SUPPORTING INFORMATION

Supreme Court Justices’ Economic Behavior. A Multi-level Model Analysis

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# Variable description

## The dependent variable

The justice’s vote is a dichotomous variable measuring whether the justice voted in favor of the public (=1) or the private party (=0) in the case. A public party includes the state, a county, a municipality or publicly owned business. A private part includes a private company of any size, an individual or group of individuals.

## Individual (justice) level variables (variables that can vary within cases) (13 variables)

Woman is a dichotomous variable, where 1 = female and 0 = male.

Osloborn is a dichotomous variable measuring whether the justice was born in the city of Oslo (=1) or not (=0). (The city changed its name from Kristiania in 1925.)

Ageatvote is a metric variable measuring the age of the justice at the year the respective vote is given.

SocDemGov is a dichotomous variable measuring whether the justice was appointed by a social democratic or a social democratic dominant coalition government (=1) or a non-social democratic or non-socialist government (=0).

The following six dichotomous variables measure the justices’ different types of former employment: in private practice as lawyer; as law professer; lower court judge; at the office of the government advocate (*Regjeringsadvokaten*); at the Legislation Department (*Lovavdelingen*) of the Ministry of Justice; at the office of the Prosecutor general (*Riksadvokatembet*). A justice has been given a value of 1 if he or she has had any of these work experience and 0 otherwise. The different types of former employment are not mutually exclusive.

Chief is a dichotomous variable measuring whether the justice is the chief justice (=1) or not (=0).

Interimjustice is a dichotomous variable measuring whether the justice is a interim justice (=1) or not (=0).

Seniority is a metric variable measuring the number of years of tenure as a justice at the year the respective vote is given.

## Panel and case level variables (variables that vary between cases only) (15 variables)

Panel variables refer to characteristics of the group of justice’s deciding each case. Case variables refer to characteristics of the cases decided.

### Panel variables (8 variables)

FemaleMajority is a dichotomous variable measuring whether the panel consists of a majority of female justices (=1) or not (=0).

OsloMajority is a dichotomous variable measuring whether a majority of justices were born in the city of Oslo (=1) or not (=0).

SocDemMajority is a dichotomous variable measuring whether there is a majority of social democratic justices (=1) or not (=0).

Private practice majority: =1 if the majority of justices on the panel has career experience from private law practice, 0 otherwise.

Law professer majority: =1 if the majority of justices on the panel were former law professors, 0 otherwise.

Government advocate majority: =1 if the majority of justices on the panel has career experience from the Office of Government Advocate, 0 otherwise.

LegislationDepMajority: = 1 if a majority of the justices on a panel has career experience in the Legislation Department, 0 otherwise.

Chief in panel is a dichotomous variable measuring whether the chief is a member and hence presiding justices of the panel (=1) or not (=0).

### Case variables (7 variables)

(*Before the decision*)

Pubplaintiff is a dichotomous variable measuring whether the public party is the plaintiff (=1) or the respondent (=0) in the case.

Third parties is a count variable measuring the total number of legal intervenients who join any of the parties of the case (third-party or accessory intervention; *hjelpeintervenient*).

(*After the decision*)

Words is a count variable measuring the total amount of words in the majority’s decision (we exclude from the count the amount of words, if relevant, in the dissenting and/or concurring justices’ opinions in the case.

Voices is a count variable measuring the number of justices who wrote an additional opinion or voice an argument, or stated a position (*særmerknad*) in the respective case. The case selection only includes five-justice panels, so there will be minimum one complex voice and a maximum five.

Dissent is a dichotomous variable measuring whether the decision is unanimous or not. The variable is given the value 1 if the decision is non-unanimous and 0 if not.

EconRelev, *the economic relevance of the case*, is an ordinal three-value variable measuring the salience of the economic issue in a civil case. This variable variable is coded 1 if the economic issue is marginal, 2 if the economic issue is of intermediate relevance, and 3 if the economic issue is central to the case. In the analysis, the ordinal variable was recoded into dummy variables, with low economic relevance as the omitted category. The economic cases in our data consist mainly of tax cases, expropriation cases and tort cases.

Cases are coded 1 if the economic issue is relatively marginal. A case is coded 1 if the case consists of a tort law case between the public and the private party, but where the presence and interest of the public party is considered less relevant. Also included in this category are expropriation cases where the court reviews the legality of the public decision to expropriate a private property.

