Law and Economics
Session 18
Judicial Decision-Making

Elliott Ash

Columbia University
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The role of judges in capitalist society

- Economic theory implicitly assumes a system of law and adjudication
  - And adjudication requires judges.
- Judges are responsible for interpreting and enforcing "the rules of the game," so they are significant economic policymakers.

Legal Formalism

- The classical theory of how judges make decisions is called **legal formalism**.
- This means that the "law" consists of a collection of well-defined rules found in statutes, regulations, contracts, and previous judicial decisions.
- Judges are mechanical decision-makers that apply these rules to particular cases.
- They face no other meaningful incentives, and they have no other intrinsic motivations to speak of.

Legal Skepticism

- Another school of thought is skepticism, which basically says that judges make it up as they go along.
- Legal skeptics say that the law is indeterminate in pretty much all cases, so judges are just following their political or ideological beliefs.
  - "Law" and "legal reasoning" are just after-the-fact rationalizations.

Legal Realism

- A more nuanced view is legal realism:
  - Legal rules have actual incentive content and do constrain judicial decison-making, but judges nonetheless have their own preferences/motivations and respond to incentives like any other labor market participant.
- But what motivates judges anyway?

Variations in Court Performance

- The quality of courts, and in particular, the speed of resoving disputes, varies considerably across countries (e.g. Legal Origins research).
- Part of what makes for good courts is good judges.

What makes a good judge?

- The problem of selecting public officials and providing them good incentives is a difficult problem facing all modern economies.
- There is no simple solution to the problem because high-powered incentives can lead to unexpectedly disfunctional behavior.
- With judges, we have weak incentives because we don't want them to be biased.

Pecuniary Incentives

- One thing that motivates judges is money.
- Increasing salaries can persuade more skilled individuals to join the judiciary.
- It can also make people work harder out of a reciprocity motivation.
- Example evidence: Eighteenth-century reforms in England that increased judge compensation were associated with improved stock market performance (Klerman and Mahoney (2005).

Reputational Concerns

- Judges might care about their reputation amongst other judges, or may want to be promoted to a higher court.
- Posner (2008) thinks that most federal appeals judges want to be promoted to the Supreme Court.

Political Pandering

- There is a wealth of evidence that judges are motivated by their own political beliefs and by the political beliefs of the people supervising their work.
- For example, elected judges impose harsher criminal sentences than tenured judges, because voters are impressed by these sentences (Gordon and Huber 2007).
- Judges that have to be retained by a governor are known to favor the governor in related litigation (Shepherd 2009).

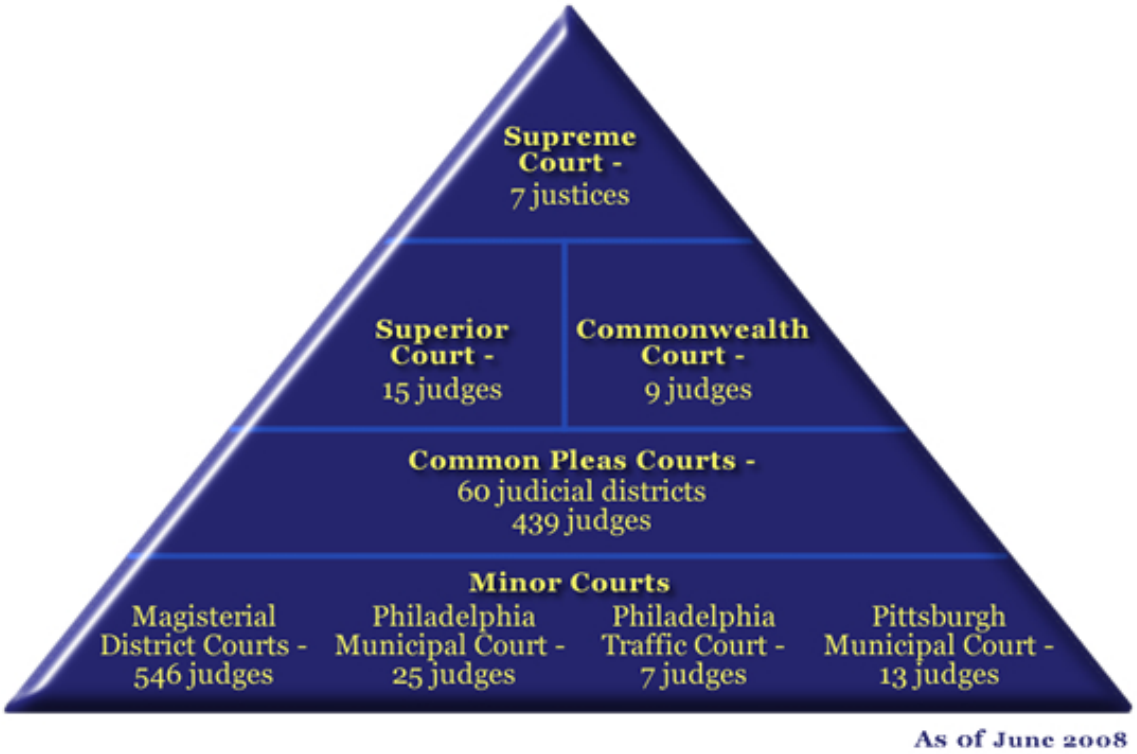
Intrinsic Motivation

- Judges might just be intrinsically motivated to do a good job.
  - If this is the case, then giving judges tenure, and doing other things to weaken extrinsic incentives, will improve their performance.
- Tenure might remove extrinsic bias, but it allows for judges' own ideological biases to be followed without accountability.
- For example, the eighteenth-century statutes in England that increased judge salaries also gave them more secure tenure – this improved stock market performance (Klerman and Mahoney 2005).

Tenure versus Elections

- So it's an important question, whether judges should be elected or tenured:
  - All federal judges in the United States have life tenure (this is the case in Europe as well)
  - But many state judges, including state supreme court judges, are elected.
- Which is a better system?
- This is also relevant to tenure in other white-collar professions, such as public school teachers and college faculty.

State Supreme Courts



The appellate process

- State supreme court judges rule on questions of state law (rather than federal law).
- At trial, facts are litigated and trial judge/jury gives a verdict, which the losing party can appeal.

- The intermediate appeals court takes the case and may affirm, reverse, or modify the trial verdict.
- That ruling can be appealed to the state supreme court.

