An error grave of consequence. Empirical models to study propensities to vote for parties*

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Abstract

Vote propensities for political parties have become an important component of many voter surveys. They are supposed to give more accurate and broad-ranging assessments of voters' positions with respect to the parties they may choose in an election. While this more detailed information on voters is certainly an advantage, many scholars analyze these data with empirical models that lead to biased estimates of the quantities of interest. We discuss the most commonly used models and demonstrate the conditions under which biased estimates result. We also propose an alternative way to analyze vote propensities (based on a SURE-model) which, under most assumptions, does not lead to biased estimates. We illustrate the performance of this model in an empirical application (European Election Study 1989), where we compare it with the more commonly used models.

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1 Introduction

The last decades of empirical electoral research have seen the introduction of a new variant of measuring the dependent variable, the so called "propensities to vote" (PTVs).[1]. These have been recently described as "measures of electoral utility" by some of their proponents (e.g., Van der Eijk, van der Brug, Kroh and Franklin, 2006) and cover the propensities to vote for each (major) party in a political system. PTV scores are to be understood as cardinal measures and have been used as interval-level variables in statistical analyses. As the question is formulated with a projective element, postponing voters' choices to an undefined future, PTVs are non-ipsative in nature and not bound to sum to any fixed amount. The standard question wording is the following:

> Please tell me for each of the following parties how probable it is that you will ever vote for this party?

Theoretically, PTV scores are rooted in random utility theory and are seen as better capturing the utilities[2] voters attach to parties than the discrete electoral choice models (Van der Eijk et al., 2006).

Besides this theoretical advantage, two empirical benefits are cited in the literature. First, with PTVs as dependent variable researchers are able to use more powerful statistical methods and are no longer constrained by the limitations of discrete-choice models. Second, analyses based on PTV scores are well suited for comparative, cross-national electoral research as the analyses are no longer fixed to a specific party but moved downward to the intra-individual level which forces the researcher to think more in terms of generic party characteristics (Van der Brug, Franklin and Tóka, 2008; De Angelis and Garzia, 2013).

While we share the general concern that PTV measures and the actual vote choice are two separate phenomena (e.g., Bélanger and Meguid, 2008, 479),[3] our

[1] Recently published articles using PTVs as dependent variable include Vegetti, Poletti and Segatti (2013), Vezzoni and Mancosu (2016), Wall, Krouwel and Vitiello (2014), Webb, Bale and Poletti (2017), and Mellon and Evans (2015).

[2] However, recently the proponents refrain from using this vocabulary and simply refer to the concepts as "PTV".

[3] Please note that according to numerous publications (e.g., Van der Eijk et al., 2006; Van der Eijk and Franklin, 1994), empirically there is a strong link between PTV scores and final vote choice.

main point in this paper is that we see major flaws in the estimators used in the analysis of PTVs proposed in the literature.

In the next section we discuss the estimator proposed in the literature and its various problems. While we discuss various issues of this estimator, some of them acknowledged in the literature, we focus on one problem that induces clearly identifyable biases in the estimates. We propose a Monte-Carlo simulation study to assess the circumstances under which these biases are most pronounced and evaluate at the same time a much more robust estimator when dealing with vote propensities, namely seemingly unrelated regression equations (SURE). In section three we replicate the analysis of a vote propensity study of the European Elections 1989 by Van der Eijk and Franklin (1994) and show that using a more appropriate estimator affects the substantive findings, before we conclude in section four.

2 The estimator and its error(s)

In most studies that use vote propensities as dependent variable the basic idea is to rely on general theories of vote choice to explain the likelihood that an individual i would consider voting for a particular party j. Consequently, empirical models being estimated are variants of the following general form:

$$pr_{i,j} = \beta'_{0j} + X_i\beta_{xj} + V_j\beta_{vj} + W_{ij}\beta_{wj} + \epsilon_{ij} \quad (1)$$

$pr_{i,j}$ corresponds in this setup to the voting propensity that individual i assigns to party j. Three types of variables normally appear as explanatory variables. First, X_i is a vector of individual characteristics of voters, like gender, age, education etc. Second, V_j corresponds to party specific characteristics like government status, electoral strength of the party, etc. Third, W_{ij} comprises characteristics of pairs of voters and parties, like for instance the ideological distance between a voter and a party.

Estimating coefficients for the various sets of variables causes, however, a certain number of problems. First, estimating these coefficients for each party j separately (as the datasets used are often in a wide format, i.e., observations correspond to individuals, and voting propensities for parties correspond to different

variables/columns) does not allow for estimating β_{vj} as V_j is constant across all observations i for every party j, and thus absorbed into the constant. Second, estimating the effect of particular voter-party characteristics like the effect of ideological distance yields as many coefficients as parties. Researchers, however, normally assume that the effect of ideological distance on vote choice (or vote propensities) should be the same, independent of the party in question.

To circumvent these problems scholars (e.g., Van der Eijk, Franklin and Oppenhuis, 1994; Tillie, 1995; Van der Eijk et al., 2006) propose to transform the dataset in a long format (i.e., to stack the individual level data as many times as there are political parties and thus vote propensity measures). In this format V_j obviously varies across the full set of observations, and β_{vj} is thus identified.[4] Proceeding like this also "solves" the second problem mentioned, namely that the coefficients β_{wj} can now easily be constrained to be the same for all observations, or more precisely, independent of the party.

This transformed dataset generates, however, a new problem, as estimating β_{xj} on the full set of stacked observations yields an average effect over all parties, which is largely meaningless. Consider for instance the effect of age. It is likely that older voters will assign higher propensities to some parties than younger cohorts, and lower ones to some other party. When estimating equation 1 party by party, we would obtain positive coefficients for age for the first set of parties and negative ones for the second set. The estimates obtained based on the long format data, however, will provide an average over these party-specific coefficients. Consequently, estimating β_{xj} in the stacked data only yields meaningful results, if β_{xj} can vary across parties.

Instead of allowing β_{xj} to vary across parties Van der Eijk et al. (2006) (see also Van der Eijk, Franklin and Oppenhuis, 1994; Tillie, 1995) suggest first estimating for each party j and each variable x belonging to the vector X (i.e., individual characteristics of voters) based on the dataset of individuals i the following equation for the propensity to vote for party j:[5]

[4] There are obviously other serious consequences of proceeding like this, which we will discuss below.

[5] This, plus a series of other manipulations for voting propensities are part of a stata-package, see `https://ideas.repec.org/c/boc/bocode/s457290.html` (accessed May 22nd, 2018, see De Sio and Franklin, 2011).

$$pr_{1i,j} = \beta_{0j} + \beta_{1j}x_{1i} + \epsilon_{i,j} \quad (2)$$

Based on this empirical model Van der Eijk et al. (2006) (see also Van der Eijk, Franklin and Oppenhuis, 1994; Tillie, 1995) suggest calculating the predicted vote propensity $\hat{pr}_{1i,j}$ and, after centering this predicted value (i.e., subtracting the average of the predicted values), to use these values to replace X_j in equation 1. More specifically, this implies calculating for each party by how much women (if our x_1 is gender) offer more (or less) support than the average for a particular party j (and do this for all other variables being part of X_j) and use the so called party and x-variable specific "$y - hat$s" to replace X in equation 1. van der Brug, van der Eijk and Franklin (2007, 43) describe this in the following terms:

> These predicted scores are, of course, measured on the scale of the dependent variable. They can be interpreted as containing two components: a component that consists of the explanatory power of the independent variable in question and a component that reflects the popularity of the party in question that is generated on other grounds than by the independent variable. By eliminating the second component (which is done by centering the predicted scores), the remainders reflect only variations caused by differences in the independent variable.

Proceeding like this, in appearance, solves the suggested problems in estimating equation 1. By adopting the long format estimating the effects of party specific characteristics becomes possible, and this also allows keeping the effects of the party-voter characteristics the same for all parties and voters. By replacing X by predicted values from a first stage defined by equation 2 also makes the coefficients reflect something more meaningful than the average effect over all parties of X.[6]

[6]Van der Brug, Franklin and Tóka (2008, 594) are right in noting that this procedures simply produces "linear transformations" of the original variables. By relying on biased estimates, however, these transformations induce biases in the estimation of the full model, as we will show below.

Needless to say, these recommendations also have a series of consequences which we will only briefly mention before focusing on the most important error. First, given the way in which X is replaced by predicted values obviously makes the standard errors estimated for X in a standard way in the second stage inappropriate. More specifically, the uncertainty linked to the estimates in the first stage is not reflected in the estimates at the second stage. In earlier applications of this process (e.g., Van der Eijk, Franklin and Oppenhuis, 1994; Tillie, 1995) this problem was largely ignored and individual-level effects appear as estimated with an incredible precision.[7] Second, as each individual appears as many times in the long dataset as there are parties, observations can hardly be considered independent of each other (as required by, for instance, an estimation according to ordinary least squares (OLS)). In latter applications (e.g., Van der Eijk et al., 2006; Van der Eijk and Franklin, 2009) this problem was also acknowledged and dealt with by using clustered standard errors at the individual level (e.g., van der Brug, van der Eijk and Franklin, 2007, 48f).[8]

This latter point relates to a more general problem due to the characteristics of the long data format. More specifically, in a strict sense this data is hierarchical, as it is based on party-individual pairs. Hence, each observation belongs to a larger set of party-specific observations, and, as noted above, to a set of individual-specific observations. Consequently, as the variables in X and V only vary at one of these two (non-nested) levels, the standard errors, by the multiplication of cases used in the estimation, will be artificially deflated.[9]

[7] See for this table 20.4 in Van der Eijk, Franklin and Oppenhuis (1994, 357) or table 6.3 in Tillie (1995, 108). In later applications (e.g., Van der Eijk et al., 2006; van der Brug, van der Eijk and Franklin, 2007; Van der Brug, Franklin and Tóka, 2008; Van der Eijk and Franklin, 2009) this problem is acknowledged, and the readers are advised to ignore the standard errors and focus on standardized coefficients.

[8] It is useful to note that when these clustered standard errors differ from the classical standard errors, it is likely that the empirical model itself is misspecificed (see for instance King and Roberts, 2014), making the use of this quick fix quite problematic (see also Angrist and Pischke, 2008, 308ff). Pardos-Prado and Dinas (2010), in their study, address this issue by relying on a hierarchical model (see also De Sio and Franklin, 2012). In our Monte-Carlo simulations we employ the same approach.

[9] Again, in two early studies Van der Eijk, Franklin and Oppenhuis (1994, 357) and Tillie (1995, 108) (table 20.4, resp. 6.3) we find coefficients for the electoral strength of the party which are estimated with unbelievable precision (for a similar unbelievable standard error, see also De Angelis and Garzia, 2013, 902). It is interesting to compare this with related results reported by Pardos-Prado and Dinas (2010, 776) who, with the help of a more appropriate hierarchical model,

While these issues mostly relate to the uncertainty estimates, a more important problem stems from the proposed two stage estimation to obtain estimates for the effects of individual characteristics on vote propensities and to control for these when estimating the effects of the other variables. More specifically, given the generally assumed empirical model in equation 1 it is obvious that equation 2, as a model to explain vote propensities is misspecified. Assuming that the estimated model is linear (as the presentation in equation 1 implies) this misspecification is innocuous as long as the xs for which the model is estimated are uncorrelated with any of the left out variables from equation 1.[10] This is quite unlikely. More specifically, if x corresponds for instance to either age or gender, we know that ideological self-positions are related to these variables. As ideological self-positions feed into the calculation of measures of distance (which should influence vote propensities) it follows that the misspecification in equation 2 will lead to biased estimates for β_{1j}. As exactly these estimates are central for the predicted values and their transformations to be included at the place of X, this leads to biases in the estimation of equation 1 as well. More formally if the true model is

$$pr_{i,j} = \beta'_{0j} + \beta'_{1j}x_{1i} + \beta'_{2j}x_{2i} + \epsilon_i \quad (3)$$

then as long as $cov(x_1, x_2) \neq 0$ we know that the expected value of $\hat{\beta}_{1j}$ estimated according to the model of equation 2 will not be equal to the expected value of $\hat{\beta}'_{1j}$ as estimated with the correctly specified model in equation 3. More precisely

$$E(\hat{\beta}_{1j}) = E(\hat{\beta}'_{1j}) + bias \quad (4)$$

only find a non-significant effect (i.e., the standard error is much more consequential). Implicitly, van der Brug, van der Eijk and Franklin (2007, 47f) brush such concerns aside, when discussing in a cross-national study the effect of economic conditions.

[10] In a surprising foonote (15) van der Brug, van der Eijk and Franklin (2007, 44) argue that the x_js' "importance in our analysis is in controlling for the effects concerned." As models using this procedure are almost always linear regressions, this implies that these authors assume that variables subjected to this procedure are correlated with other explanatory variables (as in such cases omitted variable bias would result). This implicit assumption, however, is exactly the assumption that leads to the biases discussed above (and below).

In a simple setup with one omitted variable and one included variable the direction (and extent) of the bias can be easily determined. For instance, if $\beta'_{2j} > 0$ and $cov(x_1, x_2) > 0$ then we know that the bias is positive, i.e., $\hat{\beta}_{1j} > \hat{\beta}'_{1j}$ (see for instance Hanushek and Jackson, 1977, 80f). As this bias depends not only on $cov(x_1, x_2)$ (which remains constant across parties, except for variables that are party-individual specific), but also β'_{1j} and β'_{2j}, which vary across parties, the generation of the so-called "$y - hat$s" makes that this bias carries over to the next stage. More specifically, as the latter coefficients differ across parties j and are multiplied by the values of x_1 to calculate $\hat{pr}_{i,j}$, calculating the latter as deviations from the average $pr_{i,j}$ only gets rid of part of the bias. Consequently, when these $\hat{pr}_{i,j}$ are introduced in the second stage of the estimation, i.e, the one based on the stacked dataset, a bias from the first stage is carried over.

It might be helpful to derive for a concrete case the extent and direction of these biases in more detail. For this, let us assume the following equation to generate "y-hats" for each party j (implying j regressions):

$$pr_{ij} \quad = \quad \beta_{j0} + \beta_{j1} \times age_i \tag{5}$$

However, the variable distance that we will use in a latter stage is known to correlate with age. Consequently, omitting this additional variable leads to a biased estimate of β_1, and thus a biased estimate of y-hat. If the correct specification for the y-hat equation were

$$pr_{ij} \quad = \quad \beta_{j0} + \beta_{j1} \times age_i + \beta_{j2} \times distance_i \tag{6}$$

we could easily calculate the bias introduced into the estimates of the β_{j1}s by omitting distance as it corresponds to the product of β_{j2} and $\frac{cov(age,distance)}{var(age)}$ (the latter being the coefficient coming from regressing age on distance, see for instance Greene, 2003, 148f). As in most PTV models it is assumed that β_{j2} is the same for all parties, the bias will be identical across the y-hat equations only if $\frac{cov(age,distance)}{var(age)}$ is the same for each party j. This is only true if $cov(age, distance)$ is the same for all parties. Assuming that distance is calculated as $|lr_i - c_j|$, where

lr_i is the leftright position of individual i and c_j is the position of party j then the following obtains immediately:

$$cov(age, distance) = \frac{\sum_n (age - \overline{age}) \times (abs(lr - c_j) - \overline{abs(lr - c_j)})}{n} \quad (7)$$

This expression breaks down in two parts as a function of whether or not $lr_i > c_j$

$$\begin{aligned} & if\ lr_i > c_j \\ cov(age, distance) &= \frac{\sum_{n_{(lr_i > c_j)}} (age - \overline{age}) \times (lr - c_j - \overline{lr} + \overline{c_j})}{n_{(lr_i > c_j)}} \\ &= \frac{(age - \overline{age}) \times (lr - \overline{lr})}{n_{(lr_i > c_j)}} \end{aligned} \quad (8)$$

$$\begin{aligned} & if\ lr_i < c_j \\ cov(age, distance) &= \frac{\sum_{n_{(lr_i < c_j)}} (age - \overline{age}) \times (c_j - lr - \overline{c_j} + \overline{lr})}{n_{(lr_i < c_j)}} \\ &= \frac{(age - \overline{age}) \times (-lr + \overline{lr})}{n_{(lr_i < c_j)}} \end{aligned} \quad (9)$$

As the first expression corresponds simply to the covariance between age and the left-right position, while the second is the negative of this covariance, this implies the following

$$cov(age, distance) = \frac{n_{(lr_i > c_j)} \times cov(age, lr) - n_{(lr_i < c_j)} \times cov(age, lr)}{n} \quad (10)$$

Hence, the covariance between the included and the excluded variable varies across party-specific y-hat equations, except if all parties are located to the left, resp. to the right of all voters on the left-right scale. If this is not the case, this covariance is a mixture of the positive and the negative covariance between the included variable and the left-right position. Consequently, each β_{j1} estimated for the parties will be biased to a different extent, which will be a function of the

distance variable. As this distance variable will appear in the final equation to be estimated, this induces biases, for instance, in the estimate of the coefficient for the distance variable.[11]

The extent of these biases in the final model is difficult to assess analytically, especially for party-individual variables like the ones needed to assess whether ideological distance affects vote propensities. Consequently, to study this problem in a broader way we resort to Monte-Carlo simulations, and estimate equation 1 with long format data that we generated with a known data-generating process and random error (see below for more details).

As we will be able to demonstrate that the errors induced by the proposed method can be considerable, the question arises whether there is an alternative model that allows us to eliminate or at least reduce these biases. An obvious candidate is to consider the problem as a system of regression equations (for a situation with a set j of parties) as follows:

$$\begin{aligned} pr_{i,1} &= \beta_{01} + X_i\beta_{x1} + V_1\beta_{v1} + W_{i1}\beta_{w1} + \epsilon_{i1} \\ pr_{i,2} &= \beta_{02} + X_i\beta_{x2} + V_2\beta_{v2} + W_{i2}\beta_{w2} + \epsilon_{i2} \\ ,,, &= ... \\ pr_{i,j} &= \beta_{0j} + X_i\beta_{xj} + V_j\beta_{vj} + W_{ij}\beta_{wj} + \epsilon_{ij} \end{aligned} \tag{11}$$

As noted above, it is not possible to estimate these j equations separately without any additional assumptions and constraints. More specifically, the coefficients for β_{xj}, namely the party-specific characteristics, are not identified, as v_j only varies from equation to equation. Obviously, differences in the constants estimated for these j equations could be used in a typical two-step estimation of hierarchical models, where party specific variables would be related to these differences (see below for an empirical illustration). If the three (or as many parties as there are) equations are estimated simultaneously as seemingly unrelated

[11] While we demonstrated how biases are introduced into the estimates of coefficients for party-individual specific variables, similar biases can be derived in cases where several individual specific variables are converted into "y-hats." If these variables are correlated, then the biases will come about by the fact that the coefficients for the omitted variables will not be identical for each party equation (this being the motivation of using "y-hats" in the first place).

(as proposed by Zellner, 1962), we can also easily impose that individual-party specific variables have the same effect, like for instance ideological distance), by constraining $\beta_{wj} = \beta_{wk} \forall j, k$. Such models are normally estimated by feasible generalized least squares (FGLS) or more specifically the so-called Aitken two step estimator. In a first step, all individual equations of the system of equations 11 are estimated separately and the residuals used to estimate the correlations of the error terms across the equations in 11. These correlations are used to form the variance-covariance matrix, which is then used in the GLS estimation of the full model, where the data is, implicitly, stacked. A maximum likelihood estimator and some variants of the FGLS estimator are evaluated by Kmenta and Gilbert (1968) (for a related study, see Jackson, 2002). In addition, a SURE model allows the errors from the various equations to covary, which is something one would expect, given that individuals assign values of "likely voting" across different parties. We suggest that using a SURE model provides a much better way to assess what affects vote propensities.[12] In addition, it does not require "pre-treating" the individual-level explanatory variables, which generates the biases we are concerned about.

2.1 Monte-Carlo simulations

To assess the extent of the biases we resort to Monte-Carlo simulations. We generate datasets reflecting a typical empirical situation and, by letting vary key parameters used in generating the datasets, assess how the latter affect the biases. More specifically, we assume that two individual characteristic (age and gender) and a party-individual characteristic (ideological distance) affect vote propensity. The implied empirical model, parallel to equation 1 is the following:

$$pr_{i,j} = \beta_{0j} + \beta_{aj} age_i + \beta_{sj} sex_i + \beta_{pj} distance_{ij} + \epsilon_{ij} \quad (12)$$

[12] One thing this model does not address is, however, that party characteristics operate at a higher level. A possible way to proceed, which highlights also, however, how little information is available to assess these effects, is to estimate the SURE model without party-characteristics and in a second step assess how these characteristics affect the constants in the various equations obtained from the SURE estimation. This is akin to the two-step estimations of hierarchical models (e.g., Achen, 2005; Franzese, 2005; Jusko and Shively, 2005; Lewis and Linzer, 2005; Gelman and Hill, 2007).

For this model we generate samples of 1000 observations with 500 females (sex coded 1, 0 for men), left-right positions and values for age. These latter two variables are allowed to correlate over the full spectrum (i.e., $r \in [-1, 1]$ with steps of 0.1). To generate a distance measure we assume that we have three parties with positions at 2, 5, and 7. We fix β_{pj} at -0.1 and β_{sj} at 0.1. β_a, on the other hand varies from 0 to 0.1 (in steps of 0.01). We use this value (β_a) for β_{a1} and β_{a2}, but let β_{a3} be equal to $-2\beta_a$. In addition to letting vary the correlation between age and distance (which generates the bias we are interested in) and the share of the variance explained by age (through the value for β_a), we also let vary the overall proportion of the variance explained (in each party-specific equation of the system of equations 12) from 0.01 to 0.2 (in 0.01 steps). Finally, we consider two scenarios regarding the correlation in the error terms. In the first one we set $r_{\epsilon_k,\epsilon_l}$=-0.3 $\forall k \neq l$ and $k, l \in 1, ..., j$, i.e., the set of parties.[13] In the second scenario we let all these correlations be equal to 0.[14]

For each of these combinations of parameters we generate 100 datasets, estimate both equation 1 in its long format with a two stage procedure relying on a hierarchical model with random effects at the individual level (as do for instance Pardos-Prado and Dinas, 2010), and a SURE-model based on equation 11.[15] We calculate for each parameter combination the root of the mean squared error ($rmse$) of the main coefficient of interest, namely b_p.

In figure 1 we depict the typical results we obtain for most values of our parameters used in generating our datasets. It depicts the mean estimate (first panel), the proportion of confidence intervals comprising the true value (second panel) and the $rmse$s (third panel) for the coefficient b_p from a model in which the share of the explained variance is equal to 0.2, the coefficient for age is equal to 0.03 and the correlation between age and left-right positions varies between -1 and 1. As the figure nicely shows, when this correlation is small (center of the figure) using $y - hat$s and estimating the model in a long format, yields estimates close to the

[13] In the data we use for our replication study the average absolute value of the correlations in the error terms is around this value of 0.3.

[14] In this scenario the efficiency gain in using a SURE model is eliminated.

[15] We used the `systemfit` package (`https://cran.r-project.org/web/packages/systemfit/index.html`). This package implements the Aitken estimator, which corresponds to a feasible generalized least squares estimator (FGLS), as discussed above.

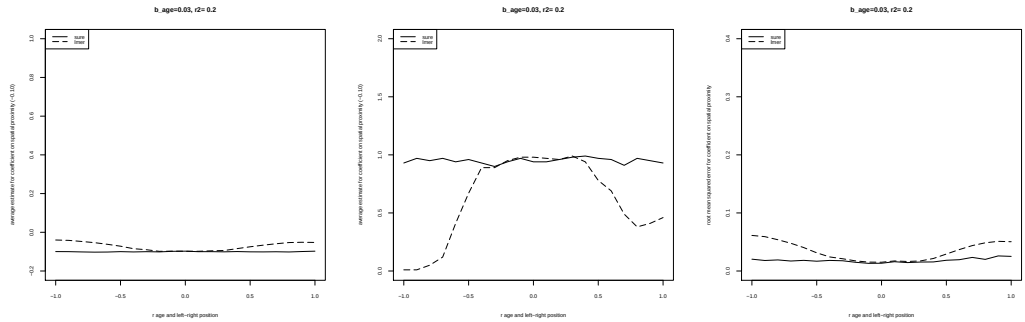

Figure 1: Mean estimate, coverage of confidence interval and root mean squared error for b_p with $b_{age} = 0.03$, explained variance=0.2

true value, the coverage of the confidence intervals is close to 1 and the $rmse$s are similar to those from a SURE model. As the absolute value of the correlation increases, however, this is no longer the case. The coefficient for ideological distance is more and more underestimated (in terms of size), and the coverage of the confidence intervals decreases considerably. Finally, the $rmse$s from the SURE model remain at the same (low) level, while those of the traditional estimator starts to increase dramatically to more than the double.

