.” This past year, he set his sights on judicial vacancies,

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9 For an early example of academic analysis see Charles Alan Wright, The Overloaded Fifth Circuit: A Crisis in Judicial Administration, 42 Tex. L. Rev. 949, 949 (1964).


describing them as one of the main obstacles to “maintenance of the public trust.”

Responding to the growing sense of dread, legal academics have begun to analyze the issue of resource restriction with renewed vigor and improved empirical methodologies. Using published court data such as judicial opinions, these empiricists have compared the behavior of judges that have more resources, such as higher salaries or more time to decide cases, to those that have less. A tentative answer is beginning to emerge, and the most fascinating part is that it is different from, and arguably more palatable than, the one that the judges have given: judges respond to limited resources by becoming more deferential and less ideological.

Indeed, recent studies have provided evidence that judges are less likely to reverse lower courts and vote ideologically when they are busy and that they are more likely to be independent and productive when they give up more money to take the job. While these studies focus myriad dimensions of judging—and I detail their methodologies and findings below—these aspects of their research in particular have contributed to a growing divide between academics and judges on this issue of appropriate resources. Professor Eric Posner, a co-author of one such study, recently stated “[t]he absence

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15 See, e.g., Bert Huang, Lightened Scrutiny, 124 HARV. L. REV. 1109, 1116-1133 (2011) (comparing circuit courts with suddenly high docket loads to those with normal docket loads).
16 Id.
18 Stephen J. Choi, G. Mitu Gulati & Eric A. Posner, Are Judges Overpaid? A Skeptical Response to the Judicial Salary Debate, 1 J. OF LEGAL ANALYSIS 47, 96 (2009) (measured by proportion of dissents against judges appointed by the same party and controlled for court composition; the more often they dissented against their own party’s judges, the more independent).
of [salary] raises is a problem only if judges weren’t overpaid to begin with."

Should society fight against court budget cuts? Should it embrace them? The answer turns in large part on how resources affect judges’ ability to get cases right. It almost goes without saying that if resource restriction leads judges to habitually ignore or subvert the legal directives that they interpret, the consequences can be dire. The rule of law is threatened. If, however, judges subject to resource restriction get the same or more cases right while maintaining or increasing levels of productivity, then cutting court budgets becomes easy to justify. Thus, a critical dimension of this inquiry is to find a way to determine whether resources-limited judges are more or less likely to follow the law. The results here illustrate the complexity and centrality of this relation; there is evidence that something as simple as the clarity of the law exerts a profound influence on case outcomes and even judicial satisfaction.

Unfortunately, existing scholarship has largely chosen not to focus on the particularities of the laws that judges interpret. This is somewhat excusable. The systematic, empirical study of law’s power to keep or “constrain” judges from reaching results that they would

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20 Glaberson, supra note 4.
21 See Frederick Schauer, When and How (If at All) Does Law Constrain Official Action, 44 GA. L. REV. 769, 778-79 (2010) (“The empirical inquiry [of whether judges are constrained by law] is significant . . . . [I]f, as an empirical matter, neither officials nor their constituents believe they have [an obligation to obey law], then our political and public understanding of official behavior and rhetoric will need to be rethought. [It would also] be important to focus more attention on the role of sanctions and coercion in producing compliance. . . . Finally, if coercion is more important to law than is sometimes supposed . . . then recognizing the comparative scarcity of perceived official legal obligation may have valuable theoretical as well as practical implications.”).
22 When I use “constrain” throughout this Article I have in mind a fundamental notion: Law is constraining when judges experience that the law forces them to choose in ways that are at odds with the way that they would have chosen in the absence of law. As will be discussed in Section II, the experiment uses judge preferences in a non-law setting as a baseline to determine whether the introduction of law has made the judges choose an outcome that is opposed to their preferred outcome. Frederick Schauer adopts a similar approach to understanding constraint empirically. See id. at 789 (“Having arrived at what they believe to be the best law-independent decision, when, if at all, are officials willing to set that decision aside in the service of a legal constraint they believe mistaken?”). See also Mark Tushnet, Popular Constitutionalism as Political Law, 81 CHI.-KENT L. REV.
prefer in the absence of law is at an early stage of development. Thus far, empiricists have struggled to find an objective way to analyze judicial accuracy. When they limit their analysis to accessible court documents, the most popular solution has been to reduce judges to black boxes that take in ideological inputs from one end and spit out liberal or conservative case outcomes from the other. Under this approach, when data show that busy judges decide cases that are at odds with their ideologies more often than judges that have lighter workloads, the empiricists suppose that the busy judges have followed the law more often. Certainly, the black box method has the virtue of objectivity; it eliminates the need to code the potentially subjective variable of whether the judge voted for the correct legal outcome. The resulting problem is obvious, however: the busy judges might have gotten their cases wrong.

Judges can vote against their ideology for any number of reasons, many of which are not related to the law they interpret. They might have been so rushed that they did not pay attention to the law at all. They might have been engaging in strategic compromises with fellow panel judges so that they would get a favorable result in a future case that is more ideologically important to them. They simply might not be as ideologically engaged with the case they are considering as the empiricists think they are. This problem of

991, 991 (2006) (“As law, it sometimes induces decision-makers to make decisions that are inconsistent with their "pure" preferences, that is, those they would hold in the absence of law.”).

23 See Thomas S. Ulen, Economics as a Science: Robert Nelson's Economics as Religion, 56 CASE W. RES. 649, 661 (2006) (“Moreover, because we are at such an early phase of the scientific study of legal issues, empirical work has only just begun.”).


25 See discussion infra Section II.

26 See Landes and Posner, supra note 17.

behavioral equivalence—when different behaviors produce the same data in an analysis—\(^28\) is a byproduct of the black box approach.

This Article uses behavioral experimentation to peer into the black box. By eliminating the need to rely on publicly available court documents and instead relying on data gathered from simulations, we gain unprecedented control over the decisionmaking environment. Reliance on court documents forces empiricists to compare judges even though they are deciding under different precedent, for different cases, and with different individual workloads. Moreover, they must use rough, imperfect proxies to guess how those judges would prefer to decide the cases that are before them, such as the party of the president that appointed them. Behavioral experimentation, on the other hand, can identify the outcome that the judges prefer in the very case that they are considering, and it allows us to compare only those judges that share the same preferences, all while controlling the precise amount of resources that each judge has. Other methods cannot provide such isolation of the effect of resource restriction. In addition, my approach teaches us more about what the judges are thinking and, most importantly, how the amount of resources they have affects their thinking. We can ask judges to provide virtually unlimited information about their decisionmaking at the very moment that they are engaged in it.

The experimental subjects in these judicial simulations were law students at highly ranked schools that had completed approximately one year of study or more. Needless to say, it would have been optimal to use actual judges, but that approach was simply unworkable in a study such as this, which requires over one hundred subjects that are willing to participate in multiple sessions to achieve statistically significant results. Consequently, this study follows the commonplace practice of using graduate-level students to test hypotheses that concern real-life counterparts.\(^29\)


\(^29\) It would be hasty to dismiss the results of this study on that ground, alone:

By now there is also a significant body of evidence showing how even simulation or survey studies using, say, college and university students—as is often the case in psychology experiments—typically generate results resembling those of experiments using more realistic participants and designs. Similarly, the results of
The results of the experiment both match and build upon those of earlier studies. First, like earlier studies, the results provide empirical support the claim that limiting resources increases judicial deference and decreases the impact of ideology on case outcomes. Critically, however, the results here also support a finding that this result is caused by increased deference to the law. In other words, time limitation made it more likely that subjects would straightforwardly follow the legal directives that applied to their cases.

While this finding is good news to those who seek to cut court budgets, there is bad news as well. Subjects under time limitation, particularly those that followed the law, experienced a considerable drop in the strength of their belief that they were doing the right thing in deciding their cases as they did. Meanwhile, those that followed the law without time limitation experienced the opposite effect—they felt more strongly about the righteousness of their decisions.

Thus, stripping judges of resources might strengthen the accuracy of their decisions while weakening their belief that they did the right thing when they made their decisions. Indeed, this interaction between restriction and satisfaction might explain why judges are leaving the bench despite being, as Posner says, overpaid.\textsuperscript{30}

In the following section, I summarize the existing scholarship on the relationship between legal constraint and judicial resources. I further propose specific changes to the models of legal constraint used in these and other empirical studies, changes drawn from analysis and observation of typical judging behaviors. The remainder of the article decision-making studies using monetary incentives for performance largely correspond with those of psychological experiments, which often do not rely on financial incentives. Avishalom Tor, The Methodology of the Behavioral Analysis of Law, 4 HAIFA LAW REVIEW 237, 285-86 (2008). Indeed, in a nearly identical experiment, which I collected data about the amount of law school education and also included in the subject pool those that had been law school graduates for up to two and a half years. There were no statistically significant differences with respect to any of the time-unrelated hypotheses described below between those that had graduated from law school and those that had only completed a half-year. Of course, that does not mean that the external validity of these results cannot be scrutinized. [NOTE: This piece will be circulated to law reviews in a few weeks, so perhaps we will be able to have a tentative cite soon]

\textsuperscript{30} Glaberson, supra note 4.
I. CRITIQUING THE PREVAILING EMPIRICAL MODEL OF LEGAL CONSTRAINT

The study of the relationship between judging and resources is the latest chapter of the empirical revolution in legal academia. The strengths and weaknesses of this recent work mirror the majority of general empirical legal studies of courts. In this section, I first summarize the latest research on the interaction and then I describe the shortcomings that prevail in the scholarship, generally.

A. RECENT SCHOLARSHIP ON JUDGING AND RESOURCES

In the last few years, there have been a handful of impressive studies that analyze how resources affect judicial performance. With respect to resources, the focus has been on two dimensions of judicial life—workload and salary. Each dimension corresponds to specific problems currently facing the judiciary. As discussed, many courts are shorthanded, so judges are facing higher docket loads. In addition, judicial salaries have been falling for decades (at least when adjusted for increased costs of living). It is obvious that shortages in either judge free time or salary could impact judging, and the following studies provide support.

1. Significant Discoveries

The most impressive study that has focused on the relationship between workload and judging is Bert Huang’s recent analysis of the

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32 Id.
surge in the immigration cases that resulted from post-9/11 deportation “streamlining.” When comparing the circuits, Professor Huang discovered that the Ninth and Second Circuits overruled significantly fewer cases than they had before; whereas the reversal rate in the other circuits stayed the same. He further showed that a similar reduction occurred in the Second Circuit when it experienced a momentary reduction in available judges just years earlier.

In a separate study, William Landes and Richard Posner make similar findings through different methods. After a thorough comparison of the voting patterns between the U.S. Supreme Court and the U.S. Courts of Appeals, they discovered that court of appeals judges were more likely than Supreme Court justices to vote against the interests of the parties that appointed them by a margin of about 15% for Republican appointees and 20% for Democratic appointees. In addition, they found that court of appeals judges were more likely to engage in conformist voting—voting as the predominant political bloc of their circuit votes. Landes and Posner’s study was not specifically designed to test the impact of resource restriction; rather, its primary goal was to determine whether judges exhibited economic rationality under the particular circumstances of their respective institutions. The reason that this study is of interest here, however, is that a key assumption of their empirical model is that resource restriction interacts with law’s constraining power.

In particular, Landes and Posner contend that the conformist and counter-ideological voting in the courts of appeals is a result of comparatively higher costs of writing a dissent. The costs are higher,
they suppose, because the workloads of the court of appeals judges are heavier. When free time is bountiful, such persuasive and probably fruitless writing is not particularly costly. An increase in the costs of resisting the majority forces in their circuits, they speculate, leads the judges to follow and even value precedent more than their colleagues on the Supreme Court:

Especially given leisure preference, the heavier workload in the courts of appeals makes the cost of a dissent greater for courts of appeals judges than for Supreme Court Justices. The heavier workload also increases the benefits of decision according to precedent, which greatly reduces the time and effort involved in a decision . . . So we can expect decision in accordance with precedent to be more valued in the courts of appeals. That reduces the value of a dissent, because the majority vote will establish the precedent and the dissent will usually have no influence on the law.42

In other words, they find that restricting resources positively correlates with legal constraint.

Rounding out the empirical analysis of judicial resources is a pair of studies examining the relationship between judicial pay and performance.43 In a similar, previous study, Scott Baker found that higher judicial pay neither reduced ideological decisionmaking nor increased the effort of judges in the U.S. Courts of Appeals.44 With respect to ideology, Baker analyzed whether higher pay made judges more likely to vote against their personal ideologies in controversial cases45 and whether it made them more likely to cite judges with opposing parties as persuasive authority.46 With respect to effort, he analyzed whether higher pay increased dissent rates in controversial cases47 and whether it decreased the time it took judges to file published opinions after hearing oral argument.48 Not only did he

42 Id. at 821.
43 Choi et al., supra note 18; Baker, supra note 19.
44 See Baker, supra note 19 at 66.
45 Id. at 85-94.
46 Id. at 95-98.
47 Id. at 98-101.
48 Id. at 101-5.
find no evidence of these relations, he found that those who had greater cuts in pay when they entered the judiciary issued published opinions the quickest.\textsuperscript{49}

In the second study, Stephen Choi and others found that, among the justices of state high courts, higher salary did not correlate with increases in any of the positive metrics they devised, including productivity (measured by pages of published opinions), higher quality opinions (measured by out-of-state citations), or judicial independence (measured by proportion of dissents against judges appointed by the same party controlled for court composition).\textsuperscript{50} They even found evidence that higher salaries might make judges less independent; as those judges that experienced higher opportunity costs in choosing to be judges exhibited higher independence.\textsuperscript{51}

Looking at these studies collectively, a rather rosy picture of judicial resource restriction emerges. When it comes to pay, there seems to be no relationship between high pay and better performance, even considering metrics that reflect upon the judges’ willingness to be constrained by law. When considering workload, it appears that there is a positive correlation between workload and deference, and if Landes and Posner are right, this deference is a result of increased willingness to be constrained by law.

2. Limitations

While these studies present a potential silver lining to the dark cloud of forced austerity, it is important to remind ourselves that the relationship between resources and constraint remains an open question.\textsuperscript{52} One dimension of constraint that remains unstudied is of crucial social importance: are we seeing increased legal constraint or are we seeing something else? Professor Huang was keenly aware of this problem:

Without a deep understanding of the case composition in each circuit, it would be hard to draw credible inferences from [differences in reversal rates between circuits]. (It could be that the circuit with the higher

\textsuperscript{49} Id. But see Christopher Zorn et al., Working Class Judges, 88 B.U. L. Rev. 829, 834 & tbl.1 (2008) (noting opposite correlation in top five legal markets).