- Judges vote whether to affirm or reverse the lower decision
- One of the majority judges writes an opinion explaining the decision.

Data Overview

- A central contribution of this project is the construction of a new, integrated data set on state appellate courts.

- Previous data sets:
  - State Court Data Project: 520 judges, four years (1995-1998)
  - Choi-Gulati-Posner Group: 408 judges, three years (1998-2000)
- Our data set:
  - 1553 judges
  - 48 years (1947-1994)
- 50 states, 52 courts (Oklahoma and Texas each have two high courts)
- 1,025,461 cases
- 1,126,560 opinions (including discretionary opinions)
- 15,486 judge-years
- 28,572 state-months

Potential Outcomes Framework

- The causal framework used in economics is the "potential outcomes" approach described in Holland (1986).
- The idea is to compare judge performance under conditions Z_t^A and Z_t^B so that the *causal impact* of potential outcome A compared to B is given by:

$$Y_{it}^A - Y_{it}^B = F\left(Z^A, X_i, t\right) - F\left(Z^B, X_i, t\right)$$

  where $F(\cdot)$ describes the outcome as a function of the treatment (Z), judge characteristics (X_i) and time (t).
- Time travel is impossible; we face what Holland calls *the fundamental problem of causal inference*.

Solutions to the Problem

- Cross-section approach: Suppose that X_i captures all the relevant characteristics of a judge, and judges face different rules. If we observe the Z assigned to different judges, we can estimate the causal effect via

$$Y_{it}^{A} - Y_{it}^{B} = F\left(Z^{A}, X_i, t\right) - F\left(Z^{B}, X_j, t\right)$$

  and no time variation is needed.

- However: We expect that judges have unobserved characteristics that vary systematically by state, and hence correlation between performance and employment conditions are not likely to be *causal* links.

Our Approach

- Our approach views the U.S. states as a set of laboratories for the exploration of the effect of law upon outcomes (see Bertrand, Duflo and Mulanathain, 2004).
- We hold fixed as many state- and judge-level characteristics as we can, with the hope of identifying the causal effect of the change of the change from Z^B to Z^A.

- This approach that has been previously applied to tort law (Kessler and McClellan, 1996; Currie and MacLeod, 2008) and employment law (Miles, 2000; Autor, Donohue and Schwab, 2004).

Econometric Specification

- Judge i, state s, year t:

$$y_{ist} = \text{TIME}_t + \text{JUDGE}_i + \text{STATE}_s \times t + Z'_{ist}\rho + \varepsilon_{ist}$$

- y_{ist}, output measure
- TIME_t, time fixed effect (allows for arbitrary nationwide trends in the performance variable)
- JUDGE_i, judge specific effect (controls for time-invariant state-level and judge-level characteristics)
- $\text{STATE}_s \times t$, state-level time trends (allows for cross-state growth variations)
- Z_{ist}, vector of treatment variables (log salary, or indicators for years after rule change)
- ε_{ist}: Robust standard errors clustered at state level (see Bertrand et al, QJE 2004)
- ρ: Causal effect of interest

Intermediate Appellate Court

- The first reform we look at is the establishment of an intermediate appellate court.
- Before, state supreme court judges reviewed a case directly from trial, with mandatory review.
- After, an intermediate court reviewed the case first, and the court exercised discretionary review.
- 26 states established IAC's between 1947 and 1994:
  - FL (1956), MI (1963), AZ (1964), NM (1965), MD (1966), NC (1967), OK (1967), AL (1969), OR (1969), WA (1969), CO (1970), MA (1972), KY (1975), IA (1976), KS (1976), WI (1977), AR (1978), HI (1979), AK (1980), ID (1981), CT (1982), MN (1983), VA (1984), ND (1987), UT (1987), NE (1990).

Incentive Effects of an IAC

- When an intermediate appellate court is operating, supreme court judges have a lot of help in reviewing cases, and have more discretion in whether to accept cases for review:
  - We expect that the introduction of an intermediate appellate court will increase the time and discretion available to judges, so they should devote more time to what they care about.

Effect of Intermediate Appellate Court (Effort)

	(1)	(2)	(3)
Log Majority Opinions Written	-0.255**	-0.197**	-0.169**
	(0.0663)	(0.0585)	(0.0481)
Log Dissents Written	-0.207**	-0.131*	-0.0951*
	(0.0733)	(0.0560)	(0.0466)
Log Concurrences Written	-0.146*	-0.063	-0.0523
	(0.0652)	(0.0489)	(0.0407)
Log Total Words Written	-0.207**	-0.157**	-0.0731*
	(0.0515)	(0.0481)	(0.0352)
Log Length of Majority Opinion	0.0664	0.0492	0.0985**
	(0.0432)	(0.0301)	(0.0251)
Log Length of Table of Cases	0.0559	0.0367	0.104**
	(0.0485)	(0.0357)	(0.0289)
Log Cases Overruled	-0.04	-0.027	-0.0543+
	(0.0326)	(0.0268)	(0.0277)
FE's/Trends	None/None	State/State	Judge/State

Effect of Intermediate Appellate Court (Quality)

	(1)	(2)	(3)
Log Positive Cites Per Opinion	-0.0149	0.0138	0.0394
	(0.0535)	(0.0346)	(0.0373)
Log Distinguishing Cites Per Opinion	0.106+	0.0832+	0.0926**
	(0.0528)	(0.0416)	(0.0330)
Log Negative Cites Per Opinion	0.0864*	0.0767**	0.0664**
	(0.0354)	(0.0279)	(0.0235)
Log Discuss Cites Per Opinion	-0.00164	0.0189	0.0413
	(0.0375)	(0.0251)	(0.0265)
Log Quoted Cites Per Opinion	0.0261	0.0214	0.0504+
	(0.0431)	(0.0291)	(0.0274)
Log Out-of-State Cites Per Opinion	0.014	-0.0016	0.00334
	(0.0253)	(0.0180)	(0.0306)
Log Federal Circuit Cites Per Opinion	-0.0435	0.00178	0.0123
	(0.0260)	(0.00837)	(0.0117)
FE's/Trends	None/None	State/State	Judge/State

IAC Discussion

- Establishment of an IAC decreased the number of opinions because they are sharing work with the lower court.
- It increased length of opinions, caselaw research, and cites – with more time, they spend more time on each opinion

Compensation Increases

- We have monthly data on individual judge salaries between 1974 and 1994, obtained from the National Center for State Courts.
- The various models of judicial behavior generate different predictions for the effect of salaries on performance:
  - The strong version of wage-effort reciprocity models suggest that effort should durably increase with salaries.
  - Agency theory suggests that salary changes should have no effect, unless they increase the value of retention and make judges work harder for reelection (e.g. Besley, 2004).

