

PLSC 476: Empirical Legal Studies

Christopher Zorn

March 25, 2021

Separation of Powers

Three questions:

- Are changes in the President's / House's / Senate's ideology associated with changes in the justices' voting behavior?
- Are those associations stronger in statutory cases than in constitutional ones?
- Do any such associations exist in cases where the Court reviews the constitutionality of acts of Congress?

Need:

- Data on Supreme Court votes / outcomes (and their legal basis)
- Measures of Supreme Court, presidential, House, and Senate ideology (liberalism / conservatism)

Separation of Powers: Expectations

If the Court is *strategic*, we would expect to see:

- Greater Court liberalism associated with higher levels of liberal voting / liberal decisions, *but*
- Greater House / Senate / presidential conservatism associated with lower levels of liberal voting / liberal decisions, and
- Greater “distance” between the Court and the House / Senate / president associated with lower probabilities of Supreme Court invalidations of Congressional statutes.

Separation of Powers: Data

- Supreme Court votes / decisions: The [Supreme Court Database](#)
- Supreme Court decisions on judicial review: The [Judicial Review of Congress Database](#) (Whittington 2019)
- Supreme Court ideology: the [Segal-Cover](#) ideology scores
- Congressional / presidential ideology: NOMINATE scores, at [Voteview](#)

Measuring Ideology: NOMINATE

voteview.com beta

[search](#) [chamber](#) [party](#) [geography](#) [data](#) [about](#)

Attention: During the transition to the new Congress, some data may be missing, incomplete, or provisional. We expect scores to propagate over the next 1-2 weeks. If you would like to be alerted when data for the new Congress is fully propagated, please [sign up for our update newsletter](#).

Realtime NOMINATE Ideology and Related Data

This section contains download links for NOMINATE scores and other data that we make available to the public, in addition to tutorial articles explaining how to generate popular ancillary data from our data exports. Please continue by choosing the data you wish to download.

Data is updated live, as new votes are taken. If you are an Institutional user of our data and wish to be notified before major or breaking changes are made to the data, please see the [About page](#).

Please cite the dataset as:

Lewis, Jeffrey B., Keith Poole, Howard Rosenthal, Adam Boche, Aaron Rudkin, and Luke Sonnet (2021). *Voteview: Congressional Roll-Call Votes Database*. <https://voteview.com/>

Data Type:

Chamber:

Congress:

File Format:

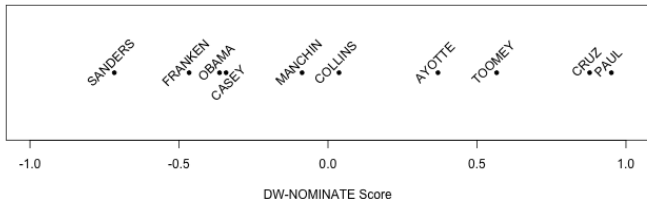
Member Ideology

This data includes basic biographical information (state, district, party, name) and ideological scores for members of the selected congresses.

Presidential / Median Senate NOMINATE Scores

- Based on “scaling” all Congressional roll call votes
- Generates liberalism / conservatism scores for every roll call, and for every representative and senator, 1789-2021
- Also scales presidents, based on their positions on Congressional bills
- Two “dimensions;” the first is standard liberalism/conservatism
- “Middle point” is zero; higher scores denote greater conservatism

113th Senate (2013-14):





FiveThirtyEight

Nate Silver's Political Calculus

How Liberal Is President Obama?

