Distribution Agreement

In presenting this thesis or dissertation as a partial fulfillment of the requirements for an advanced degree from Emory University, I hereby grant to Emory University and its agents the non-exclusive license to archive, make accessible, and display my thesis or dissertation in whole or in part in all forms of media, now or hereafter known, including display on the world wide web. I understand that I may select some access restrictions as part of the online submission of this thesis or dissertation. I retain all ownership rights to the copyright of the thesis or dissertation. I also retain the right to use in future works (such as articles or books) all or part of this thesis or dissertation.

Signature:

9/27/2023

_____   _____
William Giles   Date

Collegiality and Legitimacy: Judicial Decision-Making
During the Circuit Riding Century

By

William Giles
Master of Arts

Political Science

_____
Tom S. Clark
Advisor

_____
John W. Patty
Advisor

Accepted:

_____
Kimberly Jacob Arriola, Ph.D, MPH
Dean of the James T. Laney School of Graduate Studies

_____
Date

Collegiality and Legitimacy: Judicial Decision-Making
During the Circuit Riding Century

By

William Giles
A.B., Duke University,
2015

Advisor: Tom S. Clark, Ph.D.

Advisor: John W. Patty, Ph.D.

Abstract

Collegiality and Legitimacy: Judicial Decision-Making
During the Circuit Riding Century
By William Giles

Despite its importance, the Supreme Court's early history is rarely studied empirically. As McGuire acknowledges (2004), "[L]ongitudinal knowledge of the Supreme Court is quite limited" (128). There was an interesting quirk in the federal judicial hierarchy: the institution of circuit riding (1790-1891), where Supreme Court justices heard appellate cases on their assigned circuit courts and then could hear the same cases again when appealed to the Supreme Court. Since there was not a clear delineation between circuit judges and Supreme Court justices and Supreme Court did not have docket control during the "Circuit Riding Century," current models of judicial hierarchy struggle explain this institutional setup (e.g. Cameron, Segal and Songer 2000). By reinterpreting the model in Carrubba and Clark (2012) to account for collegiality and legitimacy costs, this thesis is the first to formally model both judicial decision-making during the "Circuit Riding Century" and analyze the institutional impact of circuit riding on the Supreme Court. I provide an empirical design to quantitatively test the results of the model and discuss results that support the prediction made by the formal model.

Collegiality and Legitimacy: Judicial Decision-Making
During the Circuit Riding Century

By

William Giles
A.B., Duke University,
2015

Advisor: Tom S. Clark, Ph.D.

Advisor: John W. Patty, Ph.D.

A thesis submitted to the Faculty of the James T. Laney School
of Graduate Studies of Emory University in partial fulfillment of
the requirements for the degree of
Master of Arts
in
Political Science
2023

Contents

List of Figures

List of Tables

1   Introduction

The modern Supreme Court hears around 100 cases per year in Washington, D.C., with most reaching the Court on a writ of cert (i.e. cases selected with discretionary docket control). However, this was not always the case; the Supreme Court did not have discretionary control of most of its docket until 1925. In fact, during the first century (1790 to 1891) of the Court's existence, justices not only had to hear thousands of cases on their Supreme Court docket on mandatory appeal but also had to travel thousands of miles each year while "riding circuit" (Frankfurter and Landis 1928; Glick 2002). Each justice was assigned to a federal circuit and required, along with a district judge from that circuit (1791-1869) or with separately-commissioned circuit judges (1869-1891), to sit in panel as circuit judges. If a circuit case heard by a sitting Supreme Court justice was appealed to the Supreme Court, the justice could hear the case again and participate in deciding the outcome. This resulted in what Frank (1964) deemed to be an "odd system...insofar as it permitted appeals from the circuit court to the Supreme Court, it permitted appeals from, among others, [Circuit Judge Philip Pendleton] Barbour to [Supreme Court Justice] Barbour" (143).

Scholars have long been interested in how the hierarchical structure of judicial systems affects judicial decision-making. In the typical application, principals (the Supreme Court) delegate discretion to agents (lower court judges) but are concerned about the agents "shirking," or not carrying out the principals' wishes and instead substituting their own preferences. In order to prevent shirking and induce compliance with its doctrine, the Supreme Court can reverse (or threaten to reverse) lower court decisions (Beim, Hirsch and Kastellec 2014; Cameron 1993; Cameron, Segal and Songer 2000; Kornhauser 1994; McNollgast 1995). Thus, reversal in the principal-agent schema is the result of the Supreme Court punishing lower court deviation.

These models do not adequately reflect the institutional setup of the Supreme Court

during the "Circuit Riding Century" because they are predicated on the Court's modern institutional structure. First, these models assume that the Supreme Court has discretionary docket control and thus is able to select which cases it hears on appeal. Because the modern Court has to be selective in which cases to review in order to reduce shirking, it must pay auditing costs in its oversight role. However, the Court did not have control of its docket until 1925 and was required to hear cases on mandatory appeal. Additionally, these models are assume that separate judges hear the cases on each level of the hierarchy. During the Circuit Riding Century, justices could hear a case on circuit and then rehear the same case again on appeal; since the Court did not have discretionary docket control, it was required to hear its own members' circuit cases. Thus, Supreme Court justices served individually as agents on circuit but then were tasked with being principals when the whole Court reviewed their own circuit (agent) decisions.

Despite circuit riding occurring concurrently with the justices deciding foundational cases of American constitutional law, such as *Marbury v. Madison* (1803), *McCullough v. Maryland* (1819), *Gibbons v. Ogden* (1824), and *Dred Scott v. Sandford* (1857), little formal or quantitative scholarship has addressed the topic. As Newmyer (1970) notes, "there has been no comprehensive effort to understand [the circuit courts'] operation, or assess their influence on society and on the development of American law and institutions." Scholars tend to "focus on the Supreme Court alone, to the exclusion of the lower federal courts" (Lacroix 2012). Thus, "[w]hat is required for a better understanding of the emergence of an effective federal court system is an examination of the link between the circuit work of. . . justices and the growth in influence of the Supreme Court" (Lynch 2018, 10).

There is an incomplete understanding of the interplay between the decisions made by justices on circuit and then the subsequent review by the Supreme Court which also included the same justice. How did the institutional framework of circuit riding affect rulemaking in the judicial hierarchy during the Court's early period? I interpret the model of

Carrubba and Clark (2012), with modifications, to formally model the institutional role of circuit riding in judicial hierarchy during the Court's early history . A key distinction of the model presented in this thesis is that the upper court pays no cost in auditing (or selecting to review) appellate cases, a common assumption in most models of strategic auditing (Cameron, Segal and Songer 2000; Carrubba and Clark 2012; Lax 2003). Instead, the Supreme Court must pay "reversal costs" to reverse a lower court decision. These reversal costs are engendered due to the *dual nature of justices as principals reviewing their own decisions as agents*: (1) concerns about the legitimacy of the Court being weakened by reversing its own members ("legitimacy costs"), and (2) concerns about the effect of collegial relationships between the justices reviewing each other's circuit decisions ("collegiality costs").

In my model interpretation, the lower court is initially able to strategically anticipate the upper court's reversal behavior and thus is able to avoid reversal. In equilibrium, the upper court never reverses the lower court's decision due to the aforementioned costs of reversal. However, by introducing incomplete information over the upper court's preferences, lower courts (i.e. circuit-riding justices) who play risky strategies m are reversed when faced with a high cost upper court.

The results of the model lead to two important implications, one theoretical and one empirical. Based on the size of the reversal costs, circuit justices, counter-intuitively, have a higher likelihood of being reversed by the Supreme Court (as they have a higher probability of playing a risky strategy and facing a high-cost upper court) compared to other judges. Empirically, the model predicts that circuit justices are more likely to have their cases reversed on appeal than cases from courts without a circuit riding justice due to the higher costs of reversal for circuit justices compared to other judges (such as state court judges and other separately-commissioned federal judges). To test this empirical prediction, I propose an empirical design that includes both running an OLS regression and a difference-in-differences (DiD) design to discern whether the affirmation rates for

cases heard by circuit riding justices were lower than cases which were not heard by justices on the circuit level. The results suggest that the model's prediction is correct.

This thesis proceeds as follows. I begin by discussing the judicial hierarchy literature and delve further into the motivating case of circuit riding. I next set up the structure of the model and my modifications of Carrubba and Clark (2012), and derive equilibrium behavior. I then discuss the model's qualitative and empirical implications for circuit riding and provide an empirical design (with results) to test the model's results, plus acknowledge possible avenues for future iteration of this project. I conclude with final remarks and suggestions for future research.

2   A Brief History of Circuit Riding

Article III of the Constitution created the judicial branch, with the Supreme Court (headed by a chief justice) at its apex, but left the establishment of inferior courts and the size and composition of the Supreme Court up to Congress. In the First Congress, Congress used this power to pass the Judiciary Act of 1789.[1] The Act, written primarily by future Chief Justice Oliver Ellsworth, set the number of justices of the Supreme Court at six (one chief justice and five associate justices), while also creating 13 judicial districts in 11 states.[2] Each judicial district consisted of both a circuit court and a district court. The circuit justice, sitting with a district court judge who could not hear his own case on appeal, constituted a circuit court.

The Act provided congressional funding for district court judges for each of the districts but did not provide separate funding for circuit court judges. Instead, two of the recently-appointed Supreme Court justices were also given circuit duties in each of the three circuits: the Southern, Middle, or Eastern Circuits. Chief Justice Charles Evans

---

[1] 1 Stat. 73

[2] Districts for North Carolina and Rhode Island, who had not ratified the Constitution at the time, were added as these states entered the Union.

Hughes later reasoned, "At the onset it was expected that through their circuit work the Justices of the Supreme Court would be in close contact with the people. The Justices left their impressions upon the communities they visited, and these communities had their effect upon the Justices" (Hughes 1932, 3). Other explanations for the establishment of this "odd system" include budget savings, the importance of having Supreme Court justices adjudicate in federal cases, the spread of the tenets of federalism (as the justices would quite possibly be the only federal officers that citizens would meet), ensuring the uniformity of federal law, and unifying the judicial branch (Glick 2002). As Congress added new circuits due to westward expansion, a single justice was assigned to ride circuit within that circuit (Frankfurter and Landis 1928).

The justices spent a considerable amount of time riding circuit, traveling thousands of miles per year from courthouse to courthouse. "[C]ircuit riding [was] an intolerable hardship" (Frankfurter and Landis 1928, 22-23). Justice Thomas Todd's circuit duties forced him to be absent for five of the nineteen terms he was on the Supreme Court, and Justice William Paterson died from injuries sustained from a carriage accident en-route to hold court on circuit (Glick 2002). Justice James Iredell's brother lamented that a "Junior Judge must lead the the life of a Postboy" (capitalization in original; qtd. in Frankfurter and Landis 1928, 23)

In an attempt to alleviate the burden of riding circuit, Congress passed the Judiciary Act of 1869, creating nine circuit judgeships (one for each circuit). The Act significantly reduced the justices' time on circuit, requiring each justice to hold court within his circuit once every two years, and allocated separately-commissioned circuit judges in order to help alleviate the jurisprudential burden. The 1869 Act did not completely alleviate the justices of their circuit-riding duties, however, as they still had to visit each court in their circuit once every two years. This finally occurred with the passage of the Judiciary Act of 1891 (Circuit Court of Appeals Act),[3] which created the Circuit Courts of Appeals. The Act shifted the appellate caseload burden from the Supreme Court and old circuit

---

[3] 26 Stat. 826

courts to the new Courts of Appeals. The old circuit courts were officially abolished by the Judicial Code of 1911. making the federal district courts the judicial system's primary trial courts. Thus, the Supreme Court's "Circuit-Riding Century" had ended.[4]

3   Previous Work

Most judicial systems throughout the world are similarly structured as an "inverse pyramid:" the further the case makes its way up the hierarchy, the higher number of judges hear it. The first level is tasked with fact-finding and generally consists of just one judge. The intermediary level, which consists of three judges in the United States, is the first appellate level. Finally, there is an apex appellate court which gets the final say in the matter. This apex court (the Supreme Court in the case of the United States) is often considered to "control" the lower levels of the hierarchy.

There are two dominant theoretical frameworks in the judicial hierarchy literature: the team approach and the agency approach (Kastellec 2016).[5] In both approaches, problems arise due to information asymmetries; in the team approach, the information asymmetry is litigants have more information about the case facts than the judges while in the agency approach, information asymmetry arises from the lower court observing case facts that the upper court does not observe without paying the cost of review. In the team approach, appellate courts are assumed to be concerned merely with error correction, and since the judges in the hierarchy share the same beliefs, errors (i.e. the wrong outcome) occur due to information asymmetry at the lower levels of the hierarchy (Kornhauser 1994; Cameron and Kornhauser 2006). Thus, the apex court becomes an error-correcting institution and only reverses lower court decisions when those courts erred in judgement.

---

[4]Today, while each justice is still assigned to a particular circuit by the chief justice, they do not have to ride circuit to hear appellate cases. As Justice Sandra Day O'Connor states, "In essence, the [current] duties of the Circuit Justice typically range from consideration of routine requests for relief from formal filing requirements to stays of a lower court's mandate in controversial civil cases and of capital sentences" (O'Connor 1985, 526).

[5]While my focus is on the principal-agent approach, I think it will be useful to the reader to briefly describe both.

In the agency approach, principals (Supreme Court justices) delegate discretion to agents (lower court judges) but are concerned about the agents deviating from their preferences (shirking). While principals typically have tools such as salary reduction or job termination in order to punish shirking, apex courts do not have such tools (Songer, Segal and Cameron 1994), and yet, we see widespread compliance with Supreme Court decisions by lower courts (Benesh and Reddick 2002; Gruhl 1980; Songer and Sheehan 1990; Songer, Segal and Cameron 1994). The central question in this literature is, "How do apex courts monitor lower courts without these formal tools?" In order to prevent shirking and induce compliance with its doctrine, the Supreme Court can review (and subsequently reverse) lower court decisions, which suffer a utility loss in being reversed. Review and reversal in the principal-agent schema is the result of the Supreme Court punishing lower court deviation. The first agency models of the judicial hierarchy conceptualized a policy-focused Supreme Court either as putting the lower courts in competition with each other (Cameron 1993) or setting a bound on the range of acceptable decisions and then randomly auditing a subset of lower court decisions in order to ensure compliance (McNollgast 1995).

These developments led to models of strategic auditing which, beginning with Cameron, Segal and Songer (2000), posit this as a classic moral hazard problem. In their model, an apex court with discretionary docket control can only observe the case facts (which are completely known by the lower court) by paying review costs. However, because of the high cost of review, the Supreme Court must be strategic in selecting cases to audit to check for noncompliance. In equilibrium, the court only reviews cases where noncompliance is more likely, allowing the lower court to shirk more than it would absent of this informational asymmetry. Cameron, Segal and Songer (2000) has been extended to the lower courts to understand the en banc review process (Beim, Hirsch and Kastellec 2014; Clark 2009; Giles, Walker and Zorn 2006). Carrubba and Clark (2012) combine the policy-making focus of Cameron (1993) and McNollgast (1995) with the strategic auditing model of Cameron, Segal and Songer (2000) to show that both higher courts

and lower courts are concerned not only with the rule created by a decision but also the dispositional outcome of the decision, and lower courts have significant leeway in law creation which is typically assumed to be the purview of the Supreme Court (e.g. Cameron, Segal and Songer 2000; McNollgast 1995).

These auditing models, whether focused on error correction or agency loss, assume there is a cost to review or audit lower court decisions for an apex court with a discretionary docket. This follows a strand of the literature that studies how and where upper court judges allocate resources to reviewing lower court decisions (Cameron, Segal and Songer 2000; Clark 2009; Clark and Strauss 2010; George 1999; Perry 2009). Judges are constrained in the number of cases they can review and thus must devise methods to decide which cases to ultimately review. These can take the forms of "fire alarms" (e.g. McCubbins and Schwartz 1984), "aggressive grants" and "defensive denials" (e.g. Caldeira, Wright and Zorn 1999) and the aforementioned strategic auditing (e.g. Cameron, Segal and Songer 2000).