Cases are coded 2 if the economic issue is of intermediate relevance. A case is coded 2 if the case consists of tort cases between parties where the presence and interest of the public party is considered to be an important aspect of the case. Also included in this category are expropriation cases where the court decides the private party’s economic compensation.

Cases are coded 3 if the economic issue is considered substantial. This applies predominantly to tax cases and other cases where the legal question clearly involved a financial dispute in which both the public or private party laid claims to the amount of money identified through the legal question. If this is the case, the code 3 applies.

# Three Intermediate models

Between the intercept-only model (Table 2) and the final model (Table 3) in our paper we tested and report here three intermediate models that demonstrate the stepwise sequence of testing and weighing variables toward the final model specification. These intermediate models are conveniently labeled J, J+P, and J+P+C to indicate the cluster of variables pertaining to Justices, Panel and Case. The models are summarized in Table A1.

In the first intermediate step (Model J) we enter the thirteen independent variables of ideology and personal attributes that pertain to individual justices.

In the second intermediate step (Model J+P) we eliminate from Model J the independent variables that fail to reach acceptable levels of theoretical or statistical significance, and we enter the eight independent panel-level variables that meaningfully correspond to the initial thirteen individual-level variables.

In the third intermediate step (Model J+P+C) we eliminate the eight individual level variables that failed to reach acceptable levels of statistical significance through Models J and J+P, and we eliminate the six panel level variables that failed to reach acceptable levels of statistical significance in Model J+P. We introduce the seven independent variables at the case level.

## Model J. Justices’ attitudes and attributes

In Model J we include the thirteen independent variables that pertain to the attitudinal model, including variables that measure personal attributes.

[Table A1 about here]

The results of the one-level Model-J inform us that the justice-level variables do improve the explanatory power of the model. The likelihood-ratio test of the intercept-only model nested in model J indicates that the justice-level variables contribute to a better model fit and the AIC estimate has decreased compared to the empty model. [[1]](#footnote-1) (The intraclass correlation has increased from .921 to .925 compared to the empty model in the paper. This change is due to an uneven distribution of justice characteristics in the different cases.)

Six of the thirteen independent variables have a significant effect at the .10-level on the justices’ votes. First, we see that justices who have been appointed by *social-democratic* or social-democratic dominant governments are more likely to vote for the public party. It follows that justices who have been appointed by non-socialist governments are more likely to vote for the private party (p < .04).

Justices who have been *professors* at the country’s law schools (or university faculties of law) are more likely to vote for the private party (p < .01).

Also, the few justices who served in the office of the *Director General of Public Prosecutions* before they were appointed to the Supreme Court are more likely to vote for the public party (p < .02).

We also find that justices who were born and raised in *Oslo* (or *Kristiania*), the country’s capital and dominant city, are more likely to vote for the private party (p < .09). It follows that justices who were born outside of Oslo, including the country’s elongated peripheries, are more likely to vote for the public party.

There are two independent and significant variables that relate to the justice’s position or status within the Court. *Chief justices* are more likely to vote for the private party (p < .09). And the more senior a justice is on the court, the more likely he or she will vote for the private party (p < .07). Since seniority also obliquely measures age, we can also conclude that as justices get older, the more likely they are to vote for the private party.

A total of seven independent variables fall short of conventional significance levels. A justice’s former employment in *private law practice*, as *lower court judge*, in the office of the *Government Advocate*, in the Government’s *Legislation Department*, has no influence on his or her vote in economic cases. Neither are there any effects of *sex*, being an *interim justice* or *age* on the justices’ votes in these cases.[[2]](#footnote-2) Additional tests supported the conclusion that the statistical basis for the continued inclusion of these seven variables was too weak.

## Model J+P. Justices’ attitudes and attributes, and panel level effects

In model J+P we also include variables that are located at the panel level.

The introduction of panel variables provides a minor improvement to the model’s explanatory power over the justice-level model (see table A1). First, the likelihood-ratio test of model J nested in model J+P indicates that model J+P is a better model fit if one accepts a liberal significance level (p < .06). Second, the AIC value is slightly smaller compared to model J. Third, the intraclass correlation drops from .925 to .923, indicating that the panel variables make a small contribution to the models explanatory power.

