

01 March 2017

1 Overview

At our last meeting, we finally reached full agreement on the use and reasoning of using an `lm` to sort party votes. Further, it was decided that we should produce additional tables and figures of potential interest for developing our analysis based on the additional things we wished to use the Senate to study as well as those which could allow us to more easily compare the House and Senate. Specifically, the following items were selected to see this week:

- Create more concise tables showing the signs of coefficients at the end of the vote sorting algorithm
- Develop plots which show the percent of votes sorted as party calls by Congress¹
- Create coefficient plots for ideological extremism by Congress between a series of groups we want to compare (Democrats/Republicans, Southern/Other Democrats, Gingrich Senators/Other Republicans, Senators approaching election/other Senators, Majority/Minority with Congress 107)
- The DV/IV and IV/IV plots for House Republicans with the exclusion of the outliers on the right side of the graph

Each of these is included throughout the rest of this document. Further, I include a regression table for our models of Southern/Other Democrats and Gingrich Senators/Other Republicans

2 Tables and Figures

2.1 Sorting Coefficient 2×2 Tables

Table 1: Senate Sorting Algorithm Coefficient Signs

	(-) Ideal	(+) Ideal
(-) Party	0.33	0.16
(+) Party	0.23	0.28

¹I also have plots which show the percent of votes which were noncalls by Congress. They are essentially mirror images of the plots I show in this document. If desired, I could also develop gray vote percent plots.

Table 2: House Sorting Algorithm Coefficient Signs

	(-) Ideal	(+) Ideal
(-) Party	0.38	0.15
(+) Party	0.17	0.30

2.2 Vote Sorting by Congress

Figure 1: Senate Party Calls by Congress

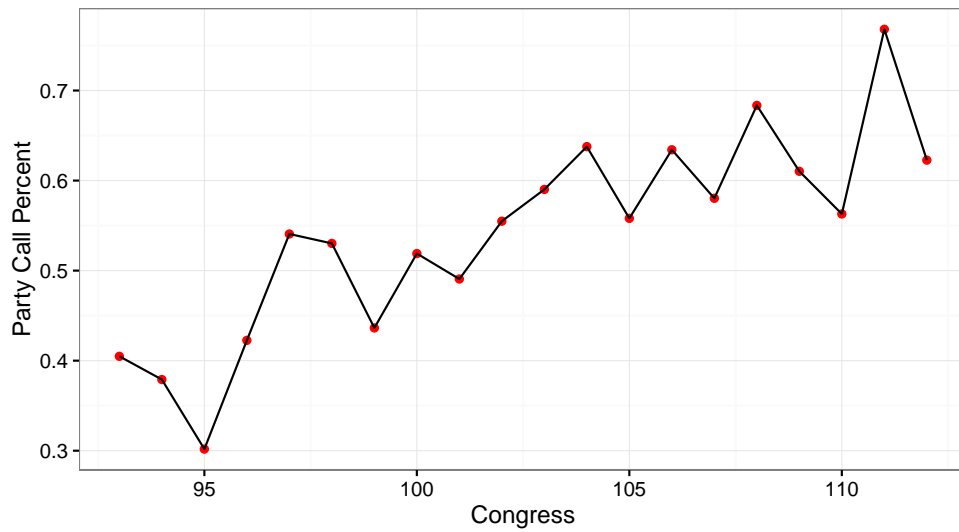
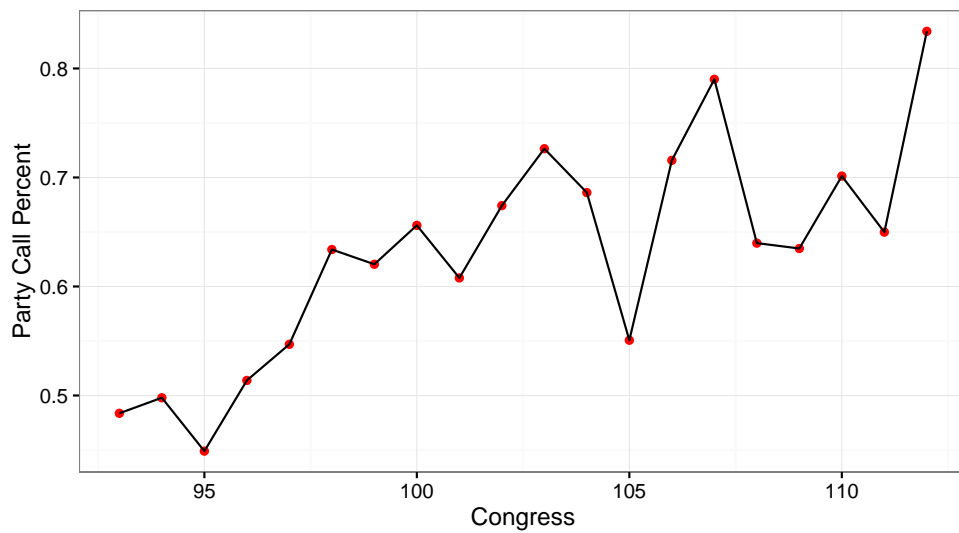


