Judicial Voting on Affirmative Action Cases: Why is the South different?

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Keywords: circuit fixed effect, panel effect, judicial voting, appellate courts

Abstract: I analyze the voting of Courts of Appeals judges on affirmative action cases. Following Kastellec, I find that judges in the South tend to be much more conservative compared to those in Northern circuits and conservatism within southern circuits varies. I develop three theories to explain this pattern: unmeasured conservatism in race-related cases, learning experience from the deliberation of a minority judge, and the lasting influence of cultural legacies. Supplementing Kastellec's dataset with additional data, I find support for the theories. While tentative, the findings have significant policy implications for reducing Southern exceptionalism.

1 Introduction

Do federal judges in the Southern circuits in the United States vote differently than other judges on race – related case, and why? More specifically, my research question is: controlling for the factors known to affect decision making for the judges, do judges on the U.S. Courts of Appeals court judges in different circuits vote differently from one another in racially charged affirmative action cases?

To study this, I analyzed and extend a well-known dataset on judicial diversity, collected by Professor Jonathon P. Kastellec of Princeton University. In particular, Kastellec's study focuses on the impact of different race and partisanship on appellate courts. He evaluates how the presence of a minority judge could affect the vote of their colleagues and the outcome of an affirmative action case on the federal bench.

First I replicate the findings of Kastellec about the factors affecting judge voting on affirmative action cases. These finding suggest judges in the Southern circuit vote more conservatively than judges in the other circuits. Although the voting decisions have been studied extensively, no one has study the effect of circuit location on these particular cases and no one has tried to explain why judges in the Southern circuits voted differently. Thus I go beyond Kastellec to examine cultural, political, and deliberation difference. The small number of circuits precludes a definitive answer but the evidence is consistent with cultural and political factors. Though lacking statistically significant results, this paper points to the institutional legacy of the racially charged history of the United States.

The paper is organized the following way: next section will introduce some backgrounds on Courts of Appeals and affirmative action; section 3 will address theories of judicial making; section 4 includes three theories explaining why southern judges vote differently; section 5 explains the data obtained by Kastellec and analyze basic patterns of the data; section 6 analyzes the data and tackles why votes of Southern judges are different. Section 7 explains that the reasons are unmeasured conservatism, lasting impact of conservative culture, and deliberation effect by minority judges; finally, section 8 discusses the results of the data analysis and concludes with implication for future policies.

2 Background on the U.S. Courts of Appeals and Affirmative Action Cases

The modern Courts of Appeals were established by the Judiciary Act of 1891, designed exclusively to hear cases of appeals from trial courts. By creating an appellate court in each circuit, the overwhelming pressure of the Supreme Court was relieved. The Act recognized nine circuits; today, one Court of Appeals is in each of the 12 circuits. Figure 1 is attached to provide more

  DOI: 10.25236/icembe.2020.161

context over the boundary of each circuit.

With the duty of checking the application of legal principals of the district courts in the region, Courts of Appeals guarantee the right to challenge decisions of the trial courts. 94 district courts are organized into 12 regional circuits, each of which has a Court of Appeals, with geographically apportioned jurisdictions. In addition, the Court of Appeal for the federal circuit prioritizes appeals from patent and trademark cases. In this paper, I will primarily analyze the jurisdiction of Courts of Appeals in circuit 1 to 11, excluding the DC circuit and federal circuit.