First, of the six significant justice-level variables that we kept from the previous model, five retain their direction and significant effects. Only Oslo-born justices failed to meet the minimum statistical threshold of .10. We also carried over from Model J the theoretically interesting variable of prior employment in the Legislation Department, but again this variable failed to gain any traction.

Second, in Model J+P we included the eight panel variables that meaningfully corresponded to these justice-levels variables. Of these eight panel-level variables, only two reached the minimum threshold (i.e. p < .10) of statistical significance: a panel majority of social democratic justices, and a panel majority of female justices.

From Model J+P we carry over to Model J+P+C the five significant justice-level variables and the two significant panel-level variables.

## Model J+P+C. Justices, Panels and Case

In model J+P+C we retain the seven selected variables from the justice and panel-level models and enter seven case variables (see Table A1). Both the AIC test statistics and the intraclass correlation tell us that the case-level variables contribute to the model’s explanatory power. The AIC estimate has decreased compared to all the former models and the intraclass correlation have dropped to .912. Compared model J+P, model J+P+C tells us that the case-level variables have a bigger impact on the justices’ votes in economic cases than do panel-level variables.

We address the three types of variables in turn. First, on the justice-level variables, social-democratic *government appointment* (p < .01) and former employment at the *Director General of Public Prosecutions* (p < .06) increases the probability of a justice voting for the public party. *Law professors* (p < .01) and *seniority* (p < .07) decrease the probability of voting for the public party. *Chief* no longer makes a statistically significant contribution on the results (p < .12).

Second, both panel-level variables retain their effects: a *majority of female justices* on the panel decreases the probability of voting for the public party (p < .03), and a *majority of* *social-democratic* *appointed justices* on the panel increases the probability of voting for the public party (p < .09).

Third, two case-level variables are deemed significant. First, when the public party is the *plaintiff*, the probability of voting for the private party increases (p < .001). Second, when the court’s decision is *nonunanimous*, there is a greater probability that the justices will vote in favor of the private party (p < .07). We saw above that the overall results of Supreme Court decisions on economic cases favored the public party in 59 percent of the votes (and that the upward bias in the multilevel model favored the public party in 83 percent of the votes), the significant effect of the dissent variable at the case-level may speak to the predisposition of the justices and their difficulty in voting for the private party.

We included three variables at the case-level that were intended to measure the complexity of a case: the total number of words in the majority’s opinion, the number of parties to a case, and the number of justices that voiced opinion on the Court’s decision. But the results show that none of these measures affects the direction of the justices’ votes.

We also included two dummy variables that address the salience of the economic issue in the case before the justices (low economic relevance was the omitted variable). Neither of the variables tapping economic relevance exhibits statistical significance. This result speaks to the validity of the economic definition that we applied for sample selection, and to the fact that the justices do not alter their voting behavior depending on how much the issue of the economy is at stake between the public and private parties.

Finally, from Model J+P+C we leave behind the five case level variables that failed to reach acceptable levels of significance.