Figure 2: House Party Calls by Congress



2.3 Senate Coefficient Plots

Figure 3: Coefficient Plot, Senate Democrats and Republicans

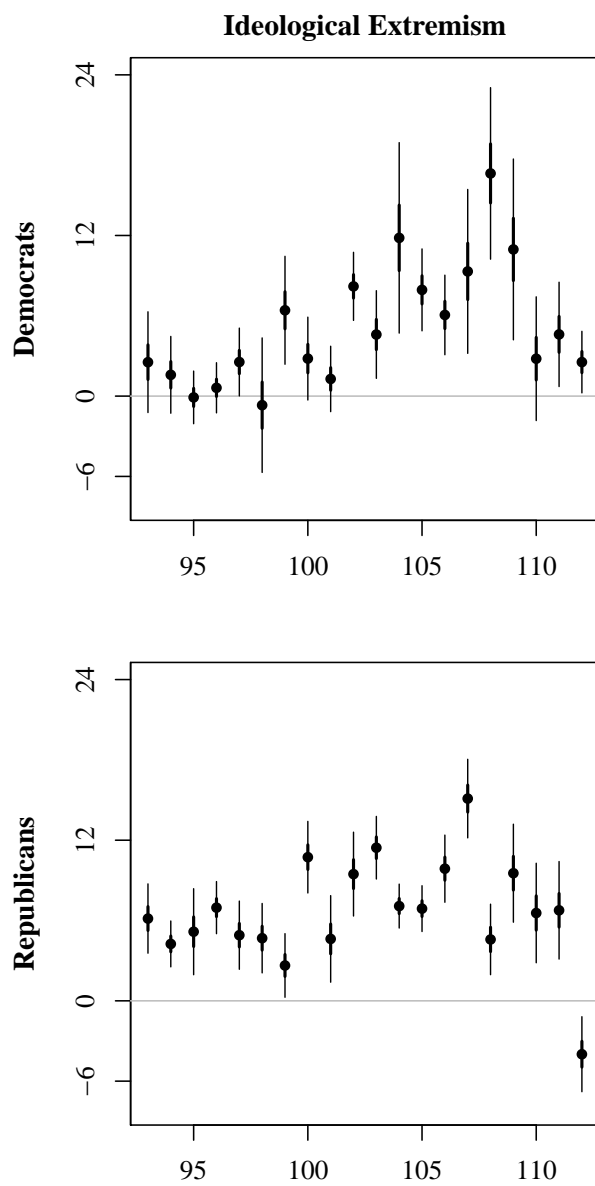


Figure 4: Coefficient Plot, Senate Southern and Other Democrats