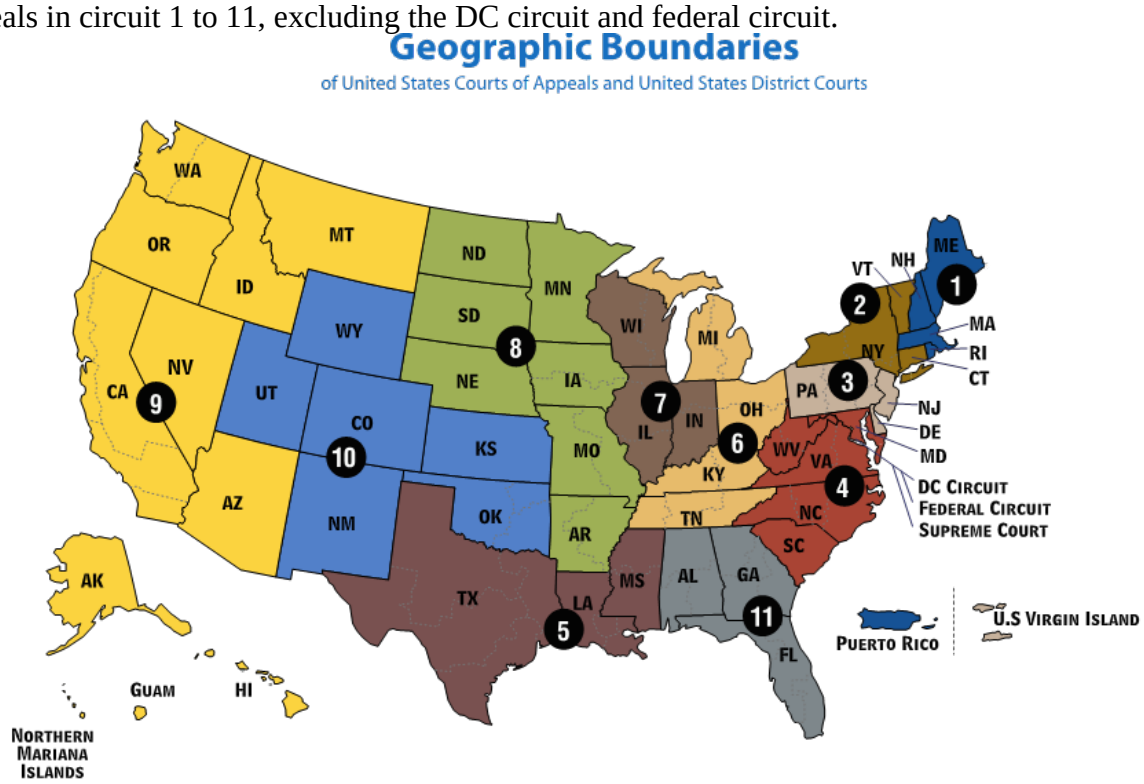

Figure 1. Boundary of the circuit courts in the United States

All of the cases studied are affirmative action cases. Affirmative action was referred to in president John F. Kennedy's Executive Order 10925 which mandates that projects financed with federal funds "take affirmative action" to ensure that hiring and employment practices are free of racial bias. In 1965, president Johnson frames the concept of affirmative action in his speech and issue an order enforcing affirmative action within government contractors. From then on, many cases challenge the presence of racial discrimination. In this paper, affirmative action cases are used to determine whether judges are in favor of affirmative action programs. Literature has shown that race has been a significant factor influencing support for affirmative action cases in the public: the percentage of blacks supporting these programs is substantially higher than the proportions of whites.

3 Theories of Judicial Decision Making

The leading model for understanding judicial behavior is the so-called attitudinal model. Segal, Champlin, and Howard explained a theory explaining factors affecting votes of Supreme Court justices: personal policy preference and case facts (2017). Since "the primary goal of Supreme Court justices are policy goals, when justices make decisions, they want the outcome to approximate as nearly as possible those policy preferences" (Rohde and Spaeth).

Early studies of U.S. Courts of Appeals adopted this approach. One can still see this employed. Maya Sen and Adam N. Glynn's study of federal trial judges found that judges with daughter votes differently – these judges more consistently vote on a feminist fashion (2015). For these judges, having daughters change their policy preference towards protecting females, which is reflected in their votes. Characteristics of the judges have shown to have a similar impact on the votes. Given

their different backgrounds and identity, we often see different votes between white and nonwhite judges or male and female judges. Specifically, Boyd, Epstein, and Martin found that female and nonwhite judges tend to cast a more liberal vote than white male judges, but only on cases related to racial or sexual discriminations (2010).