4   Auditing Costs during the Circuit Riding Century

During the Circuit Riding Century, the Supreme Court did not have control of its docket and had to hear cases automatically on appeal (or through a writ of division which meant that the justice and district court judge split on circuit). The key innovation in my interpretation of the model is that I assume the Court has no auditing costs in reviewing lower court decisions. During this period, the Supreme Court was required to hear all cases appealed rather than just the cases it selected to hear under discretionary review. The Court did not need fire alarms, aggressive grants/defensive denials, strategic auditing, or other strategies in order to audit cases to punish lower court deviation or shirking. Rather, the only means at the Supreme Court's disposal to punish lower court deviation was the reversal of lower court opinions since it was required to hear all cases

appealed.

This does not imply that there are no costs in this framework. While there are no auditing costs, there is, though, a cost of the Supreme Court reversing one of its justices' circuit opinions in cases where one of the justices heard the case previously on the circuit level. These costs are uniquely incurred *because of circuit riding* and the possibility of a justice reviewing one's circuit (agent) opinion as a member of the principal (the Supreme Court).

In this context, these costs take the form of "reversal costs", incurred by the Supreme Court from reversing one of its justices' lower court opinions. These costs fall into two categories: legitimacy costs and collegiality costs. A contemporaneous account by Edward Rutledge (governor of South Carolina, signer of the Declaration of Independence and brother of Chief Justice Edward Rutledge) concerns faced by the justices:

> "The detaching of the judges to different circuits defeats the benefit of an un-prejudiced consultation. The delivery of a solemn opinion in court commits them; and should a judgment rendered by two [justices on circuit] be erroneous, with they meet their four brethren unbiased?...Jealousy among the members of a court is always an evil, and its malignity would double, should it creep into the Supreme Court (collegiality costs), obscure the discovery of right and weaken that respect which the public welfare seeks for their decrees (legitimacy costs). But this cannot be affirmed to be beyond the compass of events to men agitated by the constant scanning of the judicial conduct of each other...If this should not happen, there is fresh danger on the other side: lest they be restrained by delicacy and mutual tenderness (collegiality costs) from probing without scruple what had been done in the circuit courts" (qtd. in Frankfurter and Landis 1928, 17-18).

4.1   Legitimacy Costs

I define legitimacy costs as the negative externalities created by external actors (such as the other branches or the public) in response to Supreme Court decisions.

The institutional legitimacy of the Court has always been a concern amongst the justices. It has been shown that the Supreme Court does not operate in a political vacuum; rather, the Court must take into consideration the policy preferences of the other branches (Clinton 1994; Epstein and Knight 1998; Ferejohn and Shipan 1990; Murphy 1959; Spiller and Gely 1992), and courts often act to avoid institutional conflict to protect their legitimacy (Caldeira 1987; Carrubba 2009; Clark 2011; Friedman 2009; Staton and Vanberg 2008; Vanberg 2005). Especially during its early history, the Court had little to no institutional power, as Congress controlled the number of justices on the Court as well as its jurisdiction, while the president appointed the justices and was tasked with enforcing judicial decisions.

Chief Justice John Jay expressed his concern about circuit riding in a letter to Congress: "The distinction made between the Supreme Court and its Judges, and appointing the same men finally to correct in one capacity, the errors which they themselves may have committed in another, is a distinction unfriendly to impartial justice, and to that confidence in the Supreme Court, which it is so essential to the public Interest should be reposed in it" (Jay et al. 1849, 162-164). By having the justices review their own circuit opinions, he argued that circuit riding would be ill-received by the American public and bring the legitimacy of the Court into question (Crowe 2012). To O'Brien (2000), circuit riding was "not merely burdensome; it also diminished the Court's prestige, for a decision by a justice on circuit could afterward be reversed by the whole Court" (138).

The constitutionality of circuit riding was actually tested in *Stuart v. Laird* (1803). In a letter to his fellow justices, Chief Justice Marshall inveighed, "This is a subject not to be lightly resolved on. The consequences of refusing to carry the law into effect may be

very serious... The law having been once executed will detract very much in the public estimation from the merit or opinion of the sincerity of a determination, not now to act under it" (Ackerman 2005, 142). It is clear that Marshall was worried about the "survival of the institution" (Haskins 1981, 1). Despite preferring to strike down the law and thus not have to ride circuit, Marshall convinced the Court to act strategically and uphold circuit riding (Knight and Epstein 1996). In *Stuart*, "The Court acted out of a fully justified fear of the political consequences of doing otherwise, not out of an overriding compulsion to reach the correct legal result at whatever sacrifice of their own political preferences" (Alfange 1993, 163).

There are other episodes during this period that suggest legitimacy costs were particularly high during this period. The size and jurisdiction of the Supreme Court and the construction of the circuits was a political battleground with at least one instance[6] of Supreme Court seats being reduced due to political maneuvers (Crowe 2012). The first (and only) impeachment of a Supreme Court justice occurred in 1804 when Justice Samuel Chase was impeached due to his politically-charged grand jury instructions while riding circuit. As evidenced by President Andrew Jackson's reaction to the *Worcestor v. Georgia* (1831),[7] the Court suffered an acute enforcement problem. In summation, the Court was rightly concerned with threats to its legitimacy during this period, which would only be exacerbated by constantly reversing their brethren on circuit.

4.2   Collegiality Costs

I define collegiality costs as the interpersonal, interdynamic costs of making decisions on collegial courts.

This could take the form of reputational costs. As Congressman James Bayard noted,

---

[6]The Judicial Circuits Act of 1866 reduced the number of circuits (and therefore the number of Supreme Court seats) from ten to seven.

[7]"Marshall has made his decision. Now let him enforce it." Though this quote is possibly apocryphal, President Jackson ignored the Court's decision that upheld treaty obligations to the Cherokee Nation and ordered the removal of Cherokee people from their lands in Georgia.

"It is possible that a judge of the Supreme Court would not be influenced by the *esprit de corps*, that he would neither be gratified by the affirmance, nor mortified by the reversal of his opinions; but this, sir, is estimating the strength and purity of human nature upon a possibility, but not on an ordinary scale." Judges care about their reputation amongst their colleagues particularly and the legal profession in general; with lifetime (or long-term) appointments, judges have to grapple with the fact that they will have to interact with their colleagues on a regular basis for the foreseeable future and thus engender significant reputational costs for being disagreeable (Baum 2006; Epstein, Landes and Posner 2013).

This may also take the form of "panel effects." Scholars have suggested that judges on the U.S. Circuit Court of Appeals are constrained in their decision-making by colleagues and would behave differently if they were making the decision alone. Lone Democratic judges vote more like their Republican colleagues (and vice versa) on a three-judge panel than if the panel was ideologically homogeneous (Cross and Tiller 1997; Revesz 1997; Sunstein, Schkade and Ellman 2004). Male judges vote more liberally in sex discrimination cases when paneling with female judges than in an all-male panel (Boyd, Epstein and Martin 2010; Farhang and Wawro 2004). In affirmative action cases, black "counterjudges" on an otherwise all-white panel influence their white colleagues toward their rationale (Kastellec 2013).

Collegiality costs were perhaps even more accentuated during the Court's early history. Particularly during the Marshall Court, justices often lodged in the same boarding houses and ate meals together while the Court was in session, discussing Court proceedings over dinner and Madeira. Since justices were appointed due to geographical considerations (Frankfurter and Landis 1928) which led to issue-area and regional specialization (Lynch 2018), it is likely that justices exercised panel influence to sway their colleagues. This panel effect would be exacerbated in Supreme Court cases in which justices heard the case on circuit. These collegiality costs impacted both the professional and personal lives of

the justices, especially when those intermingled by lodging in the same boarding houses.

5   Models

5.1   Model 1

Setup.   This model interpretation builds on the canonical principal-agent models and follows Cameron, Segal, and Songer (2000) and Carrubba and Clark (2012). In this paper's interpretation of the model in Carrubba and Clark (2012), the lower court receives a set of cases facts and creates a rule based on those case facts. On appeal, the upper court sees the rule created and the disposition induced by the rule and must to decide whether to affirm or reverse the lower court's decision. When the upper court decides to pay the cost of reversal, the case facts are revealed, and then the upper court can decide where to situate both the rule and the disposition.

Like all adverse selection problems, there is an informational asymmetry, which in this model is the upper court's beliefs about the case facts while the lower court has perfect information about the case facts. This setup intuitively follows the institutional setup of the judicial hierarchy during this period. It is safe to assume that the lower court, consisting of circuit justices (since they were appointed due to their familiarity with local laws) and district judges, would have more complete understanding of case facts than the upper court (i.e. the Supreme Court) especially since the other justices had to be experts in *their own* geographical circuits.

My interpretation is based on the model in Carrubba and Clark (2012), a model of rule creation by the lower courts in a judicial hierarchy. The authors take space to note that most of the caseload work is born by the lower courts, which was certainly true of circuit courts in this period as well. In fact, most of the justices' judicial work was conducted on circuit. While only 38 cases came before the Supreme Court in its first decade, the

justices were estimated to have heard 10,000 cases collectively on circuit during that same period (Henderson 1971; Lynch 2018). Since appeals were relatively rare, "decisions of the circuit court were in the most cases final, binding the parties and establishing law for the circuit" (Newmyer 1970, 113–14). Lynch (2018) analyzes the circuit opinions of four justices[8] to show that the justices' work on circuit had a significant impact on the development of American jurisprudence.[9] Thus, a model of lower court rule-making is useful to interpret the judiciary's hierarchy during this period.

I make a few substantive modifications to the model. While their model is a strategic auditing model in which it is costly to audit (i.e. select a case to review) lower court decisions, the "auditing" aspect of my model is the choice whether to reverse the lower court's decision. Since the Supreme Court did not have control of its docket and had to hear all cases appealed during the Circuit Riding Century, the review aspect during this time period was actually the decision whether to reverse the lower court. There is no cost to the higher court to *choose to* audit the lower court in my model. This requires a different conception of k, the cost to audit a lower court decision. In my conception, k_i is the cost of reversing a lower court decision (indexed by case i)[10] and consists of both legitimacy and collegiality costs. Because these costs would not occur in typical agency models, k_i integrates the institutional component of circuit riding and thus transforms what was originally an agency model of the modern, post-1925 judicial hierarchy into a model of the judicial hierarchy during the Circuit Riding Century.

Players and Sequence of Play. I model the institution of circuit riding as a game

---

[8]Justices Bushrod Washington, Robert Livingston, Joseph Story, and Smith Thompson

[9]E.g., federalism and the Supremacy Clause: "Thus, less than two years after the adoption of the Constitution, and five years before the Court decided the point...the Judges of the Court on Circuit exercised the function of declaring invalid a State law which infringed upon the provisions of a treaty" (Warren 1922, 66) and judicial review: "Even more notable, however, in the history of American law was the very early exercise of another form of judicial power by the Federal Circuit Courts, when, three years from their establishment, they rendered a decision for the first time holding an Act of Congress to be in violation of the Constitution" Warren 1922, 69.

[10]The Court received cases not only from the circuits, but also state supreme courts, district courts and the DC and California Circuits (which did not have a justice assigned to it). This distinction is important for the empirical implication section discussed later.

between two players, the lower court (LC)[11] and the upper court (UC), each with ideal rules on the real number line, L and U, respectively. I assume that $U = 0$ and $L > 0$.

1. Nature draws the case facts, $x \in \mathbf{R}$, from a uniform distribution of the unidimensional fact-space, and LC observes x.

2. LC chooses a rule, $r \in \mathbf{R}$, which maps the case-space into a dichotomous disposition space and results in a dispositional outcome, $d(r, x)$, where $0 \equiv Admit$ and $1 \equiv Exclude$. The disposition is determined as follows:

$$d(r, x) = \begin{cases} 1 & \text{if } x \geq r \\ 0 & \text{if } x < r \end{cases}$$

3. UC observes r and $d(r, x)$. UC must decide whether to affirm or reverse the position of LC. If UC reverses the decision, it observes x and is able to select a new rule, q.

Payoffs. UC receives utility from the rule it selects and whether the resulting disposition results in its preferred disposition (the result of its ideal rule). Specifically, UC with ideal rule, $\gamma = 0$, receives $-r^2$ from selecting rule r and receives $\phi > 0$ if the the rule results in a disposition is consistent with its preferred outcome. Thus, it receives additive utility from the rule and case disposition. UC also must pay a cost, $k_i > 0$, when reversing LC's decision, $a(r, d)$ where $0 \equiv Affirm$ and $1 \equiv Reverse$. As mentioned previously, k_i can include both legitimacy costs ($l_t > 0$) and collegiality costs ($c_i > 0$): $k_i = k_0 + l_t + c_i$.[12] LC receives utility from the *resulting rule* and *dispositional standing at the end of the game.* LC receives $-(L - q)^2$, where q is either the rule selected by LC if UC does not

---

[11]Though I model the lower court as a unitary actor, I will note that there was a possibility of the circuit riding justice and the district court judge splitting, which would lead to an automatic appeal to the Supreme Court with a writ of division. However, I assume that the Supreme Court always sides with the justice in these instances as there would be an additional collegiality cost of siding with the district judge over the justice. A review of a collection of Chief Justice Marshall's circuit opinions provides evidence for this: the Court never sided with district judge St. George Tucker over Marshall despite Tucker being a noted constitutional scholar (Marshall 1837).

[12]The constant, k_0, can be conceptualized as the time-invariant costs incurred while making a decision: the opportunity making decisions on case outcomes and writing opinions.

reverse the decision or the rule selected by UC if UC reverses the decision ($q = 0$ in this case). LC receives 0 if the disposition at the end of the game corresponds exactly to LC's preferred disposition. All components of the utility functions are additive:

$$U_{UC}(q, d, x, a) = \begin{cases} -q^2 + \phi & \text{if } x < 0 \text{ and } d = 0 \\ -q^2 - k_i + \phi & \text{if } x > 0 \text{ and } d = 1 \\ -q^2 & \text{if } x > 0 \text{ and } d = 0 \\ -q^2 - k_i & \text{if } x < 0 \text{ and } d = 1 \end{cases}$$

$$U_{LC}(q, d, x, a) = \begin{cases} -(L - q)^2 + \phi & \text{if } x < L \text{ and } d = 0 \\ -(L - q)^2 + \phi & \text{if } x > L \text{ and } d = 1 \\ -(L - q)^2 & \text{if } x > L \text{ and } d = 0 \\ -(L - q)^2 & \text{if } x < L \text{ and } d = 1 \end{cases}$$

Strategies. The strategy for the Lower Court is a rule, $r : x \to R$. A strategy for the Upper Court is the combination of the probability of reversing LC's decision and a chosen rule after reversing, $\{\rho(r), q_{UC}\}$. The Upper Court always has a dominant strategy of selecting its ideal rule ($q_{UC} = U = 0$) after reversing the Lower Court. Thus, the Upper Court's strategy is reduced to the probability of reversing the Lower Court ($\rho(r)$). A rule divides the fact-space into dispositions so that all cases with $x \geq r$ are placed into one category (*Exclude*) and all cases with $x < r$ are placed into another (*Admit*).[13]

Beliefs. The case facts, x, introduce uncertainty into the game, with x being distributed across the fact-space according to a distribution of the pdf, $g(\cdot)$. The distribution assigns full support to **R**, $g(x) > 0 \ \forall \ x$. This leads to the Upper Court being uncertain about whether the disposition of the rule, r, announced by the Lower Court matches the one

---

[13]This dichotomy arises in search and seizure cases, where judges must decide on rules which result in dispositions to either admit or exclude evidence. While search and seizure cases were not prominent during this time period, I follow Carrubba and Clark (2012) in using this dichotomy that is common in the literature (e.g. Cameron, Segal, and Songer 2000).

that would be set by UC's ideal rule. This belief is represented by $b(r) \in [0, 1]$, which is distributed over **R**.