In the appendix we depict in a series of additional figures (figures 4-14) the results of our Monte-Carlo simulations more systematically by focusing on the coverage of the confidence intervals of the coefficient β_{pj}. These figures show that the coverage of the confidence intervals is systematically better for the estimates from a SURE model. The improvement by using a SURE model becomes, however, less pronounced when the coefficient b_{age} becomes (unreasonably) large (e.g., larger than 0.05, see figures 15-25). As in the simulated datasets age has a much larger variance (almost by a factor of 10) than the left-right position, such large values of b_{age} would suggest that the former variable is a much better predictor of propensities to vote that the ideological distance. Consequently, our Monte-Carlo simulations show that for most reasonable values of the parameters used in generating our simulated datasets a SURE model has a lower (or equal) $rmse$ for the main coefficient of interest (b_p) than those obtained with the traditional model to analyze PTVs.[16]

[16]In the appendix we also depict our results from the Monte-Carlo simulations in terms of the

3 An application

Having shown that SURE models are preferable when analyzing PTVs under a wide range of parameter values for simulated datasets, we confront our modeling approach with survey data in this section and show how the results differ when estimating PTVs with a SURE model. We do so by examining the same data as Van der Eijk and Franklin (1994) have used in their classical example, the European Election Study 1989.[17] This dataset is the first European Election Study to include propensity-to-vote-questions for all major parties competing for seats in the European Parliament. It carries as further advantage that we can directly compare our results to the ones originally published by Van der Eijk and Franklin (1994).

3.1 Replication

In a first step, we therefore replicate the original analysis as presented by Van der Eijk and Franklin (1994), in particular the country-specific regressions as presented in their table 20.3. This table reports the findings from regression analyses with PTVs as dependent variable and independent variables at the individual and party level.[18] While we were able to replicate the main findings and the coefficients in terms of significance and direction, two things are worth noting in this respect. First, we decided to integrate the variables relating to class and religion as nominal variables and thus to utilize a dummy approach. The original chapter by Van der Eijk and Franklin (1994) is not entirely clear about their strategy, but it seems to us the most logical coding decision. Second, the number of observations is different in our analyses than what is reported by Van der Eijk and Franklin

$rmse$s. There, we also depict the same information for datasets generated under the assumptions that the error terms are uncorrelated. As the figures 26-36 nicely show, the biases we find in the case of correlated error terms (figures 15-25) carry over to this situation as well. As SURE models allow for an increase in efficiency under the assumption of correlated error terms, this shows even more forcefully that SURE models are to be preferred in almost all practical situations when analyzing PTVs.

[17] Downloaded from `http://eeshomepage.net/`.

[18] We document the replication and our modeling decisions in the appendix. There, we also report on a joint estimation for all countries covered that also includes interactions of variables at the two levels. This corresponds to the analysis presented in table 20.4 in Van der Eijk and Franklin (1994).

Country/Region	*Electoral strength*	*New Politics Party*	*Distance*	*Class*	*EC Approval*	*Gov. Approval*	*Issue Voting*	*Postmaterialism*	*Religion*	R^2
Denmark	.08		-.56	.56	.29	.42	.38	.12*	.16*	0.45
Flanders	.01*		-.45	.75	1.55	.60	.50	.91*	.62	0.25
France	.07	1.12	-.56	.54	.50	.56	.55	.36*	.38	0.44
Germany	.07	.59	-.62	.46	.75	.65	.36	.24	.51	0.47
Great Britain	.07	1.04	-.43	.40	.01*	.76	.69	.16	.33	0.47
Greece	.05		-.45	.28	.64	.79	.34	.39	.40	0.62
Ireland	.06	1.24	-.39	.64	.23*	.79	.58	.18*	.40	0.34
Italy	.08	.38	-.47	.72	.43*	.58	.66	.28*	.63	0.34
Luxembourg	.11	1.41	-.32	.84	.29*	.92	.67	.53	.43*	0.45
Netherlands	.08	1.52	-.41	.74	.46	.66	.46	.18*	.67	0.43
Northern Ireland	.05		-.23	.69	.51	.18*	.60	.55*	.82	0.43
Portugal	.10		-.39	.62	.37	.60	.69	.42	.37	0.49
Spain	.08		-.45	.61	.52	.79	.57	.38	.64	0.47
Walonia	.09	1.56	-.33	.69	.78*	.79	.42	.56*	.76	0.44

* not significant at p=0.05

Table 1: Replication of Table 20.3

(1994). This is most likely due to the different ways that statistical programs report weighted data.[19]

Table 1 shows that the results obtained are largely in line with those reported by Van der Eijk and Franklin (1994).[20] They also highlight, however, some of the problems discussed above. While the party-level effects are strictly speaking estimated only on a small number of observations (at most 10 per country), the precision of these estimates astounds. This is, however, due to the fact that these analyses do not take into account the fact that all observations are nested within parties. In addition, there is obviously another hierarchical structure, namely the one nesting individuals inside parties (i.e., each individual appears as many times as she has provided information on a propensity to vote for a party).

[19]We excluded individuals if information on their voting behavior or their PTVs was missing as described by Van der Eijk and Franklin (1994, 349), but it was not entirely clear whether they applied other exclusion mechanisms, e.g. to have equivalent numbers of observations for the first and second stage of estimation.

[20]The only major difference is that we were only partially able to estimate party predictors for Greece and Flanders. For Greece, the dataset that we use provides no left-right position for "Left Coalition" (party 8) and accordingly our sample has no variation on the "new politics" variable. For Flanders, the only "new politics" party (Agalev, party 11) has no PTV scores and could thus not be integrated in the model.

3.2 SURE models

For our SURE estimation we omit, for simplicity's sake, the party-level effects in a first step.[21] Consequently, we estimate a model based on the individual-level and individual-party specific variables mentioned in table 6 (see appendix) for each country separately with a SURE model. As our main interest is in the biases in the estimate for the left-right distance induced by using $y - hat$s, we report in table 2 only these coefficients. In the first column, we report the coefficient as reported in table 20.3 in Van der Eijk and Franklin (1994). In the second column we reproduce the coefficients as reported in table 1 from our replication of the country specific estimations. In the third column we report the results from models that exclude the country specific explanatory variables, which are replaced by party fixed effects, and are based on the same number of observations as those reported in table 1. If removing the party specific variables allows the estimation of the model with a larger number of observations, we report the coefficients from these models in the fourth column, again with party fixed effects, while in the last column we report the coefficients from the SURE model.

To assess the differences across estimators, the last three columns are the most relevant. As these results show, the differences in the estimates are in some instances considerable. For instance, in Portugal the coefficient estimated with the SURE model is reduced by almost a third of the size of the one estimated with OLS in the long format. For Greece, the latter estimate is significantly smaller than the one obtained by estimating a SURE model. Similar notable differences appear for France, Germany, Ireland, Italy, Luxembourg, Netherlands, Northern Ireland, Spain and Walonia. Only for Denmark, Flanders, and Great Britain are the estimated effects for ideological distance largely identical. These results show again that traditional models used in analyzing PTVs risk misleading us considerably, especially regarding the estimated effects of individual-party specific variables, like ideological distance.

Given that in some studies also party-specific characteristics are employed

[21] As noted above, these can easily be recovered, as we show below, by adopting a two-step estimations of a hierarchical model. As tables 10-23 in the appendix show, omitting these party-specific variables hardly affects the estimates of the coefficients for the other variables. For simplicity's sake we also refrain from weighting the observations in these models

country/region	stacked orig.	stacked repl.	stacked w/o	stacked w/o	sure
Denmark	-0.57	-0.56***	-0.58***		-0.60^{***}
		(0.02)	(0.02)		(0.02)
Flanders	-0.32	-0.46***	-0.46***	-0.32***	-0.31^{***}
		(0.06)	(0.06)	(0.04)	(0.04)
France	-0.54	-0.58***	-0.55***	-0.55***	-0.51***
		(0.03)	(0.03)	(0.02)	(0.02)
Germany	-0.57	-0.62***	-0.60***		-0.57^{***}
		(0.02)	(0.02)		(0.02)
Great Britain	-0.40	-0.43***	-0.42***		-0.42^{***}
		(0.02)	(0.02)		(0.02)
Greece	-0.43	-0.45***	-0.45***	-0.38***	-0.43^{***}
		(0.02)	(0.02)	(0.02)	(0.02)
Ireland	-0.34	-0.39***	-0.37***		-0.36^{***}
		(0.02)	(0.02)		(0.02)
Italy	-0.43	-0.48***	-0.51***	-0.44***	-0.46^{***}
		(0.02)	(0.02)	(0.02)	(0.02)
Luxembourg	-0.36	-0.32***	-0.33***		-0.35^{***}
		(0.05)	(0.05)		(0.06)
Netherlands	-0.37	-0.64***	-0.64***	-0.38***	-0.34^{***}
		(0.03)	(0.03)	(0.02)	(0.02)
Northern Ireland	-0.27	-0.23***	-0.20***		-0.22^{***}
		(0.04)	(0.04)		(0.04)
Portugal	-0.40	-0.39***	-0.4***	-0.37***	-0.28^{***}
		(0.02)	(0.02)	(0.02)	(0.02)
Spain	-0.37	-0.45***	-0.44***	-0.39***	-0.35^{***}
		(0.02)	(0.02)	(0.02)	(0.02)
Walonia	-0.35	-0.33***	-0.32***	-0.24***	-0.20^{***}
		(0.04)	(0.04)	(0.03)	(0.03)

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 2: Summary of the coefficients of ideological distance estimated in different models

	Model 1	Model 2			Model 3	Model 4		
		constant	Electoral strength	New politics party		constant	Electoral strength	New politics party
(Intercept)	4.16*				4.16*			
	(0.41)				(0.43)			
Electoral strength	0.05*				0.05*			
	(0.02)				(0.02)			
missing	0.00							
	(0.84)							
New politics party	−0.24				−0.26			
	(0.77)				(0.88)			
missing	0.02							
	(1.01)							
Denmark		4.45*	0.04			4.45*	0.04	
		(1.78)	(0.11)			(1.94)	(0.12)	
Flanders		4.92*	−0.13			8.21*	−0.28	
		(0.98)	(0.08)			(3.20)	(0.16)	
France		5.28*	0.01	1.92		4.96*	0.02	2.01
		(1.01)	(0.09)	(2.80)		(2.35)	(0.14)	(3.10)
Great Britain		3.90*	0.06	1.86		3.90*	0.06	1.86
		(1.66)	(0.07)	(2.86)		(1.81)	(0.07)	(3.11)
Germany		6.05*	0.03	−0.12		6.05*	0.03	−0.12
		(2.20)	(0.08)	(3.05)		(2.39)	(0.09)	(3.32)
Greece		4.02*	0.03			3.82*	0.04	
		(1.14)	(0.05)			(1.62)	(0.06)	
Ireland		4.16*	0.05	−0.77		4.16*	0.05	−0.77
		(1.48)	(0.07)	(2.91)		(1.61)	(0.07)	(3.16)
Italy		3.80*	0.10	−0.58		3.88*	0.10	−0.64
		(1.19)	(0.07)	(2.04)		(1.73)	(0.09)	(2.40)
Luxembourg		4.41*	0.09	−2.20		4.41*	0.09	−2.20
		(1.92)	(0.09)	(2.45)		(2.09)	(0.10)	(2.67)
Northern Ireland		4.78*	0.14			4.78*	0.14	
		(1.36)	(0.10)			(1.48)	(0.10)	
Netherlands		2.02	0.10	1.65		1.94	0.10	1.00
		(1.56)	(0.07)	(2.04)		(1.72)	(0.08)	(3.05)
Portugal		2.90*	0.12*			3.17*	0.11	
		(0.99)	(0.06)			(1.29)	(0.07)	
Spain		4.51*	−0.02			5.72*	−0.06	
		(1.14)	(0.07)			(1.61)	(0.08)	
Walonia		3.27*	0.03	−0.51		1.98	0.07	0.04
		(1.03)	(0.06)	(2.72)		(1.92)	(0.08)	(3.03)
N	115		115		90		90	
Resid. sd	2.47		2.54		2.59		2.77	

Standard errors in parentheses, * indicates significance at $p < 0.05$

Table 3: Party-specific effects on propensities to vote

to explain the propensity to vote for a particular party, regressing the intercepts underlying the models summarized in table 2 on these variables yields the corresponding results.[22] Following our replication study we rely on two party-specific variables, namely the electoral strength of the party and whether it is a new politics party. As this information is missing for fifteen parties we report for all models two versions, namely one excluding these cases and another in which the missing values are set to zero and an indicator variable for missingness is introduced.[23] While we might weight the observations as a function of the number of cases used in estimating the constant terms, we refrain from doing so to keep the analysis as simple as possible. As the differences in sample size are not as dramatic, this is very unlikely to affect any of our substantive conclusions.

Table 3 reports the results from our second-stage regression. The first model, using information from all parties, simply assumes that both electoral strength and being a new politics party affects the average propensity to vote for a party in the same way across all countries. The estimates clearly show that electoral strength has a slight positive effect on this propensity, while being a new politics party hardly affects the latter. The coefficients for the missingness indicator both fail to reach statistical significance, suggesting that our coding decision is unlikely to affect our results.

In model 2 we assume that the effects of our party-specific variables vary across countries. The results suggest that both variable have hardly an effect on the propensity to vote. Only for the electoral strength in Portugal do we obtain a statistically significant and positive coefficient. This effect fails to reach statistical significance, however, once we remove all cases with missing data (see model 4). For this subset of cases, the results for the simpler model (3) reproduce basically those of model 1. Thus, contrary to the results reported by Van der Eijk and Franklin (1994) in their table 20.3, who find statistically significant results at the 0.05-level for all party-specific effects are reported as, except the effect of new politics parties in Germany and Italy (see also our own replication of this table 20.3, namely table 1.).

[22] This corresponds simply to the two-step estimator for hierarchical models (e.g., Achen, 2005; Franzese, 2005; Jusko and Shively, 2005; Lewis and Linzer, 2005; Gelman and Hill, 2007).

[23] Proceeding like this is akin to a "zero-order regression" as proposed by Maddala (1977, 202) (see also Greene, 2003, 60).

3.3 Bayesian hierarchical models

The lack of precision in the estimates for the party-specific variables is obviously due to the small number of cases per country (at most ten observations). Consequently, instead of adopting a "no-pooling" (Gelman and Hill, 2007) assumption, we might assume that the coefficients for the party-specific variables are normally distributed. This might take different forms, and we specify them with the help of a more detailed equation of the general PTV-models:

$$pr_{i,j,k} = \beta'_{0j,k} + X_i\beta_{xj,k} + V_j\beta_{vj,k} + W_{ij}\beta_{wj,k} + \epsilon_{i,j,k} \quad (13)$$

We subscript in this equation (13) i for individuals, j for parties, and k for countries. The simplest way to model the constant term in this equation is to assume the following:

$$\beta'_{0j,k} \sim N(\gamma'_0 + V_j\gamma_v, \sigma^2_\beta) \quad (14)$$

Equation 14 implies that the constant terms in the party-specific PTV regressions are normally distributed (and this across all countries: in essence, this replicates the setup of models 1 and 3 in table 3). A more demanding setup, in terms of data, assumes the following:

$$\beta'_{0j,k} = \gamma'_{0j} + V_j\gamma_{vj} + \epsilon_j \quad (15)$$

$$(\gamma'_{0j}, \gamma'_{vj}) \sim N((\overline{\gamma'_{0j}}, \overline{\gamma'_{vj}}), \Omega_{\gamma_j}) \quad (16)$$

where Ω_{γ_j} are the country specific variance-covariance matrices for the γs. In this case equations 16 imply that the constant and slopes for electoral strength and new politics status vary amongst all parties per country according to a normal distribution.[24] We developed Bayesian models for these two setups using the JAGS program (Plummer, 2010) and estimated them on the two sets of observations (see discussion above).

[24] Given the sparseness of the data (see table 3), such models are far from easy to estimate.

	effect of ideological distance, resp. party characteristics	
	mean	95& credible interval
Denmark	-0.48	[-0.52, -0.44]
France	-0.39	[-0.45, -0.33]
Great Britain	-0.55	[-0.59, -0.50]
Germany	-0.45	[-0.49, -0.41]
Greece	-0.28	[-0.32, -0.24]
Ireland	-0.58	[-0.64, -0.53]
Italy	-0.40	[-0.54, -0.27]
Luxembourg	-0.38	[-0.43, -0.33]
Northern Ireland	-0.26	[-0.36, -0.16]
Netherlands	-0.39	[-0.43, -0.35]
Portugal	-0.31	[-0.38, -0.23]
Spain	-0.25	[-0.29, -0.20]
Flanders	-0.12	[-0.18, -0.06]
Walonia	-0.26	[-0.36, -0.16]
Electoral strength	0.05	[0.03, 0.08]
New politics party	0.45	[-0.75, 1.66]
constant	3.97	[3.42, 4.53]
deviance	157076.67	[156882.66, 157269.95]
σ^2	1.73	[0.98, 2.72]
N parties		115

Entries correspond to mean and 0.95 credible interval of the posterior distribution
3 combined chains, each 1000 burnins, 10000 mcmcs, thinned by 10

Table 4: Party-specific effects on propensities to vote

Table 4 reports the results for the full set of observations.[25] Not surprisingly the results correspond quite closely to the ones reported in table 3. Again, we fail to find any strong effects for the party-specific variables. While the credible interval for the electoral strength of parties excludes the value of 0, this is not the case for the variable new politics party.

Figure 2 depicts the the results of the model which allows the party-specific effects to vary across the countries according to a normal distribution.[26] While the effect of ideological distance is still estimated with a small credible interval,

[25]For simplicity's sake, and given the results reported in table 3, we refrain from including missingness indicators in the model. The results of a model estimated only on the observations with complete data offers largely identical results and is reported in the appendix (table 8). Convergence for this models has been assessed with the usual diagnostics, and the three chains all survived these tests. For instance, none of the scale reduction factors proposed by Gelman and Rubin (1992) exceeds the value of 1.1.

[26]The results of a model focusing on the observations with no missing data appear in the appendix (figure 3).

most of these intervals for the party-specifc effects include the value of zero. For the electoral strength only in some countries do we find a notable positive effect. The credible intervals for the coefficient for new politics parties are much wider and only for Great Britain and France do they exclude the value of 0. The average effects of these two variables (see bottom of figure 2 fail to exclude 0, however.

These models, while they might be useful for scholars dealing with related setups, are admittedly limited in the context of a replication of Van der Eijk and Franklin's (1994) study. Given the sparseness of the data at the level of parties in each country, a Bayesian model with its distributional assumptions can only partly improve on the inferences that other approaches yield as well. More generally and substantively, our results seem to suggest that the party-specific variables we employed hardly affect the propensity to vote for a party. And this transpires in all our analyses that rely on useing the full information from all countries at the same time.

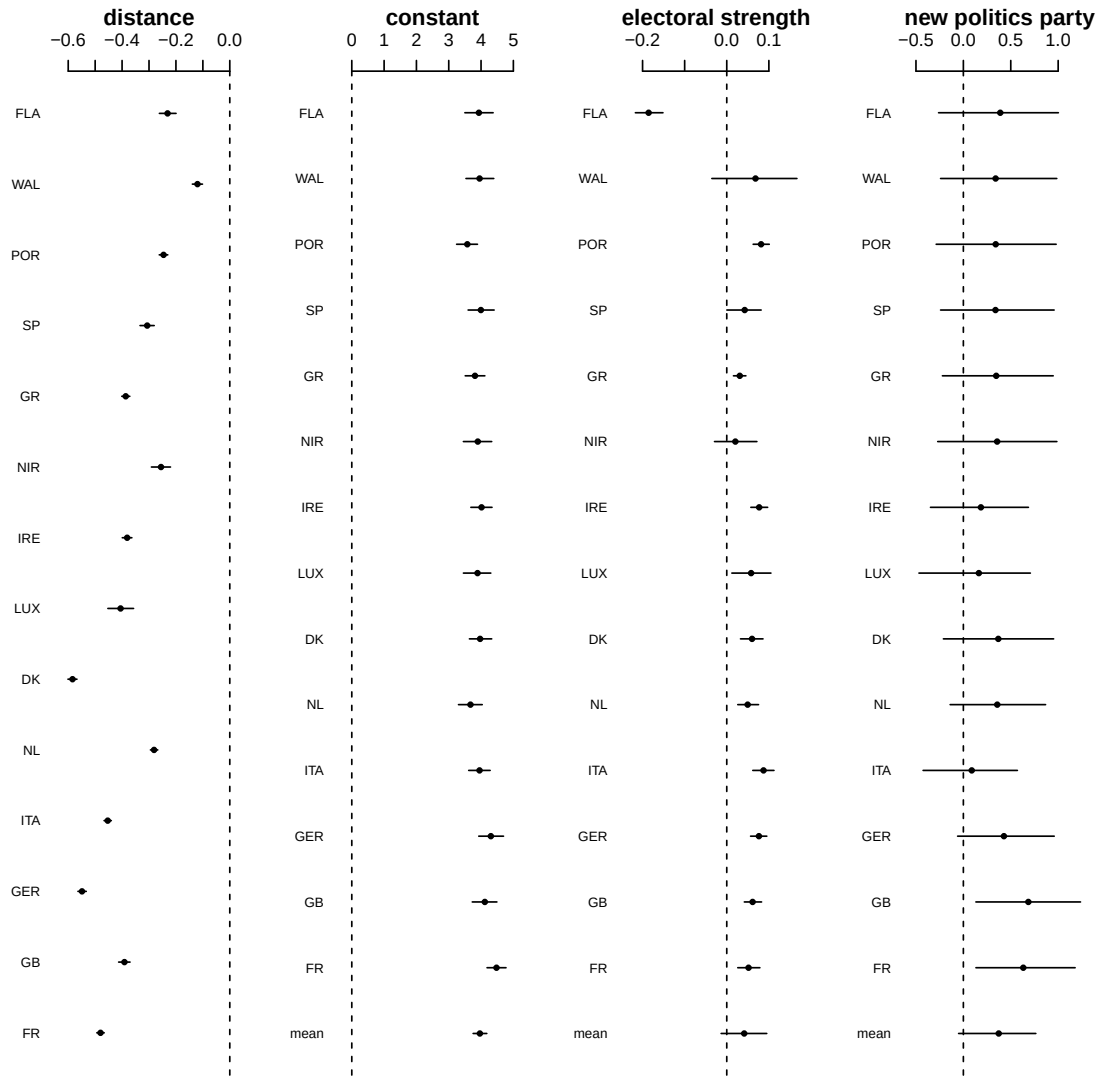

Figure 2: Bayesian hierarchical model: country-specific effects (mean and 95 % credible interval from posterior distribution, 1000 burnins, 10000 mcmcs, thinned by 10)

4 Conclusion

Propensities to vote for a party have been proposed in the literature on voting some twenty years ago and have been used to address several research questions. Pardos-Prado and Dinas (2010, 770) approvingly note that

> [t]he literature on PTV [Propensity To Vote] methodology extends to more than twenty years and covers most of the aspects regarding the practicalities and the usefulness of this approach in various voting research questions (Tillie, 1995; Van der Eijk et al., 2006).

The way in which these PTVs are used in empirical studies is, however, problematic in several regards. Some of these problems have been acknowledged and (sometimes) addressed by the proponents of this new "dependent variable in electoral behavior" (Van der Eijk et al., 2006). Most of them relate to the uncertainty attached to the coefficient estimates for the variables of interest. A more profound problem, however, has so far not been acknowledged and introduces, as we have shown in this paper, biases in the estimates.

More specifically, the suggested way to assess the effect of individual characteristics on PTVs, by a two-stage procedure involving $y - hat$s, is likely to introduce biases in the estimated coefficients for other variables. As we showed in our Monte-Carlo simulations, these biases are only absent if individual characteristics are uncorrelated with individual-party specific variables and others as well. If this is the case, however, omitting these variables will not affect the estimates of the remaining coefficients in traditional linear models of PTVs. Relying on the well-known SURE models, we were also able to show that using these models largely eliminates these biases. To show the usefulness of this approach we used these models to replicate analyses from an early study of PTVs, namely Van der Eijk, Franklin and Oppenhuis's (1994) work on the 1989 EES. As was to be expected, we find notable differences and can also demonstrate that some party-specific variables highlighted in this study fail to have significant effects on PTVs. This latter analysis required a two-stage estimation of a hierarchical model.

As SURE models are implemented in most statistical packages, and two-stage estimation of hierarchical models is easy to carry out, scholars interested in PTVs

should be advised to employ this more appropriate and feasible approach. Depending on the application and the data available a more complicated setup estimated in a Bayesian perspective (as we proposed above) might allow for an integrated estimation. Needless to say, however, proceeding as much as the literature has done with the help of a stacked data and "y-hats," as we demonstrated in this paper, should be avoided at all costs, as biases are likely.

Appendix

In this appendix we first offer additional information on the replication of Van der Eijk and Franklin's (1994) analysis in tables 5 and 6. In table 7 we sketch the JAGS code we used for our Bayesian estimation and report results from two additional estimations (using only observations without missing data) in tables 8 and 9.

Tables 10-23 report the full analyses on which table 2 draws.

In figures 15-25 we depict the $rmse$s from Monte-Carlo simulations for which we reported the coverage of the confidence intervals in the main text.

