

**The Impact of Specialized Courts on the Federal Judicial System
1925-1981: A Study of Federal Circuits' Decision of Reversal**

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Abstract

Today a considerable volume of federal caseload is under the jurisdiction of specialized courts at both the district level and circuit level. Ironically, neither judicial scholars nor political scientists treat this topic as a priority in their research agenda. Therefore, what the exact impact of specialized courts on the federal judicial system has not been carefully explored. The current study makes a primary effort to empirically figure out the systematic impact of specialized trial courts on the U.S. federal judicial system. By focusing on the simplest situation in history where both generalist trial courts and specialized trial courts were only under the direct supervision of generalist circuits, I find that specialized trial courts did enjoy a significant and considerable advantage in avoiding case reversal over their generalist counterparts.

1. Instruction

The creation and development of federal specialized courts¹ in the United States have been intimately related with the expansion of bureaucracy regulating the modern American life. In order to effectively deal with the complexity of a modern society, Congress delegated constitutional powers to bureaucratic agencies such as departmental divisions and independent commissions. Such a relationship of delegation however can raise serious problems of bureaucratic accountability, which has received considerable attention (most of which is criticism) from media, the public, political observers and politicians. Students of American politics typically describe this relationship as “between a principal, one who has permitted or directed another to act for his benefit and subject to his direction or control and an agent, one who acts on behalf of the principal” (Songer, Segal, and Cameron 1994, 674). Through this principal-agent perspective, political scientists attribute the accountability issue to the existence of asymmetric information between the legislature (the principal) and the bureaucracy (the agent), which directly raises classical dilemmas such as adverse selection and moral hazard. Also by following this strand of thought, institutional designers raise insightful suggestions concerning a successful containment of bureaucratic discretion, among which judicial review has become more and more significant (Lowi, Ginsberg, and Shepsle 2004). To better utilize the mechanism of judicial review to monitor and influence bureaucratic behaviors, Congress established several federal specialized courts with limited

¹ I use Unah's (1998, 7) definition of specialized courts, as “courts that possess limited subject matter jurisdiction and are staffed by permanent judges who have substantive expertise in the area” in this study.

jurisdiction defined by certain policy areas such as bankruptcy, tax, international trade, and patent. And propositions concerning the further establishment of more specialized courts² side by side with the traditional generalist courts within the federal judicial system have also been under debate and scrutiny.

Despite their growing influence and promising potential in shaping and tailoring public policies, specialized courts nevertheless have long been overlooked by both mainstream judicial scholars and political scientists. And the extremely limited existing literature has been exclusively focusing on the unusual judicial behavior of federal specialized courts in comparison with the federal generalist courts (Baum 1977, Jordan 1981, Hansen, Johnson, and Unah 1995, Unah 1997, 1998, Wald 1982). In the current research, I am intending to transcend this limit by looking at quantitative evidence concerning the influence of specialized courts on the federal judicial system.³ In particular, I am interested in the systematic impact of specialized courts on the decisions made by federal circuits in reviewing petitions arising from lower trial courts. Therefore the primary empirical question I am trying to answer is: Will the institutional uniqueness of specialized courts noticed by both political scientists and jurists give such courts observable advantages in avoiding the decision of reversal made by the federal circuits?

A review of the theoretical literature on specialized courts seems to drive us to two opposing conclusions. On the one hand, judicial scholars seem to hold that when facing the review of petition held by higher generalist courts, the highly limited

² Most significant examples include the proposed establishments of a court of environment and a court of labor.

³ To my knowledge, there has been no quantitative study in this direction despite the existence of sporadic case studies taken by scholars of judicial politics and jurists.