Equilibrium. In order to solve the model, I identify the set of pure-strategy perfect Bayesian equilibria. There is a set of equilibria in which the Upper Court and Lower Court strategies are essentially identical functions of the case facts, but the exact rule selected depends on the exact facts of the case. Equilibrium behavior discussed later holds independent of the relative location of L.

The game results in three types of outcomes which depend on the location of the case facts. The cutpoint, r_a, divides the fact-space. Let $\underline{r}$ be the rule the Upper Court does not reverse even if it does not produce UC's preferred disposition and $\bar{r}$ be the rule the Upper Court is indifferent over reversing.

$$
r^*(x) = \begin{cases} r_a & \text{if } x < r_a \\ x & \text{if } r_a < x < \sqrt{k_i} \\ \sqrt{k_i} & \text{if } x \geq \sqrt{k_i} \end{cases}
$$

When a search is not intrusive (i.e., case facts are far to the left, $x < r_a$), the Lower Court pools and sets a rule at $r^* = r_a$. For moderately intrusive searches ($r_a < x < \sqrt{k_i}$), the Lower Court separates sets the rule at the case facts ($r^* = x$). When the search is sufficiently intrusive ($x \geq \sqrt{k_i}$), the Lower Court again pools and sets the rule at $r^* = \sqrt{k_i}$, because UC would reverse a rule larger than the cost of reversal ($r^* > \sqrt{k_i}$).[14] In all cases, the disposition as described above is a direct consequence of the rule:

$$
d^*(r^*, x) = \begin{cases} \textit{Admit} & \text{if } r^* = r_a \\ \textit{Exclude} & \text{otherwise} \end{cases}
$$

Thus, in equilibrium, the Upper Court never reviews the Lower Court. This result was

---

[14]As demonstrated in the appendix, if $L < \sqrt{k_i}$, then the Lower Court sets the rule at L.

proved in Carrubba and Clark (2012).

Figure 1: Equilibria
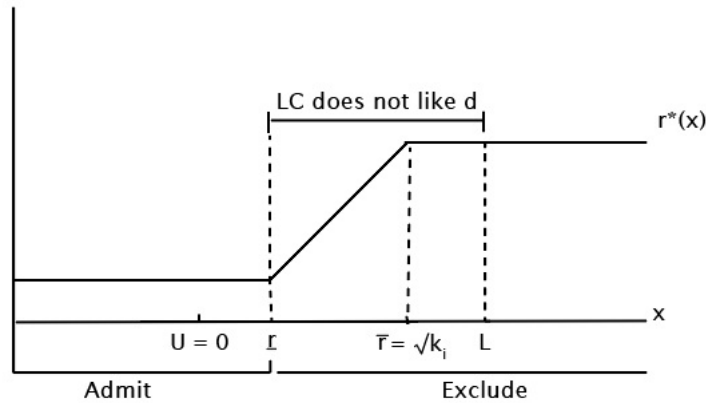
When case facts are to the left of r_a, the Lower Court pools on a rule that the Upper Court prefers not to reverse, even though the Upper Court is unsure whether it agrees with the disposition induced by the Lower Court's rule. When case facts are to the right of r_a, the Lower Court and Upper Court know that they agree on the disposition. The Lower Court uses this slack to declare a rule that is as close to its ideal point as possible, but that the Upper Court still prefers not to reverse. The threat of reversal shapes the rule the Lower Court will apply. Because the Lower Court can perfectly anticipate the Upper Court's decision, it can always choose a rule that is immune from reversal.

> **Proposition 1.** *In any equilibrium to this model, the rule selected by the Lower Court depends on the facts of the case. For case facts far enough to the left, the Lower Court pools on a rule that yields the "admit" disposition. For case facts in between the left-most rule that still yields the Upper Court's preferred disposition and furthest rule that the Upper Court will not reverse, the Lower Court chooses a unique rule for each value of the case facts, where the rule yields the "exclude" disposition. For case facts far enough to the right, the Lower Court pools on the best rule the Upper Court will not review, which yields the "exclude" disposition. In equilibrium, the Upper Court never reverses the Lower Court decision (Carrubba and Clark 2012, Model 2).*

My interpretation of the model yields some comparative statics. As either the legitimacy costs (l_t) or collegiality costs (c_i) increase, *ceterus paribus*, the Upper Court's costs of reversal (k_i) increase, resulting in $\bar{r}$ increasing in $\sqrt{k_i}$. When $\sqrt{k_i}$ increases, the Lower Court is less constrained by the Upper Court's preferences (i.e. the interval $[\sqrt{k_i - \phi}, \sqrt{k_i}]$) and can propose a rule that is more divergent from the Supreme Court's median's preferences. These comparative statics provide the foundation for the empirical implications and design in the next section.

Proposition 2. *As k_i increases, $\bar{r}$ increases.*

5.2 Model 2

Setup. While there is no uncertainty for LC about UC's type in Model 1, Model 2 will now introduce introduce this uncertainty. This model is based on Model 3 in Carrubba and Clark (2012).

Players and Sequence of Play. While the setup for this model is basically the same as the previous model, the sequence of play now begins with Nature drawing a type for UC. Formally, this is represented by $t \in \{l, h\}$ which is private information to the Upper Court. UC's type determines its cost to review LC's decision. In other words, an Upper Court with low costs of review may be a court that cares about a case below or easier to solve in terms of time or other resources. In my interpretation, an Upper Court with a low cost of review would be one in which a case was heard by a judge that was not a circuit-riding justice, i.e. other federal judges or state court judges. The Upper Court's uncertainty about the facts of the case is characterized by the same beliefs as described earlier. The Lower Court's uncertainty about the Upper Court's type, v, is characterized by a belief, $p = \Pr(t = l)$. This belief for lower court's with circuit justices, p_C, is strictly less than the belief for lower courts not having a circuit justice, p_O: $p_C < p_O$. In other words, the probability that UC's type is low ($t = l$) is higher for courts that do not have circuit justice compared to courts with a circuit justice.

Payoffs. The Lower Court's payoffs are the same as in Model 1. The Upper Court's utility function is the same except that the cost of reviewing a Lower Court decision is now also indexed by the Upper Court's type: $k_{i,l} < k_{i,h}$. As noted in the previous model, the cost to review a circuit justice's decision is *strictly* higher than the cost to review decisions originating from other judges.

Equilibrium. The critical difference between this model and the previous model is, if LC thinks that UC is the high-cost type (p is low), then the Lower Court will engage in a risk-seeking (risky) strategy and chooses a rule which would be reversed by a UC with low costs. If the Lower Court believes the Upper Court is sufficiently likely to be a high-cost type, then it will be willing to play a strategy that the high-cost type would find acceptable, but the low-cost type is willing to pay the cost to review.

In the the first two regions, LC plays a pooling strategy, but the type of pooling strategy depends on UC's type. If it pursues the risky strategy, review occurs with positive probability. UC is auditing these cases as there is a strong chance that the rule promulgated by LC does not lead to UC's preferred disposition. As in all situations of auditing under incomplete information, there will be instances in which the Upper Court reviews and learns that it would have preferred not to reverse. If the Upper Court had known it was receiving its preferred disposition ($r < 0$), then it would have been willing to accept the Lower Court's rule.

In the third region, a Lower Court playing the risk-avoiding (safe) strategy will switch from a pooling strategy to a separating strategy, giving the Upper Court its preferred disposition while choosing the the closest rule possible to its preferred rule without triggering reversal in order to reach that disposition. A Lower Court playing the risky strategy will continue to pool on a favorable rule that leads to its preferred disposition. A low-cost Upper Court will find this worthy of review due to the combination of an unfavorable rule and uncertainty about whether the disposition accords with its preferences. If the Upper Court is a low-cost type then it reviews and reverses the Lower Court.

In the fourth region, both the risky and safe strategies lead to the same equilibrium rule: the separating strategy that induces the Upper Court's preferred disposition using the best rule from the Lower Court's perspective. Therefore, reversal is not triggered.

Finally, in the fifth region, if the Lower Court pursues the risky strategy (the separating strategy through $\sqrt{k_{i,h}}$ and then pools on $\sqrt{k_{i,h}}$), then review happens with positive probability whenever the Upper Court is a low-cost type. In this instance, the Upper Court's strategy is review cases it would otherwise intend to affirm. In contrast with standard principal-agent models of the judiciary (e.g., Cameron, Segal, and Songer 2000), in this model interpretation, the Supreme Court is concerned with the case disposition and the rule invoked that produces said disposition. Thus, the Court sometimes review cases where it believes it agrees with the disposition and also is willing to pay a cost to change the rule used by the Lower Court.

LC can always avoid being reversed if it plays a risk-averse (or "reverse-averse") strategy. Although it may sometimes concede more than it needs to in order to avoid review (it will choose a rule acceptable to the low-cost type when it faces a high-cost type), this strategy will never be reviewed by either type. When it plays the risk-seeking strategy, however, it runs the chance that it faces a low cost type and therefore will be reviewed when case facts are far to the left or right (when the two strategies do not prescribe the same equilibrium rule).

Proposition 3. *The Lower Court must use either a safe and risky strategy. The only difference between the safe and risky strategies is that the risky strategy prescribes a rule that is (weakly) closer to the Lower Court's ideal rule than would be promulgated in the safe strategy. The Lower Court chooses the risky strategy if it believes, with sufficiently high probability, that the Upper Court is a high-cost type. The Upper Court reviews the Lower Court's decision if it is a low cost type, the Lower Court has played a risky strategy, and the case facts are either sufficiently far to the left or sufficiently far to the right* (Carrubba and Clark 2012).

5.3 Comparative Statics

In a world of perfect information (the first model), a lower court is never reversed by an upper court in equilibrium. However, by introducing lower court uncertainty over the upper court's preferences in the second model, the following equilibrium behavior occurs: lower courts that play safe strategies are *never* reversed by upper courts (regardless of type), while lower courts who play risky strategies are more likely to be reversed by high-cost courts.

Applying the results from the model to the Supreme Court during the Circuit-Riding Century, lower courts constituted of circuit riding justices are more likely to play a riskier strategy. Legitimacy and collegiality costs (engendered by the justices' dual roles) raise the Supreme Court's costs of reversal and therefore increse the likelihood of the circuit justice-led lower court facing a high-cost upper court compared to non-circuit justice courts. Because non-justice lower courts do not face high costs of reversal, they have a higher probability of facing a low-cost upper court, resulting in a higher likelihood of playing a safe strategy and thus not triggering reversal.

If this model is correct, this leads to a prediction that circuit justices have a weakly higher probability of being reversed than other judges. While this may seem counterintuitive at first glance, the logic behind it is as follows. Because the circuit justices know of the higher costs of reversal for them compared to non-circuit judges, justices are more likely (compared to other lower court judges) to play the risky strategy of moving the lower court rule closer to their own preferred rule at the expense of the Supreme Court's preferred rule. Since the Supreme Court is more likely to be the high-cost type in this scenario, the circuit justice may "overshoot" by moving the rule too far and thus triggering a reversal from the Supreme Court. Notice, this does not preclude other courts from playing a risky strategy and therefore being reversed (which certainly happens); what this means is that justice-led lower courts are *more likely* to be reversed than other

courts.

6   Discussion and Implications

The model interpretation developed here yields several implications for rule-making and decision-making in a judicial hierarchy. The results provide predictions that can be empirically tested to measure the impact of circuit riding on judicial decision-making and further elucidates the concept of a "norm of consensus" during the Supreme Court's early history. I conclude this section with suggestions for extending the model moving forward.

I will note that there is a vast literature on "reversal aversion": a lower court judge's fear of being reversed by a higher court. Scholars of judicial behavior commonly argue that judges personally do not like to have their decisions reversed (Murphy 1959; McNollgast 1995). Segal and Spaeth (2002) suggests that if the lower federal courts did not have to fear reversal, the judges would be freer to make decisions based on their policy preferences. Chief Justice Hughes made special note of this phenomenon during this period: "Not only did Justices of the Supreme Court on circuit duty suffer the extreme hardships of travel in the early days, but they were exposed to the even greater peril of subsequent reversal at the hands of their brethren" (Hughes 1932, 2). However, while these models assume an exogenous cost of being reversed, these costs, following Carruba and Clark (2012), are endogenously produced in my model. The lower court takes these costs into strategic consideration when deciding on a rule that will not be reversed by the upper court since the lower court is always worse off if it gets reversed.

6.1   Supreme Court and Circuit Riding

The main result of this interpretation of model from Carrubba and Clark (2012) is, as the costs of reversal increases, the more averse the Supreme Court is to reverse the circuit

opinion. Substantively, this means that the circuit justice has more leeway to move the rule closer to his ideal rule in cases where it is more difficult for his brethren to reverse his circuit opinion than in cases with lower costs of reversal. While similar to the results of Carrubba and Clark (2012), this is in contrast to other models of strategic auditing that only consider the preferences of the Supreme Court at the expense of lower court preferences (e.g. Cameron, Segal and Songer 2000). Though scholars have qualitatively noted the importance of the justices circuit opinions on the development of American law (Newmyer 1970; Lynch 2018), this model's result provides formal evidence that the work that justices did while circuit riding had a substantive impact not only on lower court jurisprudence but on Supreme Court jurisprudence as well.

However, unlike in Carrubba and Clark (2012), the costs of reversal (review) vary on a case-by-case basis. This variation is dependent on the particulars of the case: the subject matter and which judges hear the case on the lower level. It is not difficult to imagine that cases involving the constitutionality of an act of Congress have a higher cost of reversal (due to higher legitimacy costs) than cases involving statuary interpretation, meaning the Supreme Court would be less willing to reverse a justice's circuit opinion concerning constitutional issues.

This variation is particularly important in order to account for the institutional role of the judge who heard the lower court opinion. While justices were supposed to hear cases on circuit, district judges oftentimes had to sit alone as circuit judges in the absence of the circuit justice (Frankfurter and Landis 1928). In fact, when states were added to the Union, despite automatically having district courts created and district judgeships commissioned, they were not automatically added to an existing judicial circuit; this required the district court judges to also sit as circuit judges until states were incorporated into a circuit (Frankfurter and Landis 1928). Additionally, cases could arise from courts where justices were not assigned: (1) state supreme courts and (2) federal courts with separately-commissioned judges (the Circuit Court for the District of Columbia and the

U.S. Circuit Court for the California Circuit (1855-1863)). While state courts naturally were not assigned federal judges, Congress created circuit courts in DC and California (1855-1863) which had their own separately-commissioned judges and did not require a circuit-riding justice.

Since the judges of the DC and California Circuits, district courts, and the state supreme courts were strictly assigned to intermediary levels of the judicial hierarchy and did not also have a seat on the Supreme Court, the costs of reversal for overturning their cases would be lower than the costs of reversal for cases heard by circuit-riding justices. This is due to the fact that there are no additional costs (legitimacy and collegiality costs) for the Supreme Court to reverse decisions originating from these courts.[15] However, since these judges are not imposing collegiality or legitimacy costs on the Supreme Court in review of one of its members, these judges are less likely to play the risky strategy and thus the Supreme Court was less likely to reverse lower courts in this situation than lower courts with a circuit-riding justice.