Real Salary Effects Regression

- Outcome y_{ist} for judge i, state s, year t:

$$y_{ist} = \text{TIME}_t + \text{JUDGE}_i + \text{STATE}_s \times t + \rho Z_{st} + \varepsilon_{ist}$$

- Z_{st}, log real annual salary paid to judges in state s at year t
- This regression compares deviations from the detrended mean log salary to deviations from the detrended outcome variable.
- Outcome variables are in logs, so coefficients can be interpreted as the predicted percent change in the outcome variable for a one percent increase in real salary.

Effects of Real Salary (Effort)

	(1)	(2)	(3)
Log Majority Opinions Written	-0.793**	0.183	0.129
	(0.282)	(0.168)	(0.151)
Log Dissents Written	0.512	-0.442*	-0.222
	(0.369)	(0.168)	(0.178)
Log Concurrences Written	0.347	-0.198	-0.0184
	(0.368)	(0.153)	(0.149)
Log Total Words Written	0.071	0.0983	0.127
	(0.309)	(0.167)	(0.182)
Log Length of Majority Opinion	0.638*	-0.05	-0.0115
	(0.280)	(0.103)	(0.0927)
Log Length of Table of Cases	0.583	0.0139	0.0711
	(0.374)	(0.124)	(0.104)
Log Cases Overruled	0.0812	-0.248	-0.377+
	(0.278)	(0.207)	(0.211)
FE's/Trends	None/None	State/State	Judge/State

Effects of Real Salary (Quality)

	(1)	(2)	(3)
Log Positive Cites Per Opinion	1.997**	-0.0955	-0.0216
	(0.391)	(0.170)	(0.142)
Log Distinguishing Cites Per Opinion	1.846**	0.00724	0.0878
	(0.391)	(0.142)	(0.124)
Log Negative Cites Per Opinion	1.092**	0.000506	0.0433
	(0.277)	(0.0880)	(0.0770)
Log Discuss Cites Per Opinion	1.260**	-0.0856	-0.0383
	(0.291)	(0.133)	(0.130)
Log Quoted Cites Per Opinion	1.711**	-0.0654	0.0139
	(0.340)	(0.146)	(0.123)
Log Out-of-State Cites Per Opinion	0.560+	-0.125	-0.106
	(0.311)	(0.106)	(0.0907)
Log Federal Circuit Cites Per Opinion	0.749**	-0.0125	0.00197
	(0.255)	(0.0488)	(0.0513)
FE's/Trends	None/None	State/State	Judge/State

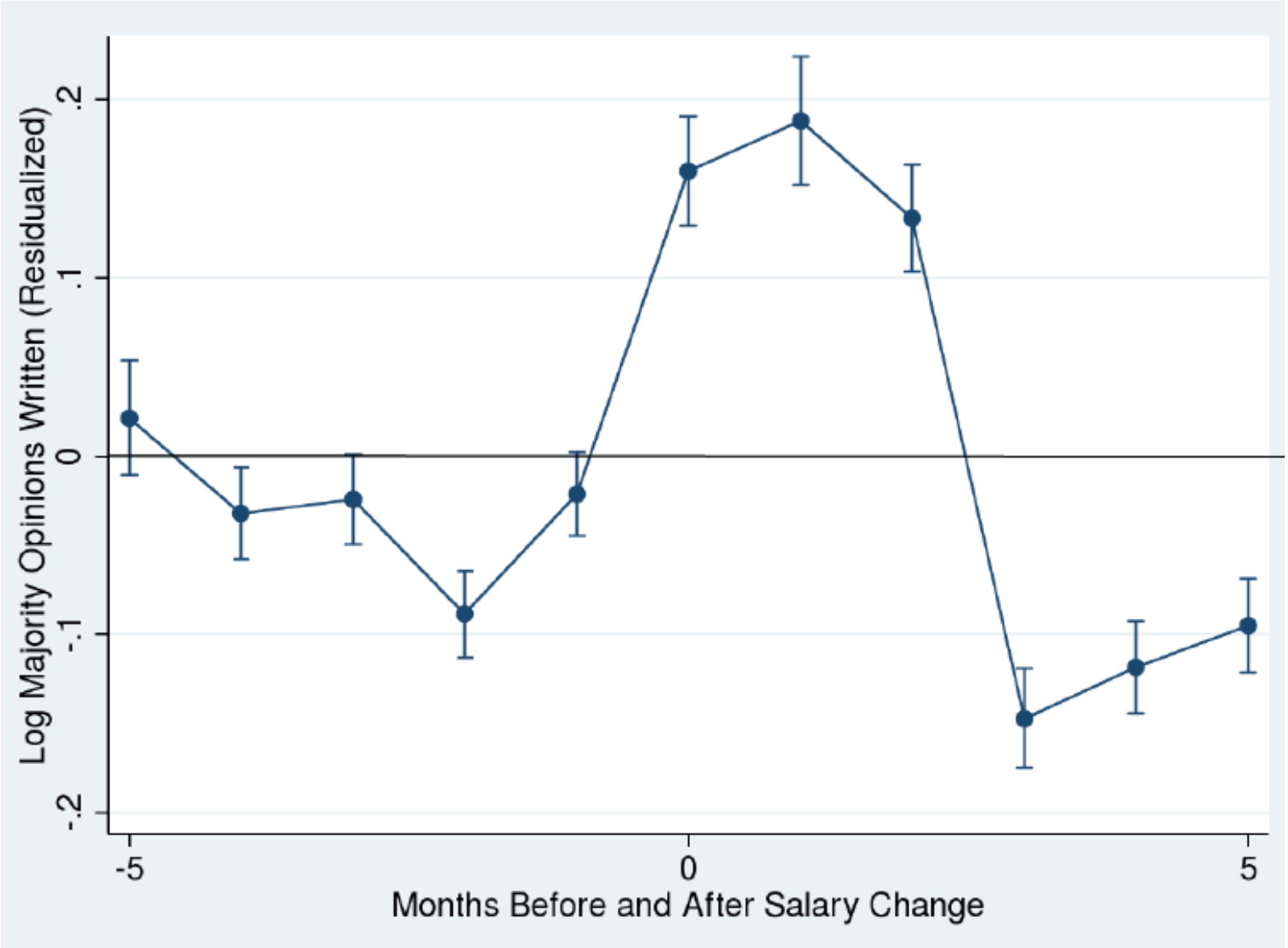
Salaries Discussion

- Better judges are paid more on average, but there is no long-term within-judge effect of increasing salaries.
- We interacted salary changes with the type of electoral system and still found no long-run effect.