Figures 4-14 report on a full set of Monte Carlo simualations. Figure 4, for instance, which is based on the assumption that the effect of age on vote propensities is zero, shows that, not surprisingly, the coverage is almost perfect, as independent of the estimator used and the extent to which the model (see equation 12) explains the vote propensities (this is reflected in the various panels of figure 14, while the horizontal axis in each panel reflects the extent to which ideological positions are correlated with age) the proportion of confidence intervals comprising the true value is almost always one. As we let the effect of age on vote propensities increase (figures 5-14) we find that especially when the correlation between ideological position and age increases, the coverage decreases systematically if the model is estimated in long format with "$y - hat$s." In each of these figures it also transpires quite clearly that when the correlation between ideological position and age is zero, then the coverage remains perfect. This illustrates our point made above, namely that the use of "$y - hat$s" to replace X is only warranted if the variables used in constructing these "$y - hat$s" are orthogonal to all other variables used in the model, i.e., when controlling for them is unnecessary. Finally, figures 26-36 depict again the $rmse$s from Monte-Carlo simulations, but in this case the correlation among the error terms set to 0.

Replication of table 20.3 and 20.4 van der Eijk et al. (1996)			
Variable name in table	Name(s) in EES1989	$y - hat$-procedure	Comment
EC-approval	var130	yes	
Postmaterialism	var201	yes	
Class	var289 (as dummies) (occupation), var285 (education) var278 (unionization)	yes	
Religion	var280 (as dummies) (denominations) var282 (church attendance)	yes	var282 0 without denomination
Government approval	var262	yes	
Issue Voting	var179 (as dummies)	yes	
Left-right Distance	var203-var212 (party positions) var202 (own placement)	no	absolute distance
Concurrent election	concurrent national election, appendix B6.1	no	
extremity of party	appendix B7/E	no	
structural agreement	appendix B7/D	no	
Electoral strength	appendix B7/A	no	
New Politics Party	appendix B7/I	no	
Identifiers:			
countries	nation		Belgium split into Flanders/Wallonia
individuals	id		
Weight	var010 (European election weight)		

Table 5: Variables used in replication study

Table 6: Replication of table 20.4

DV: PTV	b	beta	Std. error
Individual-level Effects			
EC-approval	0.31**	0.05	0.03
Postmaterialism	0.26**	0.03	0.04
Class	0.60**	0.14	0.02
Religion	0.58**	0.10	0.03
Government approval	0.62**	0.21	0.02
Issue Voting	0.54**	0.10	0.12
Left-right Distance	-0.42**	-0.29	0.01
Individual-level Interactions			
Gov. Approval with Concurrent election	0.13**	0.02	0.03
Distance with Extremity of party	0.02**	0.04	0.00
Issues with Structural agreement	-0.14	-0.016	0.20
Distance with Structural agreement	-0.18**	-0.08	0.02
Party-level Effects			
Electoral Strength	0.07**	0.28	0.00
New Politics Party	0.80**	0.08	0.05
Constant	4.09	0.04	
Model fit			
N	33397		
Variance explained	42.11		

```
model {
 for (i in 1:115){
  bo.hat[i] <- b0a[1] + b0a[2]*size[i] + b0a[3]*np[i]
 b0[i] ~ dnorm(bo.hat[i],s0 )
}
 for (i in 1:n1){
  x1[i,1:10] ~dmnorm(y1.hat[i,1:10], Omega1[1:10,1:10])
  y1.hat[i,1] <- b0[1]+ blr[1] *x1[i,11] + b1[1,1:34]%*%x1[i,21:54]
  y1.hat[i,2] <- b0[2]+blr[1] *x1[i,12] + b1[2,1:34]%*%x1[i,21:54]
. . .
}
 for (i in 1:n2){
  x2[i,1:6] ~dmnorm(y2.hat[i,1:6], Omega2[1:6,1:6])
  y2.hat[i,1] <- b0[11]+ blr[2] *x2[i,7] + b2[1,1:31]%*%x2[i,13:43]
  y2.hat[i,2] <- b0[12]+blr[2] *x2[i,8] + b2[2,1:31]%*%x2[i,13:43]
. . .
 }
. . .
Omega1[1:10,1:10] ~ dwish(R1, 10)
sigma21[1:10, 1:10] <- inverse(Omega1[,])
. . .
 for (j in 1:10){
 for (k in 1:34){
  b1[j,k] ~ dnorm(0, 0.001) } }

 for (j in 1:6){
 for (k in 1:31){
  b2[j,k] ~ dnorm(0, 0.001) } }
. . .
 s0.hat~dnorm(0, 0.001)
 s0<-exp(s0.hat)
 for (k in 1:3){  b0a[k] ~ dnorm(0, 0.001) }

 for (k in 1:14){  blr[k] ~ dnorm(0, 0.001) }
}
```

Table 7: Partial JAGS code for hierarchical Bayesian model

	effect of ideological distance, resp. party characteristics
Denmark	-0.56
	[-0.61, -0.51]
France	-0.39
	[-0.45, -0.33]
Great Britain	-0.55
	[-0.59, -0.50]
Germany	-0.51
	[-0.55, -0.46]
Greece	-0.27
	[-0.32, -0.23]
Ireland	-0.59
	[-0.64, -0.54]
Italy	-0.40
	[-0.54, -0.27]
Luxembourg	-0.38
	[-0.43, -0.33]
Northern Ireland	-0.26
	[-0.36, -0.16]
Netherlands	-0.43
	[-0.48, -0.38]
Portugal	-0.40
	[-0.49, -0.31]
Spain	-0.29
	[-0.34, -0.23]
Flanders	-0.23
	[-0.36, -0.09]
Walonia	-0.40
	[-0.58, -0.22]
Electoral strength	0.06
	[0.03, 0.09]
New politics party	0.45
	[-0.84, 1.73]
constant	4.00
	[3.35, 4.64]
deviance	131160.32
	[130992.35, 131328.80]
σ^2	1.87
	[1.02, 3.08]
N parties	90

Entries correspond to mean and 0.95 credible interval of the posterior distribution
3 combined chains, each 1000 burnins, 10000 mcmcs, thinned by 10

Table 8: Party-specific effects on propensities to vote

	Distance	constant	Electoral strength	New politics party	σ^2
Denmark	-0.56	4.54	0.06	1.23	0.18
	[-0.61, -0.51]	[3.33, 5.62]	[-0.01, 0.12]	[-0.38, 2.43]	[0.00, 1.69]
France	-0.39	4.17	0.07	0.79	5.19
	[-0.45, -0.34]	[2.74, 5.20]	[-0.03, 0.17]	[-1.14, 2.57]	[0.00, 27.28]
Great Britain	-0.55	4.55	0.07	0.51	0.44
	[-0.59, -0.50]	[3.34, 5.73]	[0.03, 0.12]	[-0.70, 1.91]	[0.00, 4.51]
Germany	-0.50	3.99	0.09	0.23	1.22
	[-0.55, -0.46]	[2.80, 5.04]	[0.01, 0.17]	[-1.36, 1.65]	[0.00, 6.30]
Greece	-0.27	3.39	0.06	0.31	2.13
	[-0.32, -0.23]	[1.84, 4.76]	[-0.03, 0.15]	[-1.68, 2.22]	[0.00, 9.28]
Ireland	-0.59	3.59	0.06	0.16	5.91
	[-0.64, -0.53]	[1.73, 4.83]	[-0.04, 0.18	[-1.34, 1.62]	1.36, 19.70]
Italy	-0.41	3.79	0.09	0.33	0.73
	[-0.54, -0.26]	[3.26, 4.60]	[0.05, 0.12]	[-0.96, 1.47]	[0.00, 6.68]
Luxembourg	-0.38	3.97	0.08	0.67	0.05
	[-0.43, -0.33]	[2.24, 6.25]	[-0.18, 0.38]	[-1.44, 3.04]	[0.00, 0.58]
Northern Ireland	-0.25	3.87	0.06	0.52	0.35
	[-0.35, -0.16]	[2.35, 5.43]	[-0.07, 0.20]	[-1.54, 2.54]	[0.00, 3.92]
Netherlands	-0.42	3.49	0.02	0.43	0.18
	[-0.47, -0.38]	[2.27, 5.25]	[-0.02, 0.08]	[-1.77, 2.53]	[0.00, 1.65]
Portugal	-0.40	3.60	0.05	0.40	0.12
	[-0.49, -0.31]	[2.67, 4.33]	[0.01, 0.09]	[-1.76, 2.44]	[0.00, 1.23]
Spain	-0.29	3.68	0.25	0.46	0.03
	[-0.34, -0.23]	[2.82, 4.97]	[0.10, 0.36]	[-1.72, 2.52]	[0.00, 0.03]
Flanders	-0.23	3.66	0.06	0.48	1.78
	[-0.37, -0.09]	[3.14, 3.89]	[0.04, 0.10]	[-1.57, 2.52]	[0.00, 16.19]
Walonia	-0.32	3.49	-0.14	0.47	1.03
	[-0.49, -0.16]	[0.48, 5.57]	[-0.24, -0.03]	[-1.85, 2.79]	[0.00, 6.66]
deviance			131175.18		
			[131005.75, 131352.08]		
N parties			90		

Entries correspond to mean and 0.95 credible interval of the posterior distribution
3 combined chains, each 1000 burnins, 10000 mcmcs, thinned by 10

Table 9: Party-specific effects on propensities to vote

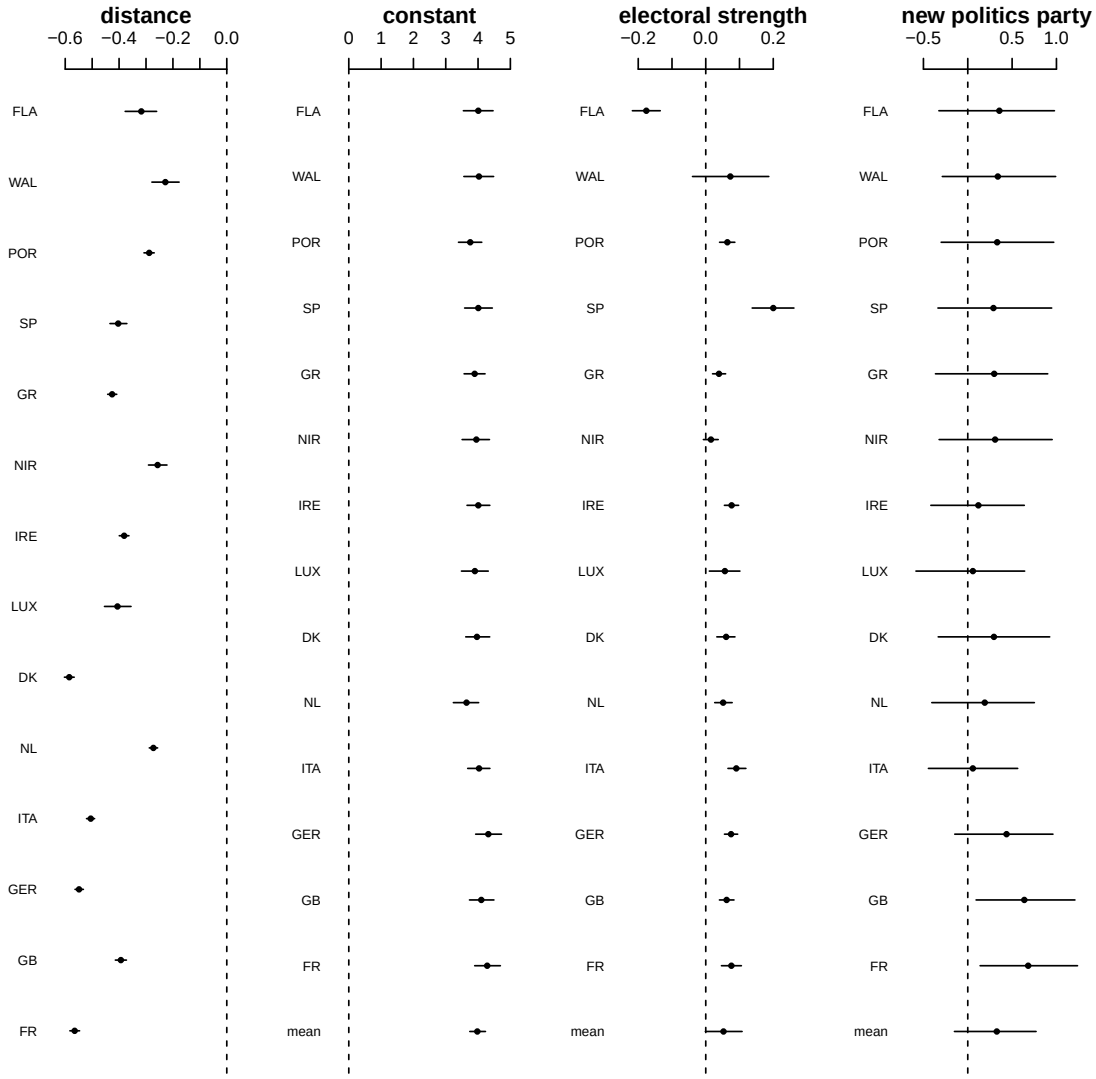

Figure 3: Bayesian hierarchical model: country-specific effects (mean and 95 % credible interval from posterior distribution, , 1000 burnins, 10000 mcmcs, thinned by 10)

Table 10: Propensities to vote: Denmark

			Social Dem. 1	Radik.	Konservative	CD	Soc. Folkep.	Venstre	Fremdkritsp.
Left-right distance	-0.559***	-0.578***	−0.60***	−0.60***	−0.60***	−0.60***	−0.60***	−0.60***	−0.60***
	(0.020)	(0.020)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Class	0.563***	0.561***							
	(0.041)	(0.041)							
Occupation 3			1.42	−0.04	4.44***	−0.32	0.60	−1.85	−2.22
			(1.14)	(0.99)	(1.07)	(1.08)	(1.05)	(1.06)	(1.21)
4			1.43	1.85*	3.43***	0.47	−0.92	−2.46**	−1.77
			(0.88)	(0.79)	(0.83)	(0.81)	(0.81)	(0.80)	(0.91)
5			0.47	1.62	4.79***	2.11	−1.63	−0.48	0.19
			(1.19)	(0.99)	(1.07)	(1.09)	(1.09)	(1.07)	(1.17)
6			1.34	1.45	2.51**	0.23	−0.91	−0.95	−2.49**
			(0.89)	(0.77)	(0.83)	(0.81)	(0.81)	(0.80)	(0.91)
7			1.85**	1.45*	2.08**	0.72	0.10	−1.94**	−1.37
			(0.71)	(0.61)	(0.67)	(0.65)	(0.65)	(0.64)	(0.74)
8			2.18**	1.43*	1.87**	0.77	0.52	−1.74**	−1.98**
			(0.73)	(0.64)	(0.69)	(0.67)	(0.67)	(0.66)	(0.76)
9			1.80*	2.11**	1.88*	1.28	0.81	−1.24	−0.32
			(0.83)	(0.74)	(0.78)	(0.76)	(0.76)	(0.75)	(0.88)
10			2.33*	1.23	2.30**	1.01	0.87	−3.44***	−1.34
			(0.94)	(0.82)	(0.89)	(0.86)	(0.86)	(0.85)	(0.97)
11			3.44***	1.79**	1.73*	0.64	1.20	−2.23***	−2.26**
			(0.74)	(0.65)	(0.70)	(0.68)	(0.68)	(0.67)	(0.77)
12			2.76***	1.12	1.39*	0.77	0.08	−2.35***	−1.04
			(0.72)	(0.63)	(0.68)	(0.67)	(0.66)	(0.65)	(0.75)
13			2.02**	1.00	1.29*	0.34	−0.27	−2.54***	−1.76*
			(0.66)	(0.58)	(0.63)	(0.61)	(0.61)	(0.60)	(0.69)
14			2.03*	0.79	2.07*	0.45	−0.75	−1.68*	−1.15
			(0.93)	(0.82)	(0.88)	(0.85)	(0.85)	(0.85)	(0.97)
15			2.96***	1.72**	2.24**	0.33	0.29	−2.11**	−1.56*
			(0.75)	(0.65)	(0.71)	(0.69)	(0.69)	(0.68)	(0.78)
16			1.47	−0.10	0.92	−1.64	−0.69	0.03	−2.25
			(2.74)	(2.37)	(2.58)	(2.52)	(2.51)	(2.48)	(2.79)
17			2.31**	1.48*	2.14**	0.04	0.46	−2.48***	−1.31
			(0.76)	(0.66)	(0.72)	(0.71)	(0.70)	(0.69)	(0.79)
Education			−0.02	0.05	0.07	0.04	0.14***	0.06	−0.04
			(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Union			0.49	−0.59*	−0.11	−0.43	−0.25	−0.66**	−0.10
			(0.26)	(0.23)	(0.25)	(0.25)	(0.24)	(0.24)	(0.28)
EC-approval	0.287***	0.278***	−0.07	−0.00	0.30***	0.41***	−0.48***	0.37***	−0.05
	(0.036)	(0.035)	(0.08)	(0.07)	(0.08)	(0.07)	(0.07)	(0.07)	(0.08)
Governmantal approval	0.417***	0.410***	−2.11***	0.09	2.07***	0.26	−1.24***	1.31***	−0.87**
	(0.033)	(0.033)	(0.26)	(0.22)	(0.24)	(0.24)	(0.24)	(0.23)	(0.27)
Religion	0.159	0.159							
	(0.107)	(0.107)							
Protestant			0.47	−0.34	0.90	1.61	−0.61	0.60	0.81
			(1.20)	(1.04)	(1.12)	(1.20)	(1.10)	(1.07)	(1.22)
Practicing			−0.03	−0.04	0.07	−0.05	−0.00	0.00	0.03
			(0.06)	(0.05)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
Postmaterialism	0.122	0.114							
	(0.110)	(0.109)							
materialist			0.11	0.30	1.15***	−0.03	−0.16	−0.12	0.74*

			(0.30)	(0.27)	(0.29)	(0.29)	(0.28)	(0.28)	(0.32)
post-materialist			0.14	−0.17	0.21	0.29	0.12	0.20	0.33
			(0.26)	(0.24)	(0.25)	(0.25)	(0.24)	(0.24)	(0.27)
Issue voting	0.377***	0.365***							
	(0.040)	(0.040)							
Issue 2			0.57	0.22	−1.04**	−0.27	0.25	−0.31	−0.16
			(0.39)	(0.34)	(0.36)	(0.35)	(0.35)	(0.35)	(0.40)
3			0.81	−0.18	−1.43*	−1.22*	0.52	0.70	−1.54*
			(0.63)	(0.55)	(0.59)	(0.58)	(0.58)	(0.58)	(0.69)
4			−0.49	0.42	−0.42	−0.06	0.12	0.39	0.22
			(0.41)	(0.36)	(0.39)	(0.37)	(0.37)	(0.37)	(0.42)
5			−1.37	0.08	−0.16	−1.15	−0.20	0.28	0.07
			(0.76)	(0.66)	(0.72)	(0.70)	(0.70)	(0.69)	(0.78)
6			0.38	1.17**	−0.75	−0.25	0.81	−0.08	−0.18
			(0.50)	(0.45)	(0.47)	(0.47)	(0.46)	(0.46)	(0.52)
7			0.81	2.70**	−0.82	0.38	0.21	0.03	2.00*
			(0.99)	(0.86)	(0.88)	(0.95)	(0.91)	(0.89)	(1.01)
8			0.74	0.23	−0.14	−0.47	−3.00*	−1.92	−2.14
			(1.57)	(1.37)	(1.47)	(1.71)	(1.45)	(1.68)	(1.91)
9			0.32	1.38***	−0.87*	−0.27	0.98**	−0.70	−0.46
			(0.41)	(0.36)	(0.38)	(0.37)	(0.37)	(0.37)	(0.42)
10			1.45	−0.71	−1.05	−1.60	−1.49	−1.45	−0.46
			(0.97)	(0.84)	(0.91)	(0.89)	(0.88)	(0.87)	(0.98)
12			−1.13	0.48	−0.38	1.07	−0.03	0.12	0.65
			(0.61)	(0.53)	(0.58)	(0.56)	(0.57)	(0.55)	(0.63)
13			1.33	0.94	1.46	−0.45	−1.20	−0.45	0.72
			(0.94)	(0.82)	(0.89)	(0.86)	(0.86)	(0.85)	(1.07)
Electoral strength of party	0.084***								
	(0.004)								
2.party		-2.676***							
		(0.139)							
3.party		-0.996***							
		(0.139)							
4.party		-1.897***							
		(0.139)							
5.party		-0.740***							
		(0.140)							
6.party		-1.159***							
		(0.139)							
7.party		-1.489***							
		(0.142)							
Constant	4.338***	6.797***	5.00***	2.53***	2.78***	4.00***	6.36***	6.97***	7.44***
	(0.093)	(0.107)	(0.73)	(0.64)	(0.69)	(0.67)	(0.67)	(0.66)	(0.77)
R-squared	0.455	0.464	0.52	0.18	0.55	0.30	0.58	0.54	0.32
Observations	4,534	4,534	4512	4512	4512	4512	4512	4512	4512

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$

Table 11: Propensities to vote: Flanders

				PRL	PVV	PS	SP	PSC	CVP	VU	FDF-RW	Ecolo	PCB
Left-right distance	-0.455***	-0.455***	-0.315***	−0.31***	−0.31***	−0.31***	−0.31***	−0.31***	−0.31***	−0.31***	−0.31***	−0.31***	−0.31***
	(0.056)	(0.056)	(0.036)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Class	0.751***	0.727***	0.775***										
	(0.143)	(0.142)	(0.092)										
Occupation 3				3.27	3.32	−1.52	2.84	−1.06	2.73	−2.53	0.25	3.84	−0.06
				(3.52)	(2.82)	(3.45)	(3.79)	(2.97)	(2.86)	(3.64)	(3.03)	(4.31)	(2.80)
4				2.22	−3.03	0.56	0.93	−1.25	4.60	−0.18	3.44	4.59	1.43
				(3.15)	(2.39)	(3.20)	(3.43)	(2.70)	(2.62)	(3.31)	(2.78)	(3.93)	(2.71)
5				0.83	−0.48	−2.72	3.86	−2.59	3.77	−0.10	−0.77	5.61	−1.89
				(4.14)	(4.12)	(4.08)	(4.55)	(3.55)	(3.36)	(4.25)	(3.49)	(5.05)	(3.24)
6				2.87	3.40	−2.28	0.59	−1.52	3.72	−2.25	1.62	1.90	0.30
				(3.51)	(3.01)	(3.46)	(3.81)	(2.98)	(2.86)	(3.63)	(2.98)	(4.33)	(2.87)
7				3.23	1.10	−1.71	1.75	−0.94	3.12	−0.56	2.10	5.82	1.28
				(3.10)	(2.24)	(3.07)	(3.29)	(2.58)	(2.50)	(3.18)	(2.67)	(3.78)	(2.52)
8				1.25	0.43	−2.37	0.91	−1.05	3.34	−0.06	1.89	5.69	−0.07
				(2.98)	(2.12)	(2.96)	(3.19)	(2.54)	(2.43)	(3.08)	(2.54)	(3.69)	(2.38)
9				2.76	−2.11	−0.95	1.64	0.81	2.93	−1.90	0.25	8.14*	1.14
				(3.12)	(2.60)	(3.05)	(3.31)	(2.65)	(2.52)	(3.21)	(2.70)	(3.82)	(2.43)
10				5.77	2.38	0.37	2.82	2.69	4.75	3.20	5.40	6.71	5.08
				(4.22)	(4.25)	(4.13)	(4.62)	(3.58)	(3.41)	(4.30)	(3.57)	(5.12)	(3.31)
11				3.38	−0.74	0.54	3.89	0.85	3.64	0.74	1.50	8.20*	0.51
				(2.99)	(2.01)	(2.93)	(3.15)	(2.51)	(2.42)	(3.11)	(2.54)	(3.66)	(2.41)
12				0.82	−2.96	−3.14	0.73	−2.07	2.95	2.26	3.03	9.22*	−1.68
				(3.23)	(2.58)	(3.18)	(3.50)	(2.73)	(2.65)	(3.42)	(2.78)	(3.99)	(2.69)
13				2.51	−0.29	−1.78	3.73	−1.43	2.97	−1.68	0.87	4.76	−0.24
				(2.96)	(1.93)	(2.93)	(3.14)	(2.52)	(2.40)	(3.06)	(2.53)	(3.65)	(2.36)
14				3.20	0.04	−1.95	2.63	−0.95	2.49	−1.38	0.46	5.55	−0.58
				(2.99)	(1.93)	(2.97)	(3.17)	(2.53)	(2.42)	(3.08)	(2.53)	(3.65)	(2.39)
15				2.02	−0.61	−0.35	2.91	−2.45	2.22	0.42	1.16	6.65	−0.31
				(3.19)	(2.45)	(3.16)	(3.39)	(2.71)	(2.58)	(3.31)	(2.72)	(3.93)	(2.56)
17				4.51	−1.62	−0.43	4.16	0.93	1.88	−0.35	2.73	6.01	1.81
				(3.02)	(2.23)	(3.06)	(3.26)	(2.62)	(2.48)	(3.16)	(2.63)	(3.69)	(2.42)
Education				−0.08	−0.17	−0.11	0.13	0.12	0.11	0.06	−0.15	0.07	−0.06
				(0.12)	(0.15)	(0.12)	(0.13)	(0.10)	(0.09)	(0.12)	(0.10)	(0.15)	(0.10)
Union				0.59	−0.88	0.50	−0.44	0.25	0.07	−1.23*	−0.05	−1.25	0.56
				(0.61)	(0.69)	(0.56)	(0.64)	(0.47)	(0.47)	(0.61)	(0.51)	(0.73)	(0.53)
EC-approval	1.551**	1.136*	1.733***	−0.05	0.10	−0.27	0.65*	−0.08	−0.05	0.01	−0.40	0.09	−0.05
	(0.663)	(0.670)	(0.469)	(0.23)	(0.28)	(0.22)	(0.26)	(0.19)	(0.19)	(0.24)	(0.21)	(0.29)	(0.19)
Government approval	0.600***	0.566***	0.527***	−1.13	−2.76***	−0.19	1.49*	−0.08	0.24	0.60	−0.15	0.06	−0.26
	(0.213)	(0.213)	(0.184)	(0.60)	(0.70)	(0.57)	(0.64)	(0.48)	(0.45)	(0.58)	(0.53)	(0.70)	(0.49)
Religion	0.620***	0.576***	0.659***										
	(0.160)	(0.159)	(0.127)										
Protestant				−0.59	2.20	−0.11	−4.03**	1.15	5.06***	4.20**	2.33*	−1.68	1.99
				(1.43)	(1.64)	(1.41)	(1.52)	(1.16)	(1.12)	(1.41)	(1.13)	(1.69)	(1.30)
Practicing				0.55	−0.09	−0.08	0.52	−0.05	−0.88**	−1.13**	−0.46	0.26	−0.52
				(0.42)	(0.48)	(0.43)	(0.45)	(0.35)	(0.33)	(0.42)	(0.32)	(0.50)	(0.39)
Postmaterialism	0.908*	0.812	0.765**										
	(0.519)	(0.518)	(0.382)										
materialist				−0.66	0.59	0.33	0.19	−0.31	0.97	0.31	−0.29	−0.17	−0.42
				(0.70)	(0.85)	(0.69)	(0.76)	(0.58)	(0.56)	(0.73)	(0.59)	(0.88)	(0.58)
post-materialist				−0.88	0.00	0.19	−0.53	−0.95	1.09*	−1.35*	−0.98	0.62	−1.36*