7   Empirical Implications

The result of the model that cases originating from lower courts sans circuit-riding justices have lower costs of reversal (and thus are less likely to face high-cost courts) than cases heard by circuit-riding justices yields an empirical prediction:

> **Hypothesis 1.** *Cases originating from non-circuit justices are less likely to be reversed by the Supreme Court than cases heard by justices on circuit.*

7.1   Previous Work on Circuit Riding

The practice of circuit riding has been primarily viewed through the lens of legal history and constitutional development. Scholars have mentioned the possibility of a conflict

---

[15]This is not to imply that there are no costs in time or energy to review these decisions.

of interest by having Supreme Court justices ride circuit, but these scholars never attempted to expand upon this relationship by comparing the circuit court and Supreme Court opinions themselves (Frank 1964; Meltzer 1989; O'Brien 2000). "[T]he structure of the original court system was flawed in conception and hence problematic from the outset...[since no] provision prevented a Supreme Court justice from voting on an appeal from a circuit court decision in which he had participated" (Meltzer 1989, 424). "The controversy, which began immediately and continued until 1869, centered around the circuit system. The core of the problem lay in the fact that three tiers of courts were operated by two sets of judges...[as] the whole system pivoted on circuit riding by Justices" (Frankfurter and Landis 1928, 14).

Recent qualitative scholarship in political science and law has begun to note the importance of circuit riding in the Court's formative years. Crowe (2012) argues that the expansion of the Supreme Court's judicial authority and institution-building during the 19th century was the result of the actions of strategic actors (including judges, presidents, and politicians) taken to shape the judiciary's institutional structures to further their own interests, with the circuit system being a key institutional battleground. Lynch (2018) analyzes the circuit opinions of four justices to show that the justices' work on circuit had a significant impact on American jurisprudence.

There are very few quantitative studies that encapsulate this early period of the Court's history.[16] As McGuire acknowledges (2004), "[L]ongitudinal knowledge of the Supreme Court is quite limited" (128). He finds that the early Court increased its institutional power gradually, hypothesizing that the institution would be hardly recognizable to observers today. In their study of the determinants of Supreme Court resignations, Vining, Zorn and Smelcer (2006) state, "As circuit riding was expected of all justices in this period on an annual basis, our data provide little opportunity to assess the effect of its presence or absence among justices' duties." Epstein, Segal and Spaeth (2001) solely

---

[16]Knight and Epstein (1996) formally model two cases (*Marbury v. Madison* (1804) and *Stuart v. Laird* (1804)), but their focus is on the Court's strategic behavior in response to the other branches rather than on circuit riding itself.

looks into the "norm of consensus" on the Supreme Court.[17] Despite focusing on the same period as this paper, these studies do not focus on the institution of circuit riding itself; Vining, Zorn and Smelcer (2006) use the practice as a variable that possibly contributed to resignation from the Court in their multivariate analysis, while McGuire (2004, 130) cites circuit riding as an impediment to the Court's differentiation, an important step in institutional building. Walker, Epstein and Dixon (1988) do not even mention the practice.

While scholars have made normative claims about the effect of justices hearing cases on both levels, there has not been a systematic attempt to empirically test the effect of circuit riding on judicial decision making during this time period. Thus, the model's prediction (that the upper court is more likely to reverse lower court decisions in which a justice is present compared to other lower court decisions) provides an avenue to finally test whether allowing justices to hear cases twice unduly influences the decision. The model prediction, though, is the opposite to what normative have predicted (i.e. the lower court is more likely to be affirmed because a justice heard the case while riding circuit due to a conflict of interest). It is exactly because of this conflict of interest (Supreme Court justices reviewing their own circuit court decisions) that justices are less likely to be affirmed on review. Empirically, we should see circuit-riding justices reversed more often than state court judges, judges of the Circuit Court for the District of Columbia, and district court judges sitting as circuit judges due to the reversal costs of non-justices being lower than the circuit-riding justices.

7.2   Data

There is not an existing dataset that contains the circuit or lower court cases of interest from the Circuit Riding Century. Since the government did not appoint official court reporters for the lower courts, case records were notoriously incomplete and, though the

---

[17]This is discussed further in subsection 7.7.

identity of the circuit justice is known, often it is difficult to ascertain whether the circuit justice attended the case hearing on the circuit level. This lack of lower court data has long been lamented: "[We will not] be able to know how our courts function until an effective system of judicial statistics becomes part of our tradition...The actual volume of business in the various district and circuit courts, [and] the manner of its disposition, we shall not know until the pride in the history of individual federal courts and an appreciation of the significance of their records leads to an illuminating writing of their story" (Frankfurter and Landis 1928, 52).

In a preliminary analysis, I focused on cases heard by the Supreme Court in the period of 1812-1823. This period represents the longest "natural court," defined as a period with no changes in membership of the Court, in the history of the Supreme Court. For example, 210 cases were heard during the 1813-1817 period. In 41 of these cases, a justice sat on the circuit case. In 60 cases, no Supreme Court justice sat on the lower level. Finally, I could not determine whether or not a justice sat on the circuit level in 109 cases. This suggests a possible missing data problem which I will address with the second prong of my empirical design.

Figure 2: Pre-1869 Supreme Court Cases
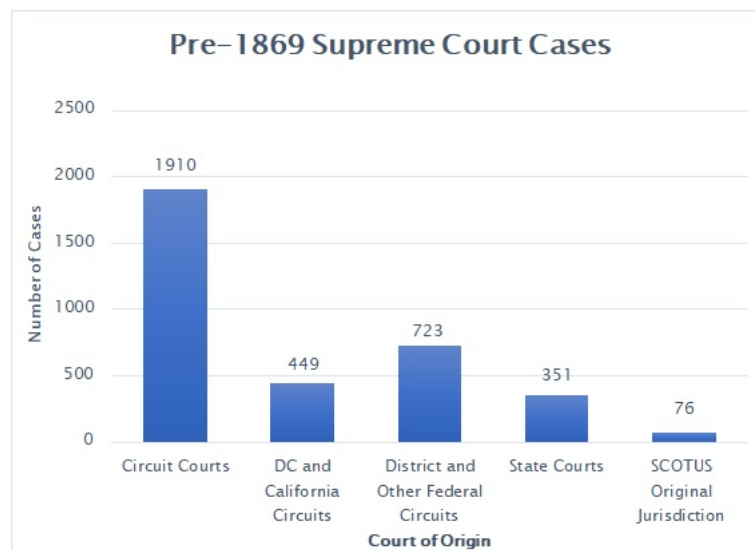
Figure 2 shows the population of cases for the pre-1869 time period. The Supreme

Court heard 3,438 cases during this time period, with 1,910 cases arising from circuit courts with assigned circuit justices and 1,533 cases coming from courts without justices assigned.

Since a circuit court database for the 1790-1891 period does not exist, I collected and hand-coded case data for the 5,507 circuit cases for two binary variables: (1) whether the a circuit riding justice heard the case and (2) whether circuit justice dissented when reversed. These data come from two sources: the 30-volume *Federal Cases* (Cases 1897) and the *Federal Reports* (from 1880 to 1891). As the *Federal Cases* was sourced from primary sources, including circuit reports, individual justice reports, and newspaper articles, it represents the best avenue for research for this period, while the *Federal Reports* contain the official case records published by the government. These circuit cases are then cross-referenced with the Legacy Supreme Court Database (Spaeth et al. 2020)[18] in order to discern the presence of a justice sitting on the circuit court. Methods of identification include the case record specifically stating the justice was present or heard the case on circuit, a justice recusing himself based on circuit participation, a justice referencing his circuit opinion during a dissent, or a writ of division (which requires both the justice and district judge to disagree on circuit). These cases serve as the treated group.

For the data in the control group, I do not need to collect additional information outside of the Legacy Supreme Court Database. The control group consists of cases appealed from the state supreme courts, from district courts directly to the Supreme Court, and the Circuit Court of the District of Columbia and the California Circuit which did not have appointed Supreme Court justices. Rather, these circuit courts consisted of judges appointed by the president and confirmed by the Senate (the only circuit with this unique feature at the time). The cases that originated in state courts did not have a Supreme Court justice sitting in on the decision, as judges on the state-level were appointed by the states' governments or elected by the voters of each state.

---

[18]I will note that the Supreme Court Database only went as far back 1953 until 2015, when all cases were finally coded.

Using the new dataset with data collected from *Federal Cases* and *Federal Reports*, I use a two-pronged approach to test my hypothesis: an OLS regression and then a differences-in-difference (DID) design. Because of the strong possibility of having a potential missing data problem (since the record are often incomplete), I will do a 85% random sample of the cases where I can be certain of the presence (or lack thereof) of a circuit-riding justice. I will also use robust standard errors clustered by circuit as Cameron and Miller (2010) suggest clustering based on units that are as similar as possible.[19]

7.3   OLS Regression

I first run an OLS regression on all cases from 1790-1869. The dependent variable is affirmation rate, and the treatment variable is the presence of a circuit-riding justice. Thus, the interpretation of β_1 would be the percentage change in Supreme Court affirmation rate by going from no circuit justice present to the presence of a circuit-riding justice. There are also a number of variables that need to be controlled for. The circuit of origin needs to be accounted for; in a similar vein, the court of origin for non-circuit cases must be controlled (as there is a possibility of variation in affirmation rates for state courts, territorial courts, district courts, and the D.C. Circuit). Since "good" justices may have been more likely to be affirmed than "bad" justices (due to legal acumen, writing skill, reputation, etc.), the circuit justice must be controlled as well as the current chief justice. As the ideological composition of the Court may affect case voting, I must control for the ideological direction of the decision. Since I am analyzing cases (indexed by i case) across a number of circuits and almost a century of cases, I add time (α, indexed by t year) and circuit-level (γ, indexed by d circuit) fixed effects to mitigate possible unintentional

---

[19]Since the states that comprised each circuit were contiguous and often grouped in circuits based on geographic and cultural similarities (Frankfurter and Landis 1928), this is the most appropriate category to cluster.

omitted variable bias.

Equation 1: $AffirmRate_{itd} = \beta_0 + \beta_1 CircuitJustice_{itd} + \beta_2 Covariates_{it} + \alpha_t + \gamma_d + \epsilon_{itd}$

I chose 1869 as the partition date of the OLS analysis due to the structural changes in the circuit system via the Judiciary Act of 1869, which commissioned (non-justice) circuit judges for the first time. After 1869, the justices only had to hear cases in each of their circuit courts once every two years (rather than once a year previously and, thus, rode circuit less frequently than before. This means that there were cases that arrived at the Supreme Court (1) that were heard by a circuit-riding justice and (2) without being heard previously by a circuit-riding justice. While not tested here, with this subset of cases, I can test *intra-circuit* variation in affirmation rates between justices and the newly minted circuit judges rather than just *inter-circuit* variation.

7.4   Difference-in-Differences Design

The second prong of my methodological strategy is to exploit the institutional variation in circuit composition by using a difference-in-differences (DiD) design. When a new state was formed, it was not automatically added to an existing federal circuit, though district courts were constituted in each state.[20] Until circuit incorporation occurred, district court judges in the state operated first as district courts but then also held circuit jurisdiction on appeal, which means that a case reaching the Supreme Court from these pre-incorporated states were not heard by a circuit-riding justice on appeal (Frankfurter and Landis 1928). I propose using DiD to test whether affirmation rates of cases originating from a state before it was incorporated into the federal circuit system are statistically different from the affirmation rates after incorporation when a circuit-riding justice would be assigned

---

[20]For example, Tennessee and Kentucky entered the Union in 1792 and 1796, respectively, but were not incorporated into the circuit system until the Judiciary Act of 1807; the Judiciary Act of 1837 added eight states to the circuit system with Louisiana having waited 26 years to be included (Frankfurter and Landis 1928).

to ride circuit within the state.

This DiD design calculates the effect of a treatment (pre-incorporation cases/post-incorporation cases) on an outcome (affirmation rates) by comparing the average change over time in affirmation rates for cases originating in newly-incorporated states compared to the average change over time for a control group (the states already incorporated into circuits).[21] In this design, the control group are cases originating from states who were already incorporated in the circuit system and are in the same circuit as the newly-incorporated state.[22] In order for the DiD results to be interpreted as causal results, the parallel trends assumption needs to be addressed; to do this, I will graphically represent the mean of affirmation rates for cases originating from newly incorporated states pre-incorporation and post-incorporation into the circuit system compared to the mean of the affirmation rates of states that were already in the circuit system.

Equation 2: $AffirmRate_{itd} = \beta_0 + \beta_1 CircuitJustice_{itd} + \beta_2 Covariates_{it}$

$$+ \beta_3(NewState_d \cdot CircuitIncorporation_t) + \beta_4 NewState_d$$

$$+ \beta_5 CircuitIncorporation_t + \alpha_t + \gamma_d + \epsilon_{itd}$$

The DiD regression equation (Equation 2) is the same as the previous OLS equation (Equation 1) except for the addition of the interaction term, ($NewState \cdot CircuitIncorporation$). $NewState$ represents the treatment and control groups; states who were just incorporated into the circuit system (treatment) receive a '1', while states who were already in the circuit (control) receive a '0'. $CircuitIncorporation$ represents the status of incorporation when the case was heard; cases heard before incorporation of a new state into the circuit

---

[21]California is a special case. Because travel would prevent a justice from attending to both his circuit and Supreme Court duties, Congress commissioned a single circuit judge for the state in 1855 until it was added to the newly created Tenth Circuit in 1863 with Oregon (Frankfurter and Landis 1928). I considered a separate DiD design for California (due to its unique status), but it is unclear which states would serve as the control group (due to distance and lack of contiguity with other states since Oregon had just joined the Union).

[22]For example, Missouri was incorporated into the Eighth Circuit with Tennessee and Kentucky under the Judiciary Act of 1837.

receive a '0' while cases heard after incorporation of new states receive a '1'. Since it took time for cases to reach the Supreme Court from the circuit courts, I will run the analysis with lagged treatments using the median time period.[23]

7.5 Results

Due to the time-intensive nature of discerning whether a circuit-riding justice heard the case on the lower level, the analytical focus of this section is using the circuit incorporation status of states newly added to the Union in the 1791-1869 period.[24] I further breakdown the analyses to compare states added to circuits in 1837[25] and states added to circuits in 1862[26]. I offer results using two approaches: OLS regression and a difference-in-differences design.

7.5.1 OLS Regressions

The following linear regression models regress case affirmation rates (dependant variable) on the the type of court where the case originated (independent variable).

Table 1 shows the results of running an OLS regression of affirmation rate on whether the case came from a circuit that has been assigned a circuit-riding justice or another court. When covariates and fixed effects are taken into account, the results are robust. Substantively, this suggests that the mean affirmation rate decreases by 9.8% for cases that originate from states incorporated in the circuit system compared to courts without the possibility of a justice present (i.e. state courts, district courts, the DC Circuit, etc.). While the R^2 is low, this suggests that the model may be on the right track and further

---

[23] As the incorporation status of states was staggered (meaning that some states were incorporated ahead of others), I will use the package in Goodman-Bacon (2018) to address the concerns about the treatment (incorporation) being administered at different times.

[24] Since the Judiciary Act of 1869 provided separately commissioned circuit judges in addition to the circuit riding justices, I restrict the analyses to this period in order to mitigate this possible confounding addition.

[25] Alabama, Arkansas, Illinois, Indiana, Louisiana, Michigan, Mississippi, Missouri

[26] California, Florida, Iowa, Kansas, Minnesota, Texas, Wisconsin

Table 1: Circuit OLS Model Results

| | All Cases without Justices | | |
	(1)	(2)	(3)
Circuit Incorporation	0.056	.052	−0.098**
	(0.036)	(0.039)	(0.035)
Observations	2,818	2,818	2,729
R-squared	0.003	0.061	0.109
Covariates	No	No	Yes
Clustered std.error	Yes	Yes	Yes
Year FE	No	Yes	Yes
Circuit FE	No	Yes	Yes

Clustered standard errors by circuit in parentheses
*** p<0.01, ** p<0.05, * p<0.1

supports my efforts to gather additional data on covariates.

Tables 2 and 3 run the same model, but restrict the analyses to cases originating from states incorporated in 1837 (Table 2) and 1862 (Table 3). The analyses are further broken down to compare cases originating from circuit justices to (a) cases originating from state courts from the same states and (b) cases originating from the DC circuit court. This was done as a robustness check to ensure differences in affirmation rates were not based on the type of control group.