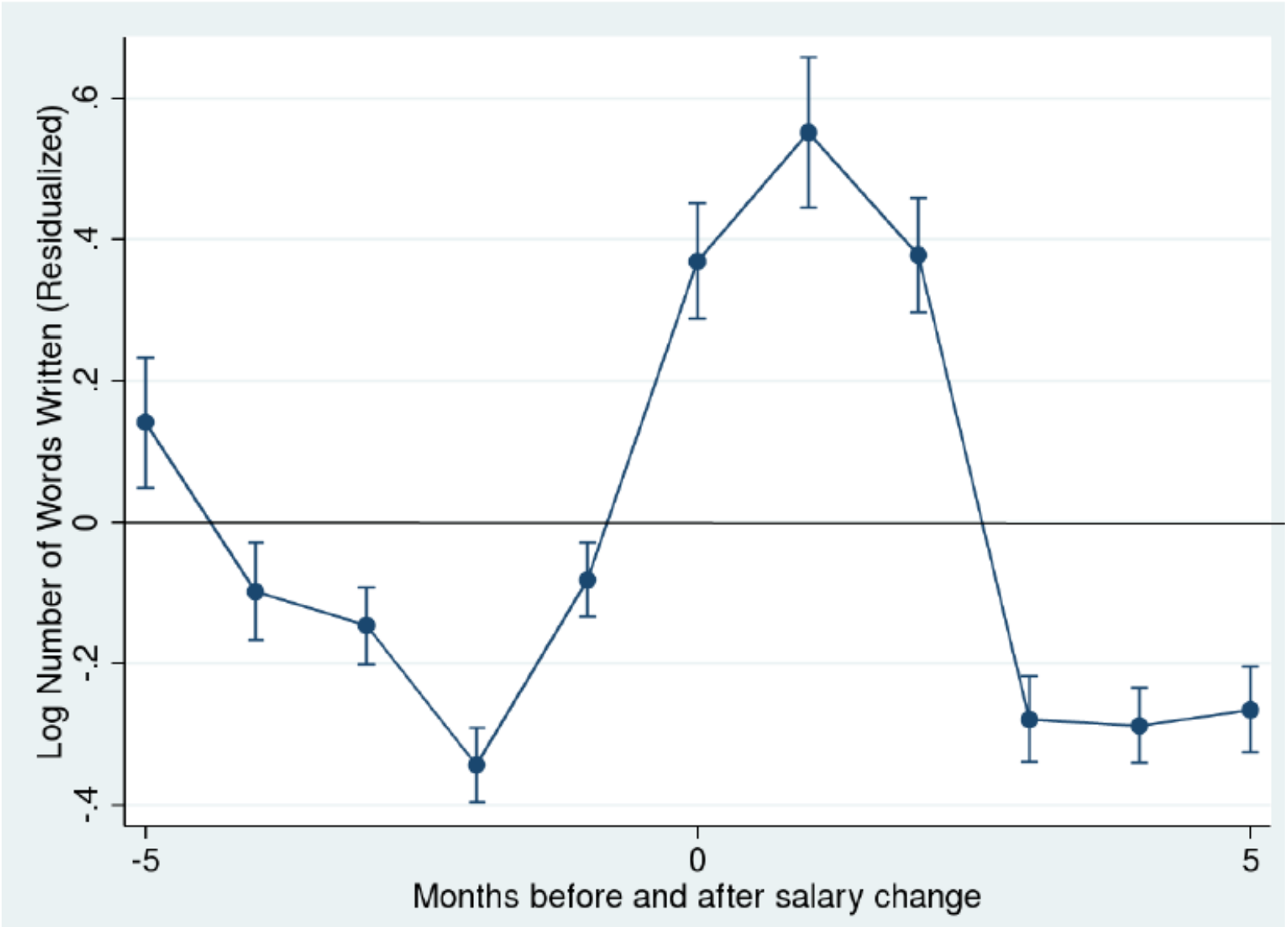
Short-Term Salary Change Effects

- Behavioral gift exchange models might predict that salary increases would be associated with a short-lived increase in performance, as a reciprocity-based effect.
- We therefore look at the trend in performance in the months before and after a salary change, controlling for our set of fixed effects.