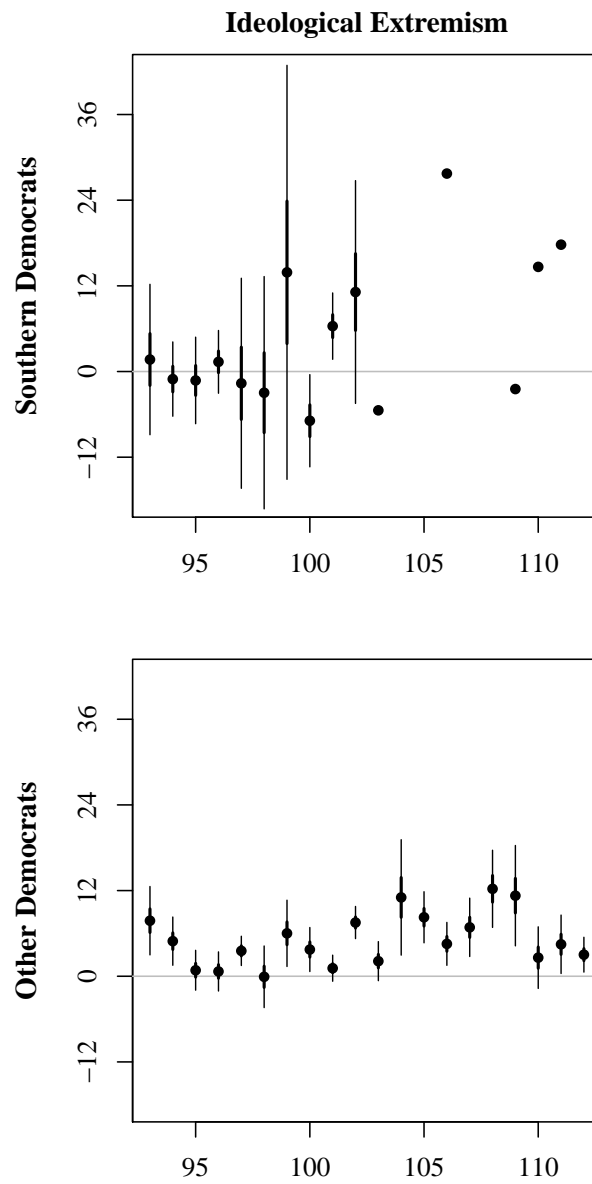


Figure 5: Coefficient Plot, Gingrich Senators and Other Republicans

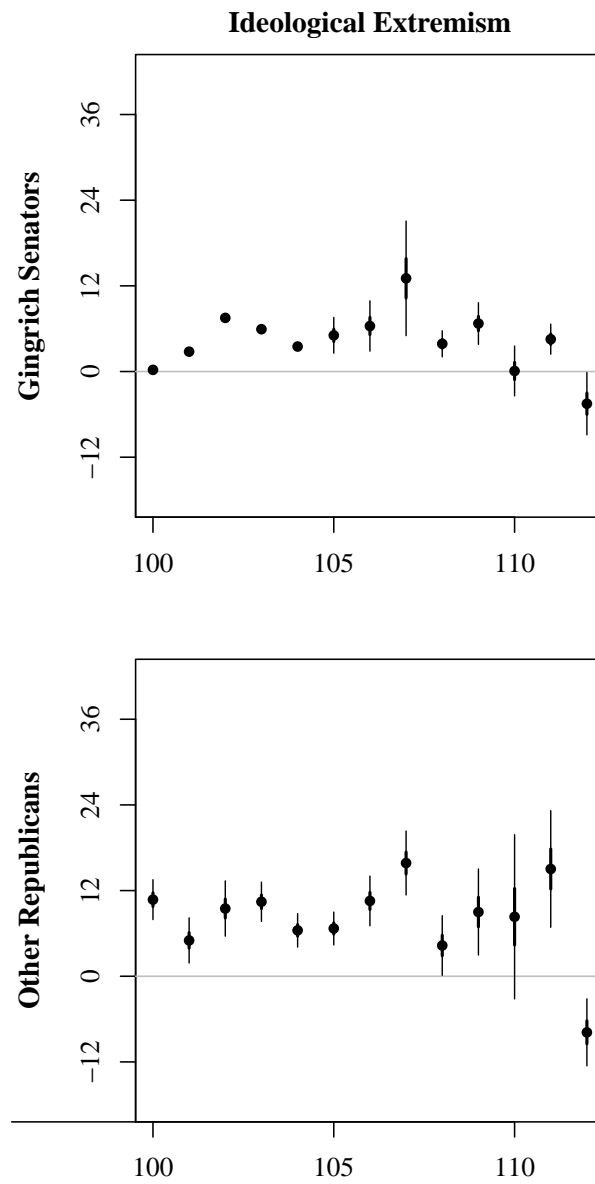
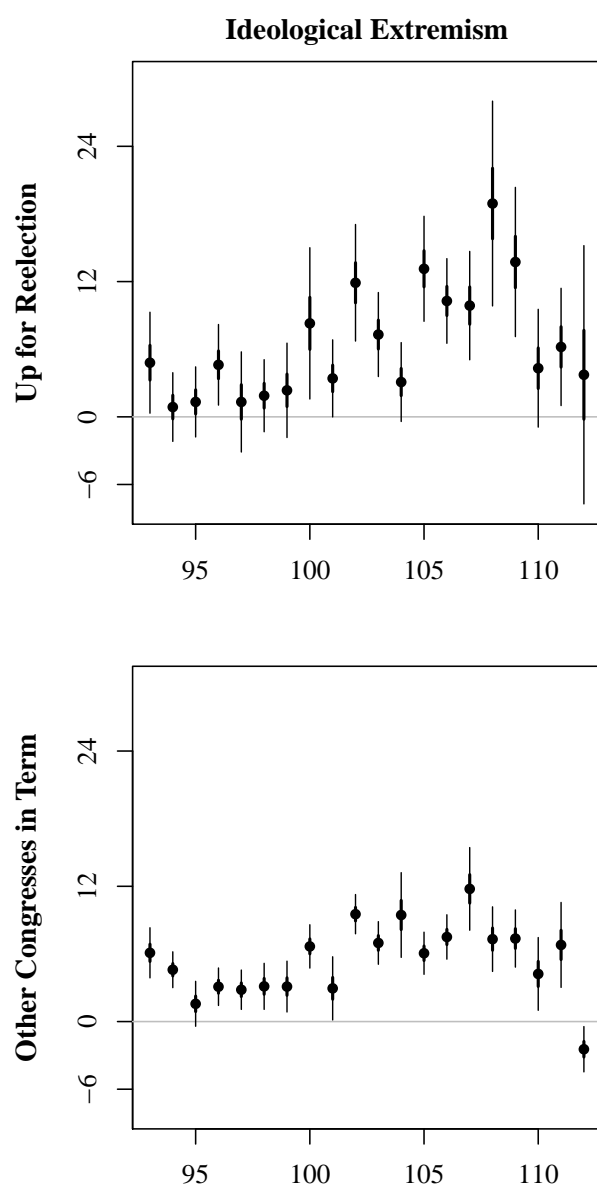