Table 2 shows the OLS regression results for the states incorporated in 1837. The results for both that state and DC controls are robust to at least the $p < .05$ level. The mean for affirmation rates from circuit cases is 16.5% lower that state court cases and 11.1% lower than DC court cases. Table 3 shows the OLS regression results for the states incorporated in 1862. The results for both that state and DC controls are robust to at least the $p < 0.1$ level. The mean for affirmation rates from circuit cases is 15.3% lower that state court cases and 19.3% lower than DC court cases.

Table 2: 1837 OLS Model Results

	State Court Control			DC Circuit Court Control		
	(1)	(2)	(3)	(1)	(2)	(3)
Circuit Incorporation	−0.085	−0.145**	−0.1675**	−0.022	−0.130**	−0.111***
	(0.051)	(0.067)	(0.054)	(0.052)	(0.016)	(0.010)
Observations	619	619	611	953	953	924
R-squared	0.004	0.155	0.280	0.0004	0.106	0.184
Covariates	No	No	Yes	No	No	Yes
Clustered std.error	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	No	Yes	Yes
Circuit FE	No	Yes	Yes	No	Yes	Yes

Clustered standard errors by circuit in parentheses
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 3: 1862 OLS Model Results

	State Court Control			DC Circuit Court Control		
	(1)	(2)	(3)	(1)	(2)	(3)
Circuit Incorporation	−0.095	−0.258**	−0.153*	−0.017	−0.204**	−0.193**
	(0.065)	(0.013)	(0.070)	(.020)	(0.019)	(0.068)
Observations	301	301	301	654	654	633
R-squared	0.008	0.159	0.345	0.0002	0.127	.207
Covariates	No	No	Yes	No	No	Yes
Clustered std.error	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	No	Yes	Yes
Circuit FE	No	Yes	Yes	No	Yes	Yes

Clustered standard errors by circuit in parentheses
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

7.5.2 Difference-in-Differences

In these DiD analyses, the treatment is an interaction term consisting of whether case came from a circuit with an assigned justice and whether case happened before or after the state was incorporated in the circuit system (before/after 1837 in the 1837 models and before/after 1862 in the 1862 models). The goal in these analyzes is to discern the effect of the treatment (circuit incorporation) by analyzing the difference in means between the affirmation rates of pre-incorporation cases and post-incorporation cases. The control groups, again, include (a) state court cases from the same states and (b) cases from the DC circuit.

Table 4: Raw Mean Affirm Rate: State Court Cases Control (1837)

	Before Incorporation	After Incorporation
Previously-Added States	0.6666667	0.6372549
Newly-Added States	0.4702381	0.5702576

Table 5: Raw Mean Affirm Rate: DC Circuit Court Cases Control (1837)

	Before Incorporation	After Incorporation
Previously-Added States	0.5603448	0.6052632
Newly-Added States	0.4702381	0.5702576

Table 6: Raw Mean Affirm Rate: State Court Cases Control (1862)

	Before Incorporation	After Incorporation
Previously-Added States	0.6232877	0.7777778
Newly-Added States	0.5503356	0.5983607

Table 7: Raw Mean Affirm Rate: DC Circuit Court Cases Control (1862)

	Before Incorporation	After Incorporation
Previously-Added States	0.5778589	0.5483871
Newly-Added States	0.5503356	0.5983607

Before proceeding to the main DiD results, I present raw mean of affirmation rate in Tables 4-7 for illustrative purposes. The raw means represent the means of each

interaction term pair (e.g. In Table 4, .667 is the mean affirmation rate of the states already incorporated to the circuit system before the Judiciary Act of 1837). As its name suggests, the DiD analysis takes the difference of the differences between treated and control groups before and after the Judiciary Acts of 1837 and 1862.

Tables 8 and 9 present the results for the states added to circuits in 1837 and 1862, respectively.[27] In both models, the change in means of the affirmation rates after incorporation compared to DC circuit cases are negative and robust, with a drop of 7.2% in affirmation rate experienced by cases from states incorporated in to the circuit system in 1837 and a 12% drop in cases from the 1862 states. This provides evidence for the hypothesis, in that Supreme Court justices are more likely to have their circuit opinions reversed by the Supreme Court as compared to cases from other lower federal courts.

However, the state court case models are both positive and not robust. I argue that I may not be getting negative, robust results for the comparison to the state court control group due to two, possibly non-mutually exclusive reasons: (1) state court cases during this time period present fundamentally different legal questions compared to federal cases and (2) federalism/Supremacy Clause concerns.

In its early history, the Supreme Court's jurisdiction was radically different than it is today. Today, the Supreme Court can grant a writ of cert to an appealing party through appellate jurisdiction in virtually all lower court cases, both federal and state, as well as still retaining cases in its original jurisdiction (cases between states, cases concerning ambassadorships, etc). This has not always been the case; initially the federal court system had jurisdiction over admiralty cases and cases concerning citizens of different states, and a limited criminal jurisdiction, which the Supreme Court curtailed to exclude common law offenses in *United States vs. Hudson* (1812) and *United States vs. Coolidge* (1816). State courts saw a majority of the cases filed in the country's legal system and drew almost all criminal cases. In fact, it wasn't until 1889 that the Supreme Court could

---

[27]See Tables 10 and 11 in the Appendix for full results as Table 8 and 9 were condensed for space purposes.

Table 8: Judiciary Act of 1837 Diff-in-Diff Model Results

	State Court Control			DC Circuit Control		
	(1)	(2)	(3)	(1)	(2)	(3)
New State x Circuit Incorporation	0.129*	0.045***	0.0003	0.055	-0.084***	-0.072***
	(0.059)	(0.008)	(0.091)	(0.059)	(0.019)	(0.005)
New State	-0.196***	-0.190***	-0.168**	-0.090***	-0.046**	-0.039**
	(0.000)	(0.008)	(0.061)	(0.000)	(0.017)	(0.012)
Circuit Incorporation	-0.029***	0.129	0.292**	0.045***	-0.331*	-0.236
	(0.000)	(0.118)	(0.109)	(0.000)	(0.166)	(0.159)
Conservative Lower Court Opinion			0.181			0.158**
			(0.098)			(0.056)
Unclear Lower Court Opinion Direction			-0.255			0.221
			(0.178)			(0.116)
Federal Law Unconstitutional			0.169*			
			(0.071)			
State/Territory Law Unconstitutional			-0.574			0.001
			(0.298)			(0.233)
Issue: Civil Rights			0.097			0.130
			(0.239)			(0.151)
Issue: 1st Amendment			-0.322			-0.186
			(0.402)			(0.212)
Issue: Due Process			-0.046			0.011
			(0.275)			(0.166)
Issue: Attorneys						0.083
						(0.126)
Issue: Economic Activity			-0.101			-0.041
			(0.253)			(0.161)
Issue: Judicial Power			-0.072			0.081
			(0.235)			(0.158)
Issue: Federalism			-0.159			0.041
			(0.283)			(0.199)
Issue Interstate Relations			-0.162			0.255
			(0.382)			(0.263)
Issue: Federal Taxation			-0.069			-0.016
			(0.173)			(0.136)
Issue: Miscellaneous						0.400**
						(0.158)
Issue: Private Action			0.124			0.113
			(0.206)			(0.153)
Conservative SCOTUS Opinion			-0.170**			-0.143***
			(0.069)			(0.038)
Unclear SCOTUS Opinion Direction						-0.344**
						(0.120)
Observations	619	619	611	953	953	924
R-squared	0.009	0.155	0.281	0.004	0.106	0.184
Covariates	No	No	Yes	No	No	Yes
Clustered std.error	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	No	Yes	Yes
Circuit FE	No	Yes	Yes	No	Yes	Yes

Note: Clustered standard errors by circuit in parentheses. The outcome variable is affirm rate (binary variable). The results are produced by using linear probability models, so the estimates are OLS coefficient estimates. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table 9: Judiciary Act 1862 Diff-in-Diff Model Results

	State Court Control			DC Circuit Court Control		
	(1)	(2)	(3)	(1)	(2)	(3)
New State x Circuit Incorporation	-0.106	0.570***	0.561***	0.077	-0.098***	-0.120**
	(0.069)	(0.027)	(0.137)	(0.059)	(0.024)	(0.044)
New State	-0.073***	-0.829***	-0.713***	-0.028*	-0.217***	-0.189**
	(0.013)	(0.028)	(0.144)	(0.013)	(0.020)	(0.067)
Circuit Incorporation	0.154**	0.074*	-0.526*	-0.029***	-0.466***	-0.591***
	(0.057)	(0.036)	(0.248)	(0.000)	(0.096)	(0.121)
Conservative Lower Court Opinion			0.026			0.057
			(0.064)			(0.073)
Unclear Lower Court Opinion Direction			0.850			0.348**
			(0.496)			(0.114)
Federal Law Unconstitutional			-0.102			
			(0.241)			
State/Territory Law Unconstitutional			0.096			0.174
			(0.358)			(0.128)
Issue: Civil Rights			0.297			0.111
			(0.280)			(0.119)
Issue: 1st Amendment						-0.427***
						(0.033)
Issue: Due Process			0.040			-0.027
			(0.436)			(0.095)
Issue: Attorneys			0.451			-0.039
			(0.317)			(0.157)
Issue: Economic Activity			0.319			0.001
			(0.212)			(0.119)
Issue: Judicial Power			0.507*			0.194
			(0.258)			(0.169)
Issue: Federalism			0.091			-0.216**
			(0.096)			(0.081)
Issue: Interstate Relations						0.028
						(0.100)
Issue: Federal Taxation			-0.047			0.001
			(0.301)			(0.131)
Issue: Miscellaneous						0.249**
						(0.087)
Issue: Private Action			-0.259			-0.264*
			(0.336)			(0.131)
Conservative SCOTUS Opinion			0.267***			0.024
			(0.065)			(0.207)
Unclear SCOTUS Opinion Direction						-0.012
						(0.258)
Observations	301	301	301	652	652	631
R-squared	0.014	0.160	0.344	0.001	0.126	0.208
Covariates	No	No	Yes	No	No	Yes
Clustered std.error	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	No	Yes	Yes
Circuit FE	No	Yes	Yes	No	Yes	Yes

Note: Clustered standard errors by circuit in parentheses. The outcome variable is affirm rate (binary variable). The results are produced by using linear probability models, so the estimates are OLS coefficient estimates. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

review capital cases.

It was the Removal Act of 1875 which, combined with 14th Amendment and the numerous other removal acts promulgated during and after the Civil War, that vastly increased federal court (and Supreme Court) jurisdiction. "Congress gave the federal courts the vast range of power which had lain dormant in the Constitution since 1789. These courts ceased to be restricted tribunals dealing with citizens of different states and became the primary and powerful reliances for vindicating every right given by the Constitution, the laws, and treaties of the United States" (Frankfurter and Landis 1928, 65). Thus, during the time of this paper's analysis, the jurisdiction of state courts was fundamentally separate from those of federal courts and therefore the types of cases originating in state courts may not a proper control group to compare to federal cases.

Secondly, another possible reason for not observing the hypothesized effect is that the Supreme Court during this period was greatly concerned with the establishment of federalism and the Supremacy Clause during the nascent Republic and thus may have overturned state court rulings at a higher clip than the circuit-riding justices.

The Marshall Court (1801-1835) was particularly active in promoting federalism by deciding several cases that strengthened federal power at the expense of the states: *Marbury v. Madison* (1803)[28] (which famously granted the Supreme Court the ability to strike down both federal and state laws as unconstitutional), *McCulloch v. Maryland* (1819)[29] (where the Court found that states could not tax federal entities wince federal laws have supremacy over state laws *Gibbons v. Ogden* (1824)[30] (in which the Court upheld that the federal government had the power to regulate interstate commerce broadly defined), amongst others. "[T]he authority conferred upon the federal courts represents an important aspect of the struggle between centralization and states rights[;]...the mode in which the federal judiciary, particularly the Supreme Court, exercised the powers en-

---

[28] 5 U.S. 137

[29] 17 U.S. 316

[30] 22 U.S. 1

trusted to it by Congress profoundly influenced the balance of forces in the unabated contest between [the] states and national government" (Frankfurter and Landis 1928, vi).

7.6 Discussion/Implications of Empirical Results

The empirical results presented in this theses have profound implications for judicial decision-making and rule-making in the federal judiciary during the Supreme Court's early history.

7.6.1 Institutional Development

First, this thesis quantitatively shows that the justices' lower court opinions significantly influenced rule-making and decision-making on the Supreme Court level.

This study is the first to quantitatively analyze the effect of the justices' circuit opinions on Supreme Court decision-making. As noted earlier, scholars have long lamented the dearth of quantitative studies of the Court's early history (e.g. McGuire 2004; Vining, Zorn, and Smelcer 2006), as well as acknowledging that quantitatively analyzing the justices' circuit work was the key to understanding the institutional development of the federal judiciary (e.g. Crowe 2012; Lynch 2018). For the first time, there is evidence that the justices' lower court work did, indeed, influence the rules being proffered on the Supreme Court Level.

Because of reversal costs, justices were able to move the case rule closer to their preferred rule than otherwise possible if they were not also reviewing their own decisions. However, justices may have overplayed their hands by moving the rule too far which triggered reversal rates at highly significant levels as compared to cases from other judges. These reversals the, in turn, became the established precedent in the circuits, which further constrained lower-level rule-making.

This dynamic, thus, fundamentally changes our understand of the collegial interplay

that went into rule-making in this time period. The following examples illustrate instances in which justices moved the lower court rule too far which was subsequently reversed by the Supreme Court: the reversals of Chief Justice Roger Taney in *Haney v. Baltimore Steam Packet Company* (1859).[31] and Justice William Johnson in *Doe on the Demise of Elmore v. Grymes* (1828).[32]

Haney involved the collision of a steamboat and a boat powered by sail, reveals a technologically-sage circuit opinion by Chief Justice Taney; he adroitly handled the advantages and limitations offered by the recent advent of steamboat technology and seems to be in command of the relevant law and precedent. However, he was reversed on appeal by the Supreme Court 7-1, as the Court contended Taney went too far in giving deference to the steamboat's technological capabilities. The Court's opinion suggests that Chief Justice Taney miscalculated the Court's reversal costs and moved the rule too far for his brethren to stomach.

In *Doe*, Justice Johnson dissented by stating, "I must submit, I suppose, but I cannot do it without protesting against the right of forcing upon my Circuit, the practice of other Circuits in this mode. By a rule of this Court, it is, unquestionably, in the power of the Court to do it. But until then, *I can never know what is the practice of my own Circuit; until I come here to learn it*" (emphasis added). Though possibly sarcastic, the dissent suggests the presence of lower court uncertainty over upper court preferences; Justice Johnson was unsure of his brethren's preferences and issued a circuit decision outside of the Court's acceptable range which was subsequently reversed.

7.6.2 Judicial Hierarchy and Institutional Design

Secondly, this changes our understanding of the effect of having of Supreme Court justices simultaneously serving on the Supreme Court and circuit courts, while district court judges served on both the district and circuit levels, effectively having "three tiers of

---

[31]64 U.S. 287
[32]26 U.S. 469

courts...operated by two sets of judges" (Frankfurter and Landis, 1928).

Substantively, the results suggest that fears by Frank (1964), Meltzer (1989), O'Brien (2000) and others that justices' lower court decisions unfavorably biasing the Supreme Court's decisions were unfounded. The strongly-robust, negative results imply the opposite; rather than circuit riding the Supreme Court biasing in favor of their fellow justices, the Court was actually quite critical of its' justices circuit opinions and would reverse decisions it deemed to have moved the case rule too far. While justices were able to shirk (within limit), clear deviations were punished by Supreme Court reversals.

Theoretically, this suggests that principals are able to punish deviation by agents even outside of the traditional conceptions of principal-agent relationships. In the typical conception, there are clear delineations between principals and agents, and the intermingling of roles would suggest that principals would have a harder time in punishing agent shirking. However, the evidence suggests that, due to reversal costs/auditing costs, principals are able to still constrain agent behavior, despite worries to the contrary. This idea is further speculatively explored in section 7.7.1.