\textsuperscript{50} Choi et al., supra note 18 at 64-73.

\textsuperscript{51} Id. at 96.

\textsuperscript{52} See, e.g., id. at 102 (“More work needs to be done before the relationship between salary and judicial quality is understood.”).
reversal rate is actually the one reviewing with greater
deferece — only, it has a higher concentration of
reversal-prone cases.) The same goes for a single
circuit whose reversal numbers are seen to change
over time. 53

It is difficult to account for the specific role that law plays in the
judges’ decisions, such as in their decisions not to reverse. Does the
judge feel that the law compels affirmance, or is the judge simply
trying to push cases off his or her desk? In short, has the law
constrained the judge or not? Put differently, has the law pushed
judge to decide in a way that is different than the way he or she would
have decided in the absence of law? Each of these studies makes
progress in answering these questions, but they either were focused on
other issues or were justifiably content to be among the first to
identify a relationship between resources and constraint rather then to
explore that relationship at length.

Professor Huang’s study, for example, does not analyze the
content of the cases before each circuit outside of adopting their
general subject matter as labeled by the Administrative Office of the
U.S. Courts. 54 His omission is reasonable: the goal of the study was
to isolate the effect of work load on dissent rates—a remarkable feat
in itself—but it was never a study of legal constraint. In a nutshell,
Professor Huang counted reversals, comparing the rate of reversal
during busy times and not-so-busy times, both within circuits and
between circuits. And Professor Huang is right that comparisons
involving a high number of cases will lower the risk that the effect he
has identified is merely the byproduct of a higher proportion of
reversal-prone cases in the unimpacted circuits. Nevertheless, even if
we assume that each court had the exact same proportion of cases
that, given ordinary work loads, would end up being reversed (or
“reversal-prone” cases), the study provides no way to determine
whether the drop in reversals reflects increased or decreased accuracy
in judging. In other words, the study cannot tell us whether judges
under normal work loads are more likely to get their cases right when
they choose to reverse lower court decisions than judges that are
considerably busier.

53 Huang, supra note 15 at 1145.
54 Id. at 1147.
This is a question that requires answering. It is entirely plausible that judges during unimpacted periods are less accurate than they would be during impacted periods. It could be that they have the free time to work around the law, granting them the resources to write convincing justifications for results that are ideologically preferable despite being legally inaccurate. When they are busy, it could be that they must engage in much more straightforward interpretation, and, as a result, they are unable to reverse these undesirable, yet legally correct, cases. On the other hand, it is entirely plausible that busy judges are more interested in completing cases than they are in interpreting those cases correctly. As a result, they might be more likely to commit errors of law and miss the cases that they should have reversed.

The Landes and Posner study also leaves this mystery unsolved.\textsuperscript{55} While they speculated that conformist and counter-ideological voting could be explained by a relationship between increased legal constraint and higher workloads, they did not rule out other explanations.\textsuperscript{56} Indeed, the decision of judges in the ideological minority to resist dissent might be a reflection of power dynamics or mere laziness rather than a respect for the prevailing law in a circuit. As claimed by some adherents of the “strategic” or “institutionalist” model,\textsuperscript{57} counter-ideological voting might arise from, say, a bargain with the other appellate panel judge: if I agree to go along with the writing judge in the next several cases, she will agree to go along with me in the one case that is very important to me down the road. Or the judges might be aware that the majority bloc of judges would never be persuaded by a dissent, so the effort to signal a case for en banc review would be fruitless. Or the judges might be acting out of fear of retaliation from other branches of government. Again, any number of explanations might suffice.

Lastly, while the Choi and Baker studies are welcome antiseptics to the hyperbolic rhetoric that sometimes accompanies discussions of judicial salaries, they too have not yet satisfactorily tested for legal constraint under different resource conditions.\textsuperscript{58} Their

\begin{itemize}
  \item \textsuperscript{55} Landes & Posner, supra note 17.
  \item \textsuperscript{56} Id. at 821.
  \item \textsuperscript{57} See James F. Spriggs II and David R. Stras, Explaining Plurality Decisions, 99 GEO. L.J. 515, 533-36 (2011).
  \item \textsuperscript{58} Choi et al., supra note 18; Baker, supra note 19.
\end{itemize}
tests for judicial independence are admirable, but they mirror the tests for ideological voting used in the Huang and Landes studies and, therefore, suffer from the same shortcomings—namely, that voting in what appears to be a counter-ideological manner is not necessarily evidence of legal constraint. \(^{59}\) Their model has additional limitations, however. Judicial salary is a poorer measure of resources than workload. While salary can change the caliber of the people hired for the job, it would not likely affect on-the-job performance beyond the margins. There are greater disparities in the amount of cases that judges are asked to complete per day than there are in judicial salary (or quality). \(^{60}\) And no matter how much a judge is paid, there will always be only 24 hours in one day.

In summary, the handful of existing empirical studies on this subject provide evidence of a relationship between how judges vote and how many resources they have. They are landmark studies for probing this connection. They do not show, however, that a lack of resources makes judges more likely to follow the law. The two primary shortcomings are that they do not identify the correct legal result in the cases that they analyze and they do have a test that allows us to verify that the judges have been constrained by law in the cases before them. These scholars are not alone. In the following section, I detail how the majority of empirical studies of judging share these weaknesses in the hope that we can elucidate the way in which methodologies might be changed to alleviate them.

B. THE CHALLENGES OF MODELING LAW’S EFFECT ON JUDGING

How do we know when a judge has been constrained by law? This is a question that has plagued empiricists for decades. There are

\(^{59}\) Id.

two main difficulties—one from law and the other from behavior. On the law side, it is hard to know objectively what the correct legal outcome of a case is. Without this knowledge, the project of figuring out whether a judge has been legally constrained is unlikely to progress. On the behavioral side, it is tough to distinguish between judicial decisions that are the result of legal constraint and those that are the result of something non-legal like ideology, strategy, or laziness; the decisions, themselves, might look identical. If we cannot draw lines between these behaviors, we will never suitably isolate law’s effect. The lion’s share of empirical scholarship reflects a tendency to avoid these problems rather than to face them head on. I argue that if we are willing to broaden our methodological approaches, such as by including behavioral experimentation, we can eliminate or alleviate the troubles they cause.

1. Identifying the Law

In modeling legal constraint, scholars initially focused on judges’ ideological preferences, and for good reason. Political scientists were the first to be interested in the project of empirically analyzing whether law influences judges, and they widely believed at the outset that the judiciary, like other branches of government, is a political organ that has an interest in instituting its own policy. In short, they hypothesized that the judge’s ideological preference would be the best predictor of the outcome of the case before the judge when political stakes were high. Most famously, political scientists used the party of the individual responsible for a judge’s appointment as a simple proxy for the judge’s attitude in politically divisive cases.

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61 See David W. Rohde & Harold J. Spaeth, Supreme Court Decision Making 78 (1976) (“[Attitude is] a set of interrelated beliefs that a person has toward some object and the situation within which it is encountered”). These scholars are called “attitudinalists.” Tracey E. George & Albert H. Yoon, Chief Judges: The Limits of Attitudinal Theory and Possible Paradox of Managerial Judging, 61 Vand. L. Rev. 1, 4 (2008).


63 See Frank B. Cross, Decisionmaking in the U.S. Circuit Courts of Appeals, 91 Calif. L. Rev. 1457, 1479 (2003) (“Most empirical studies of ideology in decisionmaking use the political party of the judge's appointing president as a proxy for the judge's own political ideology”).
The results were astounding.\textsuperscript{64} This factor, alone, has been shown to have considerable predictive force at the Supreme Court level.\textsuperscript{65} Early proponents of this approach supposed that when judges voted in a manner that was consistent with their ideologies, they were not being constrained by law. When judges voted counter-ideologically, however, Attitudinalists were willing to concede that the outcome might be legally dictated.\textsuperscript{66} That is to say that when the input of ideology matched the judge vote, then the result was a finding of no legal constraint, and vice versa.

This “counter-ideological voting” model is still prevalent. Indeed, the Landes, Choi, and Baker studies all employ a version of it.\textsuperscript{67} Rather than replacing it, the primary mode of methodological innovation was to improve the modeling of judges’ ideological preferences. Scholars devised better ways to identify the ideology of judges or included new variables that reflected behavioral or personal characteristics.\textsuperscript{68} For example, they added race, gender, age, or prior factors.


\textsuperscript{65} See Pinello, supra note 64\textsuperscript{Error! Bookmark not defined.}; Cross, supra note 63 at 1479-81.


\textsuperscript{67} Landes & Posner, supra note 17 at 823; Choi et al., supra note 18 at 92; Baker, supra note 19 at 85-94.

\textsuperscript{68} One approach was to devise ideology scores that were based on exogenous factors. \textit{See, e.g.}, Corey Rayburn Yung, \textit{Judged by the Company You Keep: An Empirical Study of the Ideologies of Judges on the United States Courts of Appeals}, 51 \textit{B.C. L. REV} 1133, 1178 (2010) (discussing endogeneity problem with using data culled from judges’ votes to predict those same votes).
experience to the list of independent variables. Other times, they used more accurate or scientific proxies for ideology. Again, results were impressive. It has been shown that female judges on federal appellate panels were significantly more likely to find for the plaintiff in Title VII sexual harassment and sex discrimination cases independent of political ideology, were significantly more likely to rule in favor of gay rights claims, and decided divorce cases and custody disputes differently in many respects. Another study of federal courts of appeals found that older judges were more conservative in a number of areas, such as labor cases and in draft resistance cases.

Despite these worthwhile findings, it is evident that the counter-ideological voting approach does not succeed in verifying whether judges were constrained by law. As to identifying the specific impact of law on judging—rather than inferring its absence from the predicting power of non-legal inputs—things have progressed slowly. Legal scholars of all stripes understand the complexity of finding and applying law, so developing a falsifiable model of legal effect, known as a “legal model,” is quite difficult.

Nevertheless, more and more scholars are willing to enter the thicket of legal interpretation when they study judicial voting. In their review of empirical analysis of opinions between 1956 and mid-2006,

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70 PINELLO, supra note Error! Bookmark not defined..

71 See Elaine Martin and Barry Pyle, Gender, Race, and Partisanship on the Michigan Supreme Court, 63 ALB. L. REV. 1205 (2000); Vicki C. Jackson, What Judges Can Learn from Gender Bias Task Force Studies, 81 JUDICATURE 15, 21 (1997).


73 See David S. Law and David Zaring, Law Versus Ideology: The Supreme Court and the Use of Legislative History, 51 WM AND MARY L. REV. 1653, 1691 (2010) (“Until recently, it would have been difficult to identify an objective and convenient way to rate the complexity of large quantities of text.”).
Mark A. Hall and Ronald F. Wright found that studies analyzing the content of opinions beyond the mere analysis of outcomes and general area of law are on the rise.\textsuperscript{74} Between 1956 and 1989, a thirty-three year period, only twenty-five such studies had been published.\textsuperscript{75} In the next ten year period, however, there were fifty-seven. And in the first six and a half years of this millennium, there were fifty-two.\textsuperscript{76}

One promising approach that has arisen among the legal modelers has been to identify a rather simple legal rule or tenet of the established legal canons of construction and analyze whether its implementation brings about a predictable change in judges’ votes. While these studies do not typically seek to isolate legal effect from all institutional or other effects,\textsuperscript{77} they are nevertheless insightful. Some legal modelers have chosen to test vertical \textit{stare decisis} in the federal appellate courts by analyzing whether trends in lower court outcomes predictably changed in accordance with new rules issued by the Supreme Court—expected statistically significant changes were observed.\textsuperscript{78} Others have analyzed standards of review, determining the relative likelihood of affirmance under increasingly deferential standards (de novo, clearly erroneous and abuse of discretion, substantial evidence, arbitrary and capricious).\textsuperscript{79} As expected under the legal point of view, the level of affirmance corresponded to the level of deference.\textsuperscript{80} On the other hand, studies have shown that the predictions of legalism can come up short. One example tested adherence to horizontal \textit{stare decisis} at the Supreme Court by

\begin{flushleft}
\textsuperscript{75} Id.  \\
\textsuperscript{76} Id.  \\
\textsuperscript{77} See Czarnezki, supra note Error! Bookmark not defined., at 857 (“it eludes us how to test whether agreement in a unanimous cases is based on legal or policy preferences, absent candid participant statements or more sophisticated information about the judges’ preferences.”).  \\
\textsuperscript{80} Cross, supra note 64.
\end{flushleft}
determining whether dissenters in a case had changed their positions when the progeny of that case later came before them. \(^{81}\) Justices overwhelmingly continued to dissent in progeny cases. \(^{82}\)

While this approach has the advantage that it does not require the empiricist to engage in complex and potentially subjective interpretation of law, its primary disadvantage is that straightforward examples of legal application are rare. And even when they are found, they rarely stay straightforward for long. Law is a moving target; it constantly evolves through application, especially in a system of precedent like we have in the United States. \(^{83}\) As a result, opportunities for complex study—such as the study of limited resources on constraint—are far too rare.

Returning to the question of how to analyze resource restriction on judges, we must develop a methodology that allows for the analysis of cases with known legally correct outcomes in a variety of subject areas and conditions. Because judicial accuracy is a fundamental concern for those seeking to determine the appropriate amount of resources, the question of whether judges are getting cases right cannot be ignored. So how do we overcome the fact that suitable conditions for determining legal accuracy in actual courts is so rare? One way is to move beyond the limits of the data we can gather from the courts, themselves, and embrace other methodologies such as behavioral experimentation. Experimentation makes it easy to draft perfectly tailored, straightforward laws that can be used in a variety of contexts. Moreover, it allows the empiricist to control legal evolution; he or she can manipulate the number of sources of legal authority, whether \textit{stare decisis} applies, or whether there have been prior applications of a statute, just to name a few. In Part II, I detail my experimental design, which attempts specifically to implement these methodological innovations.

2. Identifying Constrained Behavior

\(^{81}\) See Harold J. Spaeth & Jeffrey A. Segal, \textit{Majority Rule or Minority Will: Adherence to Precedent on the U.S. Supreme Court} 287-315 (1999).