However, as more scholars study judicial behaviors on the courts of appeals - decided by the majority ruling in a randomly formed panel of three judges - they realize the makeup of panel affects each judge. Literature has shown that judges' behaviors on appellate courts not only depends on their characteristics but also varies with the colleagues they sit with. As Boyd, Epstein, and Martin found in 2007, the presence of a female judge in a panel ruling sex discrimination affects the judicial decision substantially in two ways. The first is through individual effect – the female judge is more likely to vote in favor of the party alleging discrimination simply because of her gender. The second is by influencing the votes of her male colleagues. The latter is referred to as the panel effect.

When exploring the panel effect, this can further be divided into two categories: exogenous (contextual) and endogenous effects. Contextual effect defines how outstanding characteristics of the colleagues could affect a vote while under endogenous effect, votes of the colleagues affect the vote of a judge. To illustrate the distinction between the two, Fischman creates a hypothetical judge with female colleagues in a sex discrimination case. Under a theory of contextual effects, the gender of the panel colleagues has a direct causal effect on a judge's decision. Under a theory of endogenous effects, the colleagues' intended votes cause the judge to vote in a similar way (2013). The combination of these theories composes the panel effect. That is a judge's final vote results from a combination of his characteristics, his colleagues' characteristics, and his colleagues' votes.

The contextual effect has been explored substantially in many areas, including ideology, race, gender, and religion. Studying environmental cases on the D.C. Courts of Appeals, Richard L. Revesz concludes that "the party affiliation of the other judges on the panel has a greater bearing on a judge's vote than his or her own affiliation" (1997). For the race-based panel effect, Kastellec finds that a black judge with two nonblack colleagues substantially increases the probability that the panel will grant relief to a defendant on death row who is an African American (2019). Gender-related panel effect has been studied by scholars as well. Farhang and Warro find that male judges tend to vote more liberally when one woman serves on the panel with them. Finally, Shahshahani and Liu's study on religious cases suggests that the panel effect for religion seems to operate following the contextual effect (2017).

Kastellec(2011) introduces a more specific theory defining panel effect – a panel counter-judge: "a single judge from the opposite party of the two other judges on a panel." This idea is then extended to other distinct characteristics, such as race and gender. For instance, an African American sitting with two whites can be called as a black counter-judge; a woman sitting with two males can be called a female counter judge. The counter-judge has significant influence over the judicial decision of the panel through endogenous and contextual effects in related areas of race and gender. The presence of a female counter-judge could affect the voting behavior of her two male colleagues, changing the outcome of a sexual discrimination case.

4. Theories of Institutional Legacy

While race-based panel effects and counter-judge effects have been documented, researchers usually ignore the fixed effects derived from different circuits. These fixed effects comprise of all factors other than individual judges and the formed panels. Each circuit has numerous impacts unique to its geographical location and culture. While it's impossible to completely decompose all the mechanism behind the fixed effect, hypothesis explained below provide some suggestion.

4.1 Conservative Culture

The most intuitive explanation accounting for the difference in judicial votes is the cultural factor. The history of slavery and the Civil War has profound but opposite impacts on shaping the culture of North and South in America. The dependence on slavery for the cash crop economics and

the military suppression during reconstruction resulted in discrimination of African Americans in the South, even after slavery was abolished. The discrimination and conflict on race-related issues persist in the Southern parts of the United States and can be hard to change. The cultural persistence is evident in the Jim Crow laws prevalent in the South last century. Literature has also shown that a stable environment is less likely to foster major changes to the tradition (Guiliano & Nunn).

As a result, Southerners naturally tend to be more conservative in racial issues compared to other people – judges and lawyers in the south developed a more conservative mindset than their counterparts living in the North because of their surroundings. When senators nominate judges to the president to fill a vacancy, all the candidates they have are more conservative on race. This factor can be observed by analyzing public opinion polls about African Americans in each state. In this paper, I looked at the support for George Wallace in each state and region for each circuit.

4.2 Unmeasured Conservatism Towards Race

Each appellate court judge has been assigned a common space score, which has been controlled in the model. The common space scores are measures of ideological preference of the judges, found by Giles, Hettinger, and Peppers. The scores are calculated by taking the average common scores of the Senators of the state. However, the scores used by Kastellec are first dimension scores that provide a holistic measure of liberalism vs. conservatism, not specifically tied to attitude towards race. Thus, the judicial common space scores provide an inaccurate representation of the judges' behavior in race-related cases.