jurisdiction of federal specialized courts makes them suffer a considerable disadvantage that is usually accompanied with a higher frequency of reversal in comparison to generalist trial courts. On the other hand, political scientists equipped with strategic thought seem to believe that the limited jurisdiction defined by certain policy areas can be attributed to the rise of asymmetric information between federal specialized courts and federal generalist courts. And the asymmetric information endows a considerable advantage to the federal specialized courts in the process of petition review, which could finally be transferred into a lower rate of reversal. By focusing on the period of 1925-1982, where both the generalist courts and specialized courts at the trial level are under the direct supervision of generalist federal circuits, I find array of empirical evidence consistent with the answer provided by political scientists trained with strategic thought. However since the current study is only a crude approximation of the real world, more efforts in theoretical modeling as well as empirical analysis are needed before we can draw a definitive conclusion on this issue. The remainder of this paper is organized as follows. In section two, I start with analyzing theories that support either the advantage argument or the disadvantage argument and deriving testable hypotheses accordingly. In section three, I discuss my data source, statistical methods and variable operationalizations. Empirical results are presented and discussed in section four. In the concluding remarks, section five, I summarize my findings and propose directions for future studies.

2. Federal Specialized Courts and Their Effect on the Federal Circuits' Decision Making

(a) A General Review of the Federal Judicial System: Generalist Courts v.s. Specialized Courts

The federal judicial system of the U.S. is a three-layer, pyramid-like hierarchical structure with the Supreme Court sitting on the top. For the most part of the 20th century, the Supreme Court oversaw twelve federal appeal courts at the circuit level---eleven regional circuits plus the District of Columbia circuit. Under these federal circuits, there are a total of ninety-four federal district courts. All of these courts mentioned above---the Supreme Court, the federal circuits, and the federal district courts are generalist courts whose practice of jurisdiction are basically not delimited within a specific policy area. Over the century, Congress established several specialized courts that only have judicial power over certain policy areas. And for the most part of their history, specialized courts enjoy a similar judicial position to those district courts within the federal system---they are trial courts and are under the supervision of higher appeal courts. This situation however changed in 1982, when Congress decided to establish a specialized appeal court at the circuit level---the United States Court of Appeals for the Federal Circuit.⁴

Keeping this structure in mind, my current study intends to investigate the systematic impact of the federal specialized courts on the federal judicial system. Specifically, I am interested in answering whether the uniqueness of specialized courts in their institutional design makes any difference in comparison with their generalist counterparts when facing the review of higher courts? And if yes, what is the direction of the difference? In other words, does the institutional uniqueness of

⁴ The United States Court of Appeals for the Federal Circuit was established under Article III of the Constitution on October 1, 1982. The court was formed by the merger of the United States Court of Customs and Patent Appeals and the appellate division of the United States Court of Claims, two previous specialized courts at the district level.

specialized courts help them win more deference from higher courts in the form of a lower rate of reversal, or on the contrary, create a less desirable situation in which a higher rate of reversal is observed? Ideally, such an examination should include both generalist courts and specialized courts at the higher levels---the federal circuits, the Supreme Court and the Court of Appeals for the Federal Circuit. However, given the lack of data on the decisions made by the Court of Appeals for the Federal Circuit and the intractable nature of a three-level analysis, an inclusion of the Court of Appeals for the Federal Circuit and the Supreme Court in the current study seems unrealistic. Therefore, I limit my ambition by constraining the research domain to the simplest situation where the trial courts, both generalists and specialized, are only overseen by generalist appeal courts at the circuit level---the eleven federal circuits and the District of Columbia circuit. However, such a limited research domain is still valuable for at least two reasons. First, it appropriately fits the most part of 20th century history. Since the Court of Appeals for the Federal Circuit only existed after 1982, most of the historical records should be reasonably explained under the current research setting. Second, our knowledge accumulated with the current research domain might provide strong shoulders on which future researchers⁵ may stand.

(b) Specialized Courts and Federal Circuits' Decision of Reversal: Convergence or Divergence

Both political scientists and jurists emphasize the institutional uniqueness of federal specialized courts in comparison to federal generalist courts. Most

⁵ Who may intend to make either a vertical (by including the Supreme Court) or a horizontal (by including the Court of Appeals for the Federal Circuit) expansion of the current study.