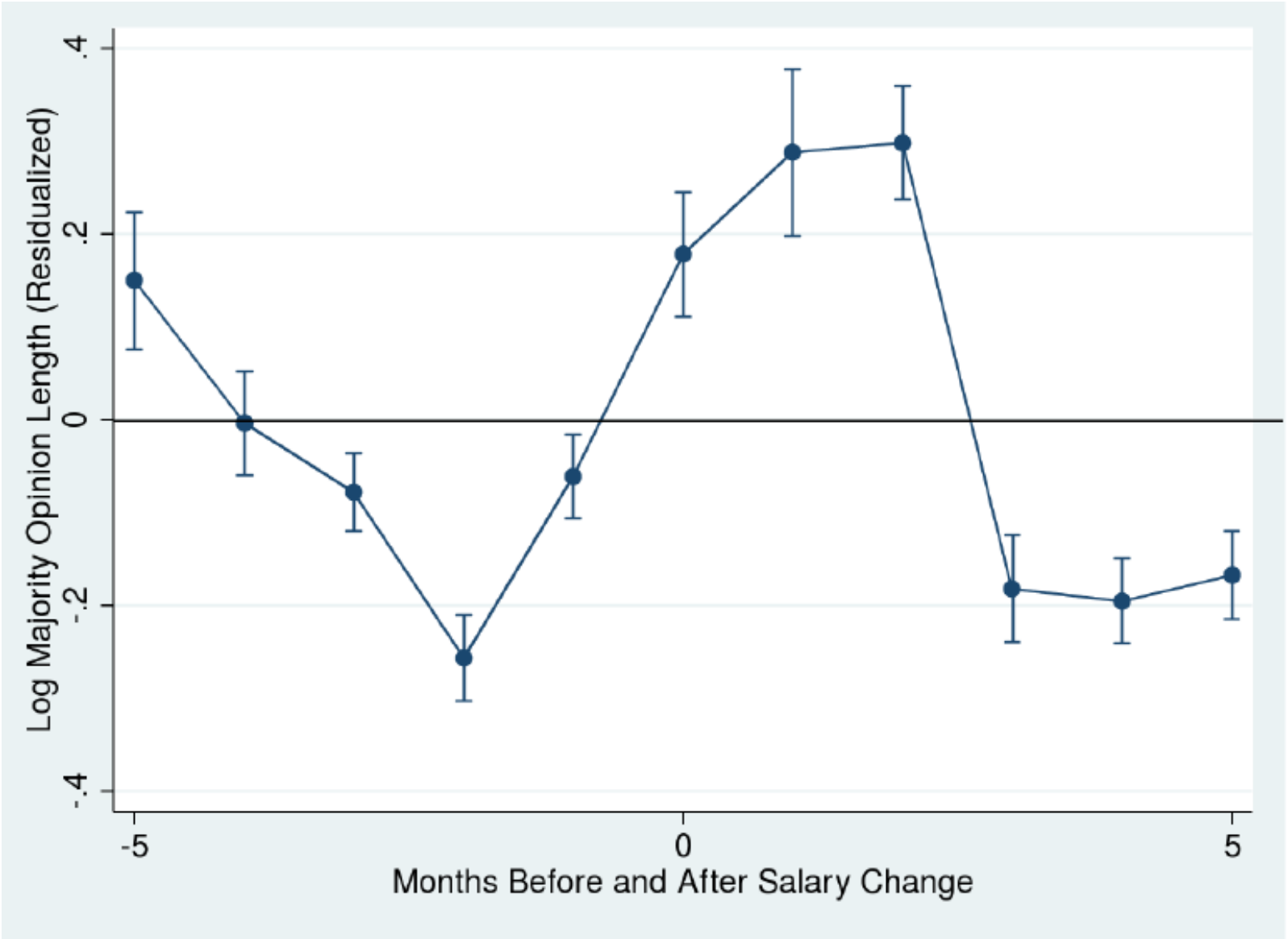
Salary Impact Effect on Majority Opinions Written



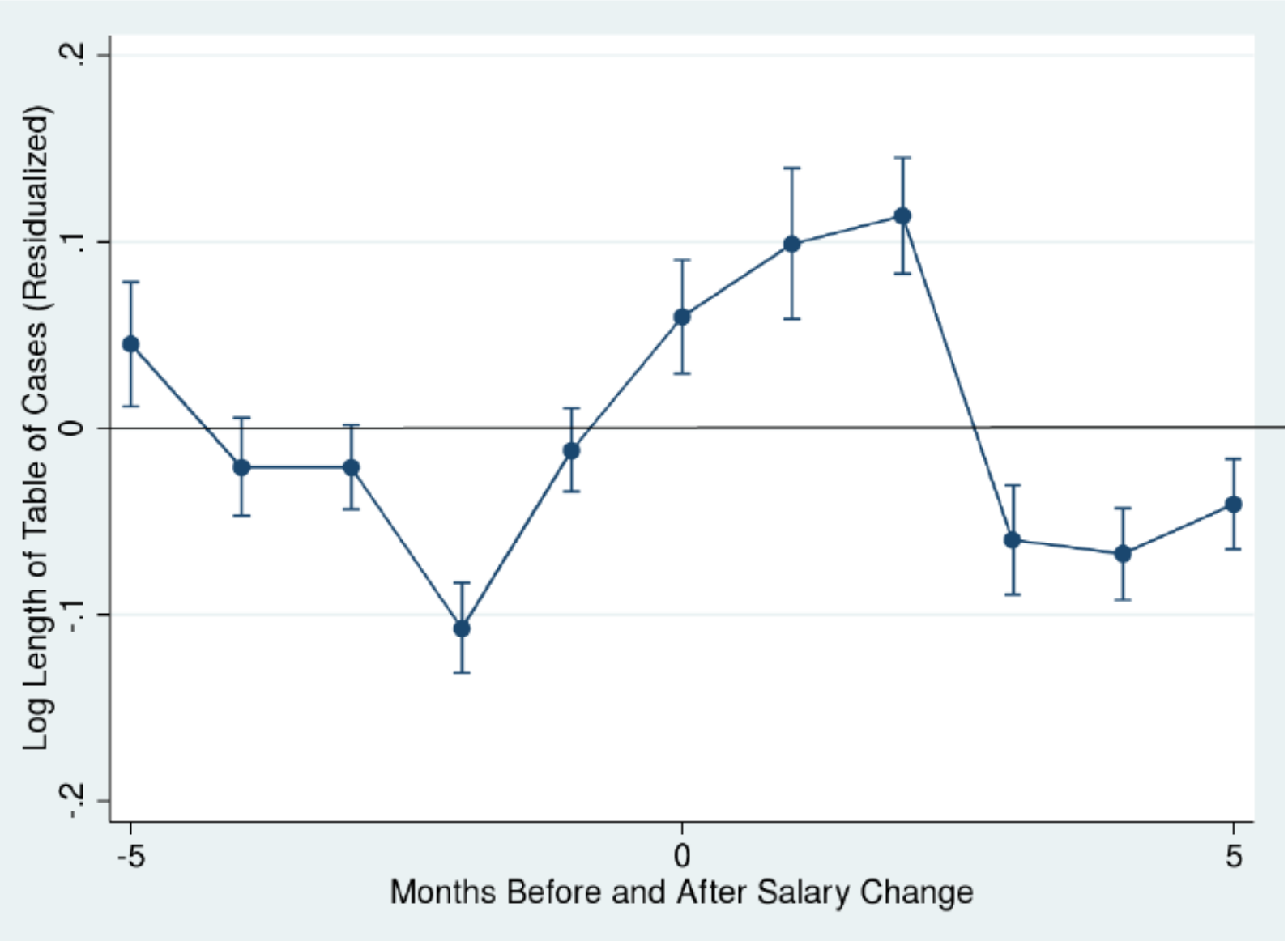
Salary Impact Effect on Total Words Written