				(0.65)	(0.77)	(0.60)	(0.72)	(0.51)	(0.52)	(0.68)	(0.55)	(0.79)	(0.54)
Issue voting	0.502**	0.507**	0.596***										
	(0.222)	(0.220)	(0.120)										
Issue 2				−3.52*	−0.39	−1.65	−2.29	−1.90	1.54	−0.16	−1.58	0.18	−0.27
				(1.47)	(1.74)	(1.37)	(1.62)	(1.17)	(1.16)	(1.46)	(1.19)	(1.73)	(1.10)
3				−3.41*	2.13	−0.54	−3.27	−0.34	1.74	−0.06	−0.88	−2.18	0.25
				(1.63)	(1.95)	(1.55)	(1.82)	(1.32)	(1.31)	(1.66)	(1.36)	(1.93)	(1.27)
4				−4.16*	−0.32	−1.82	−0.99	−1.11	1.17	0.14	−2.12	−0.99	0.42
				(1.66)	(1.98)	(1.57)	(1.84)	(1.35)	(1.32)	(1.66)	(1.35)	(1.96)	(1.24)
5				−0.22	2.90	−5.01	−5.01	0.06	−1.32	−1.15	−2.96	3.60	−1.18
				(2.34)	(2.80)	(3.18)	(3.56)	(2.53)	(2.70)	(3.43)	(2.81)	(3.97)	(2.62)
6				−3.16	−1.07	−0.75	−0.92	−1.38	0.12	0.32	−0.91	0.43	−0.15
				(1.74)	(2.06)	(1.64)	(1.94)	(1.40)	(1.40)	(1.76)	(1.42)	(2.13)	(1.30)
7				−2.49	−2.14	−1.77	−0.84	−0.72	1.05	−0.70	−1.14	0.19	0.04
				(1.63)	(1.96)	(1.52)	(1.78)	(1.29)	(1.29)	(1.66)	(1.33)	(1.95)	(1.23)
9				−4.41**	−1.59	−0.95	−1.70	−1.84	2.61*	0.06	−2.57*	0.63	−1.50
				(1.53)	(1.79)	(1.40)	(1.66)	(1.20)	(1.19)	(1.51)	(1.23)	(1.77)	(1.13)
10				−8.10**	0.85	−5.06*	−4.62	−4.51*	2.78	−1.39	−4.41*	−1.08	−2.85
				(2.58)	(3.22)	(2.49)	(2.97)	(2.11)	(2.14)	(2.65)	(2.16)	(3.13)	(2.27)
12				−3.68	−1.61	−0.92	−3.47	−1.41	3.25	−0.07	−2.50	−1.59	0.75
				(2.31)	(2.80)	(2.22)	(2.59)	(1.90)	(1.86)	(2.33)	(1.90)	(2.79)	(1.92)
Electoral strength of party	0.013												
	(0.013)												
2.party			1.699***										
			(0.321)										
3.party			0.323										
			(0.324)										
4.party		0.274	1.927***										
		(0.321)	(0.321)										
5.party			-0.028										
			(0.327)										
6.party		-0.405	1.304***										
		(0.326)	(0.317)										
7.party		-0.769**	0.901***										
		(0.331)	(0.322)										
8.party			0.043										
			(0.332)										
9.party			3.219***										
			(0.317)										
10.party			-0.261										
			(0.345)										
Constant	5.035***	5.510***	3.458***	4.76	7.15**	7.53*	3.45	4.60	−2.81	4.53	5.20	1.13	3.88
	(0.313)	(0.265)	(0.248)	(3.35)	(2.74)	(3.27)	(3.59)	(2.83)	(2.71)	(3.43)	(2.84)	(4.07)	(2.60)
R-squared	0.265	0.263	0.243	0.35	0.46	0.31	0.41	0.29	0.49	0.37	0.30	0.39	0.28
Observations	582	582	1,310	1242	1242	1242	1242	1242	1242	1242	1242	1242	1242

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$

Table 12: Propensities to vote: France

	stacked	stacked	stacked	SURE									
				PC	PS	MRG	PSU	Ecolo	PR-UDF	CDS-UDF	Radical	RPR	FN
Left-right distance	-0.581***	-0.548***	-0.551***	-0.51^{***}	-0.51^{***}	-0.51^{***}	-0.51^{***}	-0.51^{***}	-0.51^{***}	-0.51^{***}	-0.51^{***}	-0.51^{***}	-0.51^{***}
	(0.025)	(0.025)	(0.015)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Class	0.531***	0.523***	0.527***										
	(0.080)	(0.078)	(0.050)										
Occupation 3				0.06	0.17	-0.34	-1.65	-0.81	2.10	0.51	0.67	-1.23	-0.74
				(1.39)	(1.48)	(1.42)	(1.40)	(1.65)	(1.42)	(1.45)	(1.36)	(1.54)	(1.36)
3				-0.71	-0.09	-0.27	-0.82	0.33	0.31	0.39	-0.17	-0.12	0.43
				(0.64)	(0.69)	(0.67)	(0.65)	(0.77)	(0.66)	(0.67)	(0.63)	(0.71)	(0.64)
5				-1.21	-0.15	-0.41	-1.02	1.40	-0.11	0.51	0.86	-0.82	0.03
				(1.23)	(1.30)	(1.25)	(1.23)	(1.63)	(1.26)	(1.28)	(1.20)	(1.36)	(1.20)
6				-0.27	0.31	-0.60	-0.58	-1.06	-0.50	-0.64	-0.94	-1.19	0.49
				(0.71)	(0.76)	(0.75)	(0.72)	(0.85)	(0.73)	(0.75)	(0.70)	(0.79)	(0.71)
7				0.04	0.53	-0.74	-0.79	-0.01	0.38	0.02	-0.20	-0.30	0.15
				(0.57)	(0.60)	(0.59)	(0.57)	(0.68)	(0.58)	(0.59)	(0.56)	(0.62)	(0.56)
8				-0.06	0.73	-0.41	-0.61	-1.14	-0.31	0.37	-0.11	-0.57	0.03
				(0.61)	(0.65)	(0.66)	(0.62)	(0.73)	(0.63)	(0.63)	(0.60)	(0.67)	(0.61)
9				-0.12	0.74	-0.41	-0.64	0.17	0.12	-0.29	-0.44	-0.43	0.13
				(0.54)	(0.57)	(0.57)	(0.54)	(0.65)	(0.56)	(0.57)	(0.53)	(0.60)	(0.53)
10				-0.17	-0.32	-0.52	-0.72	-0.66	-0.91	-1.04	-0.35	-0.82	0.19
				(0.85)	(0.90)	(0.90)	(0.85)	(1.01)	(0.90)	(0.92)	(0.87)	(0.98)	(0.87)
11				0.06	0.95	0.37	-0.54	-0.52	-0.28	-0.59	-0.88	-1.25^{*}	0.15
				(0.56)	(0.60)	(0.60)	(0.57)	(0.68)	(0.58)	(0.59)	(0.56)	(0.62)	(0.56)
12				-0.34	0.32	-2.90^{**}	-1.93^{*}	-1.31	-1.18	-1.11	-0.94	-1.52	0.61
				(0.74)	(0.80)	(0.93)	(0.79)	(0.92)	(0.75)	(0.77)	(0.77)	(0.82)	(0.76)
13				0.24	0.07	-0.06	-0.76	-0.90	0.45	0.23	-0.41	-0.61	0.12
				(0.51)	(0.54)	(0.53)	(0.51)	(0.60)	(0.52)	(0.53)	(0.50)	(0.56)	(0.50)
14				-0.08	-0.37	-0.42	-0.45	-0.93	-0.14	0.34	-0.10	-0.61	0.73
				(0.54)	(0.57)	(0.57)	(0.54)	(0.64)	(0.55)	(0.56)	(0.53)	(0.59)	(0.53)
15				0.27	0.06	-0.64	-0.77	-1.25	0.22	0.17	-0.23	-0.64	0.94
				(0.59)	(0.62)	(0.62)	(0.59)	(0.70)	(0.60)	(0.61)	(0.58)	(0.64)	(0.57)
16				2.17	-0.59	1.09	-0.31	-0.64	1.67	1.80	0.58	2.12	2.25
				(1.66)	(1.77)	(1.70)	(1.67)	(1.98)	(1.70)	(1.73)	(1.63)	(1.84)	(1.63)
17				0.42	1.72^{*}	-0.73	-0.54	-0.37	-0.89	-0.21	-0.44	-1.81^{**}	1.04
				(0.62)	(0.67)	(0.68)	(0.62)	(0.74)	(0.64)	(0.65)	(0.62)	(0.68)	(0.61)
Education				-0.03	-0.03	0.02	0.07	0.04	-0.01	-0.03	-0.06	-0.03	-0.05
				(0.04)	(0.04)	(0.04)	(0.04)	(0.05)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Union				0.74^{**}	0.68^{*}	0.64^{*}	0.39	-0.34	-0.79^{**}	-0.38	-0.58^{*}	-1.05^{***}	-0.33
				(0.27)	(0.29)	(0.29)	(0.27)	(0.33)	(0.28)	(0.28)	(0.27)	(0.30)	(0.27)
EC-approval	0.382***	0.291**	0.467***	-0.30^{***}	0.04	-0.12	-0.27^{**}	-0.08	0.32^{***}	0.28^{***}	0.26^{**}	0.18^{*}	-0.36^{***}
	(0.128)	(0.125)	(0.083)	(0.08)	(0.09)	(0.09)	(0.08)	(0.10)	(0.08)	(0.08)	(0.08)	(0.09)	(0.08)
Governmental approval	0.601***	0.626***	0.605***	-0.17	2.72^{***}	1.18^{***}	0.27	0.88^{***}	-1.37^{***}	-0.72^{***}	-0.73^{***}	-1.75^{***}	-0.21
	(0.051)	(0.050)	(0.037)	(0.19)	(0.21)	(0.21)	(0.20)	(0.23)	(0.19)	(0.20)	(0.19)	(0.21)	(0.19)
Religion	0.392***	0.418***	0.400***										
	(0.099)	(0.096)	(0.055)										
protestant				-1.04^{**}	-0.84^{*}	-0.73	-0.31	-1.13^{*}	0.64	0.26	0.16	1.14^{**}	-0.02
				(0.37)	(0.39)	(0.40)	(0.38)	(0.45)	(0.38)	(0.38)	(0.36)	(0.41)	(0.37)
Practicing				0.17	0.14	0.24^{*}	0.13	0.26^{*}	0.10	0.12	0.16	-0.01	0.02
				(0.09)	(0.10)	(0.10)	(0.09)	(0.11)	(0.09)	(0.10)	(0.09)	(0.10)	(0.09)
Postmaterialism	0.375**	0.447***	0.374***										
	(0.171)	(0.167)	(0.097)										

materialist				−0.03	−0.56*	−0.28	−0.16	−0.13	0.31	0.57*	0.48*	0.58*	0.94***
				(0.24)	(0.26)	(0.26)	(0.25)	(0.30)	(0.24)	(0.25)	(0.24)	(0.27)	(0.24)
post-materialist				0.81***	0.23	0.14	0.13	−0.10	−0.18	−0.25	−0.03	−0.16	0.42
				(0.24)	(0.25)	(0.25)	(0.24)	(0.29)	(0.25)	(0.25)	(0.24)	(0.27)	(0.24)
Issue voting	0.574***	0.570***	0.483***										
	(0.090)	(0.088)	(0.058)										
2				0.42	−0.02	−0.10	0.22	−0.52	−0.03	0.02	0.04	0.03	−0.05
				(0.23)	(0.25)	(0.25)	(0.23)	(0.28)	(0.23)	(0.24)	(0.23)	(0.26)	(0.23)
3				−0.22	−0.50	−0.18	−0.61	−0.75	−0.78	0.11	0.19	−0.26	−0.28
				(0.61)	(0.65)	(0.69)	(0.63)	(0.73)	(0.61)	(0.62)	(0.59)	(0.67)	(0.61)
4				0.73	−0.51	−0.13	0.34	0.19	−0.35	−0.61	−0.57	0.14	0.12
				(0.47)	(0.50)	(0.52)	(0.49)	(0.58)	(0.47)	(0.49)	(0.46)	(0.52)	(0.46)
5				−0.67	−1.58	1.29	−0.53	−0.15	0.62	0.89	−0.18	1.27	1.06
				(0.88)	(0.93)	(0.95)	(0.88)	(1.04)	(0.90)	(0.91)	(0.86)	(0.98)	(0.86)
6				2.04**	1.55*	0.59	−0.15	0.10	0.52	0.16	0.40	−0.90	−0.16
				(0.73)	(0.74)	(0.77)	(0.70)	(0.83)	(0.70)	(0.70)	(0.69)	(0.77)	(0.72)
7				0.65	−0.36	0.21	0.10	−0.45	−0.41	−0.25	−0.39	−0.70	0.11
				(0.36)	(0.38)	(0.39)	(0.37)	(0.43)	(0.36)	(0.37)	(0.36)	(0.40)	(0.36)
8				1.20	2.23	6.17***	2.05	2.09	2.31	3.02	3.47*	1.55	−1.47
				(1.61)	(1.72)	(1.64)	(1.62)	(1.91)	(1.64)	(1.67)	(1.57)	(1.78)	(1.57)
9				0.09	0.03	0.60	0.60	2.17***	0.34	0.50	0.47	−0.01	−0.14
				(0.44)	(0.47)	(0.46)	(0.44)	(0.53)	(0.44)	(0.44)	(0.43)	(0.48)	(0.43)
10				0.65	−0.65	−0.43	0.31	0.41	0.08	0.48	0.05	0.29	2.37***
				(0.55)	(0.60)	(0.57)	(0.55)	(0.66)	(0.56)	(0.56)	(0.52)	(0.59)	(0.53)
11				3.25	2.40		3.01	0.66	−1.46	−1.86	−1.82	−3.10	−0.37
				(2.18)	(2.29)		(2.12)	(2.62)	(2.28)	(2.30)	(2.16)	(2.49)	(2.20)
12				−0.07	−0.32	0.27	−0.40	−1.06*	0.72	0.80	0.64	0.27	−0.08
				(0.41)	(0.45)	(0.44)	(0.43)	(0.50)	(0.43)	(0.44)	(0.42)	(0.47)	(0.42)
13				−0.66	−4.48	−2.60	−0.94	4.42	−2.84	−2.35	−2.94	4.34	−3.88
				(2.29)	(2.44)	(2.34)	(2.30)	(2.72)	(2.33)	(2.38)	(2.24)	(2.54)	(2.24)
Electoral strength of party	0.071***												
	(0.005)												
New Politics Party	1.097***												
	(0.119)												
2.party		2.486***	2.468***										
		(0.142)	(0.136)										
3.party			0.442***										
			(0.140)										
4.party			0.216										
			(0.136)										
5.party		2.365***	2.354***										
		(0.143)	(0.137)										
6.party			1.561***										
			(0.136)										
7.party		1.222***	1.207***										
		(0.141)	(0.137)										
8.party			0.827***										
			(0.137)										
9.party			1.942***										
			(0.135)										
10.party			0.830***										
			(0.136)										
Constant	4.685***	4.432***	4.446***	5.01***	5.57***	4.65***	5.18***	7.31***	5.16***	4.80***	5.04***	6.84***	5.68***
	(0.129)	(0.131)	(0.109)	(0.57)	(0.61)	(0.61)	(0.58)	(0.68)	(0.58)	(0.59)	(0.56)	(0.63)	(0.56)

R-squared	0.430	0.456	0.433	0.33	0.55	0.30	0.24	0.24	0.44	0.34	0.33	0.50	0.37
Observations	2,389	2,389	5,898	5876	5876	5876	5876	5876	5876	5876	5876	5876	5876

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$

Table 13: Propensities to vote: Germany

	stacked	stacked	SURE				
			CDU/CSU	SDP	FDP	Gruenen	Republikaner
Left-right distance	-0.618***	-0.596***	−0.57***	−0.57***	−0.57***	−0.57***	−0.57***
	(0.019)	(0.020)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Class	0.456***	0.465***					
	(0.052)	(0.051)					
Occupation 3			−0.21	0.08	1.44	−0.73	−1.38
			(1.09)	(1.13)	(1.10)	(1.05)	(1.07)
4			0.39	−0.14	0.18	−0.92	−2.12*
			(0.87)	(0.92)	(0.88)	(0.84)	(0.87)
5			0.07	0.17	−1.53	−1.49	−1.46
			(1.02)	(1.06)	(1.03)	(0.98)	(1.00)
6			0.32	0.26	0.11	−0.96	−1.68
			(0.87)	(0.92)	(0.88)	(0.84)	(0.87)
7			−0.24	0.30	−0.66	−0.32	−2.28**
			(0.83)	(0.88)	(0.84)	(0.79)	(0.83)
8			−0.97	0.21	−0.18	−0.02	−1.58
			(0.92)	(0.97)	(0.93)	(0.89)	(0.92)
9			−0.12	0.85	−0.39	−0.97	−1.74*
			(0.89)	(0.94)	(0.90)	(0.85)	(0.89)
10			−0.87	0.39	−0.73	−0.75	−2.32*
			(1.08)	(1.12)	(1.09)	(1.04)	(1.06)
11			−0.44	−0.08	−0.39	−0.89	−2.05*
			(0.84)	(0.89)	(0.85)	(0.80)	(0.84)
12			−0.49	0.52	−0.16	−0.36	−1.83*
			(0.89)	(0.94)	(0.90)	(0.85)	(0.89)
13			−0.28	0.35	−0.24	−1.05	−2.24**
			(0.83)	(0.88)	(0.84)	(0.79)	(0.83)
14			−0.31	0.26	−0.26	−0.71	−2.00*
			(0.83)	(0.88)	(0.84)	(0.80)	(0.83)
15			−0.56	0.32	−0.20	0.44	−1.38
			(0.90)	(0.94)	(0.91)	(0.86)	(0.90)
16			−0.72	−0.81		−1.62	−2.83
			(2.55)	(2.65)		(2.48)	(2.48)
17			0.59	−1.36	−0.13	−0.59	−2.07*
			(0.98)	(1.02)	(0.99)	(0.95)	(0.97)
Education			0.03	−0.11**	0.04	0.10*	−0.11**
			(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Union			−0.43*	0.87***	−0.03	0.04	0.04
			(0.21)	(0.21)	(0.22)	(0.20)	(0.20)
EC-approval	0.749***	0.740***	0.15*	0.08	0.18**	0.08	−0.22***
	(0.125)	(0.125)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
Government approval	0.647***	0.657***	3.04***	−1.74***	0.83***	−1.13***	−0.88***
	(0.035)	(0.035)	(0.19)	(0.19)	(0.19)	(0.19)	(0.18)
Religion	0.506***	0.528***					
	(0.076)	(0.075)					
Protestant			0.80***	−0.80***	−0.12	0.02	0.39*
			(0.18)	(0.18)	(0.18)	(0.18)	(0.17)
Practicing			−0.18**	0.11	−0.09	−0.08	0.06
			(0.07)	(0.07)	(0.07)	(0.06)	(0.06)
Postmaterialism	0.240***	0.242***					
	(0.070)	(0.070)					

materialists			0.51	−0.36	−0.25	−0.28	0.02
			(0.27)	(0.27)	(0.27)	(0.26)	(0.26)
post-materialists			−0.29	0.06	0.25	0.56**	−0.00
			(0.21)	(0.21)	(0.21)	(0.20)	(0.20)
Issue voting	0.361***	0.371***					
	(0.065)	(0.064)					
Issue 2			−0.77**	0.44	0.16	0.13	0.03
			(0.25)	(0.26)	(0.26)	(0.24)	(0.24)
3			−0.62	−0.26	−0.15	−0.07	0.15
			(0.46)	(0.46)	(0.46)	(0.44)	(0.43)
4			0.03	−0.53	0.22	0.83	0.00
			(0.79)	(0.79)	(0.79)	(0.75)	(0.74)
5			−1.24	−0.42	0.04	0.82	−0.06
			(0.86)	(0.87)	(0.87)	(0.82)	(0.82)
6			−0.27	0.77	0.40	0.27	0.16
			(0.40)	(0.41)	(0.41)	(0.39)	(0.39)
7			0.45	0.32	0.55	0.17	1.09*
			(0.56)	(0.58)	(0.57)	(0.55)	(0.54)
8			0.97	0.91	−0.57	0.43	0.42
			(1.79)	(1.80)	(1.79)	(1.70)	(1.69)
9			−0.42	0.39	0.20	0.98***	−0.43
			(0.27)	(0.28)	(0.28)	(0.27)	(0.27)
10			−0.23	−0.13	0.38	−0.45	0.89*
			(0.45)	(0.46)	(0.46)	(0.43)	(0.43)
11			−2.06	1.19	−1.92	1.71	−0.29
			(2.52)	(2.54)	(2.53)	(2.41)	(2.38)
12			0.40	0.54	−1.52	−2.42*	−0.59
			(1.28)	(1.29)	(1.29)	(1.22)	(1.21)
Electoral strength of party	0.066***						
	(0.003)						
New Politics Party	0.588***						
	(0.104)						
2.party		0.962***					
		(0.122)					
3.party		-1.454***					
		(0.122)					
4.party		-0.875***					
		(0.123)					
5.party		-1.710***					
		(0.127)					
Constant	4.797***	6.754***	5.65***	8.19***	4.69***	6.15***	7.94***
	(0.097)	(0.099)	(0.87)	(0.91)	(0.88)	(0.83)	(0.86)
R-squared	0.473	0.480	0.55	0.47	0.16	0.45	0.28
Observations	4,013	4,013	3987	3987	3987	3987	3987