significantly, the federal specialized courts distinguish themselves from their generalist counterparts in their concentration of jurisdiction. For instance, the Court of International Trade exclusively deals with cases involving U.S foreign trade policies. Similarly, the U.S. Patent Court only has the judicial power over civil cases concerning intellectual property. Since their practice of jurisdiction is narrowly defined within certain policy areas, the federal specialized courts are inevitably immersed with a flood of technically homogeneous cases containing similar underlying facts, administrative regulations, and legal norms. And the direct effect of such a continuous exposure to the homogenous pool of cases is specialized court judges' acquirement of knowledge over the policy area under their supervision. This is indeed a process of learning through repeated stimuli. And such array of stimuli could be so decisive that the expertise acquired by specialized court judges quickly amounts to the level that is comparable to or even higher than that reached by professional bureaucrats in the related area. In contrast to the federal specialized courts, the federal generalist courts exercise judicial power that is not delimited by any single policy area. Therefore, the possession of expertise about specialized fields of bureaucratic administration seems foreign to the judges sitting on federal generalist courts.

Despite their general agreement on the institutional uniqueness of specialized courts with respect to policy-defined jurisdiction, judicial scholars and political scientists have quite different understandings of its implications on the federal judicial system. Indeed, their reasoning lines could be so different that they finally end up with opposed conclusions for how federal circuits will behave in response to the

petitions arising from different trial courts. On the one hand, judicial scholars are more inclined to a divergence argument suggesting that the institutional uniqueness of specialized courts introduces considerably more inconsistencies in the federal judicial system and hence would receive more reversals from generalist appeal courts. On the other hand, political scientists are more likely to support a convergence argument proposing that the expertise possessed by judges of specialized trial courts nourishes an asymmetrical distribution of information between federal specialized courts and federal generalist courts, which would finally help federal specialized courts win more deference from higher generalist courts than their generalist counterparts. Here I try to trace out the typical lines of reasoning taken by the two sides and derive testable hypotheses accordingly.

Judicial scholars argue that the institutional uniqueness inherited in specialized courts drive them toward decisions that in the eyes of generalist courts are inconsistent with the founding principles of the U.S. federal judiciary (Shapiro 1968, 1981, Meador 1981, Posner 1983). Since for the most part of the 20th century, appeal courts are exclusively generalists, specialized trial courts are relatively disadvantaged when facing the review of higher appeal courts than their generalist counterparts. The reasons for why the institutional uniqueness of specialized courts raises inconsistencies within the generalist-dominated federal judicial system could be summarized in the following three facets. First and foremost, many judicial scholars believe that because of their expertise, judges serving in specialized courts have a narrow or even ill-defined view of law and policy. For instance, the possession of

field-specific knowledge concerning a single policy area may considerably influence the specialized courts' ability to appreciate ideas and insights drawn for other issue areas or other fields of law. However, the traditional legal philosophy held broadly and strongly by generalist courts is that judicial decisions should be devoid of field-driven pre-assumptions and rather should be based on a grander concern of judiciary and meaning of law. In addition, judicial decisions driven by field-specific knowledge may make certain fields of law the prisoners of policy specialists and legislators. For many common-law jurists, such a result obviously commits the original sin of legislative supremacy that is prevailing in civil-law tradition and hence is contradictory to the ideal of judicial independence that is deeply rooted in and cherished by the American common-law tradition (David and Brierley 1968, Ehrmann 1976, Merryman 1985).

Secondly, the tradition of common-law systems downplays the importance of courts whose exercise of jurisdiction is limited within a single policy area. And judges sitting on generalist “normal” courts and the general public alike often question the quality of judges serving in such specialized courts and hence the decisions made by them. Again this belief could be traced back to a common-law tradition which interprets the practice of truncated jurisdiction in specialized courts that was firstly and widely adopted in civil-law societies as the legal exigency to save their notorious ideology of legislative supremacy that is obviously contradictory to common-law understanding of judicial independence and the balance of power (David and Brierley 1968, Merryman 1985). Keeping the above two points in mind, we can easily

understand why Shapiro (Shapiro 1968, 52-53) argues: “The particular virtue of the judge is ignorance...to the extent that judges specialized, they lose the one quality that clearly disguises them from administrative lawmakers. Once they lose that quality there seems to be relatively little reason to have two separate specialists, one labeled judge and the other bureaucrat, making policy in the same field.”

