

A1. Code

The Data, Code, Analysis and Plots used to construct this paper can be found on my github profile: https://github.com/minnaheim/contribution_vote_data. This paper was written using typst, based on the template from the Technical University of Munich: <https://github.com/lisintum/thesis-template-typst>.

A2. Additional Models

| Descriptive statistics | | | | | |
|-------------------------------|-------|-----------|----------|-------|---------|
| Statistic | N | Mean | St. Dev. | Min | Max |
| District | 1,984 | 9.191 | 9.803 | 0 | 53 |
| Vote Change | 2,314 | 0.062 | 0.342 | 0 | 4 |
| Birthyear | 2,314 | 1,958.587 | 11.147 | 1,929 | 1,989 |
| 1st dimension DW Nominate | 2,314 | 0.439 | 0.137 | 0.110 | 0.848 |
| 2nd dimension DW Nominate | 2,314 | 0.215 | 0.167 | 0.000 | 0.957 |
| Vote Number | 2,314 | 21.617 | 22.326 | 3 | 52 |
| Vote Dummy | 2,217 | 0.504 | 0.500 | 0 | 1 |
| Seniority | 2,314 | 5.546 | 4.205 | 1 | 18 |
| Pro Env Contributions Amount | 2,314 | 19.800 | 29.876 | 0.000 | 380.725 |
| Anti Env Contributions Amount | 2,314 | 0.991 | 2.877 | 0.000 | 60.550 |
| Democratic Majority in House | 2,314 | 0.321 | 0.467 | 0 | 1 |
| Pro-Env Contribution Dummy | 2,314 | 0.914 | 0.280 | 0 | 1 |
| Anti-Env Contribution Dummy | 2,314 | 0.307 | 0.461 | 0 | 1 |

Figure 1: the descriptive statistics of the main dataset used for the analysis¹

¹the variable Instance refers to the Votes. The Instances are 3, 4, 51, 52, 6 and 7, where 3 stands for the vote in the 113th congress, 51 stands for the first vote in the 115th congress, 52 for the second vote in the 115th congress, etc. The district variable refers to the district which the legislators represented. Sadly not all representatives had the district information.

| | <i>Dependent variable:</i> | | | |
|-------------------------------|---------------------------------------|---|--|-----------------------------|
| | Vote <i>panel</i> <i>linear</i> | Vote <i>conditional</i> <i>logistic</i> | Vote <i>panel</i> <i>linear</i> | |
| | (1) | (2) | (3) | (4) |
| Anti-Env Contributions Amount | -0.001*** (0.0001) | -0.021*** (0.008) | -0.001*** (0.0001) | -0.0001 (0.0001) |
| Pro-Env Contributions Amount | 0.007*** (0.001) | 0.103*** (0.034) | 0.007*** (0.001) | 0.001 (0.001) |
| Pro-Env Contribution Dummy | -0.007 (0.009) | -0.049 (0.407) | -0.007 (0.009) | 0.004 (0.005) |
| Anti-Env Contribution Dummy | -0.021 (0.013) | -0.595 (0.589) | -0.021 (0.013) | -0.011 (0.008) |
| Vote Number | | 0.013* (0.008) | | |
| District | 0.001** (0.0004) | 0.010 (0.017) | 0.001** (0.0004) | 0.001*** (0.0002) |
| Birthyear | 0.001* (0.0004) | 0.039** (0.017) | 0.001* (0.0004) | -0.0002 (0.0002) |
| 1st dimension DW Nominate | -0.141*** (0.029) | -2.708* (1.398) | -0.141*** (0.029) | -0.076*** (0.017) |
| 2nd dimension DW Nominate | -0.070*** (0.021) | -3.002*** (1.024) | -0.070*** (0.021) | -0.037*** (0.013) |
| GeographicalNE | 0.073*** (0.011) | 2.432*** (0.547) | 0.073*** (0.011) | 0.039*** (0.007) |
| GeographicalSO | 0.009 (0.009) | 0.116 (0.484) | 0.009 (0.009) | 0.013** (0.005) |
| GeographicalWE | 0.019* (0.011) | 0.667 (0.568) | 0.019* (0.011) | 0.006 (0.006) |
| Seniority | 0.002 (0.001) | 0.070 (0.045) | 0.002 (0.001) | -0.002*** (0.001) |
| GenderM | -0.025*** (0.009) | -1.141** (0.469) | -0.025*** (0.009) | 0.001 (0.005) |
| Observations | 1,901 | 1,901 | 1,901 | 1,813 |
| R ² | 0.081 | 0.061 | 0.081 | 0.062 |
| Adjusted R ² | 0.072 | | 0.072 | 0.052 |
| Max. Possible R ² | | 0.205 | | |
| Log Likelihood | | -157.637 | | |
| F Statistic | 12.778*** (df = 13; 1881) | | 12.778*** (df = 13; 1881) 9.076*** (df = 13; 1793) | |
| Wald Test | | 93.070*** (df = 14) | | |
| LR Test | | 119.769*** (df = 14) | | |
| Score (Logrank) Test | | 158.630*** (df = 14) | | |
| <i>Note:</i> | | | | *p<0.1; **p<0.05; ***p<0.01 |