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$

Table 14: Propensities to vote: Great Britain

	stacked	stacked	SURE					
			Conservative	Labour	SLD	Soc. Dem.	Nationalists	Greens
Left-right distance	-0.434***	-0.422***	−0.41***	−0.41***	−0.41***	−0.41***	−0.41***	−0.41***
	(0.021)	(0.022)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Class	0.399***	0.401***						
	(0.065)	(0.065)						
Occupation 3			0.27	−0.50	0.68	0.18	−0.16	−0.99
			(0.84)	(0.95)	(1.06)	(1.02)	(1.00)	(0.97)
4			0.46	0.31	0.08	0.07	−1.19	−0.44
			(0.65)	(0.74)	(0.87)	(0.79)	(0.81)	(0.78)
5			0.88	−0.10	0.58	0.81	−1.00	−0.95
			(0.66)	(0.75)	(0.87)	(0.78)	(0.81)	(0.79)
6			0.00	−0.45	0.46	−0.15	−1.50	−0.62
			(0.83)	(0.96)	(1.06)	(0.96)	(1.07)	(1.00)
7			1.03	−1.43	1.25	0.40	−0.88	0.04
			(0.65)	(0.74)	(0.85)	(0.77)	(0.80)	(0.75)
8			−0.06	−0.80	1.91*	0.91	−0.79	−0.74
			(0.58)	(0.66)	(0.78)	(0.71)	(0.71)	(0.71)
9			0.22	0.26	1.39	0.73	−0.35	0.07
			(0.65)	(0.73)	(0.84)	(0.76)	(0.84)	(0.77)
10			1.00	0.27	0.33	−0.87	−1.71	−0.14
			(0.85)	(0.96)	(1.12)	(1.02)	(1.07)	(1.20)
11			0.36	−0.45	0.75	0.52	−0.81	−0.76
			(0.60)	(0.68)	(0.79)	(0.72)	(0.73)	(0.71)
12			−0.44	0.35	0.39	0.22	−1.39	−0.83
			(0.58)	(0.66)	(0.77)	(0.70)	(0.72)	(0.69)
13			0.43	−0.14	0.61	0.56	−0.98	−0.62
			(0.53)	(0.60)	(0.71)	(0.65)	(0.67)	(0.63)
14			−0.08	−0.09	0.53	0.77	−0.66	−0.17
			(0.54)	(0.61)	(0.73)	(0.66)	(0.68)	(0.66)
15			0.05	0.59	−0.37	0.23	−1.27	0.32
			(0.67)	(0.76)	(0.89)	(0.81)	(0.84)	(0.79)
Education			0.08	−0.13*	0.09	0.02	−0.06	0.05
			(0.05)	(0.05)	(0.06)	(0.05)	(0.06)	(0.05)
Union			−0.09	0.33	−0.07	0.12	0.28	0.74**
			(0.21)	(0.24)	(0.26)	(0.24)	(0.26)	(0.26)
EC-approval	0.011	-0.045	−0.07	0.06	−0.00	−0.01	−0.05	−0.11
	(0.325)	(0.325)	(0.07)	(0.07)	(0.08)	(0.08)	(0.08)	(0.08)
Government approval	0.764***	0.769***	4.67***	−3.74***	−0.71**	−0.05	−0.66**	−0.75**
	(0.029)	(0.029)	(0.21)	(0.23)	(0.25)	(0.23)	(0.24)	(0.25)
Religion	0.331**	0.337**						
	(0.142)	(0.141)						
Protestant			−0.01	0.68	−0.73	−0.29	−0.63	−0.06
			(0.33)	(0.37)	(0.41)	(0.38)	(0.40)	(0.41)
practicing			0.08	−0.03	0.01	−0.08	−0.12	−0.01
			(0.05)	(0.06)	(0.07)	(0.06)	(0.07)	(0.07)
Post-materialism	0.157*	0.160*						
	(0.085)	(0.085)						
materialist			0.23	−0.36	−0.35	0.13	0.11	−0.07
			(0.25)	(0.29)	(0.32)	(0.29)	(0.32)	(0.32)
post-materialist			−0.37	−0.05	−0.21	0.02	−0.22	0.35
			(0.21)	(0.24)	(0.27)	(0.25)	(0.27)	(0.26)

Issue voting	0.693***	0.694***						
	(0.079)	(0.079)						
Issue 2			−0.42	0.25	−0.18	0.27	0.70	−0.80
	(0.55)	(0.61)	(0.69)	(0.62)	(0.65)	(0.66)		
3			0.23	−0.47	0.36	0.56	−0.03	−1.18
			(0.60)	(0.67)	(0.76)	(0.69)	(0.72)	(0.73)
4			−0.33	0.57	0.27	0.52	0.34	−1.27
			(0.60)	(0.67)	(0.75)	(0.68)	(0.73)	(0.72)
5			0.57	1.07	0.89	0.77	0.01	−0.88
			(0.86)	(0.93)	(1.04)	(0.92)	(0.93)	(1.00)
6			−0.48	−0.27	−1.20	−0.31	0.60	−0.22
			(0.68)	(0.76)	(0.87)	(0.79)	(0.79)	(0.83)
7			−0.24	−0.01	0.40	0.54	−0.44	−0.34
			(0.55)	(0.61)	(0.69)	(0.62)	(0.65)	(0.66)
8			−0.92	−3.47*	0.08	1.72	3.37	3.10*
			(1.24)	(1.39)	(1.66)	(1.51)	(1.73)	(1.57)
9			0.28	0.17	0.28	0.57	0.15	1.43*
			(0.59)	(0.65)	(0.72)	(0.66)	(0.70)	(0.70)
10			0.18	−0.28	−0.08	−0.08	−0.59	−0.69
			(0.64)	(0.72)	(0.81)	(0.73)	(0.79)	(0.78)
12			0.23	−0.82	0.52	1.04	−0.61	−0.25
			(0.75)	(0.83)	(0.93)	(0.86)	(0.88)	(0.90)
Electoral strength of party	0.066***							
	(0.003)							
New Politics Party	1.043***							
	(0.121)							
2.party		-0.043						
		(0.136)						
3.party		-1.753***						
		(0.144)						
4.party		-2.418***						
		(0.144)						
5.party		-2.716***						
		(0.153)						
6.party		-0.959***						
		(0.145)						
Constant	3.868***	6.408***	4.11***	8.39***	4.04***	3.16***	5.39***	6.28***
	(0.092)	(0.119)	(0.78)	(0.87)	(1.00)	(0.91)	(0.93)	(0.92)
R^2	0.475	0.477	0.69	0.57	0.22	0.12	0.20	0.27
Num. obs.	3,206	3,206	3163	3163	3163	3163	3163	3163

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$

Table 15: Propensities to vote: Greece

				PASOK 1	ND	KKE	EAR	DIANA	KKE-INT	EPEN
Left-right distance	-0.452***	-0.449***	-0.379***	−0.43***	−0.43***	−0.43***	−0.43***	−0.43***	−0.43***	−0.43***
	(0.019)	(0.019)	(0.015)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Class	0.278***	0.273***	0.309***							
	(0.055)	(0.054)	(0.049)							
Occupation 3				−0.60	0.07	0.49	0.06	0.16	0.42	0.17
				(0.44)	(0.57)	(0.56)	(0.47)	(0.53)	(0.42)	(0.38)
4				0.25	0.63	0.26	−0.11	0.47	0.03	0.18
				(0.35)	(0.45)	(0.44)	(0.38)	(0.43)	(0.34)	(0.31)
5				−1.00	0.24	1.14	1.49*	0.88	1.57*	−0.47
				(0.70)	(0.91)	(0.90)	(0.75)	(0.84)	(0.67)	(0.61)
7				−0.58	0.57	0.07	0.77	0.81	0.59	0.03
				(0.52)	(0.68)	(0.67)	(0.56)	(0.63)	(0.50)	(0.46)
8				0.54	0.13	0.57	−0.28	0.36	0.18	−0.06
				(0.41)	(0.54)	(0.53)	(0.44)	(0.50)	(0.40)	(0.37)
9				−0.96*	1.03	−0.02	−0.13	0.59	0.16	−0.09
				(0.49)	(0.64)	(0.63)	(0.53)	(0.60)	(0.47)	(0.43)
10				−0.48	1.34	0.55	−0.11	−0.02	−0.27	1.31*
				(0.59)	(0.77)	(0.77)	(0.63)	(0.71)	(0.56)	(0.53)
11				−0.07	0.91	−0.09	−0.54	0.21	−0.21	−0.03
				(0.43)	(0.57)	(0.56)	(0.47)	(0.53)	(0.42)	(0.38)
12				0.96*	−0.68	0.16	−0.01	0.12	−0.05	0.49
				(0.46)	(0.59)	(0.57)	(0.49)	(0.59)	(0.44)	(0.42)
13				−0.46	0.17	0.52	−0.11	0.02	−0.07	−0.15
				(0.32)	(0.42)	(0.41)	(0.35)	(0.41)	(0.31)	(0.29)
14				−0.20	0.34	0.68	−0.06	0.42	0.23	−0.07
				(0.31)	(0.41)	(0.40)	(0.34)	(0.40)	(0.31)	(0.28)
15				−0.04	0.16	0.74	−0.33	0.02	−0.42	0.12
				(0.46)	(0.59)	(0.58)	(0.49)	(0.56)	(0.44)	(0.41)
16				−0.22	1.30	−2.39	−1.26	−0.59	−0.65	−0.45
				(1.32)	(1.74)	(1.72)	(1.42)	(1.58)	(1.28)	(1.15)
17				0.20	1.14	0.86	0.16	0.61	0.88	0.19
				(0.53)	(0.69)	(0.67)	(0.59)	(0.65)	(0.53)	(0.48)
Education				−0.02	−0.04	−0.04	0.01	−0.01	0.04	0.02
				(0.04)	(0.05)	(0.05)	(0.04)	(0.04)	(0.03)	(0.03)
Union				0.28	−0.32	1.15***	0.28	0.31	−0.06	0.22
				(0.25)	(0.32)	(0.32)	(0.26)	(0.30)	(0.24)	(0.22)
EC-approval	0.639***	0.707***	0.740***	0.04	0.59***	−0.34***	−0.14*	0.08	0.04	−0.21***
	(0.075)	(0.074)	(0.068)	(0.06)	(0.08)	(0.08)	(0.07)	(0.08)	(0.06)	(0.06)
Governmental approval	0.789***	0.792***	0.822***	5.68***	−3.94***	−1.54***	−1.29***	−0.59**	−0.92***	0.51**
	(0.024)	(0.024)	(0.023)	(0.18)	(0.23)	(0.23)	(0.19)	(0.22)	(0.17)	(0.16)
Religion	0.400***	0.373***	0.341***							
	(0.105)	(0.102)	(0.090)							
Protestant				0.30	−1.29	−0.79		−1.00	−0.24	0.04
				(1.91)	(2.50)	(2.24)		(2.27)	(1.39)	(1.67)
Practicing				−0.18	−0.35**	0.24	−0.00	0.02	−0.03	0.09
				(0.10)	(0.13)	(0.13)	(0.11)	(0.13)	(0.10)	(0.09)
Postmaterialism	0.390***	0.410***	0.407***							
	(0.110)	(0.107)	(0.094)							
materialist				0.24	0.08	−0.11	0.03	0.20	0.12	0.44*
				(0.20)	(0.26)	(0.26)	(0.21)	(0.25)	(0.19)	(0.18)
post-materialist				−0.23	−0.50	0.32	0.23	−0.08	−0.24	0.29

				(0.21)	(0.27)	(0.27)	(0.22)	(0.25)	(0.20)	(0.18)
Issued voting	0.343***	0.338***	0.421***							
	(0.067)	(0.065)	(0.058)							
Issue 2				−0.28	0.75	0.10	−0.47	−0.16	−0.05	−0.07
				(0.29)	(0.39)	(0.38)	(0.32)	(0.37)	(0.28)	(0.26)
3				−0.31	1.28**	−0.17	−0.22	−0.10	−0.13	−0.32
				(0.33)	(0.43)	(0.43)	(0.36)	(0.41)	(0.32)	(0.29)
4				0.03	1.24*	−0.65	−0.84*	0.01	−0.05	−0.51
				(0.39)	(0.50)	(0.49)	(0.42)	(0.48)	(0.37)	(0.35)
5				0.80	0.46	−0.97	−0.81	−0.83	−0.12	−0.66
				(0.68)	(0.89)	(0.88)	(0.73)	(0.82)	(0.66)	(0.60)
6				−0.89	0.65	0.15	−0.73	−0.52	−0.34	−0.10
				(0.46)	(0.59)	(0.60)	(0.51)	(0.58)	(0.44)	(0.41)
7				−0.72	0.60	0.83	−0.17	−0.00	0.10	−0.23
				(0.53)	(0.69)	(0.67)	(0.56)	(0.64)	(0.50)	(0.47)
8				0.17	0.71	−0.76	0.40	−0.23	−0.54	0.29
				(0.62)	(0.77)	(0.84)	(0.69)	(0.78)	(0.62)	(0.56)
9				−0.27	0.27	−0.78	−0.88	−0.81	−0.40	0.08
				(0.41)	(0.54)	(0.54)	(0.45)	(0.51)	(0.39)	(0.37)
10				−0.32	1.25*	−0.59	−0.84*	−1.26**	−0.20	−0.15
				(0.39)	(0.50)	(0.49)	(0.42)	(0.48)	(0.37)	(0.34)
11				0.75	−0.08	0.91	3.46**	1.41	6.28***	−1.23
				(1.30)	(1.41)	(1.34)	(1.22)	(1.54)	(0.92)	(0.94)
12				−0.13	0.87	1.03	1.34	−1.36	0.20	−0.43
				(0.95)	(1.15)	(1.14)	(0.94)	(1.05)	(0.85)	(0.77)
Electoral strength of party	0.052***									
	(0.002)									
2.party		0.262**	0.194							
		(0.129)	(0.125)							
3.party		-1.167***	-1.275***							
		(0.131)	(0.127)							
4.party			-2.136***							
			(0.128)							
5.party		-2.343***	-2.398***							
		(0.131)	(0.127)							
6.party			-2.355***							
			(0.128)							
7.party		-2.552***	-2.695***							
		(0.135)	(0.129)							
Constant	3.876***	5.896***	5.733***	4.51***	6.22***	5.03***	4.97***	3.42***	3.69***	3.14***
	(0.089)	(0.101)	(0.095)	(0.54)	(0.70)	(0.69)	(0.58)	(0.66)	(0.52)	(0.47)
R-squared	0.621	0.639	0.596	0.80	0.68	0.43	0.30	0.13	0.21	-0.03
Observations	2,652	2,652	3,676	3669	3669	3669	3669	3669	3669	3669

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$

Table 16: Propensities to vote: Ireland

%hline			Fianna Fail 1	Fine Gael	Labour	Workers P.	Ecology P.	Prog. Dem.	Sinn Fein
Left-right distance	-0.387***	-0.373***	-0.36^{***}	-0.36^{***}	-0.36^{***}	-0.36^{***}	-0.36^{***}	-0.36^{***}	-0.36^{***}
	(0.021)	(0.021)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Class	0.643***	0.643***							
	(0.053)	(0.053)							
Occupation 2			-4.40	-6.53^{*}	5.53^{*}	-4.03	5.14		7.82^{***}
			(3.01)	(2.88)	(2.75)	(2.78)	(2.90)		(2.00)
3			-2.68	0.53	0.86	1.26	1.77	0.17	-0.82
			(1.61)	(1.67)	(1.48)	(1.48)	(1.56)	(1.54)	(1.08)
4			0.81	-0.70	1.60^{*}	0.89	1.72^{*}	-0.89	-0.05
			(0.69)	(0.72)	(0.64)	(0.64)	(0.73)	(0.67)	(0.49)
5			-0.86	-0.41	0.45	1.06	1.99^{*}	-0.63	0.07
			(0.85)	(0.89)	(0.79)	(0.78)	(0.90)	(0.82)	(0.60)
6			0.41	0.40	2.53	0.45	1.84	0.91	-0.50
			(1.79)	(1.86)	(1.65)	(1.65)	(1.73)	(1.71)	(1.20)
7			-0.11	-1.51	0.95	0.66	3.81^{***}	-0.17	0.21
			(0.87)	(0.90)	(0.80)	(0.80)	(0.90)	(0.85)	(0.59)
8			-0.04	-1.73^{*}	1.35^{*}	1.28^{*}	1.43	-0.48	-0.14
			(0.68)	(0.71)	(0.63)	(0.64)	(0.74)	(0.66)	(0.48)
9			0.30	-1.01	2.45^{***}	1.03	2.34^{**}	-0.60	0.26
			(0.71)	(0.74)	(0.66)	(0.65)	(0.77)	(0.68)	(0.49)
10			-1.18	-0.72	3.78^{**}	1.84	1.80	1.05	-1.25
			(1.56)	(1.61)	(1.43)	(1.43)	(1.50)	(1.49)	(1.04)
11			-0.71	-1.46^{*}	1.47^{*}	1.15^{*}	1.25	0.23	0.69
			(0.62)	(0.64)	(0.57)	(0.57)	(0.68)	(0.60)	(0.43)
12			-0.18	-1.98^{**}	1.40^{*}	1.43^{*}	1.89^{**}	-0.27	0.57
			(0.63)	(0.65)	(0.58)	(0.57)	(0.70)	(0.61)	(0.44)
13			0.07	-0.60	0.89	0.56	2.03^{*}	-0.83	0.36
			(0.65)	(0.69)	(0.60)	(0.60)	(0.80)	(0.63)	(0.45)
14			-0.32	-1.12^{*}	0.93^{*}	1.00^{*}	1.47^{**}	-0.58	-0.12
			(0.48)	(0.50)	(0.46)	(0.45)	(0.55)	(0.48)	(0.34)
15			-0.50	-1.80^{*}	1.13	1.17	0.94	-1.06	0.23
			(0.73)	(0.76)	(0.68)	(0.68)	(0.78)	(0.71)	(0.51)
17			-0.66	-2.91^{***}	1.38^{*}	1.46^{**}	2.47^{***}	-1.70^{**}	0.67
			(0.60)	(0.62)	(0.56)	(0.55)	(0.64)	(0.58)	(0.42)
Education			-0.02	0.14^{*}	-0.05	-0.13^{*}	0.16^{*}	0.19^{**}	-0.01
			(0.07)	(0.07)	(0.06)	(0.06)	(0.07)	(0.06)	(0.05)
Union			0.54	-0.72^{*}	0.74^{*}	0.51	-0.79^{*}	-0.52	-0.24
			(0.32)	(0.33)	(0.29)	(0.29)	(0.33)	(0.30)	(0.22)
EC-approval	0.235*	0.304**	-0.18	0.30^{**}	-0.03	-0.12	0.12	0.13	-0.04
	(0.139)	(0.138)	(0.10)	(0.11)	(0.10)	(0.10)	(0.12)	(0.10)	(0.07)
Governmental approval	0.790***	0.802***	3.59^{***}	-1.70^{***}	-1.17^{***}	-0.86^{***}	-0.35	-1.11^{***}	0.12
	(0.050)	(0.050)	(0.27)	(0.28)	(0.24)	(0.24)	(0.28)	(0.26)	(0.19)
Religion	0.395***	0.411***							
	(0.120)	(0.119)							
Protestant			1.26^{*}	-0.34	0.18	0.02	-0.16	-0.09	0.41
			(0.62)	(0.64)	(0.56)	(0.57)	(0.63)	(0.59)	(0.43)
Practicing			-0.29	-0.17	0.00	0.43^{**}	0.37^{*}	-0.13	0.01
			(0.17)	(0.17)	(0.16)	(0.16)	(0.17)	(0.16)	(0.12)
Postmaterialism	0.177	0.163							
	(0.178)	(0.176)							
materialist			-0.51	0.05	-0.12	-0.29	-0.75^{*}	0.38	0.08

			(0.32)	(0.34)	(0.30)	(0.30)	(0.35)	(0.32)	(0.23)
post-materialist			0.08	0.25	0.31	−0.25	0.11	0.03	−0.17
			(0.30)	(0.32)	(0.28)	(0.28)	(0.33)	(0.30)	(0.22)
Issue voting	0.576***	0.569***							
	(0.097)	(0.096)							
Issue 2			0.17	0.46	0.43	0.25	−0.39	0.14	0.27
			(0.37)	(0.38)	(0.34)	(0.34)	(0.41)	(0.36)	(0.26)
3			0.02	0.47	0.14	−0.92	0.56	0.75	0.54
			(0.68)	(0.70)	(0.62)	(0.62)	(0.74)	(0.65)	(0.47)
4			0.61	1.22	−0.02	−0.26	−0.05	0.31	−0.85
			(1.15)	(1.18)	(1.05)	(1.03)	(1.35)	(1.14)	(0.86)
5			1.63	−5.28	2.28	−0.60	−3.43	−2.30	−0.31
			(3.02)	(3.13)	(2.77)	(2.77)	(2.89)	(2.88)	(2.01)
6			0.45	1.50	1.98*	0.81	0.62	0.74	−0.75
			(0.97)	(1.01)	(0.89)	(0.89)	(0.98)	(0.93)	(0.68)
7			0.95	0.77	0.53	−0.96	−1.10	0.29	1.34*
			(0.73)	(0.76)	(0.69)	(0.71)	(0.90)	(0.74)	(0.55)
8			−0.58	−1.20	−1.05	−1.06	−1.01	−1.21	−0.29
			(1.07)	(1.10)	(1.03)	(1.03)	(1.10)	(1.06)	(0.79)
9			−0.22	0.69	0.46	0.20	1.73*	1.14	0.34
			(0.81)	(0.84)	(0.77)	(0.77)	(0.86)	(0.79)	(0.59)
10			−0.32	0.37	−0.50	−0.01	−0.56	−0.00	0.28
			(0.66)	(0.68)	(0.60)	(0.60)	(0.69)	(0.63)	(0.44)
12			1.80	−1.82	3.44	0.36	−2.06	−1.42	0.26
			(2.22)	(2.30)	(2.03)	(2.04)	(2.13)	(2.11)	(1.48)
13			1.08	0.57	3.62	5.35	1.38	2.94	4.77*
			(3.08)	(3.20)	(2.83)	(2.83)	(2.95)	(2.94)	(2.06)
Electoral strength of party	0.055***								
	(0.003)								
New Politics Party	1.241***								
	(0.150)								
2.party		-0.660***							
		(0.164)							
3.party		-1.024***							
		(0.168)							
4.party		-1.722***							
		(0.172)							
5.party		-0.954***							
		(0.176)							
6.party		-2.119***							
		(0.167)							
7.party		-3.030***							
		(0.179)							
Constant	4.634***	6.870***	5.24***	7.27***	4.75***	4.41***	3.47***	4.92***	3.13***
	(0.107)	(0.123)	(0.87)	(0.90)	(0.81)	(0.81)	(0.95)	(0.85)	(0.62)
R-squared	0.337	0.353	0.39	0.23	0.28	0.31	0.29	0.20	0.14
Observations	3,691	3,691	3680	3680	3680	3680	3680	3680	3680

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$

Table 17: Propoensities to vote: Italy

	stacked	stacked	stacked	SURE									
				PCI	PSI	PSDI	PRI	DC	PLI	MSI	DP	Verdi	PR
Left-right distance	-0.481***	-0.514***	-0.436***	−0.45***	−0.45***	−0.45***	−0.45***	−0.45***	−0.45***	−0.45***	−0.45***	−0.45***	−0.45***
	(0.019)	(0.020)	(0.016)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Class	0.706***	0.701***	0.741***										
	(0.058)	(0.058)	(0.051)										
Occupation 2				−4.96	−1.92	−0.99	−0.80	−3.93	−0.36	−3.36			−1.28
				(3.02)	(3.16)	(2.29)	(2.26)	(3.14)	(2.25)	(2.11)			(2.19)
3				0.36	1.98	0.88	0.33	−3.27*	1.05	−1.40	−0.48	0.42	−0.20
				(1.38)	(1.41)	(1.08)	(1.05)	(1.41)	(1.07)	(1.04)	(1.06)	(1.46)	(1.08)
4				0.01	1.20	0.81	0.03	−2.63*	−0.67	−1.41	−0.32	0.35	−0.37
				(1.01)	(1.03)	(0.82)	(0.77)	(1.03)	(0.81)	(0.77)	(0.81)	(1.05)	(0.80)
5				2.16	−0.58	1.10	0.96	−2.81	0.40	−1.43	−0.09	−0.34	−1.31
				(1.45)	(1.48)	(1.13)	(1.09)	(1.48)	(1.14)	(1.06)	(1.11)	(1.52)	(1.13)
6				0.14	4.36*	−1.65	1.03	−2.22	−1.33	−1.17	−1.32	1.40	−3.22
				(2.04)	(2.10)	(1.57)	(1.52)	(2.09)	(1.53)	(1.45)	(1.53)	(2.05)	(1.75)
7				1.14	−0.09	0.83	0.52	−3.78**	−0.30	−1.38	−0.34	0.33	−0.88
				(1.32)	(1.32)	(1.02)	(0.98)	(1.32)	(1.03)	(0.96)	(1.00)	(1.33)	(1.03)
8				−0.04	0.43	0.98	0.64	−2.76**	−0.43	−1.10	0.01	0.47	−0.88
				(1.02)	(1.03)	(0.83)	(0.78)	(1.04)	(0.82)	(0.78)	(0.82)	(1.07)	(0.81)
9				0.83	1.47	1.18	0.48	−2.92**	0.71	−0.83	0.05	1.71	0.03
				(1.08)	(1.09)	(0.87)	(0.83)	(1.10)	(0.87)	(0.82)	(0.86)	(1.13)	(0.86)
10				0.21	1.84	0.62	0.81	−4.52*	−1.55	−1.55	−0.95	−2.74	1.35
				(1.92)	(1.97)	(1.48)	(1.44)	(1.96)	(1.45)	(1.37)	(1.44)	(1.94)	(1.48)
11				2.48*	0.34	1.09	0.36	−3.30**	0.12	−0.80	0.70	0.83	−0.78
				(1.09)	(1.11)	(0.88)	(0.84)	(1.12)	(0.87)	(0.83)	(0.88)	(1.15)	(0.87)
12				2.44*	0.79	1.02	0.37	−3.49**	0.32	−0.82	0.06	1.47	0.59
				(1.06)	(1.08)	(0.86)	(0.82)	(1.09)	(0.85)	(0.81)	(0.87)	(1.13)	(0.86)
13				0.98	0.28	0.55	0.27	−3.32***	−0.48	−1.69*	−0.34	−0.88	−0.87
				(0.97)	(0.99)	(0.80)	(0.75)	(1.00)	(0.79)	(0.76)	(0.79)	(1.03)	(0.78)
14				1.23	0.71	0.91	0.44	−3.42***	−0.27	−1.51*	0.01	1.21	−0.18
				(0.99)	(1.01)	(0.81)	(0.77)	(1.01)	(0.81)	(0.77)	(0.81)	(1.05)	(0.79)
15				0.89	1.13	1.52	1.15	−1.81	0.24	−1.21	−0.70	1.50	−0.71
				(1.12)	(1.14)	(0.90)	(0.86)	(1.14)	(0.89)	(0.85)	(0.89)	(1.18)	(0.89)
17				0.86	1.41	2.33*	0.30	−1.67	−0.01	−1.01	1.09	1.08	0.18
				(1.14)	(1.15)	(0.92)	(0.88)	(1.16)	(0.91)	(0.86)	(0.92)	(1.19)	(0.90)
Education				−0.07	−0.01	−0.09*	0.04	−0.15*	0.05	0.02	0.10*	0.08	0.11*
				(0.06)	(0.06)	(0.05)	(0.04)	(0.06)	(0.04)	(0.04)	(0.04)	(0.06)	(0.05)
Union				0.59*	−0.54	−0.15	−0.47*	−0.06	−0.29	−0.23	−0.33	−0.17	0.07
				(0.28)	(0.29)	(0.22)	(0.22)	(0.29)	(0.21)	(0.20)	(0.22)	(0.30)	(0.23)
EC-approval	0.393**	0.377**	0.322**	−0.16	0.16	0.03	0.05	0.13	−0.11	−0.18*	−0.15	−0.05	0.05
	(0.182)	(0.181)	(0.156)	(0.11)	(0.11)	(0.08)	(0.08)	(0.11)	(0.08)	(0.08)	(0.08)	(0.12)	(0.09)
Government approval	0.581***	0.560***	0.584***	−1.06***	0.27	0.13	−0.31	1.82***	−0.16	−0.44*	0.06	−0.37	0.08
	(0.078)	(0.077)	(0.074)	(0.32)	(0.33)	(0.24)	(0.24)	(0.32)	(0.25)	(0.22)	(0.25)	(0.33)	(0.26)
Religion	0.619***	0.607***	0.659***										
	(0.055)	(0.054)	(0.051)										
Protestant				−3.69***	−0.03	−0.27	−0.85*	3.78***	−0.69	−0.57	−1.47***	−0.20	−0.86
				(0.56)	(0.58)	(0.43)	(0.43)	(0.58)	(0.43)	(0.40)	(0.42)	(0.58)	(0.44)
Practicing				0.64***	0.29*	0.18*	0.42***	−0.76***	0.29**	0.28***	0.10	0.26*	0.22*
				(0.12)	(0.12)	(0.09)	(0.09)	(0.12)	(0.09)	(0.08)	(0.09)	(0.12)	(0.09)
Postmaterialism	0.237*	0.242*	0.329***										
	(0.133)	(0.132)	(0.119)										