Finally, the concentration of jurisdiction and hence case homogeneity within federal specialized courts are claimed to make specialized court the prey of related interest groups. Supposedly by either ensuring the appointment of their favorite judges or capturing judges through their repeated engagements with the court, well organized and mobilized interest groups in the related field might influence court decisions toward the direction favoring their own interest in stead of social justice. In that case, the decision made by specialized courts would be systematically biased in favor of field-related interest groups and hence jeopardize legal justice. Such a problem of clientism, however, is rarely a problem in a generalist court since it hears cases affecting many groups with considerably different interests and the influence of one group could be easily attenuated by the influence introduced by another.

Many readers may question the above common-law jurists' opinions as misunderstandings or even prejudices toward the civil-law tradition and hence specialized courts. It is worth noting, however, that such opinions do have important implications from a social science perspective on the potential different responses of federal generalist circuits to their specialized and generalist subordinates, the key interest of the current study. As the former Supreme Court Justice Holmes reminds us

(Holmes 1881), “The life of law has not been logic... The felt necessities of the time, the prevalent moral and political theories, intuitions of public policy, avowed or unconscious, even the prejudices which judges share with their fellow-men have had a good deal more to do than the syllogism in determining the rules by which men should be governed.” Given all these, we have the following hypothesis of divergence.

Hypothesis 1 (Divergence): *In reviewing petitions arising from lower trial courts, the generalist appeal courts are more likely to reverse decisions made by specialized trial courts than those by generalist trial courts.*

In sharp contrast to the “sincerity” assumption held by most judicial scholars, students of political science usually assume that political actors behave strategically and emphasize that political actors' expertise plays a pivotal role in such strategic behaviors. More recently, political scientists extended the idea of the informational effect of expertise to the study of strategic behaviors within the federal judicial system (Baum 1994, Songer, Segal, and Cameron 1994). And a closer examination of this discourse shows that it fits perfectly with the current study. Specialized court judges acquire expertise through their intensive engagement with cases arising from a single policy area, which usually become comparable to that possessed by bureaucratic professionals. Given the technical complexity of modern bureaucratic administration and the fact of limited judicial resources for any single court, specialized courts are much better informed than their generalist supervisors and counterparts for their specialized areas of jurisdiction. Therefore, if we observe the relationship between

trial courts and appeal courts through the scope of principal-agent theory, we can easily see that the possession of expertise over certain policy areas endows specialized trial courts (one type of agent) with an advantage over generalist trial courts (the other type of agent) when facing the review of the generalist appeal courts (the principal). As a result, generalist appeal courts are more likely to discover the flaws of decision committed by generalist trial courts than those committed by specialized trial courts. If the above reasoning is correct, we have reached the following hypothesis of convergence.

Hypothesis 2 (Convergence): *In reviewing petitions arising from lower trial courts, the generalist appeal courts are more likely to defer to decisions made by specialized trial courts than those by generalist trial courts.*

3. Data, Methods, and Variable Operationalizations

In order to study the systematic impact of specialized trial courts on the federal judicial system, I use the data set of *United States Courts of Appeals Database Phrase 1, 1925-1988* (ICPSR No.2086), which was originally collected by Donald Songer. The data set is constituted by a random sample of all the petitions judged by the twelve federal circuits during the period from 1925 through 1988. Because no record of the Court of Appeals for the Federal Circuits---the only specialized one at the circuit level---is included in this data set, I constrain the temporal scope of this research within the period from 1925 through 1981. The data analysis then proceeds according to the type of case. Because specialized trial courts primarily exist in the policy areas of economic administration, I first study cases whose basic concern is an

economic issue. To test the robustness of my findings, I further study an enlarged sample space that contains both economic cases and other non-criminal cases.

The dependent variable of this study is the decision of federal circuits to the petitions arising from both generalist trial courts and specialized trial courts. I code this variable in two ways---binary and ordinal. In the binary coding, the value of 0 is given if the decision made by a trial court is unconditionally upheld by a circuit court or the circuit court denied or dismissed the petition.⁶ The value of 1 is given if the decision made by a trial court is either partially reversed or fully reversed. In order to check the robustness of my findings in accordance with binary coding, I introduce an ordinal coding in which I further differentiate a partial reversal from a full reversal and give the value of 1 to the former and the value of 2 to the later. To meet the individuality of each measurement, I run ordinary logistic regression for the binary measure of reversal and ordinal logistic regression for the ordinary measure of reversal.