I will look at the second dimension of judicial common space scores, which is usually the representation of liberalism vs. conservatism on race. An example to distinguish the two scores would be looking at a Northern democrat and a Southern one. In general, they would have negative first dimension scores displaying their liberalism in economics; however, the Southern democrat is likely to have a larger second dimension score for his conservatism in race.

4.3 Long-Term Influences from Deliberation

White judges can gain unique insights from their black colleagues – they would learn more about the race and its culture after African American judges share their experience. These impacts can be long-lasting as they could have more understanding from a different perspective. As a result, white judges would act more liberally in future race-related cases after serving with a black judge.

The magnitude of the effect of deliberations should be correlated with the ratio of the black judges actively serving – chances for white judges to gain some insights on race from their black colleague increases when there are more black judges serving. Since judges are randomly drawn to form a panel, the ratio of the race of judges who served on a panel should be the approximate ratio of the race of active justices.

5. Data and Methods

I will explain and describe all the data used in the paper, including Kastellec's original dataset and the one's I've collected. Table 1 displays the corresponding data I collected for each circuit. Most data I collected for the circuits are found by averaging values of each state within the circuits.

Table 1. collected data for each circuit

circuits	coefficients	Wallace	percent_black	dimension_score
circuit1	0.24	0.033	0.033	0.033
circuit2	0.1	0.049	0.049	0.049
circuit3	-0.005	0.101	0.101	0.101
circuit4	-0.24	0.223	0.223	0.223
circuit5	-0.087	0.436	0.436	0.436
circuit6	-0.13	0.185	0.185	0.185
circuit7	0.21	0.092	0.092	0.092
circuit8	-0.006	0.113	0.113	0.113

circuit9	0.52	0.085	0.085	0.085
circuit10	0.025	0.102	0.102	0.102
circuit11	0.046	0.457	0.457	0.457

5.1 Katellec Data

In the area of laws, whites and blacks often have different opinions over affirmative action policies, which intend to correct past discrimination against African Americans. These programs are strongly supported by African Americans, but not strongly by whites. Though the distinction between race would not be completely represented by judge panels, different judges still form a diverse opinion and opposing votes. I used Kastellec's data for judges and panel information, which is a collection of affirmative action cases in the Courts of Appeals from 1971 to 2008.

I organized the Kastellec's data to display variation within different regions. All circuits from circuit 1 to circuit 11 are compiled into geographical regions: West, Midwest, Northeast, and South. I referred to divisions from the U.S. Census Bureau and arranged different circuits into one of the four regions accordingly. Table 2 reveals the composition of all cases – out of the 182 total cases, 42 cases (23%) happened in a circuit located in the South; 29 cases (16%) happened in a circuit located in the West; 60 cases (33%) happened in a circuit located in the Midwest; 40 cases (22%) happened in a circuit located in the Northeast.

Table 2. Distribution of cases

Statistic	Mean	St. Dev.
south	0.230	0.420
west	0.160	0.370
midwest	0.330	0.470
northeast	0.220	0.410
all whites	0.830	0.370
with black	0.170	0.370
all black	0.000	0.000

Figure 2 presents a display of votes on affirmative action cases, broken down into geographical locations. The plot depicts the voting rate at the level of the case. The horizontal lines represent a 95% confidential interval. Among the case- level data, 72% of cases in the North supported affirmative action, compared to 43% liberal results in the South.

More specifically, Figure 3 reveals the mean voting the rate of the judges on the individual level, organized by race of the judges. The decision of black and white judges is distinct, even under the same region. This becomes particularly obvious in the South, in which all of the black judges casted a liberal vote and only 42% white judges do so. While in other regions such as the Northeast, there seems to be less of a variation between black and nonblack votes.

5.2 Wallace Vote

To identify the aforementioned conservative cultural factor, I look at support for George Wallace, a presidential candidate who strongly supports pro-segregation policies. Relative support for Wallace reveals the overall attitude towards African Americans of each state. Though Wallace's election happened in 1968, these long-lasting cultural factors still play a role in opinions of later times.