materialist				−0.30	−0.04	−0.43	−0.22	0.31	−0.18	0.13	−0.14	−0.17	−0.07
				(0.31)	(0.32)	(0.24)	(0.24)	(0.32)	(0.24)	(0.22)	(0.24)	(0.33)	(0.25)
post-materialist				0.59	−0.26	−0.17	0.20	−0.10	−0.03	−0.16	0.40	0.43	0.47*
				(0.30)	(0.31)	(0.23)	(0.23)	(0.31)	(0.23)	(0.21)	(0.23)	(0.31)	(0.24)
Issue voting	0.652***	0.651***	0.750***										
	(0.100)	(0.099)	(0.087)										
Issues 2				−0.39	0.02	0.15	−0.43	0.44	−0.31	−0.68**	−0.28	−0.18	−0.06
				(0.34)	(0.35)	(0.26)	(0.26)	(0.35)	(0.26)	(0.24)	(0.26)	(0.36)	(0.27)
3				−0.51	1.11*	0.77	0.79	−0.17	1.07**	−0.01	0.32	−0.18	0.66
				(0.53)	(0.55)	(0.42)	(0.41)	(0.54)	(0.41)	(0.38)	(0.42)	(0.59)	(0.44)
4				−1.79	1.59	2.20*	1.28	−0.13	4.64***	2.78**	0.50	2.05	−0.11
				(1.49)	(1.54)	(1.12)	(1.10)	(1.53)	(1.09)	(1.04)	(1.08)	(1.69)	(1.27)
5				−2.03	0.94	4.67***	0.35	0.56	1.49	−0.86	−0.26	−0.99	−1.15
				(1.37)	(1.39)	(1.11)	(0.99)	(1.40)	(0.99)	(0.95)	(1.10)	(1.35)	(1.24)
6				0.35	0.58	0.78	−0.04	0.64	0.20	−0.32	0.60	0.21	0.52
				(0.56)	(0.59)	(0.43)	(0.43)	(0.57)	(0.42)	(0.40)	(0.43)	(0.60)	(0.45)
7				−0.99	−0.30	0.29	−0.49	0.07	−0.82	−0.83	0.82	1.10	1.01
				(0.98)	(1.00)	(0.76)	(0.72)	(1.00)	(0.72)	(0.68)	(0.79)	(1.02)	(0.78)
8				−1.42	−0.96	2.73*	0.24	−0.41	0.23	−1.66	−0.17	−2.15	−0.72
				(1.73)	(1.79)	(1.31)	(1.30)	(1.77)	(1.29)	(1.21)	(1.28)	(1.74)	(1.33)
9				−0.53	0.34	−0.24	−0.59	−0.50	−0.07	−0.87**	0.23	0.36	−0.08
				(0.49)	(0.50)	(0.37)	(0.36)	(0.50)	(0.37)	(0.34)	(0.36)	(0.50)	(0.38)
10				−0.68	−1.08	−0.02	0.21	3.41	−0.03	0.71	−2.49	2.70	−1.66
				(2.08)	(2.14)	(1.57)	(1.55)	(2.13)	(1.54)	(1.44)	(1.52)	(2.08)	(1.59)
12				−2.12*	1.41	1.48*	0.32	−0.22	0.99	0.11	−0.17	−1.57	−0.14
				(0.84)	(0.86)	(0.65)	(0.62)	(0.86)	(0.63)	(0.60)	(0.66)	(0.87)	(0.64)
Electoral strength of party	0.075***												
	(0.004)												
New Politics Party	1.254***												
	(0.128)												
2.party		-0.497***	-0.474***										
		(0.152)	(0.145)										
3.party		-1.847***	-1.826***										
		(0.154)	(0.148)										
4.party			-1.686***										
			(0.148)										
5.party		0.699***	0.707***										
		(0.152)	(0.145)										
6.party			-1.638***										
			(0.149)										
7.party		-0.926***	-1.106***										
		(0.160)	(0.151)										
8.party		-1.992***	-2.013***										
		(0.156)	(0.149)										
9.party		-0.053	-0.001										
		(0.157)	(0.150)										
10.party			-2.121***										
			(0.150)										
Constant	3.743***	5.653***	5.442***	7.40***	3.10**	2.67**	3.14***	7.17***	4.25***	6.55***	4.83***	4.30***	3.26***
	(0.095)	(0.120)	(0.112)	(1.07)	(1.09)	(0.86)	(0.82)	(1.09)	(0.86)	(0.82)	(0.86)	(1.13)	(0.85)
R-squared	0.370	0.378	0.350	0.45	0.22	0.18	0.21	0.43	0.13	0.30	0.26	0.23	0.11
Observations	3,759	3,759	5,293	5274	5274	5274	5274	5274	5274	5274	5274	5274	5274

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$

Table 18: Propensities to vote: Luxembourg

			CSV/PCS	LASP/POSL	DP/PD	KP/PC	GAP	GLEI	Nat. Beweg
Left-right distance	-0.316***	-0.329***	−0.37***	−0.37***	−0.37***	−0.37***	−0.37***	−0.37***	−0.37***
	(0.045)	(0.046)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
Class	0.843***	0.843***							
	(0.091)	(0.091)							
Occupation 3			−8.68**	−2.31	4.70	0.44	−0.11	−0.45	−4.17
			(2.99)	(4.23)	(3.30)	(3.16)	(3.15)	(3.01)	(3.32)
4			−3.64	0.23	1.57	1.32	3.74	4.71*	−0.19
			(2.34)	(3.03)	(2.36)	(2.22)	(2.23)	(2.14)	(2.44)
6			−4.40	−1.30	−1.54	0.76	4.55	5.00*	−1.68
			(2.49)	(3.14)	(2.47)	(2.34)	(2.34)	(2.24)	(2.49)
7			−4.63*	−1.16	−1.98	0.09	2.02	2.85	−1.01
			(2.15)	(2.86)	(2.25)	(2.14)	(2.13)	(2.05)	(2.30)
8			−3.04	−3.28	−2.21	−0.44	3.80	4.69*	−0.65
			(2.35)	(3.01)	(2.35)	(2.26)	(2.23)	(2.12)	(2.38)
9			−3.58	−1.32	−0.22	1.57	1.71	1.89	−2.10
			(2.56)	(3.18)	(2.49)	(2.35)	(2.37)	(2.40)	(2.60)
11			−3.34	−1.20	−2.18	−0.45	2.40	2.77	−1.66
			(2.25)	(2.82)	(2.21)	(2.09)	(2.12)	(2.04)	(2.25)
12			−4.40	−1.82	−3.09	−0.07	2.70	4.23	−0.75
			(2.40)	(3.07)	(2.40)	(2.27)	(2.27)	(2.18)	(2.42)
13			−3.18	−0.94	−1.83	−0.24	0.13	0.37	−1.43
			(2.07)	(2.77)	(2.17)	(2.05)	(2.05)	(1.96)	(2.19)
14			−4.20*	−0.09	−1.89	0.46	2.54	2.70	−0.38
			(2.05)	(2.80)	(2.19)	(2.07)	(2.07)	(1.99)	(2.18)
15			−4.21	−1.98	−0.58	−1.09	3.40	5.47*	−0.50
			(2.48)	(3.09)	(2.41)	(2.29)	(2.31)	(2.22)	(2.49)
Education			0.32*	0.10	0.01	0.13	−0.09	−0.10	0.05
			(0.15)	(0.16)	(0.13)	(0.12)	(0.12)	(0.12)	(0.14)
Union			−0.15	0.21	−0.10	0.89	−0.07	−0.49	−0.49
			(0.64)	(0.69)	(0.54)	(0.51)	(0.53)	(0.51)	(0.56)
EC-approval	0.286	0.287	0.11	0.23	0.10	−0.28	−0.11	0.12	−0.08
	(0.188)	(0.188)	(0.25)	(0.26)	(0.20)	(0.20)	(0.20)	(0.19)	(0.22)
Government approval	0.924***	0.920***	1.93*	1.91*	0.03	−1.04	−2.53***	−1.07	−0.09
	(0.139)	(0.139)	(0.80)	(0.86)	(0.67)	(0.64)	(0.66)	(0.63)	(0.72)
Religion	0.428**	0.420**							
	(0.180)	(0.181)							
Protestant			2.07	−1.98	1.86	−1.14	1.15	1.85	−1.72
			(1.44)	(1.53)	(1.20)	(1.16)	(1.18)	(1.12)	(1.29)
Practicing			−0.58	0.35	−0.59*	0.07	−0.19	0.14	0.76**
			(0.32)	(0.34)	(0.27)	(0.27)	(0.27)	(0.26)	(0.29)
Postmaterialism	0.532***	0.531***							
	(0.167)	(0.167)							
materialist			0.84	−0.76	−0.59	−0.56	−0.45	0.01	−0.27
			(0.87)	(0.92)	(0.73)	(0.69)	(0.73)	(0.71)	(0.76)
post-materialist			−0.47	−0.20	−0.29	−0.09	1.02	0.85	0.32
			(0.72)	(0.77)	(0.61)	(0.59)	(0.61)	(0.58)	(0.64)
Issue voting	0.668***	0.665***							
	(0.097)	(0.097)							
Issue 2			0.24	−0.69	0.75	−0.47	0.11	−1.17	0.43
			(0.93)	(1.00)	(0.79)	(0.78)	(0.79)	(0.76)	(0.82)
3			−0.41	0.11	1.82	−0.38	−0.31	−0.74	−0.07

			(1.13)	(1.20)	(0.97)	(0.88)	(0.97)	(0.95)	(1.00)
4			−0.68	−0.56	0.35	−1.05	−0.77	−1.00	−0.15
			(1.35)	(1.46)	(1.12)	(1.03)	(1.07)	(1.02)	(1.28)
5			−0.84	0.33	1.90	−1.64	−3.04	−2.98	−0.85
			(3.28)	(3.51)	(2.73)	(2.57)	(2.63)	(2.52)	(2.77)
6			0.58	−0.25	−0.52	−0.14	1.43	1.52	1.05
			(1.24)	(1.36)	(1.06)	(1.00)	(1.04)	(1.00)	(1.08)
7			−2.84	2.52	0.24	−0.64	−1.78	−3.44	−1.08
			(2.34)	(2.50)	(1.95)	(1.86)	(1.85)	(1.78)	(1.93)
8			−0.94	2.93	3.28	2.03	2.02	2.38	2.55
			(2.57)	(2.88)	(2.24)	(2.13)	(2.13)	(2.04)	(2.22)
9			−1.41	−0.89	−1.30	−0.93	1.77*	1.71*	1.05
			(0.91)	(0.98)	(0.76)	(0.72)	(0.72)	(0.69)	(0.81)
10			0.19	−0.35	−1.09	−0.74	3.06*	3.50*	0.40
			(1.66)	(1.78)	(1.39)	(1.29)	(1.43)	(1.46)	(1.47)
11			0.62	3.60	2.22	−0.27	−2.70	−2.38	−0.65
			(3.25)	(3.47)	(2.70)	(2.56)	(2.57)	(2.46)	(2.71)
12			2.49	−0.04	0.97	−2.58	−4.38	−5.43*	−1.71
			(3.29)	(3.51)	(2.74)	(2.59)	(2.59)	(2.48)	(2.74)
Electoral strength of party	0.106***								
	(0.009)								
New Politics Party	1.412***								
	(0.226)								
2.party		-0.670**							
		(0.305)							
3.party		-1.970***							
		(0.309)							
4.party		-3.055***							
		(0.319)							
6.party		-1.621***							
		(0.317)							
7.party		-1.870***							
		(0.319)							
8.party		-3.223***							
		(0.332)							
Constant	3.209***	6.766***	7.72**	5.73	6.43**	5.85**	4.47*	0.56	3.44
	(0.241)	(0.238)	(2.43)	(3.05)	(2.38)	(2.26)	(2.27)	(2.18)	(2.39)
R-squared	0.454	0.456	0.38	0.31	0.48	0.32	0.60	0.60	0.22
Observations	779	779	771	771	771	771	771	771	771

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$

Table 19: Propensities to vote: Netherlands

				PvDA	CDA	VVD	D66	PPR	PSP	SGP	GPV	RPF
Left-right distance	-0.640***	-0.638***	-0.383***	-0.34^{***}	-0.34^{***}	-0.34^{***}	-0.34^{***}	-0.34^{***}	-0.34^{***}	-0.34^{***}	-0.34^{***}	-0.34^{***}
	(0.030)	(0.030)	(0.017)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Class	0.650***	0.649***	0.730***									
	(0.065)	(0.065)	(0.050)									
Occupation 3				0.68	-0.48	1.15	2.92	-0.01	-0.52	0.28	-0.35	1.07
				(1.68)	(1.69)	(1.61)	(1.72)	(1.31)	(1.29)	(0.99)	(1.02)	(0.95)
4				0.80	-0.65	1.46	1.50	0.75	0.58	0.17	-0.73	0.88
				(1.31)	(1.31)	(1.26)	(1.34)	(1.01)	(1.00)	(0.73)	(0.78)	(0.74)
5				0.81	-1.90	-0.64	-0.13	-0.52	-2.53^{*}	1.07	-0.01	1.34
				(1.60)	(1.61)	(1.54)	(1.64)	(1.26)	(1.23)	(0.95)	(1.02)	(0.97)
6				1.32	-2.26	0.87	1.26	-0.37	-0.08	0.87	-0.01	1.38^{*}
				(1.20)	(1.20)	(1.15)	(1.23)	(0.93)	(0.92)	(0.67)	(0.72)	(0.67)
7				1.76	-1.16	-0.08	1.49	0.26	-0.15	1.16	0.41	1.64^{**}
				(1.15)	(1.15)	(1.10)	(1.18)	(0.89)	(0.88)	(0.63)	(0.67)	(0.63)
8				2.78^{*}	-1.72	-0.20	1.60	0.23	-0.15	1.20	0.58	2.07^{**}
				(1.17)	(1.18)	(1.13)	(1.20)	(0.91)	(0.89)	(0.65)	(0.70)	(0.65)
9				2.57^{*}	-0.59	0.30	1.52	0.26	-0.11	1.08	-0.35	1.53^{*}
				(1.15)	(1.15)	(1.10)	(1.18)	(0.90)	(0.88)	(0.63)	(0.68)	(0.63)
10				2.30	-0.52	-0.68	0.61	-0.76	-0.87	3.12^{***}	2.13^{*}	3.82^{***}
				(1.45)	(1.45)	(1.39)	(1.48)	(1.13)	(1.11)	(0.89)	(0.93)	(0.88)
11				2.34^{*}	-1.10	-0.78	1.49	-0.21	-0.73	1.46^{*}	0.65	1.97^{**}
				(1.16)	(1.16)	(1.11)	(1.19)	(0.91)	(0.89)	(0.64)	(0.69)	(0.64)
12				1.94	-1.50	0.23	1.30	-0.36	0.11	0.49	-0.43	0.42
				(1.29)	(1.29)	(1.26)	(1.36)	(1.03)	(1.04)	(0.78)	(0.82)	(0.78)
13				1.32	-1.19	-0.88	1.29	0.06	-0.34	1.42^{*}	0.24	2.02^{***}
				(1.12)	(1.12)	(1.07)	(1.14)	(0.87)	(0.85)	(0.61)	(0.65)	(0.61)
14				1.66	-0.92	0.20	0.99	0.02	-0.18	1.00	0.00	1.55^{**}
				(1.10)	(1.11)	(1.06)	(1.13)	(0.86)	(0.84)	(0.60)	(0.64)	(0.60)
15				1.55	-0.90	0.16	2.02	0.10	-0.20	1.10	0.05	1.71^{**}
				(1.15)	(1.16)	(1.11)	(1.19)	(0.90)	(0.88)	(0.64)	(0.68)	(0.64)
16				5.95^{**}	-2.94	-1.97	-0.28	2.85	0.44	4.64^{**}	4.71^{**}	6.77^{***}
				(2.29)	(2.29)	(2.20)	(2.33)	(1.59)	(2.05)	(1.47)	(1.57)	(1.08)
17				2.48^{*}	-2.56^{*}	-1.40	1.34	0.12	0.32	1.32^{*}	0.17	1.57^{*}
				(1.18)	(1.19)	(1.14)	(1.21)	(0.93)	(0.90)	(0.66)	(0.71)	(0.67)
Education				-0.17^{***}	-0.01	0.04	0.13^{**}	0.17^{***}	0.15^{***}	-0.01	-0.01	0.00
				(0.05)	(0.05)	(0.04)	(0.05)	(0.04)	(0.04)	(0.03)	(0.03)	(0.03)
Union				0.41	-0.09	-0.88^{***}	-0.17	0.08	0.11	0.01	0.28	0.04
				(0.26)	(0.26)	(0.25)	(0.27)	(0.21)	(0.21)	(0.17)	(0.18)	(0.17)
EC-approval	0.311*	0.324**	0.390***	-0.04	0.12	0.19^{*}	0.09	-0.06	-0.16^{*}	0.00	-0.11	-0.08
	(0.162)	(0.162)	(0.141)	(0.09)	(0.09)	(0.09)	(0.10)	(0.08)	(0.08)	(0.06)	(0.06)	(0.06)
Government approval	0.574***	0.575***	0.682***	-3.35^{***}	3.16^{***}	1.64^{***}	-0.66^{**}	-1.31^{***}	-1.40^{***}	-0.13	-0.01	-0.11
	(0.040)	(0.040)	(0.031)	(0.24)	(0.25)	(0.24)	(0.25)	(0.20)	(0.20)	(0.16)	(0.17)	(0.16)
Religion	0.621***	0.620***	0.633***									
	(0.081)	(0.081)	(0.066)									
Protestant				-0.16	1.47^{***}	-0.12	-0.11	-0.11	-0.03	-0.33	-0.53^{*}	-0.42^{*}
				(0.31)	(0.31)	(0.31)	(0.33)	(0.26)	(0.26)	(0.20)	(0.22)	(0.21)
Practicing				-0.19^{*}	0.19^{*}	-0.11	-0.05	-0.01	-0.07	-0.03	0.02	0.02
				(0.08)	(0.08)	(0.08)	(0.08)	(0.07)	(0.07)	(0.05)	(0.06)	(0.05)
Postmaterialism	0.167	0.165	0.243**									
	(0.194)	(0.194)	(0.115)									
materialist				-0.18	0.20	-0.12	-0.29	-0.09	-0.19	-0.04	-0.27	-0.10

				(0.34)	(0.34)	(0.33)	(0.36)	(0.28)	(0.28)	(0.21)	(0.23)	(0.22)
post-materialist				0.34	0.30	−0.49	−0.06	0.39	0.39	0.31	0.23	0.31
				(0.27)	(0.27)	(0.26)	(0.28)	(0.22)	(0.22)	(0.18)	(0.19)	(0.18)
Issued voting	0.369***	0.373***	0.525***									
	(0.109)	(0.109)	(0.076)									
Issue 2				0.78	−0.24	−0.50	−0.42	−0.26	0.03	0.38	0.37	0.34
				(0.47)	(0.47)	(0.46)	(0.49)	(0.38)	(0.38)	(0.30)	(0.32)	(0.31)
3				−1.44	−1.61	0.16	−1.16	1.46	0.80	0.13	−0.08	−0.14
				(1.23)	(1.24)	(1.19)	(1.26)	(1.06)	(1.05)	(0.85)	(0.92)	(0.88)
4				1.41	−0.03	−0.35	−0.56	1.49*	2.14***	0.51	1.16*	1.14*
				(0.75)	(0.76)	(0.72)	(0.78)	(0.61)	(0.62)	(0.50)	(0.54)	(0.51)
5				3.10**	0.08	−0.12	−0.49	0.87	1.04	1.50*	1.28	1.27
				(1.00)	(1.00)	(0.96)	(1.02)	(0.83)	(0.82)	(0.66)	(0.72)	(0.69)
6				0.75	−0.14	−0.89	0.25	0.14	0.27	0.06	0.16	−0.07
				(0.54)	(0.55)	(0.52)	(0.56)	(0.44)	(0.43)	(0.34)	(0.36)	(0.35)
7				−0.03	−0.04	−0.72	−0.69	−0.53	−0.07	0.26	0.24	0.21
				(0.51)	(0.51)	(0.49)	(0.53)	(0.42)	(0.42)	(0.32)	(0.34)	(0.34)
9				0.76	−0.36	−0.84*	0.08	0.19	0.56	0.37	0.26	0.35
				(0.43)	(0.44)	(0.42)	(0.45)	(0.35)	(0.35)	(0.27)	(0.29)	(0.28)
10				1.13	−0.83	0.14	0.34	−0.30	0.20	0.60	0.40	0.18
				(0.77)	(0.77)	(0.74)	(0.79)	(0.62)	(0.61)	(0.49)	(0.53)	(0.52)
12				−0.46	0.94	−0.48	−1.07	−1.34	−0.81	0.30	−0.22	−0.34
				(0.92)	(0.93)	(0.92)	(0.98)	(0.76)	(0.75)	(0.58)	(0.66)	(0.62)
Electoral strength of party	0.040***											
	(0.006)											
New Politics Party	0.281*											
	(0.171)											
2.party		-0.014	-0.028									
		(0.153)	(0.135)									
3.party		-0.963***	-1.122***									
		(0.155)	(0.136)									
4.party		-0.795***	-0.692***									
		(0.156)	(0.137)									
5.party			-2.066***									
			(0.139)									
6.party			-2.096***									
			(0.139)									
7.party			-2.897***									
			(0.143)									
8.party			-2.809***									
			(0.142)									
9.party			-2.877***									
			(0.143)									
Constant	5.273***	6.678***	6.071***	6.83***	4.32***	4.36***	3.82**	3.81***	4.23***	1.71*	3.05***	1.30
	(0.195)	(0.130)	(0.103)	(1.21)	(1.22)	(1.17)	(1.24)	(0.95)	(0.94)	(0.69)	(0.74)	(0.69)
R-squared	0.400	0.400	0.428	0.48	0.44	0.34	0.18	0.30	0.33	0.12	0.12	0.13
Observations	2,597	2,597	5,433	5420	5420	5420	5420	5420	5420	5420	5420	5420