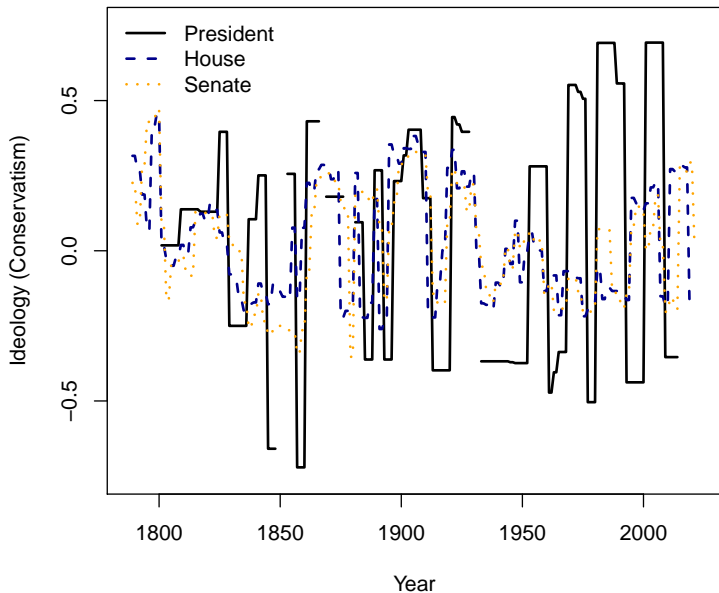
By NATE SILVER APRIL 29, 2011 5:48 PM

Earlier this week, Ezra Klein of The Washington Post published a [column](#) titled "Obama Revealed: A Moderate Republican."

Mr. Klein argued that the president's policy preferences in some key areas, including health care, resemble those of a Republican from the early 1990s:

President Obama, if you look closely at his positions, is a moderate Republican of the early 1990s. And the Republican Party he's facing has abandoned many of its best ideas in its effort to oppose him.

NOMINATE Over Time



Models:

$$\begin{aligned}\text{Pr}(\text{Liberal Court Decision}_i) = & f[\beta_0 + \beta_1(\text{Court Liberalism}_i) + \\ & \beta_2(\text{President Conservatism}_i) + \\ & \beta_3(\text{House Conservatism}_i) + \\ & \beta_4(\text{Senate Conservatism}_i)]\end{aligned}$$

$$\begin{aligned}\text{Pr}(\text{Liberal Justice Vote}_{ij}) = & f[\beta_0 + \beta_1(\text{Justice Liberalism}_j) + \\ & \beta_2(\text{President Conservatism}_i) + \\ & \beta_3(\text{House Conservatism}_i) + \\ & \beta_4(\text{Senate Conservatism}_i)]\end{aligned}$$

Sidebar: Logistic Regression

Logistic regression is a regression model used when the response / dependent variable is binary (that is when $Y \in \{0, 1\}$)

- Models the probability that the dependent variable equals 1
- Formally:

$$\Pr(Y_i = 1) = \frac{\exp(\mathbf{X}_i\beta)}{1 + \exp(\mathbf{X}_i\beta)}$$

- Interpretation is similar to linear regression:
 - $\hat{\beta} > 0$ means that, as X increases, the expected $\Pr(Y = 1)$ also increases
 - $\hat{\beta} < 0$ means that, as X increases, the expected $\Pr(Y = 1)$ decreases
- Non-technical reviews [here](#), [here](#), and [here](#)

Example Code

```
> Decision.fit<-glm(LiberalDecision~JusticeLiberalism+President+House+
+                   Senate,data=MasterC,family="binomial")
> summary(Decision.fit)
```

Call:

```
glm(formula = LiberalDecision ~ JusticeLiberalism + President +
     House + Senate, family = "binomial", data = MasterC)
```

Deviance Residuals:

Min	1Q	Median	3Q	Max
-1.501	-1.121	0.885	1.155	1.419

Coefficients:

	Estimate	Std. Error	z value	Pr(> z)
(Intercept)	-0.9733	0.0697	-13.97	< 2e-16 ***
JusticeLiberalism	1.9170	0.1229	15.60	< 2e-16 ***
President	0.0558	0.0482	1.16	0.25
House	0.9953	0.1980	5.03	0.0000005 ***
Senate	-1.0792	0.2235	-4.83	0.0000014 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 13713 on 9896 degrees of freedom
Residual deviance: 13388 on 9892 degrees of freedom
(596 observations deleted due to missingness)
AIC: 13398

Number of Fisher Scoring iterations: 4

Logistic Regression: All Cases / Votes

	<i>Dependent Variable</i>	
	Liberal Outcomes	Liberal Votes
Justice Liberalism	1.917*** (0.123)	1.332*** (0.023)
President Conservatism	0.056 (0.048)	0.054*** (0.016)
House Conservatism	0.995*** (0.198)	0.560*** (0.070)
Senate Conservatism	-1.079*** (0.224)	-0.609*** (0.078)
Constant	-0.973*** (0.070)	-0.579*** (0.015)
Observations	9,897	82,969
Log Likelihood	-6,694.000	-55,407.000
Akaike Inf. Crit.	13,398.000	110,824.000
<i>Note:</i> *p<0.1; **p<0.05; ***p<0.01		