7.6.3 Norm of Consensus?

Finally, these results clarify when dissenting behavior may be expected during the Court's early history: the result of a justice's circuit opinion being reversed.

Scholars have prescribed what has been called the "norm of consensus" during the Court's early period (Epstein, Segal and Spaeth 2001; Walker, Epstein and Dixon 1988). Dissenting opinions were relatively rare compared to the Court's modern period, and it has been shown that this was due to the emphasis placed by the justices on the Court showing public unanimity, despite individual justices privately holding dissenting views (Epstein, Segal and Spaeth 2001), and leadership styles of the chief justices (Walker, Epstein and Dixon 1988). Thus, the justices, particularly the chief justices, were again concerned about dissents affecting the legitimacy of the Court and adherence to its deci-

sions.

Judges have long been concerned how with dissents are viewed by outside actors. Maltzman, Spriggs and Wahlbeck (2000) find that justices try to bargain with opinion writers to either join or concur with their opinions to avoid potentially weakening the perception of the decision to the outside world. Unanimous opinions are signals to other judges and political actors that the law is clear, whereas separate opinions may call into question major aspects of the majority's reasoning (Corley, Collins and Calvin 2011; Hettinger, Lindquist and Martinek 2004; Spriggs 1997).

The findings here (and vigorous dissents by Chief Justice Taney and Justice Johnson discussed earlier) suggest that these dissents, while rare, were potentially triggered by justices having their circuit court opinions reversed, a cause not explored in previous literature. While the Court's avoidance of the legitimacy costs of dissent is a byproduct of the strategic interaction modeled in this paper and justices may have privately-held dissenting behavior, the Court usually coalesced around a single opinion and dissuaded public dissent to avoid these legitimacy costs. However, this seems to only apply in cases where the justices circuit cases were not being reversed as the reversed justice felt the need to justify his lower court opinion. Thus, the "the norm of consensus" may need a qualifier moving forward: there was a norm of consensus only when a justice's circuit court opinion was not being reversed.

7.7 Future Directions in Modeling

This interpretation of the model in Carrubba and Clark (2012) presented in this thesis provides insights previously unexplored in the literature. First, circuit riding justices had a sizeable impact on lower court rule-making and were able to move policy closer to their ideal points depending on the size of the costs of reversal. However, this may have come at the cost of being reversed by their brethren. Secondly, the Supreme Court (because of these costs that are only engendered by circuit riding) is more likely to reverse circuit

justices compared to other judges.

As this model interpretation is a first step, I acknowledge some blind spots which will be refined in future iterations of this project. Carrubba and Clark (2012) is a model of strategic auditing, which does not perfectly capture the collegial court dynamics at play in circuit riding. Models of judicial bargaining highlight the importance of the composition of collegial courts for the location of the final rule as the rule is located at the ideal point of one judges (e.g. Carrubba et al. 2012; Hammond, Bonneau and Sheehan 2005; Lax and Cameron 2007; Kornhauser 1994). While the interpretation of the model here suggests the importance of higher-court collegial interactions, it does not explicitly model this.

The Carrubba and Clark (2012) model is also explicitly not a model of error correction. However, since the Supreme Court did not have control of its docket until 1925, it served both as a law-making institution AND an error-correcting institution.[33] The circuit courts served as the primary trial courts during this period and thus may have made errors in judgment that may have needed to be corrected. A way to incorporate the error-correcting aspect would be to introduce uncertainty over the case facts. This would produce instances where a lower court makes an incorrect ruling, and the upper court would reverse in order to correct the ruling, resulting in a positive rate of reversal (in contrast to a negative rate of reversal is predicted by the model interpretation presented here).

7.7.1   Hybrid Agency Relationships

The interpretation of the model presented here suggests the need to rethink the common conception of principal-agent relationships (e.g. Moe 1984). Most agency models, following Weber (1958), have assumed principals and agents to be distinct subsets: "The 'political master' finds himself in the position of the 'dilettante' who stands opposite the 'expert,' facing the trained official who stands within the management of administration."

---

[33]As Crowe (2007) notes, Chief Justice William Taft's support for giving the Supreme Court docket control in the Judiciary Act of 1925 was to transition the Court to a solely law-making institution.

However, as the dual nature of circuit riding suggests, this delineation is not always so clear cut; rather, there exists what I will call "hybrid principal-agent relationships" in which an actor (a "principal agent") occupies two different positions within the same hierarchy, concurrently serving as an agent tasked with carrying out the principal's directives and as a constituent part of the principal having oversight over said agent. For example, in the world of business, the CEO of a company can simultaneously serve as an agent of the board of directors while also being a principal as a member of said board. Employees are agents in their day-to-day jobs but are oftentimes stockholders in their company (and therefore principals).

The cost of reversing circuit justices is a form of "hybrid agency cost": the cost of principals exercising oversight of themselves as agents. Since hybrid agency costs are additive and the principal (as a collective) wants to avoid them, principal agents (such as circuit justices) are may or may not be able to shirk more in hybrid agency relationships than agents in the typical conception of agency problems. This extra shirking creates additional agency loss unique to hybrid agency problems: "hybrid agency loss."

Politics also provides a number of examples of hybrid agency relationships. Congress created committees to solve principal-agent problems related to bureaucratic oversight (e.g. Weingast and Moran 1983) and devised means to punish bureaucratic shirking (e.g. McNollgast 1987). Yet, since committee members are simultaneously able to exercise oversight as principals by voting on legislation produced by committees and controlling the committee's jurisdiction, these models do not account for hybrid agency loss. Circuit judges serve on three-member panels when hearing cases that may be reviewed by the whole circuit when sitting *en banc*. While Clark (2009) models the *en banc* review process of circuit courts as a principal-agent relationship, the author is interested in the inter-level dynamic of the circuit sitting en banc as both a principal to the original three-judge panel and as an agent of another principal, the Supreme Court, rather than the intra-level hybrid agency relationship. As the model interpretation presented here suggests, scholars

need to account for these hybrid roles in their models of institutional hierarchies.

8   Conclusion and Next Steps

This thesis makes several important contributions. This is the first project to formally consider the formative period of the Supreme Court's history, one that has been little studied in the literature despite its continued influence on the Supreme Court today. The model interprets Carrubba and Clark (2012) to better understand how the institutional structure of circuit riding during the Supreme Court's early period affected decision-making. The empirical results present a counterintuitive finding, one that contradicts scholars who intoned about the justices' circuit riding duties unduly influencing Supreme Court decisions: because justices had the possibility of reviewing their own (and their brethren's) circuit court decisions, justices who played safe strategies on circuit were able to strategically shape their opinions to be closer to their own ideal points and not be reversed by the Supreme Court, while justices who moved their opinion too far by playing a risky strategy were subsequently reversed. This had a profound effect on rule-making during the Court's formative years, as well as justices' dissenting behavior and collegial relationships.

This is also the first project to speculatively describe the concepts of hybrid hierarchies, hybrid agency costs, and hybrid agency loss. While the previous literature has assumed a strict delineation between the sets of principals and agents, the relationship is altered by principal agents in hybrid hierarchies. Principal agents may be able to use their influence as principals in order to be able to shirk more as agents in some instances. This additional hybrid agency loss has important implications for not only political institutions but also hybrid relationships in business, economics, and other hierarchies.

Moving forward (as suggested by section 7.7), there are several avenues for future research. Given the third model in Carrubba and Clark (2012) (where the lower court

has some uncertainty about the size of costs of review, the institution of circuit riding could be modelled with upper court uncertainty about (a) the case facts and (b) the size of the reversal costs. Thus, reversal could happen for two reasons: (1) the circuit justice is uncertain about the preferences of his brethren and makes the incorrect ruling which is subsequently overturned, or (2) the circuit justice overestimates the value of the reversal costs to the Supreme Court and moves the rule too far, triggering a reversal. Future models can account for these possibilities by modeling additional lower court uncertainty.

Future scholars should also formally model hybrid agency relationships. While the model presented in this paper took steps in this direction, the model is still a modified-agency model applied to the context of a hybrid institution. What is needed to have a better understanding of this relationship are general models of hybrid agency problems, models which specifically account for hybrid agency costs and hybrid agency loss. Without these models, we are left with an incomplete picture of hybrid hierarchies.

9   Appendix: Supplemental Proofs and Results

Proof of Proposition 1. The proposition is a continuum of equilibria consisting of three different cases. The cases are determined by a cutpoint in the fact-space, $r_a \in [\underline{r}, \overline{r}]$. In order to derive equillibrium behavior, I must first note a series of results that underpin the results.

Lemma 1. *The Upper Court reverses a case whenever $r \geq \sqrt{k_i - (1 - b(r))\phi}$.*

Proof. $EU_{UC}(reverse|r) = \phi - k_i$ and $EU_{UC}(\neg reverse|r) = -r^2 + b(r)\phi$ with $b(r)$ being the Upper Court's beliefs about the probability that the Lower Court has established a rule that results in UC's preferred disposition. This parameter $b(r)$ is a decreasing function of r; with Brouwer's fixed point theorem, a solution to this quality exists. Thus, UC reverses a case whenever $EU_{UC}(reverse|r) > EU_{UC}(\neg reverse|r)$. ∎

Corollary 1. *If the Upper Court observes $(r \geq 0, Exclude)$, the Upper Court reverses if $r > \sqrt{k_i}$ and affirms if $0 \leq r \leq \sqrt{k_i}$.*

Proof. If the Upper Court observes $(r \geq 0, Exclude)$, $b(r) = 1$ because UC always wants Exclude for any $x > 0$, and it knows that $x > r$ on observing $(r \geq 0, Exclude)$. UC is indifferent over changing the rule when it knows it is getting the preferred disposition when $r = \sqrt{k_i}$. ∎

Corollary 2. *The Upper Court affirms if $r \in [0, \underline{r})$ for any $b(r) \in [0, 1]$, where $\underline{r} = \sqrt{k_i - \phi}$.*

Proof. The Upper Court prefers not to reverse for $b(r) \geq 0$ if $EU_{UC}(reverse|r) = \phi - k_i \leq EU_{UC}(\neg review|r) = -r^2$.

Lemma 2. *The Lower Court never prefers to be reversed.*

Proof. First, the Lower Court never offers $r < 0$. If LC offers $r = 0$, UC never reverses $(U_{UC}(\neg reverse|r = 0) = \phi > U_{UC}(reverse|r = 0) = \phi - k_i)$. If LC offers $r < 0$ and is reversed, LC gets the same outcome as if it set $r = 0$. If LC offers $r < 0$ and is not reversed, LC is strictly worse off. If $x < r$, $U_{LC}(r < 0|\neg reverse = -(r - L)^2 + \phi < U_{LC}(r = 0|\neg reverse) = -L^2 + \phi$. If $x \in [r, 0]$, $U_{LC}(r < 0|\neg reverse) = -(r - L)^2 < U_{LC}(r = 0|reverse) = -L^2 + \phi$.

Secondly, LC never offers $r > L$. If LC offers $r = L$ and is affirmed, LC gets its optimal outcome. If LC offers $r = L$ and gets reversed, LC is also reversed for any $r > L$. Because $\frac{\partial(EU_{UC}(\neg review|r))}{\partial r} = -2r + \frac{\partial b}{\partial r}\phi$, and we know that $\frac{\partial b}{\partial r} < 0$ for $r > 0$, therefore EU_{UC} is decreasing in r.

Because the LC never has an incentive to offer a rule outside of the Pareto set, LC never prefers to be reversed. If $x < 0$, $U_{LC}(\neg reverse) = -(r - L)^2 + \phi > U_{LC}(reverse) = -L^2 + \phi$. If $x \in [0, L]$, $U_{LC}(\neg reverse) = -(r - L)^2 + \phi$ or $-(r - L)^2$. Either way, $U_{LC}(reverse) = -L^2 < U_{LC}(\neg review|x \in [0, L])$. And if $x > L$, $U_{LC}(\neg review) = -(r - L)^2 + \phi > U_{LC}(reverse) = -L^2 + \phi$. ∎

Corollary 3. *By proof of Lemma 2, the Lower Court never makes an offer outside of the Pareto set, r $in[0, L]$, for any $b(r) \in [0, 1]$.*

Lemma 3. *For $x \geq \sqrt{k}$, the Lower Court's sequentially rational move is to offer $r = \sqrt{k_i}$.*

Proof. Consider $x > L$ first. By Corollary 1, the Upper Court reverses if and only if $r \geq \sqrt{k_i}$. By Lemma 2, the Lower Court never prefers to be reversed. The rule closest to LC's most preferred rule that will not be reversed is $r = \sqrt{k_i}$. Consider $\sqrt{k} \leq x \leq L$. By Corollary 1, the largest rule that UC will not reverse is $r = \sqrt{k_i}$. By Lemma 2, LC never prefers to be reversed. Thus, a LC with case facts $\sqrt{k_i} \leq x \leq L$ sets $r = \sqrt{k_i}$. ∎

Lemma 4. *All equilibria must involve pooling by Lower Courts with case facts $x < 0$ and the subset of Lower Courts with case facts $0 < x < r_a$ over a rule in the set $r \in [\underline{r}, \overline{r},$ where $\underline{r} = \sqrt{k_i - \phi}$ and $\overline{r} = \sqrt{k_i - (1 - b(r)\phi}$.*

Proof. If the Lower Court offers $r > \sqrt{k_i}$, the Upper Court reverses by Lemma 1. By Corollary 2, UC never reverses any rule where $0 \leq r \leq \underline{r}$. Because the Lower Court never prefers to be reversed by Lemma 2, and the Lower Court wants a rule as close to its ideal rule as possible, $r \in [\underline{r}, \sqrt{k_i}]$.

Suppose $r' \in (\underline{r}, \sqrt{k_i}]$ is offered by a Lower Court with the case facts $x < 0$, and it separates from all Lower Courts with case facts $0 < x < L$. The Upper Court does not reverse by Corollary 1. A Lower Court with case facts $0 < x < L$ strictly prefers to offer $r = r'$ over offering $r \leq \underline{r}$ because r' will not be reversed. Further, if a Lower Court with case facts $0 < x < \underline{r}$ chooses any other $r \in (\underline{r}, \sqrt{k_i}]$ in equilibrium, the Upper Court knows $x > 0$, $b(r) = 0$, and (by Lemma 1) the Upper Court reverses. Because of Lemma 2, any LC with case facts $0 < x \leq r'$ prefers to pool on r' rather than be reversed, we have a contradiction and separation is unsustainable.