Figure 6: Coefficient Plot, Senators Up for Reelection and Others



2.4 House Coefficient Plots

Figure 7: Coefficient Plot, House Democrats and Republicans

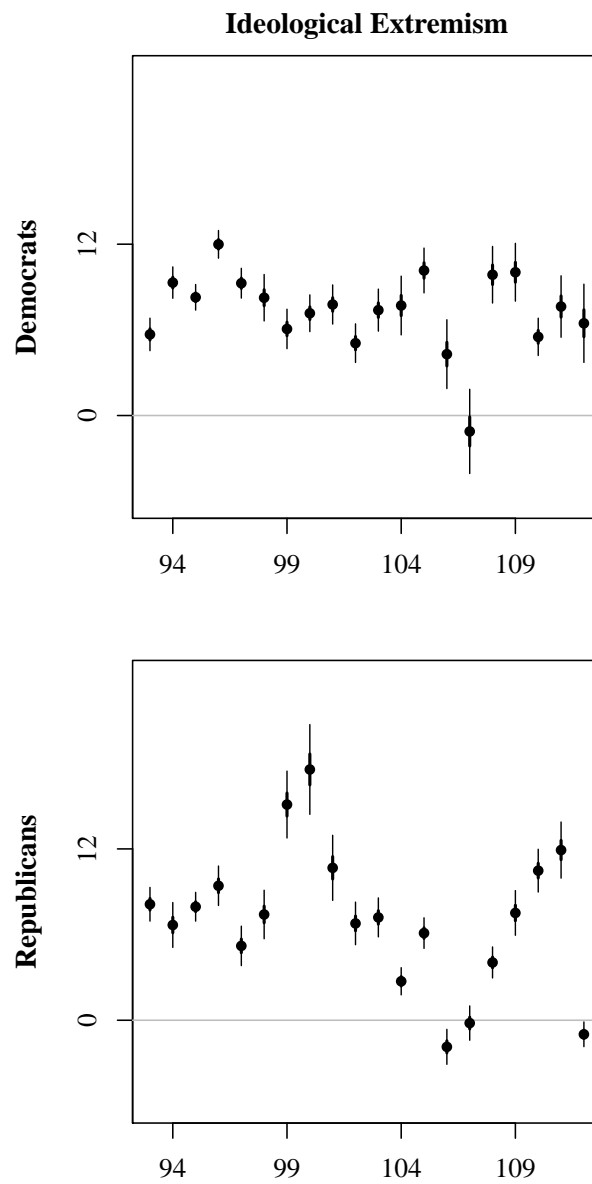
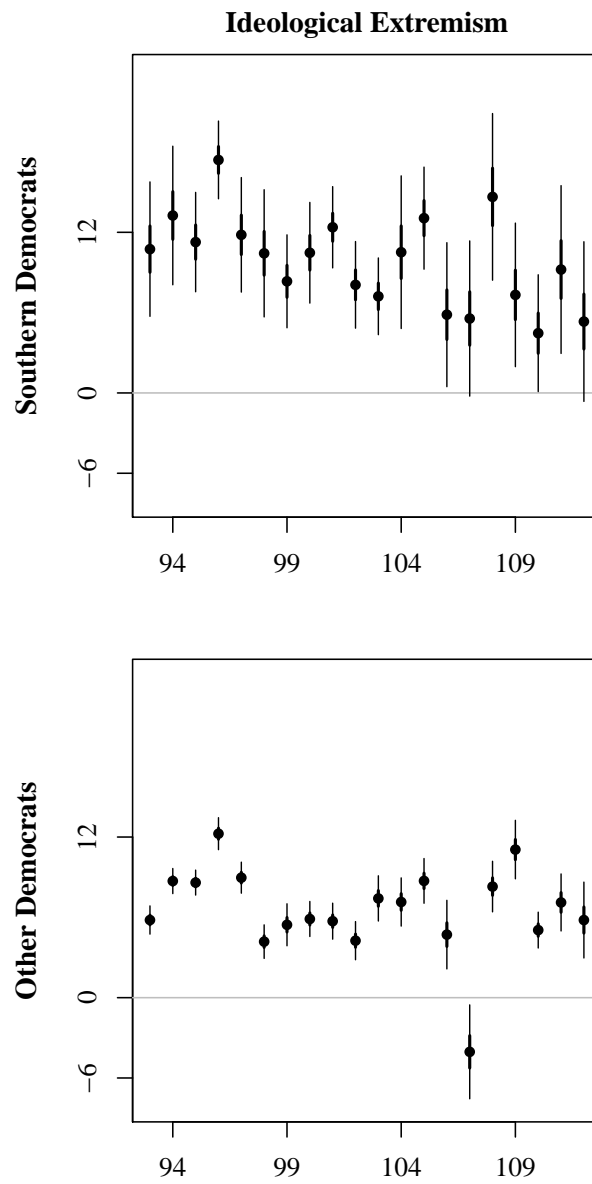


Figure 8: Coefficient Plot, House Southern and Other Democrats



2.5 Condensed DV/IV and IV/IV Plots, House Republicans

Figure 9: House Republicans, Ideological Extremism and Party Influenced Vote Rate by Majority Status