\(^{82}\) See id.

\(^{83}\) See Frederick Schauer, \textit{The Tyranny of Choice and the Rulification of Standards}, 14 J. CONTEMP. LEGAL ISSUES 803, 808 (2005) (discussing how repeated application of laws makes rules more like standards and standards more like rules over time).
The study of law’s impact on judicial decisionmaking requires empiricists to be very choosy about the behavior upon which they focus. The behavior must be easy to identify without recourse to subjectivity, and it is most desirable if it can be coded numerically. The earliest empirical studies to make waves in the legal academy focused on the judge’s vote, making it the dependent variable in their analyses. This is not surprising. For one, outcomes are a salient aspect of judicial decisionmaking, perhaps the most important aspect. Indeed, it cannot be disputed that parties care quite a bit about whether they prevail or not; it is even difficult to imagine that they would care as much or more about the particular manner in which the judge reached that result. Likewise, legal practitioners focus on outcomes because precedential force is intimately tied to them; all aspects of an opinion that are unnecessary to justify the outcome are considered dicta and are nonbinding. Lastly, the outcome-centric method is apt for empirical examination. Identifying outcomes is straightforward—winners and losers are usually obvious and binary—and in most cases the assignment of political or ideological valences to those outcomes is uncontroversial. Thus, it came to be that those engaged in quantitative study of judicial decisionmaking adopted a

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84 See James F. Spriggs II & Thomas G. Hanford, Measuring Legal Change: The Reliability and Validity of Shepard's Citations, 53 POL. RES. QU. 327, 327 (2000) (“Since the 1940s, with the publication of C. Herman Pritchett's THE ROOSEVELT COURT (1948), scholars interested in courts have relied on judges' final votes on the merits (i.e., whether supporting the liberal or conservative position) as the primary indicator of judicial outcomes. By examining individual judges' votes or collective court outcomes, this approach has generated a considerable body of knowledge regarding the causal forces underlying case dispositions.”) (citations omitted); see also GLENDON SCHUBERT, THE JUDICIAL MIND 17 (1976); STUART S. NAGEL, THE LEGAL PROCESS FROM A BEHAVIORAL PERSPECTIVE (1969); JOHN D. SPRAGUE, VOTING PATTERNS OF THE UNITED STATES SUPREME COURT (1968).

85 This is not to suggest, of course, that they care ONLY about winning. See Jeffrey Swanson, et al., Justice Disparities: Does the ADA Enforcement System Treat People with Psychiatric Disabilities Fairly?, 66 Md. L. REV. 94, 103 (2006) (“People care about winning and losing, but they are also influenced in the assessment of their experience by certain key factors: giving "voice" to their story, having an honest and unbiased decisionmaker, being treated with dignity, and having a fair process of decision.”).


sort of behaviorist approach: they assumed that the judicial mind, and even the legal opinion springing there from, ought to be treated as a black box; they focused instead upon the various inputs bearing on the deciding judge and the single output of the determination of the case.\(^8\)

Indeed, out of hundreds of articles, I was able to locate only a couple dozen published studies that use a different dependent variable in the study of judicial decisionmaking.\(^9\) Not only is it the

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methodological default,

it is approach used by several of the authors in the preceding section that have studied judicial resources.

The upside of the judicial vote is its straightforwardness and simplicity, but that can also be its downside. A judicial vote says very little about the deliberation and decisionmaking that led to it. Indeed, the institutional model, one of the most important advancements in the empirical study of judging, arose from the observation that bare fact that a judge voted counter-ideologically does not necessarily mean that the judge’s decision arose out of the perception that she was constrained by law against voting ideologically.

Institutionalists point out that the same result might be explained by non-legal and institutionally-related desires such as career advancement, avoidance of fatigue, diplomacy with co-panelists, minimizing the risk that her decision will be overturned, etc. One study in this vein discovered that federal judges are more likely to cite decisions authored by judges that have cited them. Another found that judges were less likely to disagree with one another the longer they served together. Several have found “panel effects:” appellate judges sitting on panels vote differently depending on the preferences of the other judges with whom they sit. Ironically, a debate has arisen with respect to behavioral equivalency in panel effect voting.

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90 Barry Friedman and Andrew J. Martin, “Looking for Law in All the Wrong Places: Some Suggestions for Modeling Legal Decisionmaking” (Working Paper, March 2009), available at http://adm.wustl.edu/media/working/f_and_m.pdf. (“Finally, we mention the distinction between the outcome of a case, and the opinion drafted by the court in that case. This is a distinction that has drawn attention in the literature. Yet, many studies—hampered no doubt by coding problems—continue to focus only on outcomes, as though that is all there is to law.”) (citations omitted); Hon. Harry T. Edwards & Michael A. Livermore, Pitfalls of Empirical Studies that Attempt to Understand the Factors Affecting Appellate Decisionmaking, 58 DUKE L.J. 1895, 1924 (2009); Jason J. Czarnezki, Voting and Electoral Politics in the Wisconsin Supreme Court, 87 MARQ. L. REV. 323, 337 (2003).


How do we improve the model? There are at least two obvious ways: introduce dependent variables in addition to judicial vote into the analysis, and study judges in simpler contexts.

With respect to the former, the more reliable information that we can gather about our judges, the easier it becomes to identify their precise motivations or, at least, to rule out non-legal motivations. While identification sounds like a daunting task, there is reason to be optimistic. Efforts to look beyond vote have been promising.\footnote{Even early efforts sometimes utilized content-based dependent variables. See, e.g., Donald R. Songer and Reginald S. Sheehan, Supreme Court Impact on Compliance and Outcomes: Miranda and New York Times in the United States Courts of Appeals, 43 W. Pol. Q. 297, 304 (1990) (using Shepard’s to find citation to Miranda or New York Times to determine whether the lower court’s observation of precedent was in full compliance, compliant and correctly anticipating future Supreme Court modifications of the landmark decision, narrow compliance, or noncompliant and then setting that as dependent variable); Andrew P. Morriss, Signaling and Precedent in Federal District Court Opinions, 13 SUP. CT. ECON. REV. 63 (2005); Orin S. Kerr, Shedding Light on Chevron: An Empirical Study of the Chevron Doctrine in the U.S. Courts of Appeals, 15 YALE J. REG. 1 (1998); James J. Brudney and Corey Ditslear, Canons of Construction and the Elusive Quest for Neutral Reasoning, 58 VAND. L. REV. 1 (2005).}

And it is becoming more feasible to analyze the content of text with the assistance of computers, which preserve uniformity and objectivity.\footnote{See Daniel E. Ho and Kevin M. Quinn, Viewpoint Diversity and Media Consolidation: An Empirical Study, 61 STAN. L. REV. 781, 805 (2009) (“One promising approach to avoid the subjectivity of manual content analysis is automated computational language processing. Over the past few years, rapid advances in computer science and linguistics have enabled scholars to process text information in automated ways, thereby facilitating statistical analysis of large amounts of news.”); Stephen J. Choi & G. Mitu Gulati, Which Judges Write Their Opinions (and Should We Care?), 32 FLA. ST. U.L. REV. 1077 (2005); Brady
But just as we should not be tethered to judicial vote alone, we should not be wedded to publicly available court documents. We may choose to study judging in the laboratory—as I did here—which allows us to gather vastly more information about the decisionmaking process from subjects while maintaining our focus on objective quantitative data. In the following section, I will detail my choice to include an additional dependent variable, sense of righteousness, into the model.

With respect to the latter, we must consider finding simpler contexts to study. Complex institutions provide a multitude of potential judicial motivations, some legal and some non-legal. For example, by analyzing judges that are not in panels, we can rule out the possibility that counter-ideological voting is a strategic decision designed to maximize the likelihood that an ideological outcomes will come about in other cases. In this vein, the laboratory is also a wonderful resource because cases, judges, or institutions can be streamlined to better isolate judicial motivations. The existence and composition of panel members can be controlled with ease. The structure of review can be customized to fit the needs of the research project.

II. EXPERIMENT DESIGN

First, I would like briefly to defend behavioral methodologies for the study of judging, generally. Thereafter, I will discuss the contours of the specific methodology used here.

While I endorse behavioral experimentation as a worthwhile methodology for the study of judging, I admit that there might be several ways to capture legal constraint through the popular technique of statistically analyzing actual cases. If so, then that approach

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96 For example, a model in which statutory rules and standards serve as independent variables and time of decision is a dependent variable could potentially capture them. Appellate court opinions could be coded to reflect whether the norms considered therein are rules or standards, and they would be analyzed to determine the time that it took to render a decision, such as the number of days between the date argued and the date of decision.

It would be ideal if the database of cases was such that it allowed for a comparison of the time of decision between a case in which a judge decided under a
would have much to recommend it. The results could be statistically robust because of the large number of cases, there is a good chance that it would have strong predictive power because the data are from real legal actors in real legal cases, the project would not be particularly costly, and it would not prove particularly difficult to duplicate. There are several factors that stand in the way, however. Real-world circumstances might demand an extraordinarily high number of subjects in order to preserve generalizability. It is therefore possible that comparisons would be made between cases from very different time periods, from very different judges, with very different facts, under very different areas of law, and from very different regions.97 Using multiple regression could control the influence of some of these factors,98 but doing so might come at the cost of power in the analysis.99 While the problem is not insurmountable,100 it remains a substantial issue. Lastly, it would be difficult to get a reliable sense of the strength of the judge’s ideological conviction. This would be especially tricky for measurements before and after application of a rule or standard. Certainly, great progress has been made in deciphering judicial ideology,101 but the measures will always have an air of speculation because of the difficulty in obtaining honest and accurate judicial self-reports.

standard and a case in which the same judge decided a nearly identical issue but under a rule. It is likely that such comparisons would be very rare, indeed, and thus would likely be separated by many months or years. In that circumstance, it would be quite important to account for exogenous factors that might affect time, such as spikes in docket load.

98 See Hall and Wright, *supra* note 74, at 119.
99 See H.M. Blalock, Jr., *Correlated Independent Variables: The Problem of Multicollinearity*, 42 SOCIAL FORCES 233 (1963) (“Whenever two supposedly independent variables are highly correlated, it will be difficult to assess their relative importance in determining some dependent variable. The higher the correlation between independent variables the greater the sampling error of the partials.”).
101 The development of the Segal-Cover and Martin-Quinn scores have improved prediction.
Using behavioral simulations to gather data rather than using case databases can alleviate many of these problems. The laboratory allows for systematic control and randomization, neither of which is feasible with real-world data. Moreover, it best meets the challenge of using pure examples of rules and standards, finding cases with identical facts, and controlling for exogenous factors that might impact time. To be sure, the price comes in external validity; generally speaking, the more unrealistic an experiment is, the less generalizable its results. As mentioned, I used law students rather than actual judges, who are often unavailable. Psychologists have tested laboratory external validity and found that the results exhibit surprisingly strong generality in some contexts. There is no guarantee that judging is one of those contexts, of course.

Having made the case for behavioral experimentation generally, I will now turn to the merits of the particular research design used here.

A. THE ELEMENTS OF LEGAL CONSTRAINT

102 Norbert L. Kerr and Robert Bray, Simulation, Realism, and the Study of the Jury in Psychology and Law 326 (Neil Brewer, Kipling D. Williams, eds., 2005) (“Unfortunately, a strength of one strategy is often a limitation of another. Regardless of which method is used, researchers, always face dilemmas in that they cannot (in a given study) simultaneously maximize (1) realism (i.e., the concreteness of the behavioral system), (2) precision of control and measurement, and (3) generality over actors, behaviors, and situations.”).

103 See Tor, supra note 29.

104 Kerr, supra note Error! Bookmark not defined., at 341 (noting that this is not a necessary relation).

105 See Tor, supra note 29.

106 See discussion Introduction.

107 See, e.g., Craig A. Anderson, James J. Lindsay & Brad J. Bushman, Research in the Psychological Laboratory: Truth or Triviality?, 8 Current Directions in Psychol. Sci. 3, 8 (1999) (“The obvious conclusion . . . is that the psychological laboratory is doing quite well in terms of external validity; it has been discovering truth, not triviality.”).

A basic component of our faith in law’s efficacy is our assumption that law constrains those subject to it.\textsuperscript{109} Law is written so that those who interpret it will conclude that some conduct is legally ruled out.\textsuperscript{110} Even if the interpreter would want to engage in a particular conduct or would prefer to make that conduct legal, the law has the capacity to make doing so much more difficult. That is, it has the power to constrain them from bringing about the result that she would otherwise prefer. Constraint can be complete; the judge might decide the case in the direction that is at odds with what they would prefer. Or constraint can be partial; the judge ultimately decides the case in the direction she desires, but she had to work harder to justify the decision because the law appears initially to favor ruling in the other direction.

1. Conflict as a Prerequisite for Constraint

As discussed,\textsuperscript{111} the felt difficulty of a case comes from a combination of perceived restrictions posed by the judge’s personal and/or ideological preferences and the content of legal norms. As to the former, the typical judge faces each new case with potentially conflicting bases for decision. On the one hand, she seeks to follow her oath of fidelity to the legal materials, which would lead to one decision; and on the other hand she seeks to do what is right, all things considered, which would lead to a different decision. The first demands that the outcome be dictated by law, and the second demands, at least in part, that the outcome be dictated by ideology or personal morality.\textsuperscript{112} These bases for decision come into conflict when the judge believes that the law directs her to decide the case in a way that is at odds with her desired outcome.

\textsuperscript{109} See, e.g., P.S. Atiyah, \textit{Form and Substance in Legal Reasoning: The Case of Contract} in \textit{The Legal Mind: Essays for Tony Honore} 27 (P.S. Atiyah ed. 1986) (“The concept of a system of precedent is that it constrains judges in some cases to follow decisions they do not agree with.”); \textsc{Hans Kelsen}, \textit{The Pure Theory of Law} 5-13 (1967).


\textsuperscript{111} See, supra, Section I.B.