I found the percentage casting votes for George Wallace of each state by gathering results of the 1968 Presidential General election. For each circuit region, I combined votes of states under the same circuit to find the percentage voting for Wallace. I coded a vector "Wallace" with numerals between 0 and 1: the numbers represent for each circuit region from circuit 1 to 11, excluding the D.C. circuit. Of the eleven circuits, Wallace's average result is 17 percent, with outliers of 43.6% and 45.7% support in circuit 5 region and circuit 11 regions.

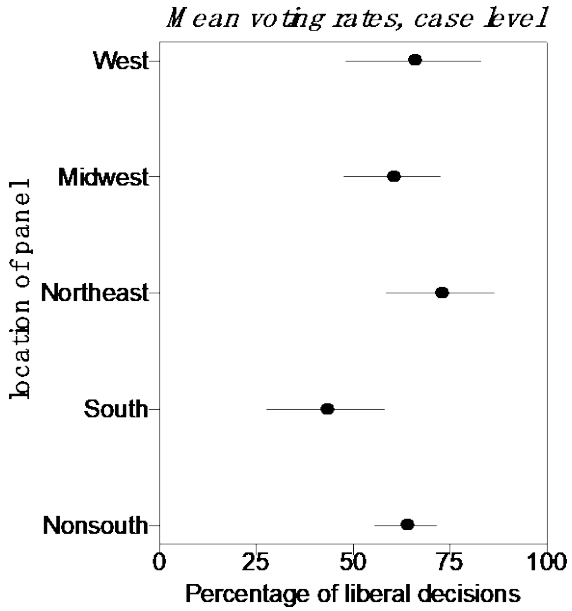

Figure 2. Voting rates on case level

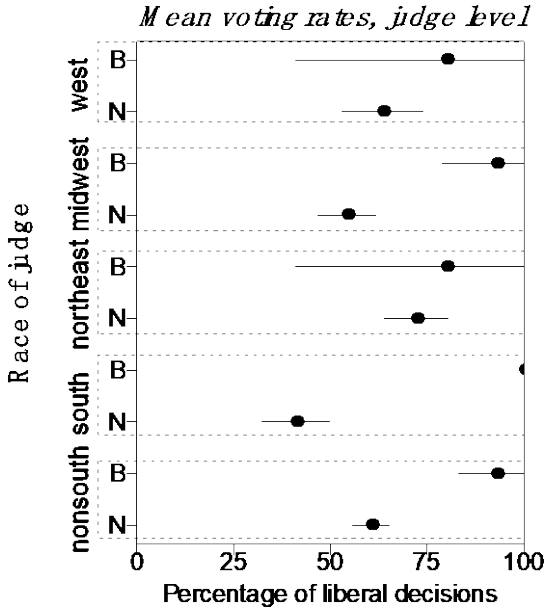

Figure 3. Voting rates on judge level

5.3 Dimension Nominate Score

The judicial common space scores used by Kastellec are GHP scores calculated from senators' first dimension common space scores, which are interpreted as economic liberalism – conservatism. I collected the common space scores by looking at the second dimension score of the Senators, collected from the Voteview database. I found the average common space scores for each state from 1970 to 2008 and calculated the average common space scores for each circuit region. I coded a vector "dimension_score" listing the average common space score for each circuit from circuit 1 to circuit 11. Positive numbers represent pro-conservative decisions related to racial issues whereas negative numbers represent liberal votes.

The average common space score for all circuit regions is -0.07. The circuit with the most liberal average is circuit 2, with an average score of -0.451; the most conservative court on average turns out to be circuit 11, with 0.415. The liberalism and conservatism towards race is roughly divided by regions – circuits with larger score tend to locate in the South of the United States.

5.4 Percent Black

The number of active African American judges serving in each circuit becomes crucial for the deliberation effect. What percent of judges are black? This can be approximated by gathering information from Kastellec's data. I compiled the judge data and found the percentage of judges who are black servings in these cases. Among all circuits, no black judge served on circuit 1, 4, 8, 10 for affirmative action cases from 1971 to 2008. In addition, an average of 4.6% of judges sitting for affirmative action cases is black for Courts of Appeals for all circuits. Though not a complete representation of the ratio of minority active judge, the statistics reveals the lack of diversity in the race among appellate court justices.