Finally, because the equilibrium must entail pooling behavior, and the Upper Court cannot reverse the Lower Court with certainty on observing the equilibrium rule, r^* (by Lemma 2), Lower Courts with case facts $x \leq \underline{r}$ would deviate to $\underline{r}$, the Upper Court at most must be indifferent reversing the rule. Because from above all Lower Courts with case facts $x \leq r'$ will pool on r', by Lemma 1 the Upper Court is indifferent over reversing a rule when $\overline{r} = \sqrt{k_i - (1 - b(r))\phi}$. Thus, $r^* = r_A \in [\underline{r}, \overline{r}]$ must hold. ∎

Lemma 5. *Given the possible equilibrium behavior defined in Lemma 4, the beliefs that can support this behavior are as follows. On the equilibrium path, on observing* $(r^*, Admit), b(r)^* = \frac{\int_{-\infty}^{0} g(x)dx}{\int_{-\infty}^{r^*} g(x)dx}$. *Off the equilibrium path, on observing* $(0 \leq r < r^*, Admit)$, $b(r)$ *can cover the entire support. Off the equilibrium path, on observing* $(0 = r < r^*, Admit), b(r)^* \leq \frac{r^2 - k_i + \phi}{\phi}$ *must hold.*

Proof. For $(r^*, Admit), r^*$ is on the equilibrium path, and so beliefs must be updated by Bayes rule. Thus, $b(r)^* = \frac{\int_{-\infty}^{0} g(x)dx}{\int_{-\infty}^{r^*} g(x)dx}$. For $(0 \leq r < r^*, Admit)$, the Lower Court always prefers offering r^* to any deviation to the left. Thus, the Upper Court moves,

and beliefs are unconstrained in this range. Finally, for $(r^* < r' < \bar{r}, Admit)$ the Upper Court must prefer to reverse the rule in equilibrium as the Lower Court would deviate to r' otherwise. The Upper Court prefers to reverse whenever it believes the likelihood of a reversal on disposition is sufficiently high. By Lemma 1, this condition holds whenever $b^* \leq \frac{r^2 - k_i + \phi}{\phi} = b(\hat{r})$ holds. ∎

Lemma 6. *For a Lower Court with case facts $r^* < x < \sqrt{k_i}$, the optimal r is the one closest to L for which the disposition is $(Exclude, r = x)$.*

Proof. If a Lower Court with case facts $r^*, x, \sqrt{k_i}$ sets the rule greater than x, the disposition would be Admit. As shown in Lemma 5, on observing $(r > r^*, Admit)$ the Upper Court reverses and holds off-equilibrium path beliefs $b^* \leq \frac{r^2 - k_i + \phi}{\phi}$. Thus, the Lower Court sets the rule at the largest value that would yield a disposition of Exclude and would not be reversed, $r = x$. ∎

With these intermediate results established, I now demonstrate equilibrium behavior in each of the three cases. Formally, the equilibrium behaviors are given as follows:

$$
r^*(x) = \begin{cases} k_i & \text{if } x > \sqrt{k_i} \\ x & \text{if } x \in (r_a, \sqrt{k_i}] \\ r_a & \text{if } x \leq r_a \end{cases}
$$

$$
a^*(r) = \begin{cases} 1 & r \geq \sqrt{k_i} \\ [0,1] & r \geq r_a \text{ and disposition is Admit} \\ 0 & \text{otherwise} \end{cases}
$$

$$r^*(x) = \begin{cases} \hat{b} \ \text{ if } \ r = r_a \\ \\ [0,1] \ \text{ if } \ \begin{cases} r \leq 0 \quad \text{and disposition is Exclude} \\ \\ r \leq r_a \quad \text{and disposition is admit} \\ \\ r > \sqrt{k_i} \end{cases} \\ \\ 1 \ \text{ if } \ r > 0 \quad \text{and deposition is Exclude} \\ \\ [0, \hat{b}) \ \text{ if } \ r \in (r_a, \sqrt{k}) \quad \text{and deposition is Admit} \end{cases}$$

where $b(\hat{r})$ is defined by Bayes rule and makes the Upper Court indifferent about auditing when $r = r_a$.

Case 1 ($x \geq \sqrt{k_i}$): By Lemma 3, $r^* = \sqrt{k_i}$, which leads to the disposition Exclude. By Corollary 1, UC does not reverse the rule. To see that LC never has an incentive to deviate, consider first a deviation to any $r' < r^*$. For any beliefs and any move by UC, LC is strictly worse off. Consider next a deviation to any $r'' > r^*$. By Corollary 1, UC reverses this rule. By Lemma 3, LC never prefers to be reversed and therefore has no incentive to deviate to $r'' > r^*$.

Case 2 ($x < r_A \in [\underline{r}, \overline{r})$: By Lemma 4, LC picks $r^* = r_A$, which leads to the disposition Admit. By Lemma 5, on observing $(r^*, Admit)$, $b(r)^* = \frac{\int_{-\infty}^{0} g(x)dx}{\int_{-\infty}^{r^*} g(x)dx}$. By Lemma 4, $b(r)^* > \frac{r^2 - k_i + \phi}{\phi}$ and therefore UC does not reverse.

Case 3 ($r_A \leq x < \sqrt{k_I}$): In this case, $r^* = x$. $r^* = x$ gives a disposition of Exclude. $(r^* = x, Exclude)$ implies $x \geq r^*$, and therefore $b(r) = 1$. By Lemma 6, LC has no incentive to deviate from r^* in either direction.

Lemma 7. *Given Proposition 1, if $L \geq r^*(x)$, the behavior characterized by Proposition 1 holds in equilibrium; if $L < r^*(x)$, then the following strategy characterizes the Lower Court's strategy in all perfect Bayesian equilibria:*

$$r^*(x) = \begin{cases} L & \text{if} \quad \begin{cases} x > r_A \\ \\ x < r_A \text{ and } b(r) \geq b(r)^* \end{cases} \\ \\ r_A & \text{otherwise} \end{cases}$$

Proof. Suppose first $L \geq r_a$. Playing $r^* = L$ leads to a disposition of Exclude because, by assumption, $L < r^*(x)$. By Corollary 1, UC does not reverse. LC can do no better because it is choosing its optimal rule. Now, suppose $L < r_a$. If on observing $r < r_a$ and $b(r) \geq b(r)^*$, then by Lemma 1, UC does not reverse. Again, LC is choosing its optimal rule and can do no better. Conversely, if on observing $r < r_A$ and $b < b^*$, then by Lemma 1, UC does reverse. By Lemma 2, LC's best reply is still r_a. ∎

Table 10: Judiciary Act of 1837 Diff-in-Diff Model Results

	State Court Control			DC Circuit Control		
	(1)	(2)	(3)	(1)	(2)	(3)
New State x Circuit Incorporation	0.129*	0.045***	0.000	0.055	-0.084***	-0.072***
	(0.059)	(0.008)	(0.091)	(0.059)	(0.019)	(0.005)
New State	-0.196***	-0.190***	-0.168**	-0.090***	-0.046**	-0.039**
	(0.000)	(0.008)	(0.061)	(0.000)	(0.017)	(0.012)
Circuit Incorporation	-0.029***	0.129	0.292**	0.045***	-0.331*	-0.236
	(0.000)	(0.118)	(0.109)	(0.000)	(0.166)	(0.159)
Conservative Lower Court Opinion			0.181			0.158**
			(0.098)			(0.056)
Unclear Lower Court Opinion Direction			-0.255			0.221
			(0.178)			(0.116)
Federal Law Unconstitutional			0.169*			
			(0.071)			
State/Territory Law Unconstitutional			-0.574			0.001
			(0.298)			(0.233)
Issue: Civil Rights			0.097			0.130
			(0.239)			(0.151)
Issue: 1st Amendment			-0.322			-0.186
			(0.402)			(0.212)
Issue: Due Process			-0.046			0.011
			(0.275)			(0.166)
Issue: Attorneys						0.083
						(0.126)
Issue: Economic Activity			-0.101			-0.041
			(0.253)			(0.161)
Issue: Judicial Power			-0.072			0.081
			(0.235)			(0.158)
Issue: Federalism			-0.159			0.041
			(0.283)			(0.199)
Issue Interstate Relations			-0.162			0.255
			(0.382)			(0.263)
Issue: Federal Taxation			-0.069			-0.016
			(0.173)			(0.136)
Issue: Miscellaneous						0.400**
						(0.158)
Issue: Private Action			0.124			0.113
			(0.206)			(0.153)
Conservative SCOTUS Opinion			-0.170**			-0.143***
			(0.069)			(0.038)
Unclear SCOTUS Opinion Direction						-0.344**
						(0.120)
Opinion Writer: Washington						0.079
						(0.053)
Opinion Writer: Marshall			-0.331*			0.134*
			(0.137)			(0.055)
Opinion Writer: Johnson			-0.554***			0.171
			(0.142)			(0.102)
Opinion Writer: Livingston			-0.121			0.312***
			(0.315)			(0.062)
Opinion Writer: Todd						-0.581**
						(0.229)
Opinion Writer: Duvall			-0.621**			0.069
			(0.179)			(0.091)
Opinion Writer: Story			-0.146			0.264***
			(0.178)			(0.058)
Opinion Writer: Thompson			-0.101			0.241***
			(0.192)			(0.053)
Opinion Writer: Trimble			0.248			0.728***
			(0.160)			(0.040)
Opinion Writer: McLean			-0.063			0.286**
			(0.154)			(0.090)
Opinion Writer: Baldwin			-0.465			0.358*
			(0.244)			(0.179)
Opinion Writer: Wayne			-0.039			0.386***
			(0.091)			(0.103)
Opinion Writer: Taney			-0.108			0.220*
			(0.124)			(0.109)
Opinion Writer: Barbour			-0.476*			-0.064
			(0.239)			(0.178)
Opinion Writer: Catron			-0.084			0.290***
			(0.211)			(0.059)
Opinion Writer: McKinley			0.065			0.221
			(0.269)			(0.321)
Opinion Writer: Daniel			0.009			0.370***
			(0.236)			(0.074)
Opinion Writer: Nelson			-0.279**			0.126
			(0.101)			(0.118)
Opinion Writer: Woodbury			-0.016			0.171
			(0.171)			(0.126)
Opinion Writer: Grier			-0.159			0.244*
			(0.101)			(0.106)
Opinion Writer: Curtis			-0.143			0.283
			(0.223)			(0.214)
Opinion Writer: Campbell			-0.300***			0.039
			(0.070)			(0.162)
Opinion Writer: Clifford			-0.383*			0.016
			(0.161)			(0.168)
Opinion Writer: Swayne			-0.201			0.118
			(0.132)			(0.143)
Opinion Writer: Miller			-0.249**			0.172
			(0.095)			(0.167)
Opinion Writer: Davis			-0.359*			-0.008
			(0.166)			(0.133)
Opinion Writer: Field			-0.080			0.223**
			(0.112)			(0.079)
Opinion Writer: Chase			-0.612*			-0.132
			(0.283)			(0.266)
Opinion Writer: Strong			-0.157			0.397*
			(0.127)			(0.164)
Observations	619	619	611	953	953	924
R-squared	0.009	0.155	0.281	0.004	0.106	0.184
Covariates	No	No	Yes	No	No	Yes
Clustered std.error	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	No	Yes	Yes
Circuit FE	No	Yes	Yes	No	Yes	Yes

Note: Clustered standard errors by circuit in parentheses. The outcome variable is affirm rate (binary variable). The results are produced by using linear probability models, so the estimates are OLS coefficient estimates. *** p<0.01, ** p<0.05, * p<0.1.

Table 11: Judiciary Act 1862 Diff-in-Diff Model Results

	State Court Control			DC Circuit Court Control		
	(1)	(2)	(3)	(1)	(2)	(3)
New State x Circuit Incorporation	-0.106	0.570***	0.561***	0.077	-0.098***	-0.120**
	(0.069)	(0.027)	(0.137)	(0.059)	(0.024)	(0.044)
New State	-0.073***	-0.829***	-0.713***	-0.028*	-0.217***	-0.189**
	(0.013)	(0.028)	(0.144)	(0.013)	(0.020)	(0.067)
Circuit Incorporation	0.154**	0.074*	-0.526*	-0.029***	-0.466***	-0.591***
	(0.057)	(0.036)	(0.248)	(0.000)	(0.096)	(0.121)
Conservative Lower Court Opinion			0.026			0.057
			(0.064)			(0.073)
Unclear Lower Court Opinion Direction			0.850			0.348**
			(0.496)			(0.114)
Federal Law Unconstitutional			-0.102			
			(0.241)			
State/Territory Law Unconstitutional			0.096			0.174
			(0.358)			(0.128)
Issue: Civil Rights			0.297			0.111
			(0.280)			(0.119)
Issue: 1st Amendment						-0.427***
						(0.033)
Issue: Due Process			0.040			-0.027
			(0.436)			(0.095)
Issue: Attorneys			0.451			-0.039
			(0.317)			(0.157)
Issue: Economic Activity			0.319			0.001
			(0.212)			(0.119)
Issue: Judicial Power			0.507*			0.194
			(0.258)			(0.169)
Issue: Federalism			0.091			-0.216**
			(0.096)			(0.081)
Issue: Interstate Relations						0.028
						(0.100)
Issue: Federal Taxation			-0.047			0.001
			(0.301)			(0.131)
Issue: Miscellaneous						0.249**
						(0.087)
Issue: Private Action			-0.259			-0.264*
			(0.336)			(0.131)
Conservative SCOTUS Opinion			0.267***			0.024
			(0.065)			(0.207)
Unclear SCOTUS Opinion Direction						-0.012
						(0.258)
Opinion Writer: Washington						0.179***
						(0.014)
Opinion Writer: Marshall						0.202***
						(0.020)
Opinion Writer: Johnson						0.289***
						(0.017)
Opinion Writer: Livingston						0.340***
						(0.016)
Opinion Writer: Todd						-0.862***
						(0.037)
Opinion Writer: Duvall						0.247**
						(0.100)
Opinion Writer: Story			0.202			0.336***
			(0.132)			(0.014)
Opinion Writer: Thompson						0.207***
						(0.019)
Opinion Writer: Trimble						0.667***
						(0.014)
Opinion Writer: McClean			-0.722***			0.348***
			(0.162)			(0.028)
Opinion Writer: Baldwin			-0.737***			0.622***
			(0.032)			(0.027)
Opinion Writer: Wayne			-0.635***			0.429***
			(0.120)			(0.110)
Opinion Writer: Taney			-1.065***			0.310**
			(0.237)			(0.090)
Opinion Writer: Barbour						0.162***
						(0.043)
Opinion Writer: Catron			-0.838***			0.242***
			(0.071)			(0.031)
Opinion Writer: McKinley						-0.312***
						(0.024)
Opinion Writer: Daniel			-0.699**			0.467***
			(0.280)			(0.098)
Opinion Writer: Nelson			-0.757***			0.305***
			(0.141)			(0.040)
Opinion Writer: Woodbury						0.226*
						(0.105)
Opinion Writer: Grier			-0.539**			0.416***
			(0.213)			(0.077)
Opinion Writer: Curtis			-1.448***			-0.030
			(0.237)			(0.350)
Opinion Writer: Campbell			-0.743***			0.240***
			(0.154)			(0.054)
Opinion Writer: Clifford			-0.720***			0.307***
			(0.131)			(0.063)
Opinion Writer: Swayne			-0.919***			0.207
			(0.179)			(0.114)
Opinion Writer: Miller			-0.372**			0.710***
			(0.114)			(0.053)
Opinion Writer: Davis			-0.792**			0.333
			(0.226)			(0.229)
Opinion Writer: Field			-0.527***			0.470***
			(0.139)			(0.099)
Opinion Writer: Chase			-0.109			0.965***
			(0.119)			(0.109)
Opinion Writer: Strong			-0.271*			0.876***
			(0.125)			(0.114)
Observations	301	301	301	652	652	631
R-squared	0.014	0.160	0.344	0.001	0.126	0.208
Covariates	No	No	Yes	No	No	Yes
Clustered std.error	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	No	Yes	Yes
Circuit FE	No	Yes	Yes	No	Yes	Yes

Note: Clustered standard errors by circuit in parentheses. The outcome variable is affirm rate (binary variable). The results are produced by using linear probability models, so the estimates are OLS coefficient estimates. *** p<0.01, ** p<0.05, * p<0.1.

References

Ackerman, Bruce A. 2005. *The failure of the founding fathers : Jefferson, Marshall, and the rise of presidential democracy.* Cambridge, MA: Belknap Press of Harvard University Press.

Alfange, Dean Jr. 1993. "Marbury v. Madison and Original Understanding of Judicial Review: In Defense of Traditional Wisdom." *Supreme Court Review* 1993.
URL: *https://heinonline.org/HOL/Page?handle=hein.journals/suprev1993&id=333&div=&collectio*

Baum, Lawrence. 2006. *Judges and Their Audiences : A Perspective on Judicial Behavior.* Princeton University Press.