\textsuperscript{112} See Duncan Kennedy, \textit{Strategizing Strategic Behavior in Legal Interpretation}, 1996 \textsc{Utah L. Rev.} 785, 816 (1996) (“To say they experience role conflict is to say that it would be problematic for them to exclude ideology because there is something in their understanding of the judge’s role that seems to push to include it.”).
Certain cases are more likely to instill a feeling of conflict in the interpreting judge. For example, some factual scenarios are much more likely to bring about considerable desires for particular case outcomes than others. Likewise, some laws are much more likely to call clearly for particular outcomes, which may be at odds with what the judge desires. The first tendency is obvious. High profile cases or cases involving hot button political issues tend to rouse the passions.113 The second tendency is slightly more complex. Conflict is most likely to occur when there is no real dispute about rule choice (one rule is clearly germane) or facts, and the rule is such that the ordinary interpreter could plausibly believe it has one determinate meaning with respect to the facts of the case.114 Focusing on the law portion of this combination, clear rules, as opposed to vague standards, maximize the likelihood of conflict between fidelity to law and ideological passion. In order to clarify the rule/standard dichotomy, it will be helpful to consider the basic types of laws that judges ordinarily encounter.

A Basic Account of Rules and Standards: When we picture a rule, we tend to think of a speed limit or voting age requirement.115 When we picture a standard, we tend to think of the reasonableness requirement.116 If we put aside, for the moment, the judge’s feelings about what the best outcomes in these cases would be in the absence of law, we can imagine that a judge who considers only, say, speeding cases that are governed by speed limit rules would have a fairly easy job. We might even conclude that her job would be so mechanical that it would be boring. On the other hand, if we visualize the same passionless judge but this time her speeding cases are governed by a reasonableness standard, then we would probably guess that her job

113 DUNCAN KENNEDY, A CRITIQUE OF ADJUDICATION (FIN DE SIÈCLE) 160 (1994).
114 See id.
116 See, e.g., Thomas S. Ulen, The Prudence of Law and Economics: Why More Economics is Better, 26 CUMB. L. REV. 773, 805 (1996) (“The reach of common law rules is attenuated, covering only the facts before the court, deciding issues on a case-by-case basis, relying on standards (such as "reasonableness") rather than on bright-line rules.”).
would be a great deal tougher, routinely forcing her to consider all of the thorny circumstances before her. In this simplified context, the guidance provided by the rule is welcome—it spares the judge from having to do much thinking in reaching the correct legal result.

_A More Advanced Account of Rules and Standards:_ Our sense that rules and standards make for easy or hard cases, respectively, fails to account for the fact that a rule can make a case very hard for the judge who has a strong objection to the result that would come from a straightforward application of that rule. Conversely, a standard can make it far easier for a judge to reach a desirable result than would a conflicting rule. Thus, the mere addition of the judge’s preference to our account of rules and standards flips our sense of difficulty completely around. This is because the judge’s goal is different; the difficulty for the judge comes from her desire to write a convincing justification in support of her preferred outcome. That will take work, which will become a key component of the model of constraint. This kind of motivation is controversial yet commonplace; politically charged cases are numerous in the appellate courts, and such cases can motivate judges to attempt to reach outcomes that are consistent with their own political ideologies, even if those outcomes seem at first to conflict with the law.117

To be sure, there are numerous instances of “unself-conscious rule following,” in which the potency of the law to regulate a dispute and the judge’s attitude under the circumstances align to make the case seem easy.118 Thereafter, the judge engages in a straightforward deductive exercise. She is not even thinking about lawmaking. In this case, law operates as a guide rather than as a constraint. While it is possible that there is no struggle simply because it appears to the judge that the case is easy due to the character of the law to be applied, it is also possible that there isn’t a struggle because the judges or parties to the case are very lazy, unmotivated, unintelligent, or uninformed.119

In other cases, however, the judge is much more likely to feel compelled to engage in some amount of work to reach the result she

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117 See e.g., STEPHANIE A. LINQUIST AND FRANK B. CROSS, MEASURING JUDICIAL ACTIVISM 149 (2009).
118 DUNCAN KENNEDY, A CRITIQUE OF ADJUDICATION (FIN DE SIÈCLE) 160 (1994).
119 See id. at 170-71.
prefers. Successful work permits the judge to convince herself that she has written a persuasive, legally-based opinion that manages to reach the ideological result that she pleases.

2. “Work”: How Resources Interact with Constraint

The relationship between the law, the likelihood that the judge will feel compelled to engage in work, and the amount of work that the judge believes is necessary can be quite complex. But it is almost always limited by the basic principle that specificity and clarity make conflict possible whereas vagueness does not. Imagine that there is only one law to consider in a case, and that law is either a pure rule or a pure standard. It is far more likely that the judge will have to engage with work under the rule than under the standard because only the rule can restrict the judge from reaching her desired outcome. It is difficult to see how the judge would have trouble justifying her desired result under a standard; as standards will likely make it seem as though the legislator of the norm was content to delegate the choice of how to regulate the conduct at issue to the judge, effectively allowing her to utilize her discretion, including her ideological beliefs.

In short, there is neither an interpretive impediment nor a role conflict that could slow the judge from reaching her desired outcome.

While this is far from an exhaustive account of work techniques, it is enough to illustrate that there is a patterned relationship between the state of the law and the type and amount of work that the judge perceives is necessary to justify a desired result.

Now that we have a basic understanding of the relationship between legal constraint and work, we are ready to explain how it might be that restricting legal resources can enhance legal constraint.

Work takes time and energy. Duncan Kennedy offers an apt phenomenological account:

The judge has to allocate his time among the cases that presently offer him chances to dispose of ideological stakes. He has to calculate the probable payoff in terms of convincing argument and the payoff in terms

\[120\text{ See id. at 170.} \]

\[121\text{ See, e.g., Michael P. Van Alstine, The Judicial Power and Treaty Delegation, 90 CALIF. L. REV. 1263, 1285 (2002) (Indeed, sound arguments support a presumption of implied delegated authority whenever Congress legislates in the form of broad standards.”).} \]
of ideological significance. It is a hard choice when an apparently hard case (an easy case for ideological work) offers a low payoff in terms of ideological stakes, whereas an apparently easy case that is obviously unjust offers a large payoff but might require a lot of work, with no guarantee of success (in order to overcome the initial sense of being constrained to ‘do the wrong thing’).  

The supply of the resources necessary to engage in work, as this era of austerity shows, can be in great or short supply. While the specificity of law and the direction of ideological preference are the factors in the likelihood that conflict will occur, the amount of resources is a factor in the likelihood that this conflict will result in constraint. Getting around a clear rule that conflicts with a desired case outcome takes a lot of work. Sometimes, the work will pay off, and the judge will reach the outcome she desires even if it first appeared to be legally ruled out. Even when work is successful, the rule can have an impact by making the judge’s work harder; it can partially constrain her. If the work is hard for a judge under a conflicting rule, then it is harder still when she is also short on time or other necessary resources. The harder it is for a judge to work around a rule, the more likely it is that the judge will follow the rule. This is a candidate explanation for the tentative finding in earlier empirical studies that judges act more deferentially and independently when they have fewer resources. Thus, theoretically, resource reduction can be a means to make rules more effective. On the other hand, vague laws, such as standards, pose no challenge to the judge seeking to bring about her desired result. Thus, the amount of resources will likely have no effect under standards, being, as they are, weak constraints for motivated judges.

To summarize, legal rules have the capacity to bring about conflict between what the judge perceives is the correct legal outcome and what she believes ought to be the outcome. In such cases, the constrained judge either gives into the law (“complete constraint”) or she engages in work to write what she believes is a convincing

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122 See A CRITIQUE OF ADJUDICATION (FIN DE SIÈCLE) 167-68 (1994).
123 See discussion, supra, Section I.A.
124 She might also engage in work only ultimately to give in to the directive of law. This is complete constraint as well.
legal justification for the outcome she prefers (“partial constraint”). The likelihood that work will produce such a justification depends, in part, on the amount of resources available to the judge. Fewer resources means a lower likelihood of success.

3. Legitimation and Delegitimation

When we consider constraint, then, the preference of the legal interpreter is the counter-component. Since preference is so important, it is worth studying the conditions under which law changes judicial preference in its favor. If the law changes people’s minds over time so that they no longer want to resist it (or do not want to resist it as much), then it can fairly be said to have an additional sort of constraining power—it legitimates the conduct that it permits or mandates. Many scholars claim that that law has a legitimation effect.125 On this account, people may change their moral or ideological beliefs to match those that are apparent in the law to which they are subject. In cases of conflict, this can fairly be characterized as another form of legal constraint because it is the result of a distinctly legal operation that changes judicial decisionmaking in a direction intended by law.

As with conflict, for a law to have a legitimation effect, that law would have to be sufficiently specific: it must suitably demarcate legally desirable conduct that is different from what the judges already desire. Thus, we can hypothesize that rules, as opposed to standards, will produce this effect; standards are vague and fail to substitute our values with law’s values.126

There is also a parallel with the role resources play in conflict, but the benefits are inverted. We can hypothesize that when the government manipulates the amount of resources it will provide to judges, this change will have an impact on judges’ preferences. Most likely, judges would feel slighted by the government, perhaps even victimized, and this would threaten their motivation to be faithful to the law, impacting their sense of whether the law they are considering is legitimate. Delegitimation might increase motivations to reach conclusions that the judges find desirable in spite of legal directives.

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126 See discussion infra notes 138-40.
If so, it might overwhelm the initial increase in constraint caused by stripping resources.

On the other hand, we can speculate that legitimation—an increase in the sense that a law is legitimate—is most likely to occur when the government provides the best conditions for judges. If judges are given plenty of time to do work and this nevertheless comes up short—the judges are unable to convince themselves that their initially preferred outcomes are legally justifiable—it would seem likely that they could become convinced that the legal directive has more merit than they initially thought.

B. Specific Experimental Design

Having set forth the model, I now turn to my experimental methodology for testing it.

Simply put, my experiment asked law students\textsuperscript{127} at three top New England law schools to serve as mock judges in a simulated case. The fact pattern of the case was ideologically salient and divisive—illegal immigration—so that there would be a spread of ideological strengths and directions.\textsuperscript{128} Despite its simulative nature, it had real-world effects because of a handful of monetary interventions that I describe below.

The model requires that we be able to control and measure several dimensions of judging. With respect to the subjects, themselves, we must be able to identify the direction and strength of their preferences for case outcomes in the absence of law. With respect to the laws that the subjects must interpret, we must control their direction and specificity. Lastly, with respect to resources, we must control the amount available to each subject. I have chosen to have a multiphase design—one phase that provides baseline measures of the subjects’ preferences in the absence of law, and one phase that provides the same measures in the presence of law. In the law phase,

\textsuperscript{127} All students had completed a minimum of approximately one academic year of study.

\textsuperscript{128} See 2006 Immigration Study, Pew Research Center for the People and the Press and Pew Hispanic Center, (showing roughly even distribution nationally of these that believe immigration is a very big problem, a moderately big problem, a small problem, and not a problem at all).
I vary the amount of resources available to the subjects so that we can isolate the effect of resource limitation on law’s constraining power.

1. The Two-Phase Design

The experiment had two phases, both of which were completed online. The phases are distinguished by whether they have potentially dispositive law or not; one phase does (the “law phase”) and the other does not (the “baseline phase”). It is important to note that the order in which the subjects received the two phases was random, and there was a decay period between phases of several weeks.

This multiphase design is important for a couple of reasons. First, it allows within-subjects analysis for certain measures. Rather than having to divine what a hypothetical individual might do when he or she encounters law from a comparison of the behavior of a law group and baseline group, we are able to track how individual subjects respond to law as they encounter each phase. This connects with the second benefit: this experimental model provides an ideological baseline and outcome for each subject. In other words, we get a reliable indicator of how subjects would decide a case and how they would feel when judging a particular case without law guiding their actions. As a result, there is no need to use proxies to identify the pre-existing ideology of a judge, which suffers from at least two defects. First, if the proxy is exogenous—as it ought to be—then it might not be reliable indicator of the judge’s particular ideology. Second, even if it is representative of the judge’s ideology in most instances, it risks failing to approximate the judge’s ideology with respect to the facts of the case being analyzed. My methodology eliminates these weaknesses by providing the subject’s baseline outcome and a quantitative measure of his or her conviction with respect to the exact issue analyzed.

Turning now to the details, I will draw a quick sketch of the experiment’s two phases. The complete experiment script is included in the Appendix. It will be easiest first to discuss what is held constant across the two phases and then to discuss the differences.

2. The Elements Held Constant across Phases

129 The decay period, which was simply the amount of time between phases, was designed to be just long enough that the students would forget the details of their decisionmaking in their first phases, but not so long that we risked them changing their ideologies.
The essential constants were the fact pattern of the case, the questions posed to the subjects, and the incentives structure.

The Facts of the Case: I presented subjects in both phases with the same fact pattern:

A citizen of a foreign nation ("the alien") has legally entered our country on August 1, 2007 with a valid 1-year work visa issued that same day. He fled his home country after being persecuted for his activism on behalf of the poor and his anti-establishment political opinion. He had been imprisoned for his political protests briefly in 2006, and he and his family had been threatened by the local police force. Worried for his personal safety, he obtained the visa and arrived here. He could not speak English and was largely ignorant of our laws regarding asylum, which is the mechanism our country uses to allow aliens to reside here who have been or fear being persecuted on account of their race, religion, nationality, membership in a social group, or political opinion. He began working in a restaurant shortly after his arrival, but his employer never asked him to show documentation indicating that he was a legal worker. He was paid under-the-table. On July 31, 2008, his visa expired. He continued to work at the restaurant, however, receiving pay as usual for the next 13 months. At that point, a new employee began work at the same restaurant. The new employee soon learned of the alien's experiences in his home country and of his expired one-year visa. The new employee explained to the alien that staying here after the expiration of the visa was illegal but that he might qualify for asylum on the ground of past persecution for political opinion. She suggested that the alien file a petition for asylum. The alien retained a lawyer and filed a petition about 4 weeks later on September 25, 2009. If granted asylum, the alien will have the legal right to live here indefinitely. If denied asylum, he will be removed from our country and transported back to the country of his citizenship.
The Collected Data (Dependent Variables): Having reviewed the facts, the subjects were then asked a series of questions from which I collect data.

a. Decision. First, subjects were asked to decide whether or not to grant asylum (although, as described below, the role that the subject plays is different between phases). This provides both baseline values (in the baseline phase) and experimental values (in the law phase) from which we can draw comparisons and determine whether subjects have been constrained by law: subjects that choose different outcomes in the two phases (so long as the decision in the law phase is the one that the law calls for) have been constrained by law.

b. Satisfaction. Having made their decisions, I then ask them to note the strength of their satisfaction that their answer was “the right thing to do” on a numbered, 0-10 scale. This measure (hereinafter “satisfaction”) gives us the ability to analyze a number of things. In the baseline phase, it provides important baseline measures, allowing us to know with some precision the intensity of their desire to reach outcomes that are at odds with the legal directive, which further indicates whether they will be likely to engage in work to get around the law. By comparing the baseline and law phases, we are able to learn whether the law has had a legitimating or delegitimating effect, depending on whether the subject’s satisfaction is higher or lower, respectively, in the law phase for those that were completely constrained.