The primary explanatory variable of the current study is the source of petition---whether the case was raised from a generalist trial court or a specialized trial court. I treat this variable as a dummy---if the case was appealed through a generalist trial court to a federal circuit, it is coded as 0; if it was appealed through a specialized trial court to a federal circuit, it is coded as 1⁷. The control variables of this study include whether an issue about (1) jurisdiction (2)failure to state a claim

⁶ In the former case, the appeal court actively assures the validity of the decision made by a trial court while in the later case, it chooses to support the decision of a trial court by passively denying any further action.

⁷ U.S. Bankruptcy Court, U.S. Court of Customs and Patent Appeals, U.S. Court of Claims, U.S. Military Appeals, and U.S. Tax Court.

(3)standing (4)mootness (5)governmental immunity (6) timeliness or (7) frivolousness.

4. Empirical Results

Empirical results based on treating appeal court decisions as a binary outcome are presented in Table 1. It shows that when reviewing an appeal primarily concerning economic issues, a switch from a generalist trial court to a specialized trial court in the source of petition significantly decreases the chance of reversal drawn up by a federal circuit. Obviously, this evidence supports the convergence argument commonly held by political scientists. For all control variables, only the dispute of jurisdiction has a significant effect on the likelihood of case reversal. By expanding my research sample from economic cases to all non-criminal cases, I do a cross-validation test to show the robustness of my findings. As shown in the right-hand-most column of Table 1, the above findings are confirmed---coefficients keep their directions with the same level of statistical significance and their magnitude only changes slightly.

[Table.1 here]

Due to the nonlinear nature of logistic regression, coefficients show in Table 1 can not be interpreted directly. Hence, to show the quantities of my research interest, I calculate the predicted probabilities in some hypothetical contexts (See Table 3). First, I use economic cases as my research sample and set all control variables concerning threshold issues---jurisdiction, failure to claim, standing, mootness, governmental immunity, timeliness, and frivolousness at the value of 0. In other words, this is a situation where none of these threshold issues are involved in an appealing process.

Under this setting, a switch from a generalist trial court to a specialized trial court is expected to decrease the likelihood of reversal by 5.9 percent (the confidence interval is between 2.4 percent and 9.3 percent). Second, I construct another hypothetical situation in which all of the threshold issues are supposedly involved in an appealing process. In this case, a switch in appeal source from a generalist trial court to a specialized trial court decreases the likelihood of reversal by 3.8 percent (the confidence interval is between 0.2 percent and 7.4 percent). Further examinations based on an expanded research sample including all non-criminal cases demonstrate a similar effect. A switch in the source of appeal from a generalist trial court to a specialized court on average decreases the probability of case reversal by 6.4 percent (with a confidence interval between 3 percent and 10 percent) in the situation where none of the threshold issues are involved. And when all such issues are involved, the same switch is expected to decrease the probability of case reversal by 4.7 percent (with a confidence interval between 1.2 percent and 8.3 percent).

[Table.2 here]

Empirical findings based on the ordinal measure of case reversal are reported in Table 2. It shows that a change from a generalist trial court to a specialized trial court in the source of petition does contribute a negative effect on the likelihood of both partial reversal and full reversal. And such an effect is robust to the expansion of research sample from pure economic cases to all non-criminal cases. According to the estimates about economic cases, the threshold (cut1) of separating affirmation and partial reversal is 0.547 (with a confidence interval between 0.492 and 0.603) while

the threshold (cut2) of separating partial reversal and full reversal is 0.813 (with a confidence interval between 0.756 and 0.870). The fact that the estimated cut1 is smaller than and disentangled with the estimated cut2 gives an important piece of information that the dependent variable is indeed ordinal massed. And this statement is equally valid for the expanded sample including all non-criminal cases appealed to the federal circuits in which the estimated cut1 is 0.518 (with a confidence interval between 0.469 and 0.567) and the estimated cut2 is 0.798 (with a confidence interval between 0.747 and 0.849). Again, cut1 is smaller than cut2 and they are not overlapped.