6. Data Analysis 1: The Voting Model

I replicated Kastellec's model in proving the counter-judge effect. Table 3 represents the result of a linear regression model. When controlling for the other effect, like the GHP score, race and fixed effect from the circuits, the coefficient of having a black colleague is .290, with a standard error of .061. This supports Kastellec's conclusion that a black colleague tends to affect a white judge to vote in a more liberal way. A black counter-judge can influence the final decision substantially.

Table 3. Linear model of judge votes

	Dependent variable
	j1vote
j1jcs	-0.430***
	(0.056)
j1black	0.230***
	(0.084)
blackcollegue	0.290***
	(0.061)
south.circuit	-0.120**
	(0.056)
midwest.circuit	-0.067
	(0.050)
west.circuit	0.007
	(0.060)
Constant	0.590***
	(0.038)
Observations	546
R^2	0.180
Adjusted R^2	0.170
Residual Std. Error	0.450 (df = 539)
F Statistic	20.000*** (df = 6; 539)

Note: *p **p ***p<0.01

Despite all the above analysis, votes in Southern circuits remain unexplored. Kastellec's findings and analysis primarily focuses on the characteristics of the judges, from a holistic point of view. The paper studies the counter-judge effect within race and party ideology, the location of the circuit is not one among considerations. However, basic data analysis dissecting the votes base on their circuits and regions do reveal a difference. As it becomes obvious in the analysis, there is a statistically significant and negative correlation between the case being heard in South appellate courts and the judges' votes. Thus, I furthered Kastellec's study and analyzed the fixed effect oriented from the circuits.

7. Data Analysis 2: Why the South is Different

Comparisons of different regions in Figures 2 and 3 reveals the conservative opinion judges in Southern circuits hold. But do judges at different Southern circuits perform similarly? To answer this question, I look at individual votes of the circuits. Figure 4 compares the decisions of all judges on affirmative action cases by circuits, and the circuits are organized into regions they belonged to. Even among Southern circuits – circuit 4, circuit 5, and circuit 11 – the percentage of liberal votes varies substantially; these circuits have a percent- age of liberal votes of 22%, 40%, and 57%, respectively. Circuit votes in other regions vary as well.

What causes the different performances in the South? And what leads to distinct behavior even among the Southern circuit? To answer these questions, I hypothesized the aforementioned three factors of conservative culture, race-specific common space score, and influence from deliberation.

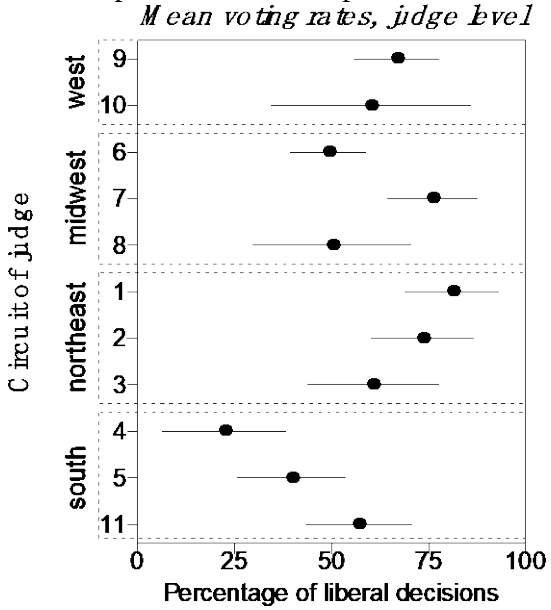

Figure 4. judge votes base on circuits and regions

Each circuit, according to Table 4, is assigned a coefficient which accounts for all fixed effect after controlling for jcs, race, and black colleagues, the coefficient for circuit 9 includes the constant as well. Hypothetically, these coefficients should include all other impacts other than the controlled variables and should be correlated with the three factors of conservative culture, race-specific common space score, and influence from deliberation.