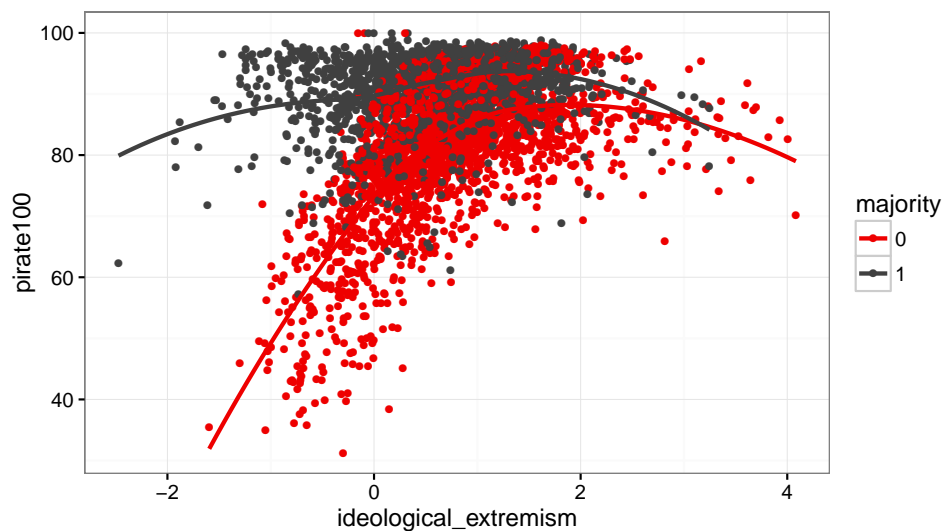
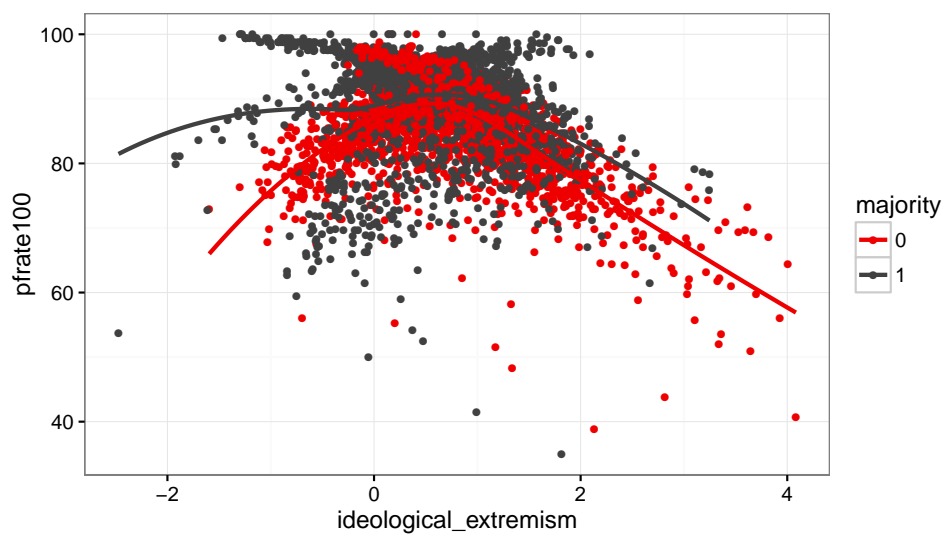


Figure 10: House Republicans, Ideological Extremism and Party Free Vote Rate by Majority Status



2.6 Senate Intra-party Comparison Regressions

Table 3: Senate Intra-Party Comparison Table

	South. Democrats	Democrats	Gingrich Senators	Republicans
Ideological Extremism	4.657*** (1.157)	2.519*** (0.413)	3.058*** (0.589)	6.570*** (0.398)
South			0.102 (0.644)	0.811 (0.661)
Baseline Party Vote Rate	0.844*** (0.066)	0.639*** (0.035)	0.293*** (0.046)	0.820*** (0.034)
Pres. Vote Share	26.380*** (5.096)	24.044*** (2.672)	-4.157 (4.293)	-5.883 (3.411)
Vote Share	-4.027 (3.861)	-4.607 (2.881)	3.928 (3.325)	10.878*** (3.240)
Latino		2.734 (1.965)	3.612 (2.302)	3.009 (3.593)
Female	0.125 (1.993)	2.404** (0.739)		1.872 (1.115)