As before, I interpret the meaning of original statistical estimates within several hypothetical contexts. In the situation where no threshold issues are involved in the petition of an economic case, a switch in appeal source from a generalist trial court to a specialized one accounts for a 0.5 percent (with confidence interval between 0.2 and 0.9 percent) decrease in the likelihood of partial reversal and a 5 percent (with a confidence interval between 2 percent and 8 percent) decrease in the likelihood of full reversal. In the situation where all threshold issues are involved in the petition of an economic case, the same change in the source of appeal on average explains a 0.6 percent (with confidence interval between 0.1 and 1 percent) decrease in the probability of partial reversal and a 3 percent (with a confidence interval between 0.1 percent and 6 percent) decrease in the probability of full reversal. For all non-criminal cases appealed to the federal circuits, when none of the threshold issues are involved, a switch in the source of appeal accounts for a 0.6 percent (with a confidence interval

between 0.2 and 1 percent) decrease in the likelihood of partial reversal and a 6 percent (with a confidence interval between 3 percent and 9 percent) decrease in the likelihood of full reversal. When all of the threshold issues are involved, the same switch in the source of appeal explains a 0.7 percent (with a confidence interval between 0.3 and 1 percent) decrease in the probability of partial reversal and a 4 percent (with a confidence interval between 1 percent and 7 percent) decrease in the probability of full reversal.

[Table.3 here]

The above econometric findings show significant and considerable effects of specialized trial courts on the decision of reversal drawn by the federal circuits. And the convergence argument is obviously supported. Besides the pure statistical methods in use, there is also a theoretical way by which I can confirm the validity of my findings. Suppose both parties in disputes know in advance that the generalist appeal court reverse decisions according to the source of appeal due to the intensified asymmetric information between specialized trial courts and their generalist supervisors. Then the party who is unsatisfied with the decision made by the two types of trial courts (generalist trial courts and specialized trial courts) would behave quite differently. The potential petitioners through a specialized court will only appeal those cases that are highly likely to be reversed by higher courts. In other words, they are imposing a more stringent standard on their selection for appealing cases. Hence, there should exist a systematic difference between cases appealed through generalist trial courts and specialized trial courts. And as we all know, estimates without a

decent control of selection effect can lead to biased results.

My current study does not make any effort to control such a case selection effect. Therefore, it is possible that all the statistical findings reported above are under the threat of bias. However, bias is not necessarily a bad thing for the conclusion I am trying to make as long as I know the direction of such a bias. And this is the case in my current study. Since cases appealed through specialized courts are those that are highly likely to be overturned by generalist appeal courts, my statistical findings must on some level underestimate the real impact of specialized trial courts on the decisions made by the federal circuits. In other words, the potential bias makes me more confident about the statement that specialized courts as a source of appeal significantly decrease the likelihood of case reversal by federal circuits, since the significance and magnitude reported above are probably very conservative estimates of their actual effects.⁸

5. Concluding Remarks

As Felix Frankfurter and James Landis noticed (Frankfurter and Landis 1928, 147), “an important phase in the history of the federal judiciary deals with the movement for the establishment of the tribunals whose business was to be limited to litigation arising from a restricted field of legislative control.” Today a considerable volume of federal caseload has already been under the jurisdiction of specialized courts at both the trial level and circuit level. Ironically, neither judicial scholars nor

⁸ The establishment of Court of Appeals for the Federal Circuits by Congress in 1982 may serve as an ad hoc evidence for the statement that specialized courts are more successful in avoiding reversal of federal circuits. Probably because Congress realized the disadvantage of using generalist appeal courts to oversee specialized trial courts, a specialized appeal court at the circuit level was finally established.

political scientists treat this topic as a priority in their research agenda. Therefore, what the exact impact of specialized courts on the federal judicial system has yet to receive the attention it really deserves. The current study makes a primary effort to figure out the systematic impact of specialized courts on the U.S. federal judicial system. By focusing on the simplest situation in history where both generalist trial courts and specialized trial courts were only under the direct supervision of generalist circuits, I find that specialized trial courts did enjoy a significant and considerable advantage in avoiding case reversal over their generalist counterparts. And such evidence obviously supports the convergence argument usually held by political scientists.