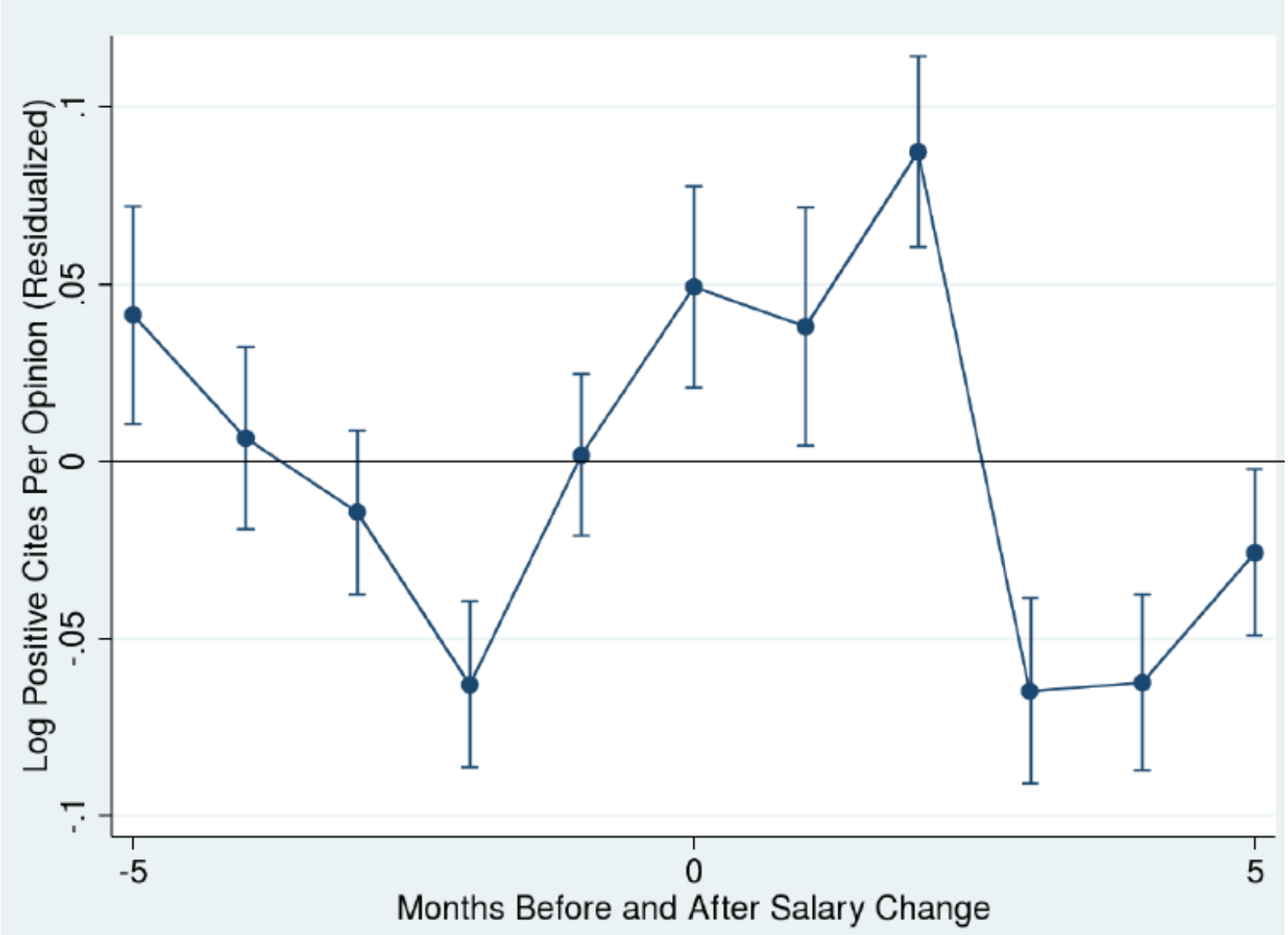
Salary Impact Effect on Opinion Length



Salary Impact Effect on Caselaw Research



Salary Impact Effect on Positive Cites Per Opinion



Salary Impact Effects Regression

- Outcome y_{st} for state s, month t:

$$y_{st} = \text{TIME}_t + \text{STATE}_s \times \text{MONTH}_t + \text{STATE}_s \times t + \bar{\rho}\,\bar{Z}_{st} + \rho\, Z_{st} + \varepsilon_{st}$$

- $\text{STATE}_s \times \text{MONTH}_t$, state-month seasonal effect.
- Z_{st}, log real annual salary paid to judges in state s at year t
- $\bar{Z}_{st}$, baseline time window of 5 months before and 5 months after the salary change.
- Z_{st}, indicator for the month of the salary change and two subsequent months.

Salary Impact Effects on Judge Performance

Log Majority Opinions Written	0.263**
	(0.0619)
Log Total Words Written	0.708**
	(0.158)
Log Length of Majority Opinion	0.415**
	(0.105)
Log Length of Table of Cases	0.151**
	(0.0462)
Log Positive Cites Per Opinion	0.0968*
	(0.0367)
Log Out-of-State Cites Per Opinion	0.0270+
	(0.0143)
Log Federal Circuit Cites Per Opinion	0.0148*
	(0.00667)

Salary Increase Impacts Discussion

- There are short-term behavioral responses to salary increases, but they die out quickly.
- This is consistent with gift exchange models of wage reciprocity, and also consistent with the null result in the long run.

Term Length Change

- Increasing term lengths reduces the frequency with which a judge faces reelection, so the effects of election on a judge's time allocation will be reduced.
- Eight states increased the term length:
  - IL (1962), HI (1968), IN (1970), MT (1972), SD (1972), VT (1974), KY(1975), MD (1976)
- Two states decreased the term length:
  - PA (1968), LA (1974)

Rule Change Regression

- Judge i, state s, year t:

$$y_{ist} = \text{TIME}_t + \text{JUDGE}_i + \text{STATE}_s \times t + \bar{Z}'_{st}\bar{\rho} + Z'_{st}\rho + \varepsilon_{ist}$$

- $\bar{Z}_{st}$, baseline time windows of ten years before and ten years after each policy change
- Z_{st}, treatment indicators for the ten years after a rule change
- Procures average effect of judge-retention reform k on all judges who are active at the time that particular reform occurred in each state, in the ten years after the policy change, relative to the ten years before the policy change.