Beim, Deborah, Alexander V. Hirsch and Jonathan P. Kastellec. 2014. "Whistleblowing and Compliance in the Judicial Hierarchy." *American Journal of Political Science* 58(4):904–918.
URL: *http://doi.wiley.com/10.1111/ajps.12108*

Benesh, Sara C. and Malia Reddick. 2002. "Overruled: An Event History Analysis of Lower Court Reaction to Supreme Court Alteration of Precedent." *The Journal of Politics* 64(2):534–550.
URL: *https://www.journals.uchicago.edu/doi/10.1111/1468-2508.00138*

Boyd, Christina L., Lee Epstein and Andrew D. Martin. 2010. "Untangling the Causal Effects of Sex on Judging." *American Journal of Political Science* 54(2):389–411.
URL: *http://doi.wiley.com/10.1111/j.1540-5907.2010.00437.x*

Caldeira, Gregory A. 1987. "Public Opinion and The U.S. Supreme Court: FDR's Court-Packing Plan." *American Political Science Review* 81(4):1139–1153.

Caldeira, Gregory A., John R. Wright and Christopher J.W. Zorn. 1999. "Sophisticated voting and gate-keeping in the supreme court." *Journal of Law, Economics, and Organization* 15(3):549–572.
URL: *https://academic.oup.com/jleo/article/15/3/549/905798*

Cameron, A. Collin and Douglas L. Miller. 2010. Robust inference with clustered data. Technical report.
URL: *www.econstor.eu*

Cameron, Charles M. 1993. New Avenues for Modeling Judicial Politics. In *Conference on the Political Economy of Public Law.* pp. 1–5.

Cameron, Charles M., Jeffrey A. Segal and Donald Songer. 2000. "Strategic Auditing in a Political Hierarchy: An Informational Model of the Supreme Court's Certiorari Decisions." *American Political Science Review* 94(1):101–116.

Cameron, Charles M. and Lewis A. Kornhauser. 2006. Appeals mechanisms, litigant selection, and the structure of judicial hierarchies. In *Institutional games and the U.S. Supreme Court,* ed. J. R. Rogers, R. B. Flemming and J. R. Bond. Charlottesville: University of Virginia Press pp. 173–204.

Carrubba, Clifford, Barry Friedman, Andrew D Martin and Georg Vanberg. 2012. "Who Controls the Content of Supreme Court Opinions?" *American Journal of Political Science* 56(2):400–412.

Carrubba, Clifford J. 2009. "A model of the endogenous development of judicial institutions in federal and international systems." *Journal of Politics* 71(1):55–69.

Carrubba, Clifford J. and Tom S. Clark. 2012. "Rule creation in a political hierarchy." *American Political Science Review* 106(3):622–643.

Cases, Federal. 1897. The Federal cases: comprising cases argued and determined in the circuit and district courts of the United States from the earliest times to the beginning of the Federal reporter, arranged alphabetically by the titles of the cases, and numbered c. Technical report St. Paul, MN: .

Clark, Tom S. 2009. "A principal-agent theory of en banc review." *Journal of Law, Economics, and Organization* 25(1):55–79.
URL: *https://academic.oup.com/jleo/article/25/1/55/885570*

Clark, Tom S. 2011. *The limits of judicial independence.* Cambridge University Press.

Clark, Tom S. and Aaron B. Strauss. 2010. "The Implications of High Court Docket Control for Resource Allocation and Legal Efficiency." *Journal of Theoretical Politics* 22(2):247–268.
URL: *http://journals.sagepub.com/doi/10.1177/0951629809359036*

Clinton, Robert Lowry. 1994. "Game Theory, Legal History, and the Origins of Judicial Review: A Revisionist Analysis of Marbury v. Madison." *American Journal of Political Science* 38(2):285.
URL: *https://www.jstor.org/stable/2111405?origin=crossref*

Corley, Pamela C., Paul M. Collins and Bryan Calvin. 2011. "Lower court influence on U.S. Supreme Court opinion content." *Journal of Politics* 73(1):31–44.

Cross, Frank B. and Emerson H. Tiller. 1997. "Judicial Partisanship and Obedience to Legal Doctrine: Whistleblowing on the Federal Courts of Appeals." *Yale Law Journal* 107.
URL: *https://heinonline.org/HOL/Page?handle=hein.journals/ylr107&id=2189&div=&collection=*

Crowe, Justin. 2007. "The forging of judicial autonomy: Political entrepreneurship and the reforms of William Howard Taft." *Journal of Politics* 69(1):73–87.

Crowe, Justin. 2012. *Building the Judiciary : Law, Courts, and the Politics of Institutional Development.* Princeton University Press.

Epstein, Lee and Jack Knight. 1998. *The Choices Justices Make.* CQ Press.

Epstein, Lee, Jeffrey A. Segal and Harold J. Spaeth. 2001. "The Norm of Consensus on the U.S. Supreme Court." *American Journal of Political Science* 45(2):362.

Epstein, Lee, William M. Landes and Richard A. Posner. 2013. *The Behavior of Federal Judges: A Theoretical and Empirical Study of Rational Choice.* Cambridge, MA and London, England: Harvard University Press.

Farhang, S. and Gregory Wawro. 2004. "Institutional Dynamics on the U.S. Court of Appeals: Minority Representation Under Panel Decision Making." *Journal of Law, Economics, and Organization* 20(2):299–330.
URL: *https://academic.oup.com/jleo/article-lookup/doi/10.1093/jleo/ewh035*

Ferejohn, John and Charles Shipan. 1990. "Congressional Influence on Bureaucracy." *Journal of Law, Economics, and Organization* 6.
URL: *https://heinonline.org/HOL/Page?handle=hein.journals/jleo6&id=485&div=&collection=*

Frank, John P. 1964. *Justice Daniel dissenting : a biography of Peter V. Daniel, 1784-1860.* Harvard University Press.

Frankfurter, Felix and James M. Landis. 1928. *The Business of the Supreme Court: A Study in the Federal Judicial System.* The Macmillan Company.

Friedman, Barry. 2009. *The will of the people : how public opinion has influenced the Supreme Court and shaped the meaning of the Constitution.* Farrar, Straus and Giroux.

George, Tracey E. 1999. "The Dynamics and Determinants of the Decision to Grant En Banc Review." *Washington Law Review* 74.
URL: *https://heinonline.org/HOL/Page?handle=hein.journals/washlr74&id=227&div=&collection=*

Giles, Micheal W., Thomas G. Walker and Christopher Zorn. 2006. "Setting a judicial agenda: The decision to grant en banc review in the U.S. Courts of Appeals." *Journal of Politics* 68(4):852–866.

Glick, Joshua. 2002. "On the Road: The Supreme Court and the History of Circuit Riding." *Cardozo Law Review* 24.
URL: *https://heinonline.org/HOL/Page?handle=hein.journals/cdozo24&id=1767&div=&collection=*

Goodman-Bacon, Andrew. 2018. "Difference-in-Differences with Variation in Treatment Timing." *National Bureau of Economic Research Working Paper Series* .
URL: *http://www.nber.org/papers/w25018.pdf*

Gruhl, John. 1980. "The supreme court's impact on the law of libel: Compliance by lower federal courts." *Political Research Quarterly* 33(4):502–519.

Hammond, Thomas H., Chris W. Bonneau and Reginald S. Sheehan. 2005. *Strategic Behavior and Policy Choice on the U.S. Supreme Court.* Stanford University Press.

Haskins, George L. 1981. "Law versus Politics in the Early Years of the Marshall Court." *University of Pennsylvania Law Review* 130(1):1.
URL: *https://www.jstor.org/stable/3311809?origin=crossref*

Henderson, Dwight F. 1971. *Courts for a new nation.* Washington: Public Affairs Press.

Hettinger, Virginia A., Stefanie A. Lindquist and Wendy L. Martinek. 2004. "Comparing Attitudinal and Strategic Accounts of Dissenting Behavior on the U.S. Courts of Appeals." *American Journal of Political Science* 48(1):123–137.

Hughes, Charles Evans. 1932. Remarks of Chief Justice Hughes at the Judicial Conference of the Federal Judges of the Fourth Circuit, Held at Asheville, North Carolina, on Thursday Morning, June 9, 1932. In *Minutes of the Second Annual Meeting of the Federal Judicial Conference of the Fourth Circuit Held at Asheville, North Carolina June 9-10-11, 1932.* pp. 2–4.

Jay, John, William Cusing, James Wilson, John Blair, James Iredell and Thomas Johnson. 1849. "The Chief Justice and the Associate Judges of the Supreme Court Respectfully Represent to the Congress of the United States" Letter to George Washington. 9 Aug. 1792. In *Annals of Congress. The Debates and Proceedings in the Congress of the United States.* Washington, D.C.: pp. 163–164.

Kastellec, Jonathan P. 2013. "Racial Diversity and Judicial Influence on Appellate Courts." *American Journal of Political Science* 57(1):167–183.
URL: *http://doi.wiley.com/10.1111/j.1540-5907.2012.00618.x*

Kastellec, Jonathan P. 2016. The Judicial Hierarchy: A Review Essay. In *Oxford Research Encyclopedia of Politics.* Oxford University Press.
URL: *https://oxfordre.com/politics/view/10.1093/acrefore/9780190228637.001.0001/acrefore-9780190228637-e-99*

Knight, Jack and Lee Epstein. 1996. "On the Struggle for Judicial Supremacy." *Law & Society Review* 30(1):87.
URL: *https://www.jstor.org/stable/10.2307/3054035?origin=crossref*

Kornhauser, Lewis A. 1994. "Adjudication by a Resource-Constrained Team: Hierarchy and Precedent in a Judicial System." *Southern California Law Review* 68.
URL: *https://heinonline.org/HOL/Page?handle=hein.journals/scal68&id=1621&div=&collection=*

Lacroix, Alison L. 2012. "Federalists, federalism, and federal jurisdiction." *Law and History Review* 30(1):205–244.

Lax, Jeffrey R. 2003. "Certiorari and Compliance in the Judicial Hierarchy." *Journal of Theoretical Politics* 15(1):61–86.
URL: *http://journals.sagepub.com/doi/10.1177/0951692803151003*

Lax, Jeffrey R. and Charles M. Cameron. 2007. "Bargaining and Opinion Assignment on the US Supreme Court." *Journal of Law, Economics, and Organization* 23(2):276–302.

Lynch, David. 2018. *The role of circuit courts in the formation of United States law in the early Republic : following Supreme Court Justices Washington, Livingston, Story, and Thompson.* Oxford, UK: Hart Publishing.

Maltzman, Forrest, James F. Spriggs and Paul J. Wahlbeck. 2000. *Crafting Law on the Supreme Court: The Collegial Game.* Cambridge University Press.

Marshall, John. 1837. *Reports of Cases Decided by the Honourable John Marshall, Late Chief Justice of the United States, in the Circuit Court of the United States for the District of Virginia and North Carolina, from 1802 to 1833 Inclusive, in Two Volumes.* Philadelphia: James Kay, Jun. & Brother.

McCubbins, Mathew D. and Thomas Schwartz. 1984. "Congressional Oversight Overlooked: Police Patrols versus Fire Alarms." *American Journal of Political Science* 28(1):165.

McNollgast. 1987. "Administrative procedures as instruments of political control." *Journal of Law and Economics* 3(2):243–277.
URL: *https://www.jstor.org/stable/764829?casa_token=bAZvMQkqDvYAAAAA:RXvR28mu8aCWx wtU9vyziIurFF9HgWEdQOI-jCfk2JM8HxZ3N8LWOedsCAxk6IG1rnDC1FvomS_3OFc*

McNollgast. 1995. "Politics and the Courts: A Positive Theory of Judicial Doctrine and the Rule of Law." *Southern California Law Review* 68.
URL: *https://heinonline.org/HOL/Page?handle=hein.journals/scal68&id=1647&div=&collection=*

Meltzer, Daniel J. 1989. "The Judiciary's Bicentennial." *The University of Chicago Law Review* 56(2):423.
URL: *https://www.jstor.org/stable/1599843?origin=crossref*

Moe, Terry M. 1984. "The New Economics of Organization." *American Journal of Political Science* 28(4):739.

Murphy, Walter F. 1959. "Lower Court Checks on Supreme Court Power." *American Political Science Review* 53(4):1017–1031.

Newmyer, R. Kent. 1970. "Justice Joseph Story on Circuit and a Neglected Phase of American Legal History." *The American Journal of Legal History* 14(2):112.
URL: *https://academic.oup.com/ajlh/article-lookup/doi/10.2307/844397*

O'Brien, David M. 2000. "Storm Center: The Supreme Court in American Politics.".

O'Connor, Sandra Day. 1985. "Foreword: The Changing Role of the Circuit Justice." *University of Toledo Law Review* 17.
URL: *https://heinonline.org/HOL/Page?handle=hein.journals/utol17&id=531&div=&collection=*

Perry, HW. 2009. *Deciding to decide: agenda setting in the United States Supreme Court.*
URL: *https://books.google.com/books?hl=en&lr=&id=UReZT7fNPTUC&oi=fnd&pg=PA1&dq=.+L*

Revesz, Richard L. 1997. "Environmental Regulation, Ideology, and the D. C. Circuit." *Virginia Law Review* 83.
URL: *https://heinonline.org/HOL/Page?handle=hein.journals/valr83&id=1735&div=59&collection*

Segal, Jeffrey A. and Harold J. Spaeth. 2002. *The Supreme Court and the Attitudinal Model Revisited.* Cambridge University Press.

Songer, D. R. and R. S. Sheehan. 1990. "Supreme Court Impact On Compliance and Outcomes: Miranda and New York Times in the United States Courts of Appeals." *Political Research Quarterly* 43(2):297–316.

Songer, Donald R., Jeffrey A. Segal and Charles M. Cameron. 1994. "The Hierarchy of Justice: Testing a Principal-Agent Model of Supreme Court-Circuit Court Interactions." *American Journal of Political Science* 38(3):673.
URL: *https://www.jstor.org/stable/2111602?origin=crossref*

Spaeth, Harold J., Lee Epstein, Andrew D. Martin, Jeffrey A. Segal, Theodore J. Ruger and Sara C. Benesh. 2020. "2020 Supreme Court Database.".
URL: *http://supremecourtdatabase.org*

Spiller, Pablo T. and Rafael Gely. 1992. "Congressional Control or Judicial Independence: The Determinants of U.S. Supreme Court Labor-Relations Decisions, 1949-1988." *The RAND Journal of Economics* 23(4):463.
URL: *http://doi.wiley.com/10.2307/2555900*

Spriggs, James F. 1997. "Explaining Federal Bureaucratic Compliance with Supreme Court Opinions." *Political Research Quarterly* 50(3):567–593.

Staton, Jeffrey K. and Georg Vanberg. 2008. "The Value of Vagueness: Delegation, Defiance, and Judicial Opinions." *American Journal of Political Science* 52(3):504–519.
URL: *http://doi.wiley.com/10.1111/j.1540-5907.2008.00326.x*

Sunstein, Cass R., David Schkade and Lisa Michelle Ellman. 2004. "Ideological Voting on Federal Courts of Appeals: A Preliminary Investigation." *Virginia Law Review* 90(1):301.
URL: *https://www.jstor.org/stable/3202429?origin=crossref*

Vanberg, Georg. 2005. *Politics of Constitutional Review in Germany, The. Political Economy of Institutions and Decisions.* Cambridge University Press.

Vining, Richard L., Christopher Zorn and Susan Navarro Smelcer. 2006. "Judicial tenure on the U.S. supreme court, 1790-1868: Frustration, resignation, and expiration on the bench.".

Walker, Thomas G., Lee Epstein and William J. Dixon. 1988. "On the Mysterious Demise of Consensual Norms in the United States Supreme Court." *The Journal of Politics* 50(2):361–389.

Weber, Max. 1958. *From Max Weber: Essays in Sociology.* New York: Oxford University Press.

Weingast, Barry R. and Mark J. Moran. 1983. "Bureaucratic Discretion or Congressional Control? Regulatory Policymaking by the Federal Trade Commission." *Journal of Political Economy* 91(5):765–800.
URL: *https://www.journals.uchicago.edu/doi/abs/10.1086/261181*