**Table A1: Three intermediate justice (J), panel (P) and case (C) models of economic voting on the Supreme Court 1963-2012**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Model J** | **Model J+P** | **Model J+P+C** |
| **Fixed effects** | **B** | **Std.err** | **P** | **B** | **Std.err** | **P** | **B.** | **Std.err** | **P** |
| **Justice level:** |  |  |  |  |  |  |  |  |  |
| SocDemGov appoint | .36\*\* | .17 | 0.037 | .33\*\* | .17 | 0.049 | .44\*\*\* | .16 | 0.005 |
| Private practice | -.02 | .19 | 0.938 |  |  |  |  |  |  |
| Law Professor | -.97\*\*\* | .35 | 0.005 | -1.11\*\*\* | .30 | 0.000 | -1.18\*\*\* | .29 | 0.000 |
| Earlier Judge | .25 | .17 | 0.146 |  |  |  |  |  |  |
| Government Advocate | .08 | .22 | 0.712 |  |  |  |  |  |  |
| Legislation Department | .23 | .18 | 0.201 |  |  |  |  |  |  |
| Public prosecutor | .66\*\* | .29 | 0.023 | .54\*\* | .27 | 0.042 | .50\* | .26 | 0.054 |
| Woman | .07 | .22 | 0.765 |  |  |  |  |  |  |
| Oslo born | -.27\* | .16 | 0.090 | -.26\* | .16 | 0.094 |  |  |  |
| Age at vote (C) | .02 | .02 | 0.285 |  |  |  |  |  |  |
| Seniority | -.03\* | .02 | 0.068 |  |  |  |  |  |  |
| Chief | -.67\* | .39 | 0.087 | -.62 | .38 | 0.101 | -.59 | .37 | 0.110 |
| Interim justice | .11 | .49 | 0.815 |  |  |  |  |  |  |
| **Panel level** |  |  |  |  |  |  |  |  |  |
| SocDemMajority |  |  |  | 1.20\* | .70 | 0.085 | 1.03\* | .60 | 0.086 |
| PrivPractMajority |  |  |  | -.36 | .64 | 0.570 |  |  |  |
| LawProfMajority |  |  |  | .65 | 2.36 | 0.783 |  |  |  |
| GovAdvMajority |  |  |  | .81 | .78 | 0.299 |  |  |  |
| LegDepMaj |  |  |  | .59 | .59 | 0.324 |  |  |  |
| WomenMajority |  |  |  | -2.80\*\* | 1.18 | 0.017 | -2.18\*\* | 1.00 | 0.030 |
| OsloMajority |  |  |  | .20 | .57 | 0.724 |  |  |  |
| ChiefInPanel |  |  |  | .58 | .66 | 0.380 |  |  |  |
| **Case level** |  |  |  |  |  |  |  |  |  |
| PublicPartyPlaintiff |  |  |  |  |  |  | -4.31\*\*\* | .51 | 0.000 |
| Third parties |  |  |  |  |  |  | .38 | .39 | 0.322 |
| Words |  |  |  |  |  |  | 9.02e-06 | .00014 | 0.949 |
| Voices |  |  |  |  |  |  | -.42 | .96 | 0.667 |
| Nonunanimous decision |  |  |  |  |  |  | -2.18\* | 1.19 | 0.066 |
| Econ relevance high |  |  |  |  |  |  | .70 | .53 | 0.186 |
| Econ relevance medium |  |  |  |  |  |  | .88 | .62 | 0.160 |
| Constant | 1.54 | .42 | 0.000 | .45 | .75 | 0.546 | 3.19 | 1.27 | 0.012 |
| **Random effects** |  |  |  |  |  |  |  |
| ICC | .925 | .924 | .912 |
| **Explained variance (AIC/BIC)** | 3036.51 | 3130.92 | 3034.85 | 3141.85 | 2944.68 | 3045.38 |
| \* *p* < 0.10, \*\* *p* < 0.05, \*\*\* *p* < 0.01. N votes = 4000 , N cases = 806 |

**Table A2. Marginal Effects of the Independent Variables on the Probability of Voting for the Public Rights Claimant**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Probability of DV = 1** | **Standard Error** | **95% Confidence Interval** |
|  |  |  |  |  |
| Social Democratic Appointee | .066 | .025 | .017 | .115 |
| Law Professor | -.220 | .068 | -.353 | -.088 |
| Public Prosecutor | .050 | .028 | -.004 | .105 |
| Seniority | -.082 | .049 | -.178 | .015 |
|  |  |  |  |  |
| Social Democratic Majority | .157 | .115 | -.067 | .382 |
| Female Majority | -.426 | .235 | -.887 | .035 |
|  |  |  |  |  |
| Public Party plaintiff | -.699 | .077 | -.851 | -.548 |
| Nonunanimous Decision | -.430 | .103 | -.632 | -.228 |
|  |  |  |  |  |

Notes: Other than “Seniority,” all the variables are binary (0, 1). The effect for each factor variable is calculated as the discrete change from the base level, while holding the other variables constant at their means. The effect of “Seniority” is measured as it moves from its minimum (0) to maximum value (29), while holding the other variables at their means.

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1. Likelihood-ratio test (Assumption: model 1 nested in model 2) LR chi2 (13) = 45.3 Prob > chi2 = 0.000 [↑](#footnote-ref-1)
2. In a very preliminary model, we also controlled for whether the justice was appointed before (=0) or after (=1) the introduction of the independent *Advisory Council*, a 2002 effort to remove the appointment of justices from the increasing politicized Ministry of Justice. This control variable failed to indicate any effect on the justices’ votes. [↑](#footnote-ref-2)