Effects of Increased Term Length (Effort)

	(1)	(2)	(3)
Log Majority Opinions Written	-0.127	-0.148	-0.15
	(0.238)	(0.186)	(0.181)
Log Dissents Written	-0.627*	-0.330+	-0.207
	(0.311)	(0.185)	(0.148)
Log Concurrences Written	-0.638*	-0.288+	-0.155
	(0.273)	(0.145)	(0.101)
Log Total Words Written	-0.26	-0.194	-0.156
	(0.193)	(0.129)	(0.149)
Log Length of Majority Opinion	-0.0806	-0.0372	-0.0242
	(0.0857)	(0.0808)	(0.0512)
Log Length of Table of Cases	-0.00824	0.0131	0.0659
	(0.0969)	(0.0805)	(0.0420)
Log Cases Overruled	-0.0322	-0.0194	-0.0372
	(0.0341)	(0.0396)	(0.0434)
FE's/Trends	None/None	State/State	Judge/State

Effects of Increased Term Length (Quality)

	(1)	(2)	(3)
Log Positive Cites Per Opinion	-0.346*	0.0244	0.0743*
	(0.136)	(0.0556)	(0.0342)
Log Distinguishing Cites Per Opinion	0.0829	0.142+	0.156*
	(0.138)	(0.0812)	(0.0636)
Log Negative Cites Per Opinion	0.0277	0.103*	0.0979**
	(0.0570)	(0.0448)	(0.0364)
Log Discuss Cites Per Opinion	-0.219**	0.0465	0.0749*
	(0.0812)	(0.0524)	(0.0298)
Log Quoted Cites Per Opinion	-0.0748	0.0603	0.102*
	(0.104)	(0.0699)	(0.0406)
Log Out-of-State Cites Per Opinion	0.0578	0.0123	0.0313
	(0.106)	(0.0480)	(0.0262)
Log Federal Circuit Cites Per Opinion	-1.084*	-0.0436*	-0.0166
	(0.414)	(0.0192)	(0.0257)
FE's/Trends	None/None	State/State	Judge/State

Term Length Discussion

- Increasing term length increases the quality of opinions, suggesting that with reduced election-related obligations, judges spend more time on their opinions.

State Supreme Court Election Systems

- There are three key judge retention schemes:
  - In partisan elections, incumbent judges face a challenger, with party affiliations on the ballot.
  - In nonpartisan elections, incumbent judges face a challenger, but party affiliations are not on the ballot.
  - In uncontested elections, incumbent judges face an up-or-down retention vote with no challenger.
- Lim and Snyder (2013) look at whether voting is correlated with state bar association evaluations of judge performance:
  - In nonpartisan elections, evaluations are highly correlated with vote share and probability of winning.
  - In partisan elections, evaluations are uncorrelated with voting.
  - In uncontested elections, evaluations are correlated with vote share but not probability of winning; unchallenged judges have de facto tenure.
- Judges in nonpartisan systems have the strongest electoral incentives.

Election System Changes

- Six states moved from contested nonpartisan elections to uncontested elections:
  - AZ (1974), WY (1972), FL (1976), MD (1976), SD (1980), UT (1985)
- Nine states moved from contested partisan elections to uncontested elections:
  - KA (1958), IA (1962), NE (1962), IL (1964), IN (1970), CO (1966), OK (1967), TN (1971), NM (1988)
- By measuring performance before and after these changes in tenure status, we can assess whether competitive elections incentivize higher judging effort, or whether they instead divert effort away from judging.
- The findings in Lim and Snyder (2013) suggest that moving from nonpartisan to uncontested elections may have a stronger effect on judge behavior than moving from partisan to uncontested elections.

Effect of Nonpartisan-to-Uncontested Reform (Effort)

	(1)	(2)	(3)
Log Majority Opinions Written	-0.0321	-0.0738	-0.104
	(0.148)	(0.118)	(0.0945)
Log Dissents Written	0.0569	0.0449	0.046
	(0.132)	(0.0952)	(0.0587)
Log Concurrences Written	0.202	0.159+	0.0569
	(0.150)	(0.0921)	(0.103)
Log Total Words Written	0.0518	0.0541	-0.00644
	(0.0991)	(0.0836)	(0.0677)
Log Length of Majority Opinion	0.0511	0.0899	0.0634
	(0.113)	(0.0774)	(0.0697)
Log Length of Table of Cases	0.219	0.213*	0.155*
	(0.131)	(0.0888)	(0.0589)
Log Cases Overruled	-0.174**	-0.128*	-0.148**
	(0.0469)	(0.0544)	(0.0526)
FE's/Trends	None/None	State/State	Judge/State

Effect of Nonpartisan-to-Uncontested Reform (Quality)

	(1)	(2)	(3)
Log Positive Cites Per Opinion	0.0506	0.153**	0.109*
	(0.0830)	(0.0545)	(0.0476)
Log Distinguishing Cites Per Opinion	0.241*	0.304**	0.234**
	(0.111)	(0.0631)	(0.0703)
Log Negative Cites Per Opinion	0.122	0.173**	0.138**
	(0.0754)	(0.0422)	(0.0462)
Log Discuss Cites Per Opinion	0.052	0.111*	0.0828*
	(0.0671)	(0.0471)	(0.0378)
Log Quoted Cites Per Opinion	0.0914	0.140**	0.0913*
	(0.0737)	(0.0473)	(0.0408)
Log Out-of-State Cites Per Opinion	0.0252	0.0839*	0.0621
	(0.0697)	(0.0398)	(0.0508)
Log Federal Circuit Cites Per Opinion	-0.0909+	-0.00524	0.00314
	(0.0500)	(0.0202)	(0.0254)
FE's/Trends	None/None	State/State	Judge/State

Effects of Partisan-to-Uncontested Reform (Effort)