Lastly, I asked them to write a justification for their decision. This aspect of the research design allows resources variation to impact the subject’s decisions and convictions; it is the writing of the justification during the law phase that forces subjects to do work, which requires resources according to the hypotheses described below. Indeed, a big part of the accountability of judges comes from the fact that they are expected to provide written justifications for their decisions; it is what makes work difficult. It also increases the realism of the simulation because it forces subjects to think through

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130 More specifically, this is complete constraint. See supra, Section II.A.2.
131 Such scales, sometimes called “Likert-type Scales” are commonplace in behavioral experimentation. See Wikipedia, “Likert Scale” available at http://en.wikipedia.org/wiki/Likert_scale (“[i]t is the most widely used approach to scaling responses in survey research”).
their opinions on the case, minimizing the likelihood of careless or random responses. Moreover, this design provides opportunities for content analysis of opinions in future papers, although this content was not analyzed here. Below, I describe the particulars of this dimension of the experiment.

The Incentives Structure: I designed the reward/penalty system for completion of the written justification to bring about potentially conflicting desires—(1) the desire faithfully to interpret the law and (2) the desire to bring about an ideologically satisfactory state of affairs.

As to the former, subjects were told that they would have the opportunity to be entered in a contingent lottery. The contingency was as follows: if subjects can convince one of two colleagues that they adequately justified their result, they are eligible to win a random drawing with a $300 prize. Subjects were told to write only until they feel they have written a convincing justification. Regardless of the phase of the experiment, this served to make sure that students were motivated to put in effort. Most importantly, however, when in the law phase, subjects will be motivated to write a decision that they feel is legally supported.

As to the latter, I told subjects that their decision would result in the payment of $2 to actual charitable organizations whose mission was consistent with the result they choose. More specifically, I told them that a decision to grant asylum would result in payment to Grantmakers Concerned with Immigrants and Refugees, a non-profit and pro-immigration organization. On the other hand, a decision to deny asylum would result in a payment to the Federation for American Immigration Reform, a non-profit organization that is critical of current immigration policies. While these stakes are lower than if this case described a real immigration hearing, they are large enough for students to care about the real-world consequences of the decision that they are asked to make and therefore make the experiment more representative of actual judging.

3. The Differences between the Phases

The difference between the law phase and the baseline phase is primarily that the law phase had the following additional elements

132 See http://www.gcir.org/about (last visited August 1, 2011).
133 See http://www.fairus.org/site/PageNavigator/about/ (last visited August 1, 2011).
that were not included in the above description. First, the law, as its name implies, contained a legal variable—specifically, subjects were given either a pure rule or a pure standard. Secondly, it contained a resources variable—specifically, subjects were given either a very strict time limit or no time limit at all. Whereas subjects in the baseline phase do not play a role (we want to learn what their personal preferences are), they are asked to serve as simulated judges in the law phase. It will be helpful to provide a bit more detail about the mechanics of the law phase.

The Legal Rule Condition: The subject under this condition is exposed to a bright-line legal rule. In particular, it provides a deadline for the filing of asylum after the expiration of the visa, which the immigrant has not met. A plain reading of the rule would permit a simple deductive solution—namely, all successful applications for asylum must file before the deadline, the immigrant here did not file before the deadline, therefore he is not a successful applicant. Other outcomes would more difficult to reach, so the resource restriction described below should prevent some subjects from making otherwise preferable decisions. That is to say that it should take work.

The Legal Standard Condition: The subject under this condition is exposed to a pure standard. In particular, it requires that immigrants file within a reasonable time after the expiration of the visa. Unlike the rule, it does not permit a simple deductive solution, and the lack of clarity should make it easy for the subject to decide as he or she prefers, which ought to be the same decision that he or she chose or will choose in the baseline phase. The subject should be able to reach the same decision in both the law and the baseline phases regardless of the resource restriction described below.

The Resources Limited Condition: Subjects under this condition must write their opinions in two minutes or less. Judging takes time, and engaging in judicial work even more so. Piloting revealed that the vast majority of subjects took over two minutes to complete their justifications. Accordingly, I set the resource limit at a time that would make it challenging for those who seek to engage in work to justify a decision that does not comply with a plain reading of the legal rule.

The Resources Unlimited Condition: Subjects under this condition have unlimited time to complete their legal opinions. In
particular, they are told that they make take as long as they would like to write a convincing answer.

These conditions are combined together in the following 2x2 matrix:

<table>
<thead>
<tr>
<th></th>
<th>Rule</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Time Limit</td>
<td>Rule/Unlimited</td>
<td>Standard/Unlimited</td>
</tr>
<tr>
<td>Time Limit</td>
<td>Rule/Limited</td>
<td>Standard/Limited</td>
</tr>
</tbody>
</table>

C. HOW THE DESIGN ALLEVIATES THE PROBLEMS OF THE EXISTING MODEL OF LEGAL CONSTRAINT

Having sketched out the basic mechanics of the experiment, it is now possible to explain how the design addresses the weaknesses of the existing model for legal constraint.

1. Providing a Straightforward Legal Directive

Recall that one of criticisms of the dominant methodological approach to the empirical study of judging was that they often do not bother to identify the correct legal outcome in the case before each judge that they study, so determining whether a judge has followed the law becomes more difficult. In that section, I argued that using simpler legal norms was one way to identify correct legal outcomes without threatening scientific objectivity.

With that in mind, I designed the rule such that it provides a clear, obvious directive when interpreted straightforwardly, and I designed the standard so as to provide the minimal amount of constraint possible. The rule sets a clear time limit for the filing of

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134 I am perfectly willing to accept a different label for the denial of asylum. Perhaps “legally straightforward” is more apt than “legally correct.” But this is merely a debate over labels; it does not rob the methodology of its appeal so long as the label we choose is applied consistently and we can agree that the same operation is behind a judge’s decision to vote counter-ideologically—namely, that the judge feels (regardless of whether it is legally correct) that the law rules out the option she would prefer ideologically.
asylum applications, and the alien in this case missed that deadline by several months. Thus, a straightforward application of the rule would bar the grant of asylum. The standard, on the other hand, is included as a control condition to reproduce the results of the baseline phase. This hypothesis is drawn from philosophical literature. Joseph Raz famously argues that laws with moral criteria are equivalent to asking people to do what they ought to do on the balance of all reasons; that is, it directs them to do what they would have done if there were no law on the issue. This norm content need not specifically be moral either. It could be any content that is merit-evaluative. Put differently, the content of the norm depends on the reasons for creating the norm in the first place; it is “content-dependent.”

The distinction between rules and standards tracks this principle. Rules generally do not force those interpreting them to

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135 Certainly, detractors might complain that the most straightforward outcome is not necessarily the legally correct outcome. Someone might argue, for example, that moral requirements have been incorporated into all law through, say, invocations of equity or through the operation of natural law. From this vantage point, it might be argued that the moral and, therefore, legally correct outcome, is the one in which the alien is provided safe haven through asylum. For those judges that share this belief, there will be no conflict and reaching the same result in the baseline phase and law phase under the rule should be easy. Fortunately, the experiment allows us to verify that: if enough judges share this belief, then we will not see significant differences on outcomes from resource restriction.

136 While Raz takes this exclusive position regardless of whether the norm is a primary or secondary rule, some exclusive legal philosophers offer arguments that focus on the particular secondary rule of the rule of recognition. See generally Scott Shapiro, Law, Morality and the Guidance of Conduct, 6 LEGAL THEORY 127 (2000).


139 It tracks the distinction but not perfectly; the term “standard” is overinclusive for Raz’s category of content-dependent norms. There are standards that are more content-independent than “do the moral thing” or “do justice” or “be reasonable” all of which are basically equivalent to “make the best decision, all things considered” under the Raz model. Indeed, they are more so than the last three segments of the Fifth Amendment, all of which have been called standards despite having different, and increasing, levels of content-dependence: “nor shall be compelled in any criminal case to be a witness against himself,” “nor be deprived of life, liberty, or property, without due process of law;” “nor shall private property be taken for public use, without just compensation.” KERMIT ROOSEVELT III, THE
reconsider the reasons that gave rise to their creation, providing independent and clear guidelines for dispute resolution. Recall the speed limit example. A judge that considers whether to impose a penalty based on the speed of an automobile is directed to exclude all reasons from her deliberation that were within the scope of the reasons for adopting the speed limit in the first place. She cannot consider whether the driving is more fun when it is done at excessive speeds, or whether it might sometimes be safer to drive more quickly. This regulates her deliberation and makes it much easier for her to conclude that, because this driver exceeded the speed limit by 15 miles per hour, he deserves the legal fine. Now consider a legal standard. Imagine a law that tells all citizens to be “generally fair and equitable” in contractual relations. This norm directs subjects to resolve contractual disputes using the very reasons that they would have considered in deciding to follow that rule in the first place. The judge that carefully considers how to resolve a contractual dispute would presumably have considered those very reasons in the absence of law under the Razian view. The right thing to do on the balance of all reasons must, itself, be fair and equitable, so the law fails to do anything that would justify its insertion into the deliberation of the judge. It does as much work as a law that says, “consider all the reasons that you would have considered anyway.”

In their classic work, Hart and Wechsler describe this very characteristic: A standard may be defined broadly as a legal direction which can be applied only by making, in addition to a finding of what happened or is happening in the particular situation, a qualitative appraisal of those happenings in terms of their probable consequences, moral justification or other aspect of human experience. HENRY M. HART, JR. AND ALBERT M. SACHS, THE LEGAL PROCESS: BASIC PROBLEMS IN THE MAKING AND APPLICATION OF LAW 139-40 (1994). Kathleen Sullivan more recently defined standards in nearly identical terms, stating, “[a] legal directive is ‘standard’-like when it tends to collapse decisionmaking back into the direct application of the background principle or policy to a fact situation.” Kathleen M. Sullivan, Foreword: The Justices of Rules and Standards, 106 HARV. L. REV. 22, 58 (1992).
Because standards function such that there should be no difference between the results they produce and what an all-things-considered determination would produce, standards have the power to serve as a control condition while analyzing rules. Standards should duplicate the results of the baseline phase of the experiment. In short, paradigm examples of rules and standards serve as independent variables in the experiment for the sake of allowing isolation of their differential constraining effect. Because the experiment exposes half of the subjects to rules and the other half to standards, it is capable of showing how these legal norm types cause different constraining behaviors.

Admittedly, one limitation of this study is that I am only testing pure rules in standards in a single case. Before any firm conclusions can be drawn about the differential constraining effect of rules and standards, at the very least a variety of cases ought to be tested. As explained, this was a good starting place.

2. Reducing Problems of Strategic Behavioral Equivalence

Recall that existing studies on the relationship between resources and judging suffer from the fact that they do not have the ability to verify that voting counter-ideologically was the result of law constraining the voting judge rather than some other basis. Here, this problem of behavioral equivalence has been alleviated. Many of the alternative strategic explanations for counter-ideological voting have been eliminated: there is no panel and the decision is one-shot, so the judge’s behavior cannot be explained using the typical institutionalist critiques. In short, the streamlined nature of the laboratory allows us to rule out alternative explanations based on the notion that the subject is acting in a way that is best for his or her ideological agenda in the long run. As a result, it becomes reasonable to conclude that a decision to choose the opposite outcome from the one preferred in the baseline phase represents a decision to be constrained by the law.

Moreover, we have the ability to screen out subjects that do not have strong enough passions to produce conflict under the rule, so we can be more confident that the counter-ideological voting we are seeing is hard-earned rather than the result of confusion, lack of effort, or changed ideological preferences between phases. For this
reason, I screen out those under rules that did not have a satisfaction of five or higher in the baseline phase.

Likewise, we are able to rule out other behavioral equivalencies that are particularly problematic in the study of sharply limited resources. It might be worrisome that judges are voting ideologically because, without adequate resources, they become confused from the time pressure, thereby ignoring both law and ideology, and make decisions that are simply random. Of course, given the straightforwardness of the case and the fact that pilot testing revealed that the amount of time provided under the resources limited condition was enough to make an intentional determination, this is quite unlikely. Nevertheless, by using standards as a control condition, however, we can rule out this possibility and provide evidence that the specificity of the legal directive in the rule or the resource condition, or the combination thereof, was the factor making a difference. In other words, we can provide further evidence that it is legal constraint doing the work.

3. Providing a Measure of Legitimation through Satisfaction

One of the benefits of using behavioral experimentation is that it permits the adoption of new and improved dependent variables. As described above, I use a numbered scale to monitor the subject’s level of satisfaction that the result he or she reached was righteous under the different experimental conditions. The two-phase design allows us to see how the intervention of law changed their sense of righteousness. In this respect, the baseline phase provides a behavioral demonstration as well as a measure of intensity regarding the subjects’ views on the legitimacy of a specific state of affairs independent of dispositive law on that state of affairs. In comparison, the law phase shows how that sense of legitimacy changes in the face of law. Using the measure of satisfaction in the law phase, we can see how subjects are more or less likely to reach outcomes under law that are different than what they would prefer under the baseline condition. Just as important, however, we also learn in the law condition how reaching either a law-guided or

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141 While the vast majority of subjects in the pilot who were unlimited in the time it would take them ended up taking longer than two minutes, many did not exceed that time by a large amount. See discussion supra Section II.B.3.

ideologically-guided resolution changes the subject’s satisfaction that she did the right thing in bringing about that outcome. As a result, we can identify those conditions under which following the dictates of law—even when those conflict with the judge’s ideology—actually increases the subject’s satisfaction in the result. This phenomenon must be understood as a legitimation effect.

Of particular importance to the study of limited resources, we can see whether limiting resources might affect judges’ motivation to follow and apply the law. A delegitimation effect might warn that judges will be less likely to follow their oaths of fidelity or might explain why judges are beginning to quit the job.