Figure 2: All party FE models, with all representatives, only those who changed their votes and all those who didn't

| | <i>Dependent variable:</i> | | | | |
|------------------------------------|-------------------------------|-----------------------------------|-----------------------------------|----------------------------|----------------------------|
| | Vote in 114th Congress (1) | 1st Vote in 115th congress (2) | 2nd Vote in 115th congress (3) | Vote 116th congress (4) | Vote 117th congress (5) |
| Anti-Env Contributions for Vote 3 | 0.001 (0.0005) | 0.001 (0.001) | -0.0004 (0.001) | -0.002*** (0.001) | -0.002*** (0.001) |
| Pro-Env Contributions for Vote 3 | -0.001 (0.004) | -0.008 (0.006) | -0.001 (0.007) | -0.005 (0.005) | -0.001 (0.005) |
| Anti-Env Contributions for Vote 4 | 0.0001 (0.0004) | -0.0004 (0.001) | 0.00003 (0.001) | -0.0001 (0.001) | -0.003*** (0.001) |
| Pro-Env Contributions for Vote 4 | 0.001 (0.005) | -0.010* (0.005) | 0.004 (0.006) | 0.007* (0.004) | -0.020*** (0.004) |
| Anti-Env Contributions for Vote 51 | | 0.001 (0.001) | 0.006*** (0.002) | 0.005*** (0.001) | 0.006*** (0.001) |
| Pro-Env Contributions for Vote 51 | | 0.002 (0.005) | 0.009 (0.006) | 0.001 (0.006) | -0.0003 (0.006) |
| Anti-Env Contributions for Vote 52 | | | -0.004** (0.002) | -0.003** (0.001) | -0.002* (0.001) |
| Pro-Env Contributions for Vote 52 | | | -0.014*** (0.003) | -0.003 (0.005) | 0.0003 (0.005) |
| Anti-Env Contributions for Vote 6 | | | | 0.0003 (0.001) | 0.002*** (0.001) |
| Pro-Env Contributions for Vote 6 | | | | -0.002 (0.011) | -0.014* (0.008) |
| Anti-Env Contributions for Vote 7 | | | | | -0.001 (0.001) |
| Pro-Env Contributions for Vote 7 | | | | | 0.017* (0.009) |
| PartyR | | 0.936*** (0.028) | 0.905*** (0.033) | 0.979*** (0.022) | 0.955*** (0.023) |
| 1st dimension DW Nominate | -0.048 (0.069) | -0.079 (0.091) | -0.061 (0.110) | -0.011 (0.075) | 0.035 (0.079) |
| 2nd dimension DW Nominate | 0.170*** (0.052) | 0.110* (0.065) | 0.064 (0.078) | 0.026 (0.056) | 0.081 (0.055) |
| GenderM | 0.031 (0.021) | 0.007 (0.025) | 0.017 (0.030) | 0.024 (0.020) | 0.004 (0.019) |
| Pro-Env Contribution Dummy | -0.016 (0.022) | 0.017 (0.026) | 0.012 (0.030) | 0.010 (0.036) | -0.018 (0.033) |
| Anti-Env Contribution Dummy | 0.048 (0.030) | 0.052 (0.036) | -0.036 (0.047) | 0.007 (0.030) | 0.009 (0.027) |
| Observations | 332 | 281 | 268 | 224 | 179 |
| R ² | 0.067 | 0.917 | 0.891 | 0.968 | 0.976 |
| Adjusted R ² | -0.119 | 0.869 | 0.824 | 0.943 | 0.954 |
| F Statistic | 2.201** (df = 9; 276) | 163.850*** (df = 12; 178) | 96.517*** (df = 14; 165) | 235.046*** (df = 16; 126) | 211.775*** (df = 18; 93) |