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$

Table 20: Propensities to vote: Northern Ireland

			Alliance 1	Off Union P.	Dem. Union P.	Other unionist	Sinn Fein	SDLP	Workers P.	Cons.	Labour
Left-right distance	-0.234***	-0.198***	-0.22^{***}	-0.22^{***}	-0.22^{***}	-0.22^{***}	-0.22^{***}	-0.22^{***}	-0.22^{***}	-0.22^{***}	-0.22^{***}
	(0.038)	(0.038)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Class	0.694***	0.693***									
	(0.078)	(0.076)									
Occupation 3			-0.80	-5.46	-3.25	-3.85	0.71	2.68	6.46^{*}	-8.55^{*}	3.54
			(3.32)	(3.68)	(3.90)	(3.91)	(3.43)	(3.16)	(2.91)	(3.64)	(3.70)
4			-5.20	-3.07	-1.79	-5.48	-0.28	3.05	2.74	-7.94^{*}	4.91
			(3.46)	(3.82)	(4.03)	(4.05)	(3.53)	(3.28)	(3.03)	(3.78)	(4.29)
5			-4.13	-2.79	-2.78	-3.80	1.12	3.43	1.53	-7.27^{*}	3.16
			(3.12)	(3.45)	(3.65)	(3.64)	(3.21)	(2.97)	(2.74)	(3.41)	(3.44)
6			-3.61	-1.04	-4.28	-4.49	1.67	2.60	2.48	-2.73	2.02
			(3.38)	(3.73)	(3.94)	(3.95)	(3.46)	(3.22)	(2.96)	(3.69)	(3.71)
7			-3.11	-2.96	-0.62	-3.91	-0.83	3.93	1.77	-7.70^{*}	0.96
			(3.20)	(3.56)	(3.76)	(3.75)	(3.35)	(3.05)	(2.85)	(3.51)	(3.62)
8			-2.57	-2.55	-2.46	-3.99	-0.04	5.17	6.30^{*}	-4.93	2.91
			(3.00)	(3.32)	(3.51)	(3.51)	(3.07)	(2.86)	(2.63)	(3.28)	(3.35)
9			-3.91	-3.72	-2.92	-5.19	1.65	3.16	3.51	-5.81	3.90
			(2.95)	(3.26)	(3.45)	(3.45)	(3.01)	(2.82)	(2.58)	(3.22)	(3.24)
10			-1.81	-0.63	-1.84	-2.60	0.46	3.19	2.59	-3.35	2.20
			(3.92)	(4.33)	(4.58)	(4.59)	(4.01)	(3.75)	(3.43)	(4.29)	(4.30)
11			-6.14^{*}	-3.70	-2.10	-4.03	1.55	2.62	0.86	-6.58^{*}	2.92
			(2.94)	(3.25)	(3.43)	(3.43)	(3.00)	(2.80)	(2.57)	(3.21)	(3.23)
12			-4.20	-4.08	-3.59	-5.60	0.98	1.05	3.27	-8.88^{**}	1.19
			(3.01)	(3.31)	(3.55)	(3.52)	(3.09)	(2.88)	(2.64)	(3.30)	(3.32)
13			-4.24	-2.08	-2.15	-3.50	1.14	2.45	1.34	-5.49	0.23
			(2.88)	(3.20)	(3.38)	(3.38)	(2.97)	(2.75)	(2.52)	(3.17)	(3.18)
14			-3.82	-4.53	-3.33	-4.61	1.17	3.32	1.39	-8.09^{*}	2.58
			(2.95)	(3.25)	(3.43)	(3.44)	(3.00)	(2.80)	(2.57)	(3.21)	(3.23)
15			-3.44	-1.49	-0.45	-1.23	0.79	2.73	3.53	-7.87^{*}	0.62
			(3.19)	(3.55)	(3.76)	(3.78)	(3.36)	(3.08)	(2.83)	(3.50)	(3.57)
17			-5.28	-2.46	-2.95	-3.22	2.41	-0.77	-0.04	-5.76	1.34
			(2.88)	(3.20)	(3.38)	(3.38)	(2.95)	(2.76)	(2.52)	(3.14)	(3.17)
Education			-0.02	0.01	-0.26	-0.26	0.10	-0.12	-0.41^{*}	0.17	0.20
			(0.18)	(0.20)	(0.21)	(0.22)	(0.20)	(0.17)	(0.17)	(0.20)	(0.23)
Union			0.23	-0.19	-0.99	0.22	-0.27	-0.31	0.02	-1.06	-0.27
			(0.69)	(0.76)	(0.80)	(0.79)	(0.71)	(0.64)	(0.60)	(0.74)	(0.80)
EC-approval	0.508***	0.520***	0.55^{*}	-0.41	-0.64^{*}	-0.45	-0.60^{**}	0.69^{***}	0.15	-0.09	0.42
	(0.107)	(0.106)	(0.22)	(0.24)	(0.26)	(0.26)	(0.22)	(0.20)	(0.19)	(0.23)	(0.25)
Governmental approval	0.178	0.153	0.86	-0.79	0.12	0.39	-0.07	0.10	0.58	1.56^{*}	-0.78
	(0.111)	(0.110)	(0.65)	(0.73)	(0.78)	(0.78)	(0.72)	(0.64)	(0.60)	(0.72)	(0.80)
Religion	0.817***	0.821***									
	(0.054)	(0.053)									
Protestant			-0.57	-4.77^{***}	-4.16^{***}	-2.60^{***}	3.24^{***}	3.90^{***}	1.33^{*}	-1.46^{*}	1.80^{*}
			(0.64)	(0.71)	(0.77)	(0.76)	(0.67)	(0.62)	(0.56)	(0.69)	(0.73)
Practicing			0.03	0.78^{**}	0.24	0.15	0.07	-0.40	0.31	0.08	-0.30
			(0.22)	(0.25)	(0.27)	(0.26)	(0.24)	(0.22)	(0.20)	(0.24)	(0.25)
Postmaterialism	0.554	0.669									
	(0.442)	(0.436)									
materialist			0.46	-0.24	-0.18	-0.31	-0.28	0.65	0.84	-0.88	0.06
			(0.75)	(0.84)	(0.91)	(0.92)	(0.82)	(0.71)	(0.70)	(0.87)	(0.91)
post-materialist			1.63^{*}	-2.09^{**}	-0.57	-0.11	0.04	1.24	2.06^{***}	-0.14	0.29

			(0.68)	(0.75)	(0.82)	(0.81)	(0.72)	(0.67)	(0.60)	(0.74)	(0.76)
Issue voting	0.600***	0.587***									
	(0.112)	(0.110)									
Issue 2			0.07	−0.57	0.63	0.22	0.60	0.37	0.46	−3.05*	1.22
			(1.19)	(1.30)	(1.71)	(1.61)	(1.28)	(1.19)	(1.08)	(1.41)	(1.47)
3			0.42	−1.85	−0.78	−0.38	0.96	0.46	−0.18	−4.71**	1.83
			(1.52)	(1.70)	(2.04)	(1.95)	(1.62)	(1.49)	(1.36)	(1.78)	(1.84)
4			2.30	−2.29	−0.42	2.15	2.41	−0.21	0.78	−2.99	1.97
			(1.74)	(1.91)	(2.24)	(2.19)	(1.71)	(1.67)	(1.55)	(1.98)	(2.43)
5			4.31	−0.14	1.74	0.88	−2.98	2.55	5.67*	−3.35	−5.25
			(3.07)	(3.37)	(3.69)	(3.66)	(3.14)	(2.93)	(2.69)	(3.40)	(3.46)
6			0.80	−2.16	2.44	0.33	−1.67	1.87	−0.26	−3.67	−1.84
			(3.21)	(3.53)	(3.89)	(3.85)	(3.30)	(3.08)	(2.82)	(3.53)	(3.57)
7			2.34	−1.63	0.89	0.20	0.18	−1.01	−0.23	−2.41	1.50
			(1.37)	(1.50)	(1.85)	(1.77)	(1.46)	(1.34)	(1.25)	(1.59)	(1.66)
9			2.14	−1.33	−0.57	0.89	0.80	−0.91	0.56	−2.99	−1.16
			(1.46)	(1.61)	(2.03)	(1.91)	(1.54)	(1.44)	(1.31)	(1.67)	(1.71)
10			2.96	2.47	−0.24	6.86	−0.02	3.57	4.74	−5.96	0.61
			(3.39)	(3.72)	(4.07)	(4.05)	(3.50)	(3.24)	(2.99)	(3.72)	(3.83)
12			0.08	2.58	4.71	2.94	3.08	−3.03	1.39	0.34	1.37
			(2.29)	(2.52)	(2.79)	(2.75)	(2.38)	(2.19)	(2.01)	(2.53)	(2.55)
Electoral strength of party	0.051***										
	(0.010)										
2.party		1.070***									
		(0.349)									
3.party		0.426									
		(0.351)									
4.party		-0.089									
		(0.352)									
5.party		-1.376***									
		(0.355)									
6.party		0.057									
		(0.346)									
7.party		-1.021***									
		(0.346)									
8.party		-0.497									
		(0.347)									
9.party		0.623*									
		(0.355)									
Constant	4.133***	4.677***	6.38*	11.75***	11.03**	10.82**	1.13	0.30	0.03	13.87***	1.08
	(0.184)	(0.266)	(3.19)	(3.52)	(3.86)	(3.82)	(3.31)	(3.07)	(2.82)	(3.52)	(3.58)
R-squared	0.432	0.458	0.49	0.63	0.59	0.44	0.47	0.71	0.63	0.50	0.44
Observations	992	992	983	983	983	983	983	983	983	983	983

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$

Table 21: Propensities to vote: Portugal

				CDU	CDS	PPM	PS	PSD	PRD	UDP	MDP/CDE	PSR	PDC
Left-right distance	-0.394***	-0.409***	-0.369***	−0.28***	−0.28***	−0.28***	−0.28***	−0.28***	−0.28***	−0.28***	−0.28***	−0.28***	−0.28***
	(0.022)	(0.023)	(0.020)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Class	0.626***	0.609***	0.628***										
	(0.073)	(0.072)	(0.067)										
Occupation 2				−0.19	1.92	1.55	−3.19	2.76*	0.64	1.71	0.41	0.59	−0.20
				(1.56)	(1.42)	(1.32)	(1.69)	(1.38)	(1.23)	(0.95)	(0.87)	(0.71)	(1.01)
3				−0.38	1.40	−2.01	−0.90	0.73	2.66	0.89	4.92**	3.02*	−0.39
				(3.11)	(2.95)	(2.25)	(3.47)	(2.82)	(2.27)	(1.94)	(1.79)	(1.43)	(2.08)
4				−1.05	−0.29	0.19	−2.68**	1.13	0.14	−0.53	−0.04	0.21	0.27
				(0.94)	(0.90)	(0.67)	(1.02)	(0.84)	(0.69)	(0.57)	(0.52)	(0.44)	(0.61)
5				−0.37	0.84	−0.20	−3.81*	2.67	−0.06	0.34	0.63	0.86	0.75
				(1.54)	(1.46)	(1.12)	(1.67)	(1.48)	(1.13)	(0.95)	(0.88)	(0.72)	(1.02)
7				−0.53	−1.10	0.01	−1.44	1.13	0.86	1.09	0.16	0.51	0.21
				(1.08)	(1.01)	(0.78)	(1.19)	(0.98)	(0.79)	(0.66)	(0.61)	(0.51)	(0.73)
8				−0.57	0.35	0.70	−1.46	0.58	0.47	0.22	0.21	0.40	0.85
				(0.89)	(0.85)	(0.65)	(0.97)	(0.80)	(0.66)	(0.54)	(0.50)	(0.42)	(0.58)
9				−0.53	−0.11	0.44	−2.02*	1.17	0.89	−0.16	0.06	0.38	0.79
				(0.91)	(0.86)	(0.67)	(0.99)	(0.81)	(0.68)	(0.56)	(0.51)	(0.44)	(0.60)
10				0.02	2.39	1.63	−1.29	2.04	0.78	0.60	0.69	0.89	1.04
				(1.80)	(1.71)	(1.31)	(1.96)	(1.62)	(1.32)	(1.12)	(1.03)	(0.83)	(1.19)
11				−0.07	−0.19	0.29	−1.68	0.77	0.55	0.67	0.69	0.50	0.31
				(0.85)	(0.81)	(0.62)	(0.92)	(0.76)	(0.63)	(0.51)	(0.47)	(0.40)	(0.55)
12				−0.02	0.24	0.17	−2.62*	0.00	0.60	0.31	0.82	0.19	0.24
				(1.04)	(0.98)	(0.77)	(1.13)	(0.93)	(0.76)	(0.63)	(0.58)	(0.48)	(0.68)
13				−0.19	0.02	0.40	−2.18*	1.00	0.65	0.27	0.47	0.45	0.38
				(0.86)	(0.82)	(0.62)	(0.94)	(0.76)	(0.63)	(0.52)	(0.48)	(0.41)	(0.56)
14				−0.60	0.03	0.45	−0.68	0.33	0.49	0.09	0.55	0.48	0.36
				(0.87)	(0.82)	(0.63)	(0.94)	(0.78)	(0.64)	(0.53)	(0.49)	(0.41)	(0.57)
15				0.46	0.82	1.74*	−0.18	1.03	0.71	0.91	1.27*	1.30**	0.83
				(1.04)	(0.98)	(0.76)	(1.13)	(0.92)	(0.76)	(0.63)	(0.58)	(0.49)	(0.69)
16				−0.92	−2.51	−0.03	−1.76	1.15	−0.28	0.50	−0.16	0.50	0.50
				(1.60)	(1.47)	(1.05)	(1.74)	(1.42)	(1.15)	(0.98)	(0.90)	(0.74)	(1.16)
17				0.31	−0.50	0.18	0.11	−0.66	0.70	−0.29	0.02	0.02	−0.06
				(1.14)	(1.08)	(0.82)	(1.24)	(1.02)	(0.85)	(0.69)	(0.64)	(0.54)	(0.75)
Education				−0.14*	0.15*	0.01	−0.13	0.09	0.01	−0.02	0.01	0.05	−0.04
				(0.06)	(0.06)	(0.05)	(0.07)	(0.06)	(0.05)	(0.04)	(0.04)	(0.03)	(0.04)
Union				0.46	0.25	0.07	−0.20	−0.02	−0.16	−0.51	0.01	−0.48*	0.07
				(0.45)	(0.42)	(0.32)	(0.48)	(0.40)	(0.33)	(0.28)	(0.25)	(0.21)	(0.30)
EC-approval	0.374***	0.207*	0.247**	−0.51***	0.02	−0.05	0.01	0.11	−0.11	0.12	−0.12	0.05	−0.15
	(0.118)	(0.121)	(0.115)	(0.13)	(0.12)	(0.10)	(0.14)	(0.12)	(0.10)	(0.08)	(0.08)	(0.06)	(0.09)
Government approval	0.602***	0.632***	0.647***	−1.30***	0.83**	0.29	−1.50***	3.53***	−0.32	−0.30	0.13	0.06	0.46*
	(0.050)	(0.051)	(0.048)	(0.34)	(0.32)	(0.25)	(0.37)	(0.31)	(0.25)	(0.21)	(0.19)	(0.16)	(0.22)
Religion	0.369***	0.410***	0.416***										
	(0.105)	(0.104)	(0.099)										
Protestant				−1.80**	0.71	−0.57	−0.51	1.44*	0.24	−0.77*	−0.96**	−0.51	0.04
				(0.63)	(0.58)	(0.47)	(0.69)	(0.57)	(0.47)	(0.39)	(0.36)	(0.30)	(0.42)
Practicing				0.39*	−0.20	0.20	0.26	−0.32*	−0.05	0.25**	0.12	0.03	0.02
				(0.15)	(0.14)	(0.11)	(0.17)	(0.14)	(0.11)	(0.09)	(0.09)	(0.07)	(0.10)
Postmaterialism	0.421***	0.405***	0.411***										
	(0.143)	(0.142)	(0.134)										
materialist				−0.19	0.56	−0.25	−0.26	1.05***	0.04	−0.06	0.12	0.19	0.17

				(0.35)	(0.33)	(0.25)	(0.37)	(0.31)	(0.25)	(0.22)	(0.20)	(0.16)	(0.23)
post-materialist				0.35	−0.22	−0.21	1.24*	0.10	0.35	0.13	0.13	0.00	0.25
				(0.46)	(0.43)	(0.33)	(0.50)	(0.41)	(0.34)	(0.28)	(0.26)	(0.21)	(0.30)
Issue voting	0.687***	0.694***	0.715***										
	(0.094)	(0.093)	(0.083)										
Issue 2				−0.11	−0.63	−0.99*	−1.64**	−0.18	0.43	0.87*	0.66*	0.42	−1.28***
				(0.54)	(0.52)	(0.40)	(0.59)	(0.48)	(0.40)	(0.34)	(0.31)	(0.25)	(0.36)
3				−0.35	−0.32	−0.52	−0.62	−0.00	0.68	0.55	0.30	0.51	−1.15**
				(0.66)	(0.62)	(0.48)	(0.72)	(0.59)	(0.49)	(0.41)	(0.38)	(0.30)	(0.44)
4				0.15	−0.96	−1.21*	−1.33	0.55	0.14	0.79*	0.69	−0.00	−1.50***
				(0.64)	(0.60)	(0.47)	(0.70)	(0.57)	(0.46)	(0.40)	(0.37)	(0.30)	(0.42)
5				0.84	−2.31	−1.60	1.84	−1.98	0.70	2.36*	2.79**	0.79	−2.21*
				(1.69)	(1.51)	(1.18)	(1.83)	(1.49)	(1.39)	(1.03)	(0.94)	(0.75)	(1.06)
6				3.00**	−2.84**	−1.87*	−1.33	−1.09	−0.62	−0.24	1.86**	−0.41	−1.45
				(1.12)	(1.06)	(0.79)	(1.22)	(1.01)	(0.79)	(0.64)	(0.62)	(0.60)	(0.75)
7				−0.55	−2.03	−1.84	−4.37**	2.50*	0.19	0.67	0.16	−0.23	−2.31*
				(1.36)	(1.29)	(0.99)	(1.48)	(1.22)	(0.99)	(0.85)	(0.78)	(0.62)	(0.90)
8				−0.72	−4.92*		0.49	1.97			−0.15	−0.75	−1.69
				(2.77)	(2.45)		(3.02)	(2.44)			(1.24)	(1.06)	(1.42)
9				−1.98	−0.38	−0.18	−1.96	−2.05*	0.85	0.54	−0.13	−0.98	−0.78
				(1.08)	(0.99)	(0.78)	(1.17)	(0.91)	(0.81)	(0.68)	(0.62)	(0.55)	(0.81)
10				0.01	−1.25	−1.31**	−2.62***	−0.14	−0.86	−0.22	−0.23	−0.42	−1.52***
				(0.69)	(0.66)	(0.50)	(0.76)	(0.62)	(0.51)	(0.43)	(0.40)	(0.32)	(0.46)
12				0.63	−0.81	−1.65	0.82	−2.25	0.66	0.13	0.18	−0.56	−2.16*
				(1.51)	(1.43)	(1.10)	(1.64)	(1.36)	(1.10)	(0.94)	(0.87)	(0.69)	(1.00)
13				0.44	−0.87	0.47	−2.03	0.31	0.62	−0.04	0.42	0.20	−0.52
				(1.22)	(1.11)	(0.81)	(1.57)	(1.16)	(0.87)	(0.76)	(0.70)	(0.56)	(0.85)
Electoral strength of party	0.101***												
	(0.003)												
2.party		0.491***	0.472***										
		(0.173)	(0.165)										
3.party		-0.842***	-0.838***										
		(0.176)	(0.168)										
4.party		2.441***	2.520***										
		(0.176)	(0.167)										
5.party		2.463***	2.503***										
		(0.177)	(0.169)										
6.party			-0.946***										
			(0.167)										
7.party		-1.122***	-1.124***										
		(0.172)	(0.164)										
8.party		-1.307***	-1.298***										
		(0.173)	(0.165)										
9.party			-1.436***										
			(0.167)										
10.party		-0.943***	-0.958***										
		(0.176)	(0.168)										
Constant	3.314***	4.438***	4.296***	7.41***	3.82***	3.64***	10.53***	2.49**	2.70***	1.98**	2.51***	1.90***	3.88***
	(0.103)	(0.145)	(0.135)	(1.03)	(0.98)	(0.75)	(1.12)	(0.93)	(0.76)	(0.63)	(0.58)	(0.49)	(0.69)
R-squared	0.496	0.506	0.495	0.38	0.31	0.19	0.29	0.58	0.15	0.22	0.24	0.19	0.20
Observations	2,698	2,698	3,344	3342	3342	3342	3342	3342	3342	3342	3342	3342	3342

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$

Table 22: Propensities to vote: Spain

				PSOE	PP	CDS	IU	HB	CiU	PNV	EA
Left-right distance	-0.452***	-0.438***	-0.385***	−0.35***	−0.35***	−0.35***	−0.35***	−0.35***	−0.35***	−0.35***	−0.35***
	(0.023)	(0.024)	(0.021)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Class	0.614***	0.621***	0.644***								
	(0.079)	(0.078)	(0.074)								
Occupation 3				2.61	−1.66	−1.92	−1.43	−1.44	1.82	0.49	−0.06
				(1.78)	(1.77)	(1.74)	(1.98)	(1.44)	(2.16)	(1.41)	(1.65)
4				1.63	−1.16	−0.70	−1.03	0.14	1.08	−0.17	−0.23
				(1.43)	(1.46)	(1.44)	(1.71)	(1.23)	(1.94)	(1.17)	(1.43)
5				2.63	−1.22	0.30	0.63	−0.11	0.28	0.54	1.28
				(1.66)	(1.70)	(1.67)	(1.92)	(1.37)	(2.15)	(1.37)	(1.60)
6				0.92	−3.26	−2.87	−3.45	−1.22	5.85	−1.05	0.17
				(3.22)	(3.08)	(3.01)	(3.26)	(2.16)	(3.32)	(2.35)	(2.52)
7				2.54	−1.52	0.83	−1.12	−0.51	0.88	−0.07	−0.07
				(1.61)	(1.61)	(1.59)	(1.88)	(1.39)	(2.09)	(1.28)	(1.57)
8				2.35	−1.42	−0.52	−0.93	−0.70	0.28	−0.36	0.01
				(1.46)	(1.48)	(1.46)	(1.74)	(1.29)	(1.97)	(1.20)	(1.47)
9				2.93*	−2.81	−1.60	−0.72	−1.14	−1.24	−0.55	−0.18
				(1.47)	(1.49)	(1.47)	(1.74)	(1.38)	(2.02)	(1.27)	(1.53)
10				3.68	−3.51	−1.35	1.03				
				(3.18)	(2.98)	(2.94)	(3.24)				
11				2.83*	−1.80	−1.38	−0.76	0.79	−0.66	−0.45	−0.51
				(1.38)	(1.42)	(1.40)	(1.67)	(1.22)	(1.89)	(1.13)	(1.38)
12				2.20	−1.92	−0.77	−0.18	0.10	0.35	−0.17	0.56
				(1.40)	(1.43)	(1.42)	(1.69)	(1.24)	(1.96)	(1.18)	(1.41)
13				2.84*	−1.60	−1.32	−0.86	−0.05	0.13	−0.06	1.50
				(1.33)	(1.37)	(1.35)	(1.64)	(1.19)	(1.86)	(1.11)	(1.37)
14				2.31	−1.54	−0.87	−0.48	−0.16	0.63	0.21	0.55
				(1.31)	(1.36)	(1.34)	(1.62)	(1.17)	(1.84)	(1.09)	(1.36)
15				2.93*	−1.20	0.26	−0.25	−0.28	0.27	0.02	0.72
				(1.41)	(1.45)	(1.43)	(1.71)	(1.26)	(1.95)	(1.18)	(1.45)
16				−3.10	1.29	−2.95	1.53		−0.22	−0.35	
				(3.18)	(2.98)	(2.95)	(3.23)		(3.12)	(2.00)	
17				2.44	−1.51	−1.32	0.59	−0.73	−0.62	−0.29	−0.27
				(1.41)	(1.44)	(1.43)	(1.71)	(1.27)	(1.99)	(1.28)	(1.48)
Education				−0.13*	0.02	−0.05	−0.03	0.09	0.07	0.05	0.01
				(0.06)	(0.06)	(0.06)	(0.06)	(0.05)	(0.07)	(0.05)	(0.06)
Union				0.39	−0.93*	−0.79	−0.02	0.39	−0.91	−0.15	−0.73
				(0.50)	(0.47)	(0.46)	(0.49)	(0.40)	(0.56)	(0.41)	(0.50)
EC-approval	0.519***	0.499***	0.538***	0.22	−0.10	−0.07	0.19	−0.31**	0.29*	0.01	−0.07
	(0.141)	(0.141)	(0.137)	(0.12)	(0.12)	(0.12)	(0.12)	(0.10)	(0.15)	(0.11)	(0.12)
Government approval	0.793***	0.802***	0.816***	3.73***	−1.43***	−1.08***	−1.14***	−0.45	−0.76*	−0.12	−0.43
	(0.054)	(0.054)	(0.052)	(0.34)	(0.32)	(0.32)	(0.34)	(0.27)	(0.38)	(0.29)	(0.32)
Religion	0.638***	0.654***	0.698***								
	(0.111)	(0.111)	(0.107)								
Protestant				−1.51*	2.38***	2.00***	−2.10***	0.37	0.83	0.56	−0.01
				(0.59)	(0.55)	(0.54)	(0.58)	(0.47)	(0.69)	(0.52)	(0.59)
Practicing				0.22	−0.47***	−0.37**	0.24	−0.12	−0.20	−0.11	0.00
				(0.13)	(0.12)	(0.12)	(0.13)	(0.11)	(0.16)	(0.12)	(0.13)
Postmaterialism	0.383***	0.380***	0.383***								
	(0.140)	(0.139)	(0.134)								
materialist				0.41	−0.19	−0.73*	−0.68*	0.04	−1.22**	−0.08	−0.33