D. Hypotheses

Now that that basic mechanics of the experiment are clear, it is possible to articulate hypotheses. There are certainly more hypotheses than those included below, but those included are sufficient to highlight the primary indicators of legal constraint and to set forth the most essential predictions regarding the interaction between legal constraint and resources.

As a threshold matter, we expect that standards will operate in the same fashion as the baseline phase, making them a suitable control condition. We will not see a significant difference between the decisions or the level of satisfaction under standards.143

With respect to the interaction between rules and resources, the hypotheses are more specific. First, for the subjects with desires

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143 As between rules and standards, we generally expect that the rules will exhibit constraining power on outcomes and the standards will not. But making basic hypotheses regarding how all judges under rules will compare to all judges under standards is not the goal here—this study is designed to test regarding the interaction between the specificity of law and the availability of resources. Accordingly, we are most interested in seeing whether constraint is increased by cutting resources, and how that constraint, or lack thereof, affects their strengths of conviction.
that permit conflict with the legal rule\textsuperscript{144} (that is, they support granting asylum in the baseline phase), we can expect that a higher proportion of subjects will change decisions to deny asylum under the rule when resources are limited than under all of the other conditions. With respect to satisfaction, we can expect that subjects under the rule will experience greater changes than those under the standard. The standard should do nothing to change them. Under the rule, there should be significant changes, although it should depend on whether one was completely constrained by the law—that is, they changed their decision to deny asylum during the law phase—or not. This term, “complete constraint” will be used often in the results and analysis sections, as will be some related terms, like “not completely constrained” and “partially constrained”, which are listed below in descending order of their use:

<table>
<thead>
<tr>
<th>Term</th>
<th>Necessary Conditions for Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely Constrained</td>
<td>(1) Subject Granted Asylum in Baseline but (2) Denied Asylum in Law Phase</td>
</tr>
<tr>
<td>Not Completely Constrained</td>
<td>(1) Subject Granted Asylum in Baseline and (2) Granted Asylum in Law Phase</td>
</tr>
<tr>
<td>Partially Constrained</td>
<td>An \textit{indirect} measure estimating the proportion of subjects that would likely have been completely constrained had they been subject to resource restriction, obtained by</td>
</tr>
</tbody>
</table>

\textsuperscript{144} There are a series of rule assistance-related hypotheses that could have been made, many of which are the inverse of the rule constraint-related hypotheses. Too few of the subjects tested supported denying asylum in the law phase to permit statistical testing. This comes as little surprise—there aren’t many Conservatives in the Northeast.
Those subject to resource restriction who were not completely constrained (they decided to grant asylum in both the law and baseline phases) should experience higher drops under resource restriction than under no resource restriction. This would reflect that they were rushed and therefore not as confident that they reached the right outcome. Likewise, those subjects that were completely constrained and were subject to resource restriction ought to experience larger drops in their strengths of conviction than those who were not restricted. The difference here should be the most dramatic of all the comparisons, however, because of the possibility that resource unlimited subjects will experience a legitimation effect—an increase in conviction. They chose to side with a counter-ideological result even though they had all the time that they would need to engage in work to get around the rule. In short, they had every opportunity to try to get around the rule but chose to follow it anyway. It is thus possible that they became more convinced of its merit. On the other hand, we can expect that those who were constrained and had their resources limited will experience considerably larger drops in their satisfaction than all other combinations under the rule. They were given almost no opportunity to work around the rule, and this is likely to embitter them. As a result, there could be a pronounced delegitimation effect.

While these hypotheses might seem complicated, they are designed to reflect the principle that resource limitation will increase the constraining power of only those laws that have specific directives, but the increase in power has the cost of high delegitimation.

III. Results

The number of subjects that completed both phases of the experiment totaled 132. Of these, only 10 chose to deny asylum in
the baseline phase, and they were omitted because the rule would assist them rather than constrain them (they chose to deny asylum in the baseline). Lastly, a small portion of the subjects that were in the legally constrain-able group did not exhibit strong enough satisfaction scores in the baseline phase to behave in a predictable fashion under the experimental conditions. This left 114 subjects for the remaining hypotheses.

Except where otherwise indicated, I performed a multiple analysis of variance test (MANOVA) with the independent variables of type of law (rule or standard) and type of time (limited or unlimited) and the dependent variables of law position, law satisfaction, baseline decision, baseline satisfaction, as well as change in decision and satisfaction.

The multivariate tests returned a significant result, so I continued to analyze the between-subjects effects. The main effect of the type of law—rule or standard—was significant with respect to the law phase decision $F(1, 110) = 7.348, \text{MSE} = .903, p < .01$. The main effect of type of time available—limited or unlimited—was significant with respect to law phase decision; $F(1, 110) = 4.252, \text{MSE} = .522, p < .05$; to law phase satisfaction $F(1, 110) = 5.502, \text{MSE} = 29.518, p < .05$; and change of satisfaction $F(1, 110) = 7.427, \text{MSE} = 43.139, p < .001$. The interaction between the two factors was significant with respect to law phase satisfaction $F(1, 110) = 4.533, \text{MSE} = 24.318, p < .01$. Post-hoc analysis, using a Bonferroni correction factor, was conducted. These results are discussed in more detail below.

As predicted, there was no significant difference between the baseline phase and law phase measures of satisfaction (Table 1) or decision (Table 2) for the legal standards group. Nor was there a significant difference under the standard when comparing the decisions of the subjects between the two phases.

Table 1:

<table>
<thead>
<tr>
<th>Mean Satisfaction</th>
<th>Stan. Dev.</th>
<th>N</th>
<th>Sig.</th>
</tr>
</thead>
</table>

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145 See discussion supra Section II.C.2 (screening out those lower than 5).
Table 2:

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Stan. Dev.</th>
<th>N</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Std. Delta Decision</td>
<td>-6.9%</td>
<td>.26</td>
<td>58</td>
<td>&gt;.1</td>
</tr>
</tbody>
</table>

With respect to satisfaction, there was no significant difference between rules and standards (Table 3), between those completely constrained under rules and those that were not (Table 3), and between those that were under rules in the law phase and those that were under rules in the baseline phase (Table 3).

Table 3:

<table>
<thead>
<tr>
<th>Type of Law</th>
<th>Mean Change in Satisfaction</th>
<th>Stan. Dev.</th>
<th>N</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rule</td>
<td>-.43</td>
<td>3.09</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>Standard</td>
<td>-.09</td>
<td>1.83</td>
<td>58</td>
<td>&gt;.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Mean Change in Satisfaction</th>
<th>Stan. Dev.</th>
<th>N</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Completely Constrained under Rule</td>
<td>-0.24</td>
<td>2.08</td>
<td>41</td>
<td>&gt;.1</td>
</tr>
</tbody>
</table>
This is not particularly surprising. For the reasons discussed in Section III, differences in the direction and magnitude of satisfaction depend on the combination of whether one was subject to a rule and whether there was resource restriction. Critically, only subjects that were under both a rule and resource restriction showed significantly higher rates of complete constraint than the control group of subjects under the standard that did not have their time limited. (Table 4) This finding parallels and builds upon the results in prior studies of the effect of resource restriction, which found that subjects exhibited more deference or independence when time was limited. The similarity to actual judge practice ought to allay concerns that this simulated case lacks external validity. Furthermore, we can be confident that this difference is the result of legal constraint because we do not see this effect when a standard is substituted for the rule. Indeed, there was no significant difference in decisions between time limited subjects and unlimited subjects under the standard. (Table 5)

<table>
<thead>
<tr>
<th>Completely Constrained under Rule</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>N</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law Satisfaction under Rule</td>
<td>6.55</td>
<td>2.68</td>
<td>56</td>
<td>&gt;.1</td>
</tr>
<tr>
<td>Baseline Satisfaction under Rule</td>
<td>7.04</td>
<td>2.35</td>
<td>56</td>
<td>&gt;.1</td>
</tr>
</tbody>
</table>

Table 4:

<table>
<thead>
<tr>
<th>Group</th>
<th>Denial Rate</th>
<th>N</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rule Limited</td>
<td>32%</td>
<td>28</td>
<td>.01</td>
</tr>
<tr>
<td>Standard Unlimited</td>
<td>0%</td>
<td>22</td>
<td></td>
</tr>
</tbody>
</table>

Table 5:
While this result might cause budget cutters to rejoice, the findings concerning the strength of the subjects’ satisfaction in the righteousness of their decisions are predictably troubling.

As hypothesized, those subjects that were under a combination of rules and time limitation experienced on average significantly larger drop in satisfaction in the law phase than subjects under rules that had unlimited time. (Table 6) Note that there was again no significant difference under the comparable standard control condition. (Table 7)

Table 6:

<table>
<thead>
<tr>
<th>Group</th>
<th>Denial Rate</th>
<th>N</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Limited</td>
<td>11%</td>
<td>36</td>
<td>&gt; .1</td>
</tr>
<tr>
<td>Standard Unlimited</td>
<td>0%</td>
<td>22</td>
<td></td>
</tr>
</tbody>
</table>

Table 7:

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean Change in Satisfaction</th>
<th>Std. Dev.</th>
<th>N</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Limited</td>
<td>-.22</td>
<td>1.71</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Standard</td>
<td>.14</td>
<td>2.03</td>
<td>22</td>
<td>&gt; .1</td>
</tr>
</tbody>
</table>

146 To assist the reader, this measure already calculates the change in conviction. I have noted that earlier that the more traditional between subjects comparison also returned significant results. In this case the final conviction of Rule Limited (M = 5.61, SD = 2.77) was significantly different from that of Rule Unlimited (M = 7.5, SD = 2.27).
Yet, even these data risk understating the size of the effect. If the results are further broken down to compare subjects that were completely constrained to those that were not, the difference grows even starker. Those that surrendered to the rule under the time limit saw a precipitous drop in their satisfaction of 4.3 points; whereas those who surrendered with no time limit saw a substantial increase in their satisfaction of 2.2 points. Because these subgroups are small, this finding is not statistically significant, but the trend is noteworthy. These findings support the conclusion that there is an interaction between the occurrence of complete constraint and resource limitation.

IV. ANALYSIS OF RESULTS

Before moving on to policy implications and avenues for further study, it is necessary to discuss what these results mean. Generally speaking, the independent variables of legal norm-content type (introducing a rule or a standard) and of resource limitation type (limiting time or not) produced complimentary effects.

Rules and standards behave as we expect them to; only rules exhibit the ability completely to constrain subjects, forcing them to reach the decision called for in a straightforward application of the rule even though they would have chosen otherwise in the absence of law. And while the impact of the law’s specificity was pronounced with respect to decisions, it did not make a considerable impact on the subjects’ satisfaction when analyzed across all subjects. On the other hand, the addition of resource limitation had a profound impact on satisfaction but a weaker impact on outcomes.

A. THRESHOLD FINDINGS: RULES VERSUS STANDARDS

Recall that a unique dimension of this experiment is both that it provided a methodology for distinguishing between constraining and non-constraining legal norms using a popular conceptual distinction and for providing empirical support for incorporating that distinction into statistical analysis of judicial decisions where
possible. Recall further that the simplest account of rules and standards is that rules constrain and standards do not.

Looking at the results here, standards did not produce statistically significant differences on decisions or on change in satisfaction. Rules\textsuperscript{147} fared much better. Indeed, rules completely constrained 20 percent more subjects than standards did (6.5% under the standard and 26.8% under the rule). The following tables (Table 8 (Decision) and Table 9 (Satisfaction) detail these results:

Table 8: Percentage Constrained by Subgroup

<table>
<thead>
<tr>
<th></th>
<th>Time Unlimited</th>
<th>Time Limited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>N= 22</td>
<td>N= 36</td>
</tr>
<tr>
<td>% Completely Constrained= 0</td>
<td>% Completely Constrained= 11</td>
<td></td>
</tr>
<tr>
<td>Rule</td>
<td>N= 28</td>
<td>N= 28</td>
</tr>
<tr>
<td>% Completely Constrained= 25</td>
<td>% Completely Constrained= 32</td>
<td></td>
</tr>
</tbody>
</table>

Table 9: Changes in Satisfaction by Subgroup

<table>
<thead>
<tr>
<th></th>
<th>Time Unlimited</th>
<th>Time Limited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>N= 22</td>
<td>N= 36</td>
</tr>
<tr>
<td>Delta Satisfaction= .1364</td>
<td>Delta Satisfaction= -.2222</td>
<td></td>
</tr>
<tr>
<td>Std. Dev.= 2.03</td>
<td>Std. Dev= 1.71</td>
<td></td>
</tr>
<tr>
<td>Not Completely Constrained</td>
<td>Completely Constrained</td>
<td></td>
</tr>
<tr>
<td>N= 22</td>
<td>N= 0</td>
<td></td>
</tr>
<tr>
<td>Delta Satisfaction= .14</td>
<td>Delta Satisfaction= -.19</td>
<td></td>
</tr>
<tr>
<td>Std. Dev.= 2.03</td>
<td>Std. Dev.= 1.38</td>
<td></td>
</tr>
<tr>
<td>Completely Constrained</td>
<td>Not Completely Constrained</td>
<td></td>
</tr>
<tr>
<td>N= 4</td>
<td>N= 32</td>
<td></td>
</tr>
<tr>
<td>Delta Satisfaction= -.50</td>
<td>Delta Satisfaction= .19</td>
<td></td>
</tr>
<tr>
<td>Std. Dev.= 3.79</td>
<td>Std. Dev.= 1.38</td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{147} Hereinafter, the discussion of rules considers only constraining rules; as no testing occurred with respect to the rule assistance hypotheses.
A visualization of these results will make the differences more apparent.

Likewise, the overall change in conviction was considerably greater under rules as it made almost no difference to standards but brought about a half point of change to those subject to rules (-.07 under the standard and -.48 under the rule).
Generally speaking, then, subjects who thought that granting asylum was the correct outcome despite the immigrant’s delayed filing continued to think so even after learning that the law limited asylum to those that filed within a “reasonable” amount of time. These findings support the notion that standards are, at best, a weak constraint on judges. It would, of course, be premature to conclude that adjudication under standards reduces to nothing more than an all-things-considered determination, as the views of Joseph Raz and other exclusive legal positivists would suggest.\textsuperscript{148} Some subjects, although a statistically insignificant number, changed their positions under the standard.\textsuperscript{149}

\textsuperscript{148} See discussion \textit{infra} Section II.E.1.