Tables 5 represent the linear regression model between coefficients and the three factors. In model 1, the vote of Wallace (representing the measurement of conservative culture) has a negative correlation of -0.61 with the coefficient. This and the corresponding figure point to the right direction – the more support Wallace had translated to the more conservative opinion in the region, resulting in less liberal votes on the circuit. Similarly, in model 2, the percentage of black judges (representing the magnitude of deliberation influence) is negatively correlated with the coefficient of liberal voting. According to model 3, the second-dimensional common space score also has a negative correlation with liberal voting.

Since there is a limited number of Courts of Appeals, it is almost impossible to get statistically significant results with 11 observations. However, these models do point a correct direction in decomposing the constant fixed effects of individual circuits.

I assign new three new columns representing these factors to the original dataset. As a result, each judge now has a value for these three factors, depending on the circuit number.

Then, I run a linear model again, controlling for jcs, black, black colleague, Wallace, percent black and dimension scores. According to Table 6, the coefficients of these factors are 1.400, -3.600, -1.100, respectively. However, only the second dimension score proves my hypothesis with statistically significant result. A negative second dimension score indicates the liberalism of the judge and as the score increases, so does conservatism. Thus, the negative correlation between the

votes and second dimension score proves role second dimension score.

Table 4. Fixed effect of circuits

	Dependent variable
	j1vote
j1jcs	-0.410***
	(0.055)
j1black	0.280***
	(0.083)
blackcollegue	0.330***
	(0.061)
circuit1	0.240***
	(0.080)
circuit2	0.100
	(0.078)
circuit3	-0.005
	(0.088)
circuit4	-0.240**
	(0.095)
circuit5	-0.087
	(0.077)
circuit6	-0.130**
	(0.061)
circuit7	0.210***
	(0.074)
circuit8	-0.006
	(0.100)
circuit10	0.025
	(0.120)
circuit11	0.046
	(0.075)
Constant	0.520***
	(0.044)
Observations	546
R^2	0.240
Adjusted R^2	0.220
Residual Std. Error	0.440 (df = 532)
F Statistic	13.000*** (df = 13; 532)

Note: *p **p ***p<0.01

Table 5. Correlations between coefficients and fixed effects

	Dependent variable:		
	coefficients		
	(1)	(2)	(3)
Wallace	-0.610		
	(0.420)		
percent_black		-0.610	
		(0.420)	
dimension_score			-0.610
			(0.420)
Constant	0.170	0.170	0.170
	(0.093)	(0.093)	(0.093)
Observations	11	11	11
R^2	0.190	0.190	0.190
Adjusted R^2	0.098	0.098	0.098
Residual Std. Error (df = 9)	0.200	0.200	0.200
F Statistic (df = 1; 9)	2.100	2.100	2.100

Note: *p **p ***p<0.01

Table 6. Analysis of new factors

	Dependent variable
	j1vote
j1jcs	-0.420***
	(0.130)
j1black	0.030
	(0.250)
blackcollegue	0.130
	(0.180)
wallace	1.400**
	(0.680)
percent_black	-3.600***
	(0.950)
dimension_score	-1.100***
	(0.310)
Constant	0.350**
	(0.140)
Observations	117
R^2	0.350
Adjusted R^2	0.320
Residual Std. Error	0.410 (df = 110)
F Statistic	10.000*** (df = 6; 110)

Note: *p**p***p<0.01

8. Discussion and Conclusion

This paper suggests that fixed effects of the circuit courts have a substantial impact on both the individual votes of the judges and the overall decisions formed by the panel. Particularly to affirmative action cases, judges who sit in Northern circuits tend to vote a lot more liberally compared to their peers sitting in Southern circuits. Even for the three circuits located in the South, the performance of the judges varies significantly: circuit 4 has the most conservative votes whereas circuit 11 the least.

I hypothesized the difference in the circuit and regions could be explained by the three theories mentioned above: unmeasured conservatism in race-related case, learning experience from the deliberation of a minority judge, and lasting influence of the cultural legacy. The models do suggest a trend and the following analysis also proves some of my speculations.

The finding is interesting as it might shed light on how to change the voting tendency in the Courts of Appeals. I am under no illusion that I provide a solution to this problem rooted back in the institutional legacy of the racially charged his- tory of the United States; however, I can suggest implication for potential theories.