	(1)	(2)	(3)
Log Majority Opinions Written	0.109	0.0493	0.00927
	(0.0688)	(0.0781)	(0.102)
Log Dissents Written	0.243*	0.0511	0.0137
	(0.113)	(0.123)	(0.0873)
Log Concurrences Written	0.244**	0.11	0.047
	(0.0804)	(0.0800)	(0.0511)
Log Total Words Written	0.0519	-0.0445	-0.0461
	(0.0597)	(0.0761)	(0.0903)
Log Length of Majority Opinion	-0.0536	-0.0695	-0.0293
	(0.0714)	(0.0612)	(0.0305)
Log Length of Table of Cases	0.0133	-0.0246	-0.0321
	(0.103)	(0.0788)	(0.0556)
Log Cases Overruled	0.0711	0.014	0.0572+
	(0.0563)	(0.0399)	(0.0313)
FE's/Trends	None/None	State/State	Judge/State

Effects of Partisan-to-Uncontested Reform (Quality)

	(1)	(2)	(3)
Log Positive Cites Per Opinion	0.209+	0.0157	-0.0419
	(0.108)	(0.0545)	(0.0539)
Log Distinguishing Cites Per Opinion	0.0406	-0.0291	-0.0685+
	(0.0849)	(0.0530)	(0.0398)
Log Negative Cites Per Opinion	0.0112	-0.0329	-0.031
	(0.0502)	(0.0296)	(0.0250)
Log Discuss Cites Per Opinion	0.139	-0.00225	-0.0296
	(0.0943)	(0.0329)	(0.0278)
Log Quoted Cites Per Opinion	0.0573	0.0053	-0.0401
	(0.0935)	(0.0423)	(0.0274)
Log Out-of-State Cites Per Opinion	0.0785	-0.00205	-0.0184
	(0.0955)	(0.0215)	(0.0210)
Log Federal Circuit Cites Per Opinion	0.198+	0.00587	-0.00136
	(0.104)	(0.0123)	(0.0114)
FE's/Trends	None/None	State/State	Judge/State

Electoral Rule Change Discussion

- Increasing tenure increases performance for the nonpartisan judges but not for the partisan judges
- This is because the partisan system was not competitive, and because these judges are basically politicians and don't care as much about their work.

Electoral Cycle

- Like U.S. Senators, state supreme court judges face election on a staggered basis, where a subset of judges are up for election in any particular election year.
- We can assess whether competitive elections incentivize higher judging effort, or whether they instead divert effort away from judging

Electoral Cycle Regression

- The election schedule is arbitrarily assigned by history.
- We estimate

$$y_{ist} = \text{JUDGE}_i + \text{STATE}_s \times \text{TIME}_t + Z'_{ist}\rho + \varepsilon_{ist}$$

- $\text{STATE}_s \times \text{TIME}_t$ is a state-year fixed effect for each s and year t.
- $Z_{ist} = (Z^{NP}_{ist}, Z^{P}_{ist}, Z^{U}_{ist})$, a vector of indicators for being up for election in each of the three electoral systems (nonpartisan, partisan, and uncontested)
- This regression compares the performance of judges who are up for election to other judges on the same court that are not up for election, controlling for judge-specific characteristics and arbitrary state-level trends.

Effect of Being Up for Election (Effort)

	(NP1)	(NP2)	(P1)	(P2)	(U1)	(U2)
Log Maj. Ops Written	-0.0953*	-0.117*	-0.208+	-0.116*	0.137*	0.0361
	(0.0375)	(0.0569)	(0.119)	(0.0502)	(0.0540)	(0.0804
Log Disc. Ops Written	-0.0956	-0.0861+	-0.163	-0.0654	0.0408	-0.0839
	(0.0700)	(0.0506)	(0.100)	(0.0562)	(0.0596)	(0.0604
Log Words Written	-0.108+	-0.130*	-0.257*	-0.197**	0.0783	0.00108
	(0.0625)	(0.0577)	(0.110)	(0.0694)	(0.0653)	(0.0965
Log Maj. Op. Length	0.0173	0.00644	-0.000293	-0.0605**	-0.0474	-0.0251
	(0.0352)	(0.0258)	(0.0350)	(0.0168)	(0.0488)	(0.0233
Log TOC Length	-0.0016	-0.0145	-0.033	-0.0516*	-0.00674	-0.0057
	(0.0397)	(0.0350)	(0.0421)	(0.0235)	(0.0556)	(0.0280
Log Cases Overruled	-0.132**	-0.118*	-0.078	0.0336+	0.14	0.133
	(0.0398)	(0.0541)	(0.0745)	(0.0191)	(0.114)	(0.189)
Fixed Effects	State	State-Year Judge	State	State-Year Judge	State	State-Ye Judge

Effect of Being Up For Election (Quality)

	(NP1)	(NP2)	(P1)	(P2)	(U1)	(U2)
Log Positive Cites	-0.0881	-0.128*	-0.177+	-0.177*	0.159*	0.00718
	(0.0650)	(0.0534)	(0.0952)	(0.0877)	(0.0735)	(0.109)
Log Total Dist. Cites	-0.0624	-0.0605	-0.121+	-0.192*	0.177	-0.00812
	(0.100)	(0.113)	(0.0704)	(0.0754)	(0.128)	(0.143)
Log Total Neg. Cites	-0.175**	-0.14	-0.148**	-0.234**	0.182+	0.00657
	(0.0589)	(0.0854)	(0.0474)	(0.0502)	(0.102)	(0.138)
Log Total Discuss Cites	-0.0784	-0.0992+	-0.191+	-0.209*	0.156*	0.0322
	(0.0651)	(0.0582)	(0.0945)	(0.0956)	(0.0658)	(0.108)
Log Out-of-State Cites	-0.0437	-0.0608	-0.138*	-0.161+	0.124	0.0497
	(0.0904)	(0.0720)	(0.0550)	(0.0842)	(0.0931)	(0.144)
Log Fed. Circuit Cites	-0.0944	-0.0937	-0.112**	-0.145*	0.116	0.00976
	(0.0589)	(0.0999)	(0.0392)	(0.0644)	(0.0998)	(0.121)
Fixed Effects	State	State-Year Judge	State	State-Year Judge	State	State-Yea Judge

Electoral Cycle Discussion

- Being up for election reduces judge performance in both the nonpartisan and partisan system (but not the uncontested sytem).
- The fact that judges spend more time on their opinions when they have more free time suggests that they have an intrinsic motivation to do a good job.
- This is supportive evidence for policies seeking to improve judge tenure.