\textsuperscript{149} It might be tempting to write off these outlying judges on the suspicion they independently changed their ideological position on immigration in the interim between phases or that they were simply confused. There is reason to doubt both of these explanations, however, and to believe instead that the standard, itself, was the source of the change. First, the judges did not have low conviction scores in either
Whereas standards appear ineffectual, rules are certainly doing something: they do a good job producing complete constraint. Yet, they do not correlate with statistically significant differences on satisfaction without additionally considering whether the subjects were constrained or whether they were subjected to resource limitation.

B. ADVANCED FINDINGS: DECISIONS

Recall that I adopted the experimental intervention of time limitation to isolate the “work” that subjects engage in to get around a constraining rule. Since work requires resources, including time, restricting resources should reduce an individual subject’s ability to engage in work and, in turn, her ability to reach a convincing yet ideologically-driven outcome. The results indeed show that the combination of limiting time and imposing a rule exhibited the most powerful constraint on our subjects. When we view the results together, showing both of our interventions (law and time) in action, it is apparent that our strongest combination—rule and time limitation—was the one that significantly constrained subjects compared to the weakest group—standard and time unlimited. Thirty-two percent of the subjects under the strongest combination changed positions while none of the subjects under the weakest combination did:

the baseline phase or the law phase; they felt almost as strongly about the righteousness of granting asylum as even those that stuck to their guns under the rule. Second, they were notably uniform; each of them maintained the exact same satisfaction throughout. This consistency suggests a lack of confusion.

For some reason, these outlying judges appear to have interpreted the legal standard as a strong constraint on their ability to reach the ideologically favorable result. While further study of this behavior is necessary, it could very well be that there are judges that seek to be constrained by legal norms that most of us would consider weakly constraining or not constraining at all. Such people were not numerous enough to change the overall picture for standards, however.
It is notable that the other combinations trend as anticipated; the rule/unlimited condition produced about half of the completely constrained subjects as did the rule/limited condition, followed by the standard limited condition at an even lower amount. But it is most important that the significant relation is the one between the strongest and weakest combinations (Rule/Limited vs. Standard/Unlimited). This supports the notion that resource limitation generally, and time limitation specifically, enhances the differences between the constraining power of rules and standards.

The finding that time limitation acts as a constraint enhancer in this context is important for several reasons. First, it lends empirical support to the account of constraint in which a considerable number of judges engage in work to get around the straightforward directives of law but require resources to do so successfully. This relates to a second point: it provides evidence that partial constraint—a phenomenon that has been ignored by previous studies—can be

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150 See discussion infra at Section II.A.
turned into complete constraint by controlling resources. Thirdly, as mentioned, it parallels the findings of studies that used real court data to show resource restriction increases deference and independence, thus providing external validity to the design and implementation of this simulation. Lastly, it shows that the benefits of resource restriction depend on the specificity of the laws that the subjects interpret. We can speculate that the higher the proportion of standard-like laws before the judges in a court, the lower the impact of resource restriction will be on legal constraint.

C. ADVANCED FINDINGS: LEGITIMATION AND DELEGITIMATION EFFECTS

The findings regarding outcome are only part of the story. Resource limitation appears to have had a very strong bearing on the degree to which subjects felt satisfied that their outcomes were righteous.

The picture of legitimation and delegitimation emerges once we distinguish between those subjects that successfully worked around the rule and those that did not. This makes sense, as those that chose not to follow the law were not asked directly whether the straightforward legal outcome was more or less righteous. For those that followed the law, as predicted, a constraining rule correlated with a significant overall drop in satisfaction.\textsuperscript{151} Moreover, a subject’s decision to submit to the rule or not ought also impacted whether she experiences a drop in her satisfaction. Let us now consider that relation.

\textsuperscript{151} Though we have heretofore been considering legal constraint, this effect is even more pronounced if we include legally assisted subjects in the analysis—the subjects that favored a denial of asylum in the baseline phase and therefore would favor a rule like the one provided. All ten legally-assisted subjects continued to deny asylum when given the rule. Thus, simply knowing how the judges ruled in the baseline phase would allow correct prediction of the outcome under the legal rule about 79% of the time. Furthermore, whereas those subject to constraining legal rules experienced an overall drop in satisfaction, those subject to legally assisting rules saw a considerable increase in their conviction (+.9). Unfortunately, a lack of ideological diversity in the subject pool made it difficult to find statistically significant findings with respect to legal assistance; there just weren’t that many that wanted to deny asylum in the baseline phase. While the numbers are too small to be reliable, the trends are nevertheless consistent with the hypotheses.
Why would the presence or absence of a strong time limit impact the subjects’ satisfaction under the rule? The simplest explanation could be that it takes time to be convinced of the wisdom of the law’s position when that position is at odds with the subject’s baseline position. Without available time, the subjects that are completely constrained make their legal decision before they can adequately evaluate the merit of the law, and the prematurity of their decision to cave into the law’s directive embitters them.

It is further possible that the subjects view the management of their time to be something like a legal procedural rule. Understood in that way, the fairness of the time limit could influence the subjects’ sense of whether the legal system is procedurally just and, in turn, whether applying the law straightforwardly is satisfying. This explanation requires a bit of unpacking.

Numerous studies, many of which were co-authored by Tom Tyler, have shown that perceptions of procedural justice influence peoples’ sense that the authority operating within those procedures is
legitimate. Their sense of legitimacy in turn influences their willingness to obey the authority that has promulgated or maintained those procedures. For example, one such study found that the fairness of court procedures was the primary influence on peoples’ willingness to accept court decisions. The lesson of these studies is that a subject’s opinion of the procedural dimensions of law can influence how she responds to the content of the law.

Here, it could be that rule constrained subjects doubt the righteousness of the strong time limit on their decisionmaking, and this jaundices their view of the righteousness of the law that they must interpret. In other words, these subjects could be critical of the procedure under which they must operate, and this makes them more likely to doubt the legitimacy of content of the law that they have applied. On the other hand, those that are accorded unlimited time to complete their adjudication of the issues might consider that provision to be a supremely just procedural rule, so much so that they experience an increase in their satisfaction. The size of this legitimation effect is quite considerable, as the subjects feel that their decision under law was more righteous than even their own, conflicting decision without it. Perhaps because it must clear the hurdle of baseline preference, the effect under the time unlimited condition registered as half as powerful; the drop in satisfaction under the time limit was two times greater than the increase under the time unlimited condition.

It might be wondered, however, why the time limit did not exhibit the same effect under standards. While Tyler and others did not consider the differential constraining power of rules and


153 See id.

standards, it is easy to explain how only rules would have the power to affect senses of legal legitimacy with respect to a particular case of legal application. Here, the standard was a weak constraint on the subjects. And even if the subjects were not pleased that they were held to a strict time limit when applying the standard, it is possible that the standard simply did not have enough constraining power to force the subjects into decisions that they did not otherwise prefer. Thus, on this account, the procedural injustice would not have had an influence on the subjects’ satisfaction and, as a result, had diminished salience for those subjects exposed to it.

Moreover, this reasoning would further explain why those that were subject to the time limit but did not surrender to the rule saw no drop in satisfaction. Upon seeing that they were subject to the limit, the same resentment might have occurred, but the subjects chose not to follow the dictate of the law and therefore did not need to question the righteousness of the outcome.

Skeptics might argue that the best explanation is much more banal—namely, that subjects had lower satisfaction under the time limit because it forced them to rush and they were therefore less confident that they reached the correct result. There are three reasons to doubt this explanation, however: (1) we do not see the drop in satisfaction with those subjects subject to the same time limit under a standard; (2) we do not see the same drop in satisfaction with those subjects that did not surrender to the rule and were subject to the same time limit; and (3) subjects were not asked to indicate on the Likert scale their confidence that they reached the right result but rather whether the result was right, all-things-considered.

Now that we have a better sense of how the type of legal norm-content, judicial ideology, and the limitation of resources

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156 Under this account, we would expect to see a similar, corresponding increase in satisfaction among subjects who were legally assisted by the law. They too followed the law and were presumably impressed with its wisdom. We do—their scores went up by nearly an entire point, and they were the only other subjects in the experiment that exhibited an increase. The number of conservatively-minded subjects were so low, however, that the increase did not reach significance.
interact, we are almost ready to turn to the question of how these results might inform policy and avenues for future research.

V. POLICY IMPLICATIONS: MAXIMIZING DESIRED CASE OUTCOMES AND ITS RISKS

The findings of this study tell us something about how to maximize the likelihood that judges will interpret legal norms in a way that is consistent with the dictates of a legal norm. Thus, these results ought to be of particular interest to those who legislate for and control the workloads of judges, with the proviso, of course, that further study is necessary.

A. BASIC LEGISLATIVE GUIDELINES

The results of this study concern two legislative tools—the choice the specificity of law and the choice to modify judicial resources. It also considered two important consequences—case outcomes and the strength of judges’ convictions that they have reached the right outcome. At both the federal and state level, the legislative, executive, and judicial branches wield these tools: they can promulgate legal norms, controlling initially whether they are in the form of rules or standards, and they each exercise some control over the amount and dissemination of resources to judges. Legislatures and executive branches often have control over court budget and jurisdiction, which can impact the size of any individual judge’s docket load. Judicial branches exercise similar controls, although to a lesser extent. They can promulgate rules and standards through case law, and they can limit or expand docket loads by doing such things as implementing more or less restrictive appellate review policies, issuing more or less dismissals, or issuing more or less unpublished decisions, and shifting workloads among individual judges. Furthermore, both groups care about case outcomes.\textsuperscript{157} Even though there is overlap in the goals of the three major players, there are important conflicts in this particular context. Those parties that

\textsuperscript{157} While it is less clear that both legislators and judges care about judges’ perceptions of righteousness, they certainly care about them insofar as they impact case outcomes.
seek to control the courts from the outside would likely seek maximum control over court decisions at minimum costs. Courts would likely seek maximum freedom over their decisions with maximum resources. The findings here provide general guidelines for the use of these tools to maximize desired case outcomes, but we must also consider how the implementation of these guidelines will reflect a give and take between these competing goals.

The results here support the notion that rules constrain better than do standards. Because standards allow judges to reach the result they prefer and in a manner of their choosing, the implementation effectively delegates to the judge the opportunity to take over the legislative function of supplementing the norm with rule-like content. Assuming that promulgating a rule is the same price as promulgating a standard, and the legislators feel confident that they can draft a pure rule that calls for clear, desired outcomes, then legislators will likely prefer to promulgate rules under those circumstances when there is a fear that the judges might be ideologically predisposed to make decisions that are at odds with what the legislature wants.

Our results further justify a legislative concern that ideologically motivated judges will make efforts to “work” around the rules they promulgate. Thus, the legislature will likely be interested in ways to enhance the constraining power of their rules. One way to do this, our results suggest, is to limit the resources that judges have to adjudicate. This strategy is doubly tantalizing because the legislature might have an independent interest in cutting the budget as much as possible. In short, they might be able to achieve more with less. Let’s call this the “aggressive approach”

The aggressive approach is perilous, however. In this study, judges that complied with the rule under a time limit suffered a

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158 If we assume, however, as some economists do, that a rule is more expensive to promulgate than a standard—as the cost of fleshing out the norm falls on the judiciary—then a rule should only be employed when there is a payoff to outweigh the cost of promulgation. See Louis Kaplow, Rule Versus Standards, 42 Duke L.J. 557, 621-622 (“If behavior subject to the law is infrequent, however, standards are likely to be preferable. . . . Determining the appropriate content of the law for all such contingencies would be expensive, and most of the expense would be wasted. It would be preferable to wait until particular circumstances arise.”).
precipitous drop in the their satisfaction that they reached a righteous result. Such a drop could lead to job dissatisfaction, unhappiness, sloppiness, or worse.

At the outset, it bears mentioning that there are plenty of reasons why limiting judicial resources is a risky policy. It could threaten judges’ ability to meet the interests of justice by making them more likely to commit reasoning or factfinding errors, for example.\textsuperscript{159} If too aggressive, it might actually increase erroneous interpretation of law. Common sense (not to mention law school final exams) tells us that rushing through legal problems increases the likelihood of mistake regardless of ideology or preference.

Another troubling possibility is that judges, as repeat players, will eventually grow exhausted or resentful from feeling unsatisfied and, as a result, will allow their personal ideology to dictate their decisions in spite of contrary legal directives. It could very well be the case that the rule and resource limit combination could bring about a risk of what could be described as a “catapult effect.” Those seeking to control judges can use a combination of rules and resource restriction to tighten their leash on the courts. We can forecast, however, that increasing the tension on judges in this manner could snap the leash. The delegitimation effect could reach a point where the judges have grown so embittered that they care even less about fidelity to law than they did before they were stretched, and as a result the judges are more likely to reach undesired outcomes than ever before. They are catapulted into activism.

A catapult effect is just one countervailing force; there are others. As mentioned, courts have defenses to resource restriction in their arsenal. For example effected judges might be able to soften the blow of the resource restriction measure through avoidance tactics. They might shift cases in the docket to allow them to devote the most time to ideologically important cases, might delegate a higher proportion of unimportant cases to staff attorneys, might kick more unimportant cases on procedural grounds, might limit oral argument, etc.\textsuperscript{160} This is not to suggest that any limitation measure would be ineffectual. A time limitation or some similar measure would


\textsuperscript{160} See Huang, \textit{supra} note 15
increase the cost of engaging in “work” such that an overall decline in judicial activism might be seen. But evasion tactics by courts could mitigate the effect, and it might take more than one measure to effectively and desirably limit the resources available to judges that would be inclined to do work.

The good news for those that promulgate laws is that the combination of rules and unlimited time can have the salutary effect of producing a legitimation effect. There is evidence that it made completely constrained legal interpreters feel more satisfied in the results of their cases than had they been able to decide them entirely without having the law as a guide! Assuming again that the law interpreters are repeat players, like judges, then this combination might have the effect of changing judicial ideologies in the direction of the legal directives to which they are subject. Just as the limit appeared to sour time-limited judges, the lack of a time limit on judges under the same legal rule appeared to make them embrace the law. Over time, this could impact the judge’s underlying ideology in favor of the content of the rule. It is unclear what amount of resources would be necessary in the real world to produce a comparable legitimation effect, but further study might provide some indication.

In a nutshell, then, there is support for the notion that implementing rules and resource limitation has a stronger initial payoff, but it comes with the risk that the payoff will disappear (or worse) over time. Implementing rules in an environment with ample resources, however, has a weaker initial payoff, but the payoff might grow over time due to increased legitimation, as it could create a sub-population of obedient, satisfied judges.