Statutory vs. Constitutional Decisions

- Court decisions based on statutory ground are easier to override
- Constitutional decisions are of greater significance (and durability)
- *Most* constitutional decisions involve the constitutionality of state/local laws...
- Constitutional decisions involving federal statutes are among the most important

Statutory vs. Constitutional Cases / Votes

	<i>Dependent Variable</i>			
	Liberal Decision		Liberal Vote	
	Statutory	Constitutional	Statutory	Constitutional
Justice Liberalism	1.662*** (0.173)	2.213*** (0.241)	1.045*** (0.032)	1.858*** (0.041)
President Conservatism	0.165** (0.068)	-0.017 (0.087)	0.110*** (0.023)	0.031 (0.030)
House Conservatism	0.744*** (0.262)	1.320*** (0.361)	0.288*** (0.092)	0.825*** (0.129)
Senate Conservatism	-0.670** (0.307)	-1.500*** (0.410)	-0.218** (0.107)	-0.965*** (0.145)
Constant	-0.744*** (0.097)	-1.097*** (0.132)	-0.371*** (0.021)	-0.784*** (0.027)
Observations	4,893	2,976	41,009	25,398
Log Likelihood	-3,328.000	-1,996.000	-27,708.000	-16,337.000
Akaike Inf. Crit.	6,666.000	4,002.000	55,427.000	32,685.000

Note:

*p<0.1; **p<0.05; ***p<0.01

Judicial Review of Congressional Acts

- Unit of Analysis: Instances of Supreme Court constitutional review of federal laws, 1794-2018 ($N = 1308$)
- Outcome: Whether ($=1$) or not ($=0$) the Court struck down the statute as unconstitutional on its face
- Expectations: Greater ideological distance between the Court and the other branches will increase $\Pr(\text{Struck Down})$
- Requires the use of *multiplicative interactions*:
 - Of the sort:

$$\Pr(Y_i = 1) = f[\beta_0 + \beta_1 X_i + \beta_2 Z_i + \beta_3 X_i Z_i]$$

- Allows the association between $\Pr(Y = 1)$ and X to vary as a function of Z
 - Here: The impact of (say) Senate conservatism on $\Pr(\text{Strike Down})$ depends on whether the Court is liberal or conservative
- Note: Court ideology only available for 1946-2018...

Model:

$$\begin{aligned} \text{Pr}(\text{Strike Down Law}_i) = & f[\beta_0 + \beta_1(\text{Court Conservatism}_i) + \\ & \beta_2(\text{President Conservatism}_i) + \\ & \beta_3(\text{House Conservatism}_i) + \\ & \beta_4(\text{Senate Conservatism}_i) + \\ & \beta_5(\text{President Conservatism}_i \times \text{Court Conservatism}_i) + \\ & \beta_6(\text{House Conservatism}_i \times \text{Court Conservatism}_i) + \\ & \beta_7(\text{Senate Conservatism}_i \times \text{Court Conservatism}_i)] \end{aligned}$$

Models of Federal Judicial Review

	<i>Dependent variable:</i>	
	Strike Down Statute	
	Model w/o Court Ideology	Model w/Court Ideology
President Conservatism	0.174 (0.215)	2.557** (1.125)
House Conservatism	1.514** (0.703)	25.530*** (8.845)
Senate Conservatism	-1.774** (0.833)	-31.230*** (7.439)
Justice Conservatism		3.094*** (1.004)
President Conservatism × Justice Conservatism		-4.252** (1.857)
House Conservatism × Justice Conservatism		-37.990*** (14.470)
Senate Conservatism × Justice Conservatism		49.270*** (12.450)
Constant	-2.022*** (0.091)	-3.499*** (0.611)
Observations	1,202	613
Log Likelihood	-433.700	-239.300
Akaike Inf. Crit.	875.400	494.600

Note:

*p<0.1; **p<0.05; ***p<0.01

Separation of Powers: Summary

In general:

- The Supreme Court is responsive to the ideological positions of the other branches
- Higher levels of presidential and Senate conservatism were associated with reduced probabilities of liberal Supreme Court votes and decisions; the reverse was true for House conservatism
- The effects of presidential ideology were stronger in statutory cases; the effects of House and Senate ideology were stronger in constitutional cases
- The strongest and most consistent ideological effects in cases of federal judicial review were those of the Senate