Note: *p<0.1; **p<0.05; ***p<0.01

Figure 3: the LPM models of each vote, with all relevant contributions leading up to the vote.

| | Dependent variable: | |
|------------------------------------|--------------------------------|----------------------|
| | Vote | |
| | OLS (1) | logistic (2) |
| Log. Anti-Env Contributions Amount | -0.015*** (0.004) | -0.532*** (0.185) |
| Log. Pro-Env Contributions Amount | 0.027*** (0.009) | 0.839** (0.334) |
| Anti-Env Contribution Dummy | 0.003 (0.016) | 0.190 (0.747) |
| Pro-Env Contribution Dummy | -0.015 (0.012) | -0.319 (0.569) |
| District | 0.001** (0.0004) | 0.007 (0.017) |
| PartyR | -0.898*** (0.009) | -8.385*** (0.530) |
| Birthyear | 0.001* (0.0004) | 0.022 (0.018) |
| GenderM | -0.023** (0.009) | -1.138** (0.494) |
| 1st dimension DW Nominate | -0.141*** (0.029) | -3.339** (1.454) |
| 2nd dimension DW Nominate | -0.072*** (0.021) | -3.150*** (1.112) |
| GeographicalNE | 0.071*** (0.011) | 2.460*** (0.553) |
| GeographicalSO | 0.006 (0.009) | 0.127 (0.477) |
| GeographicalWE | 0.018 (0.011) | 0.804 (0.561) |
| Vote Number | 0.001*** (0.0002) | 0.029*** (0.009) |
| Seniority | 0.001 (0.001) | 0.039 (0.047) |
| Democratic Majority in House | 0.023*** (0.009) | 1.569*** (0.476) |
| Constant | -0.434 (0.785) | -36.504 (34.885) |
| Observations | 1,901 | 1,901 |
| R ² | 0.908 | |
| Adjusted R ² | 0.907 | |
| Log Likelihood | | -157.266 |
| Akaike Inf. Crit. | | 348.533 |
| Residual Std. Error | 0.152 (df = 1884) | |
| F Statistic | 1,162.325*** (df = 16; 1884) | |
| Note: | * p<0.1; ** p<0.05; *** p<0.01 | |

Figure 4: the LPM models with geographical and year fixed effects

A3. Declaration of Aids

| Type of Aid | Use of Aid |
|-------------|------------|
|-------------|------------|

| | |
|----------------|--|
| Github Copilot | Used for coding repetitive things in R |
| DeepL Write | Applied over entire thesis to improve spelling and wording |
| ChatGPT | Applied over entire thesis to improve wording |
| Quillbot | Applied over entire thesis to paraphrase text from sources |

A4. Declaration of Authorship

I hereby declare,

- that I have written this thesis independently
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- that all parts of the thesis produced with the help of aids have been precisely declared;
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21.05.2024

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