Up for Reelection	-1.645 (1.070)	-0.392 (0.427)	-0.308 (0.676)	-2.041*** (0.581)
Seniority	-0.403* (0.165)	0.048 (0.062)	-0.108 (0.211)	0.249** (0.087)
Freshman	-1.135 (1.458)	-1.310* (0.588)	0.636 (1.141)	1.937* (0.828)
Retiree	1.867 (2.249)	2.130* (0.946)	3.060* (1.468)	2.480* (1.044)
Best Committee	0.460 (0.303)	0.064 (0.137)	-0.225 (0.181)	0.022 (0.182)
Party Leader	5.760* (2.311)	1.713* (0.702)	2.004 (1.031)	1.290 (0.840)
Power Committee	0.762 (2.110)	-1.179 (0.797)	1.995 (1.029)	-0.760 (1.061)
Committee Chair	3.196* (1.401)	0.557 (0.556)	1.194 (1.017)	3.889*** (0.739)
African American		-0.455 (2.498)		-7.396 (4.177)
(Intercept)	-2.038 (7.168)	22.236*** (3.234)	67.517*** (5.152)	7.632 (4.003)
R ²	0.727	0.572	0.296	0.682
Adj. R ²	0.712	0.564	0.239	0.675
Num. obs.	246	793	187	762
RMSE	7.346	5.437	3.710	7.052

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$