B. LIMITATIONS AND AVENUES FOR FURTHER STUDY

Like those that have studied the relationship between resources and judging before me, I believe that further study on this issue is necessary before we draw any firm conclusions. There are certain aspects of this study that were narrowed to maximize isolation of certain factors, and this narrowing forced the omission of phenomena that might occur in a real-life legal system. In systems in which judicial decisions are given precedential effect, pure rules and standards can be difficult to find. Not only do many norms fall
somewhere between the rule and standard poles, even polar rules and standards converge towards each other over time.

It is important to remember, however, that there are examples of pure rules and standards in law, even if they mutate over time. And certainly the mutability of rules and standards has not prevented the rule/standard distinction from being widely heralded as useful and meaningful in a variety of contexts. It would be strange indeed for a study of rules and standards to employ weakened versions of each; choosing just how impure they are would risk arbitrariness.

Moreover, this concern can be alleviated with a reminder of one of the primary purposes of this study. This is the first study to link the impact of resource restriction to a clear legal directive. As a result, I began with the clearest example of the rule/standard distinction in a considerably streamlined case. This allowed us to see not only that there is a relationship between constraint and resources, but also that the specificity of law matters. We risk overly scrupulous adherence to external validity when we ignore that the laboratory may be the best or only way to capture concept function.

\[161\] See, e.g., Richard H. Fallon, Jr., “The Rule of Law” as a Concept in Constitutional Discourse, 97 Colum. L. Rev. 1, 49 (1997) (“First, as is well recognized, "rules" and "standards" do not so much define a dichotomy as reflect ranges along a continuum.”).

\[162\] As Fred Schauer has noted:

When authorised to act in accordance with rules, rule-subjects will tend to convert rules into standards by employing a battery of rule-avoiding devices that serve to soften the hard edges of rules. . . . Conversely, the adaptive behaviour of rule-subjects when given a standard goes in the opposite direction. These rule-subjects, when given few rules in the rules--standards sense, will make them themselves, and apply them to their own allegedly discretionary behaviour, thus limiting significantly the case-sensitive discretion that it was the intention of the rule-maker to grant.


\[163\] Professor Douglas G. Mook advanced a similar justification even for experiments that utterly fail to satisfy external validity concerns. See, e.g., In Defense of External Invalidity, 38 Am. Psychol. 379, 382 (1983) (“[External validity is of no concern in at least four cases.] First, we may be asking whether something can happen, rather than whether it typically does happen. Second, our prediction may . . . specify something that ought to happen in the lab. . . . Third, we may demonstrate the power of a phenomenon by showing that it happens even under unnatural conditions that ought to preclude it. Finally, we may use the lab to
especially so when our intuitions about these concepts are already used to justify particular governmental decisions in the absence of rigorous empirical support, as is the case with the rules-standards distinction.\(^{164}\) I leave it to future studies to experiment further with the variability of specificity. Nevertheless, the results here are not to be haphazardly applied to those situations in which judges apply “standardized” rules or “rulified” standards, as are often found in systems of precedent.\(^{165}\)

Secondly, it is important to note that our judges were not professional judges—they were law students. They were not repeat players—they were asked to consider the facts on two separate occasions. And the record they considered was quite streamlined. These dimensions helped us isolate their preferences, but they increase the risk of spawning overstatement when we apply these results to judges that have extensive experience and expertise and make several factually and legally similar determinations within a system of precedent. In this way, then, this simulation is not particularly representative of the very best of our courts, such as the flagship appellate courts at the state and federal levels. It is much more representative of our worst courts. Indeed, that the simulation here bore the closest resemblance to our Immigration Courts or our Boards of Immigration Appeals is no coincidence. “Quite simply, IJs in many instances do not understand the law. Extreme examples of such incompetence are not hard to find. . . . Credibility determinations are repeatedly found baseless. . . . The BIA, the administrative appellate unit of our immigration courts, is also roundly criticized for its incompetence.”\(^{166}\) Moreover, these courts typically have short or incomplete records and inadequate argumentation.\(^{167}\) Most notably, the amount of time that immigration judges spend on each case is not much longer than the time spend by our time unlimited subjects, and the trend is downward. The


\(^{165}\) See Schauer, supra note Error! Bookmark not defined..

\(^{166}\) Linda Kelly Hill, The Poetic Justice of Immigration, 42 IND. L. REV. 1, 5-6 (2009).

\(^{167}\) See id.
Transactional Records Access Clearinghouse at Syracuse University recently released a report showing that the maximum amount of time that immigration judges could possibly spend on each of their cases if they are ever to complete the cases in their backlog fell from 102 minutes to approximately 72 minutes in the ten-year period between 1999 and 2009.168

And although my study leaves open the question of what would happen with repeated cases of this sort over a longer period of time, many judges face decisions that bear the features of one-shot decisionmaking at least periodically.169

Finally, there are institutional dimensions of judging that do not figure prominently in this study. In that vein, further research of the phenomena seen here ought to examine whether they continue to appear in a variety of institutional settings, manipulating variables such as the known ideological composition of panel members, the collegiality of colleagues, or the decisions of lower courts might affect them. Further experiments can change these variables to examine how contextual factors, such as resources, might affect more complex strategic, ideologically-driven behaviors.

Another opportunity for further study is to analyze the fragility of rules and standards. While this study intentionally used very clear examples of rules and standards, future studies could analyze how the increasing rulification of standards or the standardization of rules affects outcomes and satisfaction.

The results here showed that a particular resource limitation, time, impacted the constraining power of rules, but it came at the cost of satisfaction. It remains to be seen whether other types of resource limitation will produce these same effects. Of particular philosophical interest will be to further investigate the relationship between attitudes towards the content of primary rules of a legal


169 See Cass R. Sunstein, et al., Predictably Incoherent Judgments, 54 STAN. L. REV. 1153, 1202-1203 (2002) (“The most important implication of this phenomenon is that judgments in isolation will predictably produce incoherence from the standpoint of the very people asked to make those judgments. . . . The pattern of within-category coherence, and global incoherence, is a nearly inevitable product of adjudication that is defined by one-shot judgments; the same pattern is embedded in many domains of law and policy.”).
 system and resource limitation, which can under certain circumstances be understood to be a secondary rule, in particular a rule of adjudication.\textsuperscript{170} This research could provide support for the notion that we actually conceive of the legal system as a union of primary and secondary rules, as H.L.A. Hart famously claimed.\textsuperscript{171}

VI. CONCLUSION

This study provides empirical evidence of a complex interaction between the amount of resources available to judges and the likelihood that those judges will follow the straightforward dictates of the law. The interaction has three dimensions. First, decreasing the amount of available resources appears to have increased the likelihood that subjects in this experiment were completely constrained by the law to which they were subject. Second, this reduction of resources—in particular, time—also appears to have decreased the degree to which subjects believed that their decisions were righteous. This emotional response to resource reduction might be a red flag that limiting judicial resources would lead to job dissatisfaction and legal delegitimation. Lastly, for any of these interactions to occur, it appears that the law must be sufficiently rule-like. Vague laws, such as standards, do not appear to produce these results.

It bears mentioning that trends in the data suggest that providing judges with ample resources can produce large legitimation effects. Although there were not enough subjects to reach statistical significance in this regard, those subjects that were completely constrained under unlimited time felt that their legally-guided decisions were even more righteous than the decisions they would make on their own in the absence of law.

In this era of austerity, those that control court budgets and personnel will likely be heartened by the finding that providing fewer resources to judges might, under certain circumstances, improve judicial performance. They would be wise, however, to take into account the potential long-term costs of delegitimation and judge dissatisfaction before making cuts or leaving seats vacant.


\textsuperscript{171} See id.
Looking forward, exploring the multifaceted relationship between the law’s specificity, the judge’s satisfaction, and available judicial resources could be the key to understanding how to maximize the constraining power of law. These links might have gone undiscovered under the prevailing empirical methodology for the study of judicial decisionmaking. Fortunately, behavioral experimentation allowed them to come to the fore.

APPENDIX (EXPERIMENT FRAMEWORK)

INSTRUCTIONS

[Bracketed material will not be visible to subjects but is included here to show different experimental conditions. Minor revisions have been made to the actual experiment online, but this version gives a good sense of the mechanic.]

[This is the fact pattern that was given to all test subjects]

Assume that you live in a country very much like this one and you are asked to make a determination based on the following facts. You are an immigration judge sitting on a court known as the Superior Immigration Court. You are the first judge that has considered this case. Because you are a judge, you ARE expected to know the relevant laws of your system, which are provided. The facts are as follows:

A citizen of a foreign nation ("the alien") has legally entered our country on August 1, 2007 with a valid 1-year work visa issued that same day. He fled his home country after being persecuted for his activism on behalf of the poor and his anti-establishment political

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172 It bears noting that this design received IRB approval.
opinion. He had been imprisoned for his political protests briefly in 2006, and he and his family had been threatened by the local police force. Worried for his personal safety, he obtained the visa and arrived here. He could not speak English and was largely ignorant of our laws regarding asylum, which is the mechanism our country uses to allow aliens to reside here who have been or fear being persecuted on account of their race, religion, nationality, membership in a social group, or political opinion. He began working in a restaurant shortly after his arrival, but his employer never asked him to show documentation indicating that he was a legal worker. He was paid under-the-table. On July 31, 2008, his visa expired. He continued to work at the restaurant, however, receiving pay as usual for the next 13 months. At that point, a new employee began work at the same restaurant. The new employee soon learned of the alien’s experiences in his home country and of his expired one-year visa. The new employee explained to the alien that staying here after the expiration of the visa was illegal but that he might qualify for asylum on the ground of past persecution for political opinion. She suggested that the alien file a petition for asylum. The alien retained a lawyer and filed a petition about 4 weeks later on September 25, 2009. If granted asylum, the alien will have the legal right to live here indefinitely. If denied asylum, he will be removed from our country and transported back to the country of his citizenship.

[In the non-law condition, the following appeared. Subjects were given the non-law condition in random order.]

Given these facts and assuming that they are true, please answer the following questions:

1. The alien’s asylum application should be (one of the following):
   ___ Granted ___ Denied

2. On the scale below, indicate the strength of your conviction that your answer for question 1 is the right thing to do, all things considered (please circle one):
In this section you will be asked to write a justification for your decision. There is no time limit, so you may take as much time as you need. Nevertheless, your response time will be recorded, so we ask that you indicate in your response whether you have experienced technical difficulties that affected the amount of time that it took to complete the section. You may work for as long as it takes for you to write a convincing justification. Please do not feel the need to work beyond that point. When this disappears, the time will begin and a blank document will appear with the fact pattern at the top and within which you will write your justification.

There are no word or length limits of any kind. Your justification will be reviewed by two other individuals that have been selected by the designers of this experiment. These individuals will not be ____ Law Students. If you are able to convince at least one of these individuals that you have reached the right result, you will be entered into a lottery, the winner of which will receive $500. You will be contacted on _____ if you are the winner. In the event that you succeed in getting one or both of them to join you, your determination will have real-world consequences: If you choose to justify a grant of asylum, $2 will be donated to the non-profit organization Grantmakers Concerned with Immigrants and Refugees, which, among other things “seeks to influence the philanthropic field to advance the contributions and address the needs of the world’s growing and increasingly diverse immigrant and refugee populations.” If you choose to justify a denial of asylum, $2 will be given to the non-profit organization the Federation for American Immigration Reform, which seeks, among other things, “to improve border security, to stop
illegal immigration, and to promote immigration levels consistent with the national interest.”

__________________________

[In the law condition, the subjects randomly receive one of the following two options.]

On June 1, 2007, two months before the citizen arrived and was granted a visa, the country enacted its first set of immigration laws. Among them was the following:

Sec. 1:02:
[Version A.1: Aliens seeking asylum must file their petitions no later than 6 months after the day upon which their work visas expire.]
[Version A.2: Aliens seeking asylum must file their petitions within a reasonable time after the expiration of their work visas.]

Because the law is so new, there have been no cases brought by the government pursuant to it. It is acceptable for courts to base their decisions upon the laws, policies, purposes, or principles of other jurisdictions, although that is ordinarily viewed as secondary authority and, therefore, is not strictly binding.

Given these facts and assuming that they are true, please answer the following questions:

1. The alien’s asylum application should be (one of the following):
   ___Granted   ___Denied

2. On the scale below, indicate the strength of your conviction that your answer for question 1 is the right thing to do, all things considered:

   0------1------2------3------4------5------6------7------8------9------10
   (weakest)   (strongest)
[Button click here will bring up the following, which will be timed, giving them about two minutes to read it.]

In this section you will be asked to write a legal opinion supporting your decision.

[Version B.1: There is no time limit, so you may take as much time as you need. Nevertheless, your response time will be recorded, so we ask that you indicate in your response whether you have experienced technical difficulties that affected the amount of time that it took to complete the section. You may work for as long as it takes for you to write a convincing opinion. Please do not feel the need to work beyond that point. When this disappears, the time will begin, and a blank document will appear with the fact pattern at the top and within which you will write your opinion.]

[Version B.2: There is a strict time limit of 2 minutes for you to write this opinion. Please indicate in your response whether you experience technical difficulties during that time. When this disappears, the time will begin, and a black document will appear with the fact pattern at the top and within which you will write your opinion.]

There are no word or length limits of any kind. Your legal opinion will be reviewed by the two other judges on your panel that have been selected by the designers of this experiment. These judges will not be ____ Law Students, and they are not the same people that judged you last time. If you are able to convince at least one of the judges that you have reached the right result, you will be entered into a lottery, the winner of which will receive $500 (if you have already been selected for the lottery in round one, then success here will double your chances of winning). You will be contacted on _____ if you are the winner. In the event that you succeed in getting one or both of them to join you, your determination will have real-world consequences: If you choose to justify a grant of asylum, $2 will be donated to the non-profit organization Grantmakers
Concerned with Immigrants and Refugees, which, among other things “seeks to influence the philanthropic field to advance the contributions and address the needs of the world's growing and increasingly diverse immigrant and refugee populations.” If you choose to justify a denial of asylum, $2 will be given to the non-profit organization the Federation for American Immigration Reform, which seeks, among other things, “to improve border security, to stop illegal immigration, and to promote immigration levels consistent with the national interest.” This will be done regardless of whether money was given to one of these organizations in the first round.