First, if unmeasured conservatism in race-related case (the second-dimensional score) prove to be the dominant factor resulting in conservatism in certain circuits, the problem of diversification could be easily solved. Senators only need to nominate different judges and consider their preference specifically on race-related issues. This theory, if proven correct, can efficiently change the overall opinion and votes in all Courts of Appeals across the nation.

Second, if the second theory – the one dealing with perspectives gained from black colleagues – tend to have a profound impact on voting behaviors, the issue will be more optimistic. Since sitting with a black judge on a panel can influence the thoughts and behaviors of two other judges for a period of time, the Senators only need to nominate more minority judges. They would pass their unique in- sights regarding race to many more judges, and the effect will snowball as each black judge would sit with numerous white judges in his career.

However, there still remains the less optimistic possibility that conservatism in the South is simply the residual of historical legacy. In that case, any changes would likely to happen slowly and gradually. Instead of nominating different judges, we have to wait until the overall culture in the regions to change.

In this paper, I replicate Kastellec's finding on the impact race and black counter-judge on affirmative action cases. Then, I went a step further and analyzed the fixed effect of the circuits, particularly those in the South. To explain the differences, I hypothesized three potential reasons behind the fixed effect and tested the hypothesis. Though limited by the data I had, my results point towards my hypothesis.

References

[1] Boyd, C. L., Epstein, L., & Martin, A. D. (2010). Untangling the causal effects of sex on judging. *American Journal of Political Science, 54*(2), 389-411. https://doi.org/10.1111/j.1540-5907.2010.00437.x

[2] Farhang, S., & Wawro, G. (2004). Institutional Dynamics on the U.S. Court of Appeals: Minority Representation under Panel Decision Making. *Journal of Law, Economics, & Organization*, *20*(2), 299-330.

[3] Fischman, J. B. (2013). Interpreting Circuit Court voting patterns: A social interactions framework. *Journal of Law, Economics, and Organization*, *31*(4), 808-842. https://doi.org/10.1093/jleo/ews042

[4] Glynn, A., & Sen, M. (2015). Identifying judicial empathy: Does having daughters cause judges to rule for women's issues? *American Journal of Political Science*, *59*(1), 37-54.

[5] Kastellec, J. P. (2011). Hierarchical and collegial politics on the U.S. Courts of Appeals. *The Journal of Politics*, *73*(2), 345-361.

[6] Kastellec, J. P. (2013). Racial diversity and judicial influence on appellate courts. *American Journal of Political Science, 57*(1), 167-183.

[7] Kastellec, J. P. (2019). *Race, context and judging on the Courts of Appeals: Race-based panel effects in death penalty cases* (150006). https://scholar.princeton.edu/sites/default/files/jkastellec/files/kastellec_race_dp_paper_jsj_submission.pdf

[8] Lewis, Jeffrey B., Keith Poole, Howard Rosenthal, Adam Boche, Aaron Rudkin, and Luke Sonnet (2020). *Voteview: Congressional Roll-Call Votes Database*. https://voteview.com/

[9] Revesz, R. L. (1997). Environmental regulation, ideology, and the D. C. Circuit. *Virginia Law Review*, *83*(8), 1717. https://doi.org/10.2307/1073657

[10] Rohde, D. W., & Spaeth, H. J. (1976). *Supreme Court decision making*. W.H. Freeman.

[11] Segal, J. A., & Champlin, A. J. (2018). The attitudinal model. In R. M. Howard & K. A. Randazzo (Authors), *Routledge handbook of judicial behavior* (pp. 17-33). Routledge.

[12] Shahshahani, S., & Liu, L. J. (2017). Religion and judging on the Federal Courts of Appeals. *Journal of Empirical Legal Studies*, *14*(4), 716-744. https://doi.org/10.1111/jels.12162

[13] Understanding cultural persistence and change. (Forthcoming). *Review of Economic Studies*.

[14] U.S. Federal Courts Circuit Map [Map]. (n.d.). In *United States Courts*. Retrieved August 3, 2020, from https://www.uscourts.gov/about-federal-courts/federal-courts-public/court-website-links