It is worth noting, however, that the current research is a rather crude approximation of what happens in the real world. Therefore, further theoretical as well as empirical efforts are needed for a more complete and conclusive answer to the proposed impact of specialized trial courts on the federal judicial system. Here I suggest two directions for future related efforts. First, we can theoretically complicate the current situation by introducing the Court of Appeals for the Federal Circuit into our study and investigating what impact the specialized trial courts can make on the federal judicial system when they are overseen by both generalist and specialized higher courts. Since this setting of two types of appeal courts overseeing two types of trial courts is a much more accurate description of the post-1982 federal judicial system, findings based on this setting might provide more useful insights for a better

understanding of the contemporary American judiciary.⁹ The second possible direction for future research is to investigate the impact of specialized trial courts on the decision making of individual judges of the higher courts rather than their effect on individual cases. By substituting case with judge as our unit of analysis, we can better communicate with wisdom accumulated by mainstream empirical works concerning U.S. judicial politics. For example, we may try to control both the attitude of judges¹⁰ and other political branches such as Congress and the presidency. Obviously such studies at a more “micro” level make the study of specialized courts’ impact more complete.

Table1. Ordinary Logistic Regression Results for the Binary Measure of the Federal Circuits Review Decision 1925-1981

Sample Variables	Economic cases (Standard error)	All non-criminal cases (Standard error)
Source of appeal	-0.263*** (0.082)	-0.285*** (0.081)
Jurisdiction	0.177*** (0.041)	0.150*** (0.035)
Failure to claim	0.067 (0.066)	0.056 (0.52)
Standing	-0.015 (0.087)	0.051 (0.073)
Mootness	0.063 (0.102)	0.121 (0.080)
Gov. immunity	-0.152 (0.208)	0.127 (0.093)

⁹ Besides the complexity of modeling, the major difficulty for taking this direction is the lack of data collection about the decisions made by the Court of Appeals for the Federal Circuit.

¹⁰ However, compared with the attitude of Supreme Court justices, the measurement of judges' attitude at the circuit level could be theoretically more controversial and practically more laborious.

Timeliness	-0.127 (0.173)	-0.293 (0.163)
Frivolousness	-0.876 (0.536)	-0.864 (0.444)
Constant	-0.555*** (0.028)	-0.524*** (0.025)
Number of observation	6581	8134
Note: *0.05 level	**0.01 level	***0.005 level

Table2. Ordinal Logistic Regression Results for the Ordinal Measure of the Federal Circuits Review Decision 1925-1981

Sample Variables	Economic cases (Standard error)	All non-criminal cases (Standard error)
Source of appeal	-0.253*** (0.082)	-0.275*** (0.080)
Jurisdiction	0.144*** (0.036)	0.122*** (0.032)
Failure to claim	-0.002 (0.056)	0.001 (0.045)
Standing	-0.012 (0.086)	0.054 (0.072)
Mootness	0.043 (0.093)	0.098 (0.073)
Gov. immunity	-0.233 (0.201)	0.073 (0.082)
Timeliness	-0.101 (0.173)	-0.269 (0.164)
Frivolousness	-0.865 (0.536)	-0.849 (0.442)
Cut1	0.547	0.518
Cut2	0.813	0.798
Number of observation	6581	8134
Note: *0.05 level	**0.01 level	***0.005 level

Table3. Interpretation in Hypothetic Settings for the Switch from Generalist Trial Courts to Specialized trial Courts in the Source of Appeal

Probability Changes	No threshold issues involved		All threshold issues involved	
	Economic	Non-criminal	Economic	Non-criminal
Binary measure:				
Chance of reversal	-5.9	-6.4	-3.8	-4.7
(Confidence interval)	(-2.4,-9.3)	(-3,-10)	(-0.2,-7.4)	(-1.2,-8.3)
Ordinal measure:				
Partial reversal	-0.5	-0.6	-0.6	-0.7
(Confidence interval)	(-0.2,-0.9)	(-0.2,-1)	(-0.1,1)	(-0.3,-1)
Full reversal	-5	-6	-3	-4
(Confidence interval)	(-2,-8)	(-3,-9)	(-0.1,-6)	(-1,-7)

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