				(0.34)	(0.32)	(0.33)	(0.35)	(0.30)	(0.43)	(0.34)	(0.37)
post-materialist				−0.04	−0.55	−0.41	0.78	0.50	−0.69	−0.15	−0.01
				(0.44)	(0.41)	(0.41)	(0.44)	(0.37)	(0.49)	(0.37)	(0.42)
Issue voting	0.574***	0.588***	0.693***								
	(0.123)	(0.122)	(0.112)								
Issue 2				0.28	0.09	0.20	−0.07	−0.74	−1.25	−0.34	0.42
				(0.84)	(0.82)	(0.80)	(0.85)	(0.63)	(0.94)	(0.69)	(0.79)
3				0.23	0.81	0.13	−0.64	−0.85	−0.25	2.65*	0.78
				(1.18)	(1.13)	(1.12)	(1.22)	(0.97)	(1.47)	(1.14)	(1.33)
4				−1.11	0.11	0.15	0.48	2.20*	0.55	1.52	3.68**
				(1.30)	(1.23)	(1.20)	(1.27)	(0.98)	(1.49)	(1.09)	(1.22)
6				0.50	−0.94	−0.87	0.12	−1.19	0.46	0.09	0.36
				(1.13)	(1.07)	(1.07)	(1.21)	(1.17)	(1.25)	(0.91)	(1.19)
7				0.09	0.51	−0.21	0.14	−1.17	−1.00	−0.13	−0.07
				(0.88)	(0.85)	(0.84)	(0.88)	(0.66)	(0.98)	(0.73)	(0.82)
9				0.58	−0.40	0.14	−0.05	−1.54	−0.64	−0.07	0.72
				(1.12)	(1.05)	(1.06)	(1.10)	(0.83)	(1.24)	(0.94)	(0.98)
10				1.85	0.55	1.76	−0.63	−1.92*	−1.75	−0.24	0.80
				(1.45)	(1.37)	(1.34)	(1.41)	(0.97)	(1.42)	(1.12)	(1.19)
12				−0.90	0.34	0.26	0.95	−2.16	2.18	0.90	1.64
				(1.95)	(1.84)	(1.82)	(1.92)	(1.92)	(1.88)	(1.68)	(1.76)
Electoral strength of party	0.081***										
	(0.004)										
2.party		-2.031***	-2.147***								
		(0.173)	(0.166)								
3.party		-2.571***	-2.611***								
		(0.166)	(0.160)								
4.party		-2.584***	-2.598***								
		(0.164)	(0.159)								
5.party		-3.908***	-3.985***								
		(0.202)	(0.195)								
6.party		-3.140***	-3.197***								
		(0.188)	(0.181)								
7.party			-3.827***								
			(0.189)								
8.party			-3.895***								
			(0.199)								
Constant	3.552***	6.986***	6.867***	2.25	6.52***	5.66***	6.46***	4.29**	4.14	2.88*	2.61
	(0.110)	(0.130)	(0.123)	(1.63)	(1.64)	(1.62)	(1.88)	(1.40)	(2.13)	(1.35)	(1.64)
R-squared	0.473	0.478	0.473	0.55	0.43	0.30	0.29	0.29	0.26	0.15	0.16
Observations	2,153	2,153	2,582	2553	2553	2553	2553	2553	2553	2553	2553

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$

Table 23: Propensities to vote: Walonia

				PRL	PVV	PS	SP	PSC	CVP	VU	FDF-RW	Ecolo	PCB
Left-right distance	-0.329***	-0.322***	-0.243***	−0.20***	−0.20***	−0.20***	−0.20***	−0.20***	−0.20***	−0.20***	−0.20***	−0.20***	−0.20***
	(0.039)	(0.039)	(0.027)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Class	0.687***	0.691***	0.760***										
	(0.075)	(0.075)	(0.062)										
Occupation 3				5.90		−0.17	−0.12	−6.98	1.23	1.37	2.00		1.31
				(4.21)		(4.96)	(3.44)	(3.99)	(2.50)	(1.55)	(2.81)		(2.34)
4				2.83	2.89	−0.02	0.68	1.17	−4.38*	3.27**	3.32	4.32	0.95
				(2.86)	(1.85)	(3.35)	(2.38)	(2.72)	(1.72)	(1.09)	(1.97)	(3.40)	(1.59)
5				−1.77	−0.41	2.50	−2.52	−3.22	−6.87**	1.90	2.22	3.51	0.32
				(3.75)	(2.29)	(4.41)	(3.19)	(3.51)	(2.28)	(1.44)	(2.60)	(4.15)	(2.10)
6				3.85	2.79	−3.14	−0.22	−0.00	−1.91	2.20	3.31	3.03	0.40
				(3.19)	(2.04)	(3.74)	(2.67)	(3.04)	(1.93)	(1.21)	(2.20)	(3.65)	(1.78)
7				0.02	2.64	−1.57	−0.32	−1.15	−4.34*	3.48**	4.29	6.19	0.12
				(3.45)	(2.14)	(3.90)	(2.79)	(3.14)	(2.02)	(1.31)	(2.36)	(3.79)	(1.85)
8				4.52	6.03**	2.49	4.26	−5.30	2.50	1.66	5.20*	7.40	1.34
				(3.54)	(2.17)	(4.18)	(3.01)	(3.30)	(2.14)	(1.34)	(2.39)	(4.40)	(1.96)
9				2.70	2.20	1.72	0.62	0.40	−4.15*	2.69*	3.01	2.93	0.91
				(2.84)	(1.88)	(3.38)	(2.39)	(2.76)	(1.74)	(1.13)	(2.07)	(3.41)	(1.61)
10				1.17	2.54	2.76	−2.40	−1.18	−4.94*	2.83*	5.11*	4.32	4.22*
				(3.46)	(2.16)	(4.09)	(2.93)	(3.32)	(2.11)	(1.35)	(2.50)	(3.92)	(1.95)
11				3.03	2.61	−0.39	1.06	0.46	−4.77**	2.71*	3.58	3.25	1.45
				(2.85)	(1.84)	(3.32)	(2.37)	(2.70)	(1.72)	(1.07)	(1.96)	(3.41)	(1.59)
12				1.13	1.70	1.37	−1.36	−0.68	−5.53**	2.14	2.14	4.36	1.58
				(2.90)	(1.85)	(3.43)	(2.42)	(2.82)	(1.74)	(1.10)	(2.00)	(3.48)	(1.63)
13				0.80	2.16	1.54	−0.40	−1.01	−5.28***	2.33*	1.65	2.74	1.47
				(2.65)	(1.74)	(3.11)	(2.20)	(2.52)	(1.58)	(0.99)	(1.80)	(3.26)	(1.47)
14				1.51	3.13	0.47	−0.40	−0.52	−4.27**	2.24*	2.44	5.06	0.93
				(2.74)	(1.80)	(3.24)	(2.28)	(2.61)	(1.65)	(1.04)	(1.90)	(3.35)	(1.55)
15				−1.23	−0.63	1.76	2.31	−3.23	−5.40*	9.19***		2.61	1.01
				(3.55)	(2.22)	(4.24)	(2.98)	(3.50)	(2.16)	(1.49)		(4.00)	(2.28)
17				0.73	1.78	1.03	−0.75	0.37	−5.92***	2.20*	1.86	4.58	1.33
				(2.83)	(1.86)	(3.34)	(2.36)	(2.71)	(1.71)	(1.08)	(1.97)	(3.37)	(1.58)
Education				0.11	0.02	−0.09	−0.02	0.16	−0.15	0.01	−0.10	0.31*	0.05
				(0.13)	(0.08)	(0.16)	(0.12)	(0.13)	(0.08)	(0.06)	(0.10)	(0.14)	(0.08)
Union				−1.59*	−0.02	2.05*	0.55	0.23	0.37	0.51	−0.47	0.04	0.02
				(0.69)	(0.40)	(0.82)	(0.60)	(0.71)	(0.43)	(0.29)	(0.52)	(0.75)	(0.42)
EC-approval	0.778*	0.900*	0.942**	0.21	−0.19	0.15	−0.08	0.29	0.11	0.05	−0.12	0.14	−0.08
	(0.462)	(0.463)	(0.381)	(0.21)	(0.12)	(0.24)	(0.18)	(0.20)	(0.13)	(0.09)	(0.16)	(0.22)	(0.12)
Government approval	0.786***	0.759***	0.778***	−1.55*	0.44	0.32	0.65	0.10	0.05	0.08	−0.60	−0.15	0.06
	(0.258)	(0.259)	(0.225)	(0.64)	(0.37)	(0.75)	(0.54)	(0.66)	(0.41)	(0.28)	(0.50)	(0.69)	(0.39)
Religion	0.759***	0.792***	0.781***										
	(0.167)	(0.167)	(0.141)										
Protestant				−1.20	0.32	−4.67*	−1.08	5.20***	0.31	0.78	−0.29	−1.75	−0.80
				(1.51)	(0.90)	(1.84)	(1.30)	(1.57)	(0.95)	(0.66)	(1.18)	(1.78)	(0.91)
Practicing				0.16	0.06	0.99*	0.18	−1.04**	0.05	−0.25	−0.04	−0.01	0.15
				(0.37)	(0.22)	(0.45)	(0.32)	(0.38)	(0.23)	(0.16)	(0.28)	(0.42)	(0.22)
Postmaterialism	0.560	0.536	0.575*										
	(0.394)	(0.392)	(0.295)										
materialist				0.99	−0.38	−0.24	−0.85	−0.42	−0.49	0.18	0.23	−0.81	−0.34
				(0.69)	(0.40)	(0.79)	(0.58)	(0.66)	(0.42)	(0.28)	(0.51)	(0.71)	(0.40)
post-materialist				−0.78	−0.56	−0.22	−0.92	−0.07	−0.20	−0.15	0.04	0.64	−0.43

				(0.86)	(0.49)	(0.99)	(0.72)	(0.83)	(0.54)	(0.36)	(0.70)	(1.04)	(0.50)
Issue voting	0.420***	0.410***	0.605***										
	(0.124)	(0.124)	(0.095)										
Issue 2				−0.78	−1.25	−0.91	−1.96	0.32	−1.68*	−2.05***	−0.35	−2.27	−1.47*
				(1.26)	(0.70)	(1.57)	(1.10)	(1.21)	(0.76)	(0.50)	(0.91)	(1.31)	(0.71)
3				−1.05	−1.95**	1.77	−2.23*	−0.71	−2.77***	−1.75***	−1.38	−2.08	−1.57*
				(1.30)	(0.73)	(1.62)	(1.13)	(1.26)	(0.79)	(0.51)	(0.95)	(1.41)	(0.73)
4				0.23	−2.25*	−3.44	−3.04*	0.99	−2.79*	−2.63***	−1.36	−1.53	−1.57
				(1.72)	(0.95)	(2.11)	(1.48)	(1.64)	(1.12)	(0.70)	(1.28)	(1.87)	(0.97)
5				2.03	1.57	−1.38	−1.04	−2.23	−1.77	−2.22*	−0.76	−2.14	−1.40
				(2.34)	(1.28)	(2.76)	(2.02)	(2.19)	(1.43)	(0.91)	(1.62)	(2.29)	(1.30)
6				3.42	0.54	1.51	−0.21	1.86	−0.81			0.71	−1.45
				(2.69)	(1.47)	(3.29)	(2.21)	(3.38)	(1.62)			(3.36)	(1.63)
7				0.60	3.29**	−4.20	1.71	0.39	0.55	−1.67	−1.40	0.13	−0.81
				(2.24)	(1.24)	(2.69)	(1.92)	(2.15)	(1.37)	(0.94)	(1.71)	(2.29)	(1.38)
9				−1.29	−1.71	0.65	−1.82	−0.80	−2.11	−1.85**	−1.04	−3.43	−1.00
				(1.74)	(0.99)	(2.06)	(1.50)	(1.61)	(1.10)	(0.70)	(1.25)	(1.78)	(0.95)
10				3.21	2.63	−0.70	−1.76	0.76	−1.86	−0.88	−1.07	−3.12	−1.74
				(2.57)	(1.78)	(3.99)	(2.72)	(2.40)	(1.55)	(0.92)	(1.75)	(2.53)	(1.84)
12				−0.25	−1.98	3.61	−1.23	−2.35	−3.13	1.14	−2.50	−4.86	−1.05
				(2.77)	(1.99)	(3.32)	(2.24)	(2.62)	(1.65)	(1.34)	(2.50)	(2.70)	(1.57)
Electoral strength of party	0.087***												
	(0.007)												
New Politics Party	1.564***												
	(0.248)												
2.party			-1.399***										
			(0.282)										
3.party		2.302***	2.321***										
		(0.296)	(0.271)										
4.party			-1.100***										
			(0.276)										
5.party		-0.013	-0.046										
		(0.300)	(0.275)										
6.party			-1.246***										
			(0.274)										
7.party			-1.552***										
			(0.292)										
8.party		-0.918***	-0.952***										
		(0.320)	(0.293)										
9.party		1.481***	1.493***										
		(0.309)	(0.284)										
10.party		-1.537***	-1.597***										
		(0.304)	(0.278)										
Constant	2.632***	4.197***	3.964***	3.51	1.08	5.68*	4.60*	2.04	9.08***	0.99	2.27	3.25	2.65*
	(0.210)	(0.239)	(0.209)	(2.42)	(1.65)	(2.82)	(1.98)	(2.26)	(1.44)	(0.91)	(1.63)	(3.05)	(1.35)
R-squared	0.449	0.456	0.451	0.53	0.53	0.50	0.37	0.45	0.59	0.59	0.40	0.40	0.28
Observations	757	757	1,249	1239	1239	1239	1239	1239	1239	1239	1239	1239	1239

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$

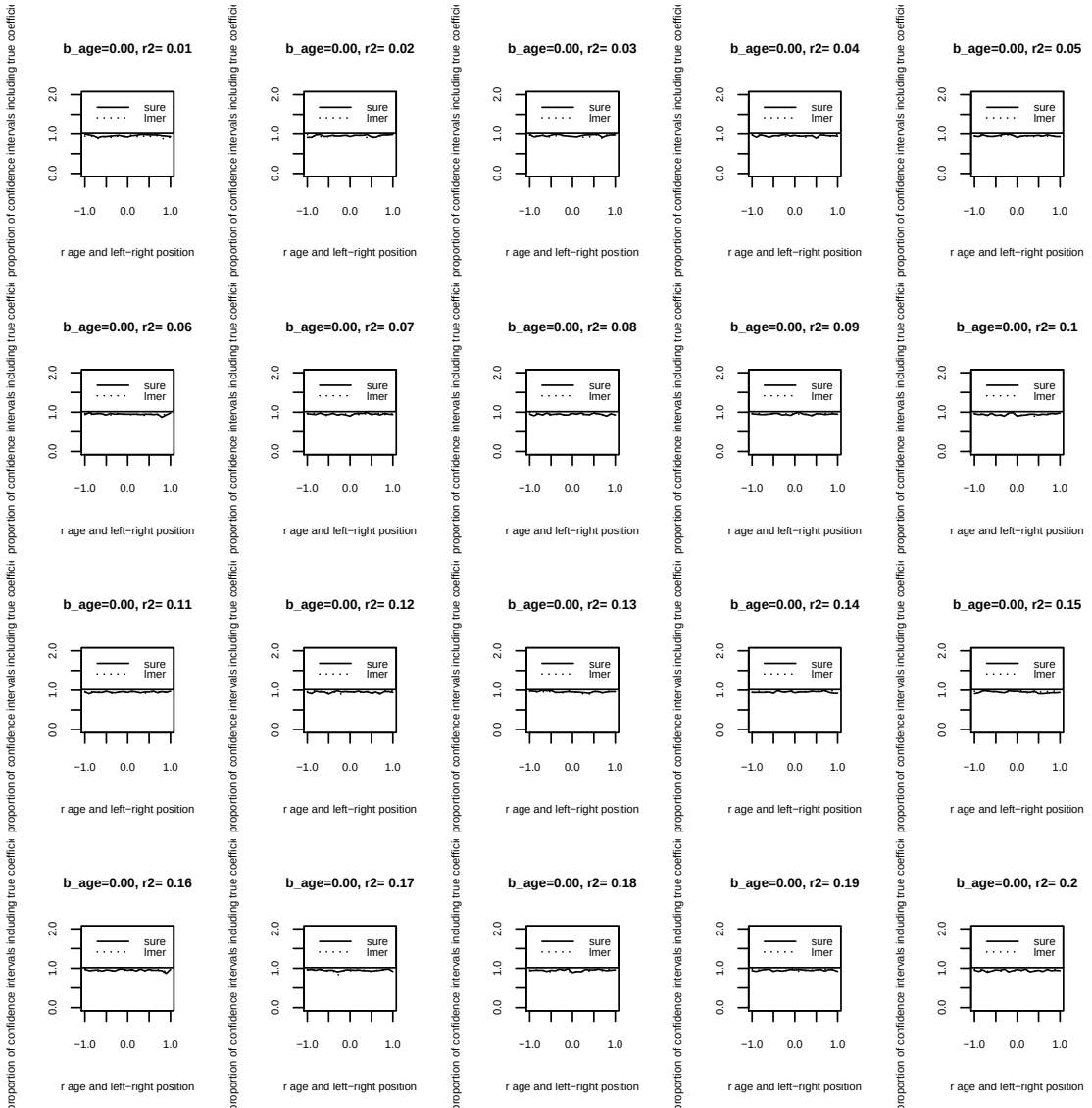

Figure 4: Coverage of confidence interval for b_p with $b_{age} = 0.00$

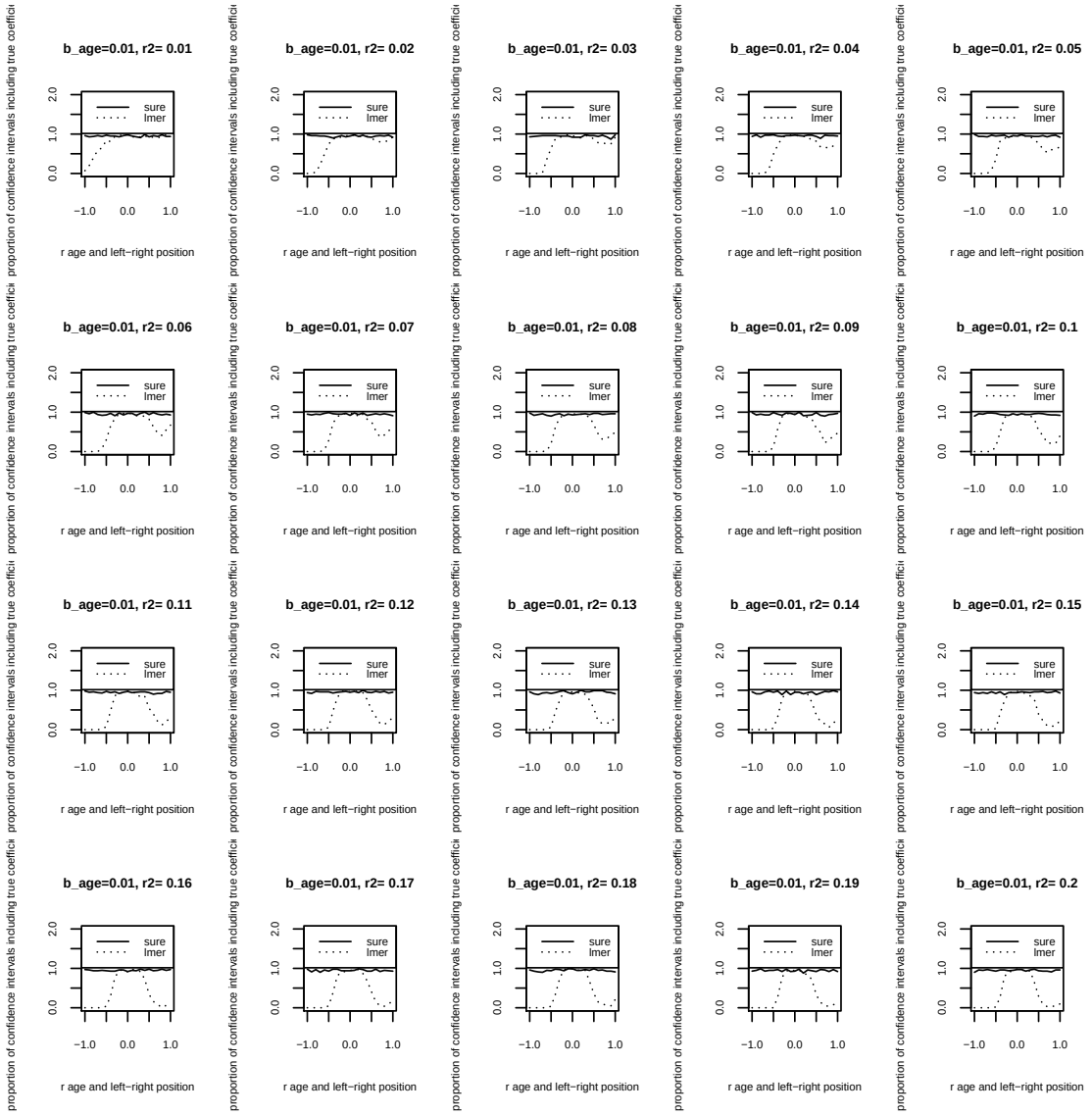

Figure 5: Coverage of confidence interval for b_p with $b_{age} = 0.01$

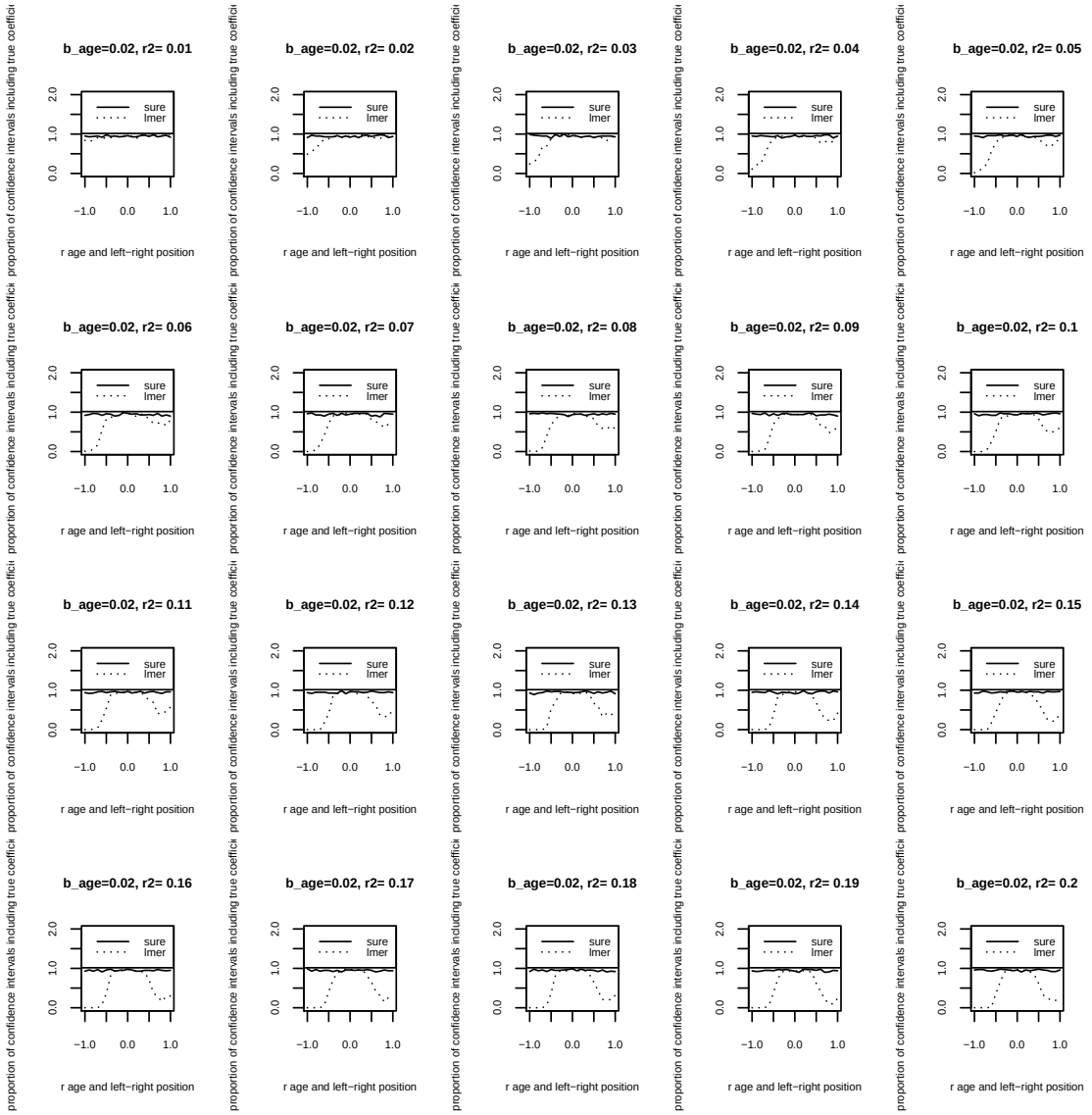

Figure 6: Coverage of confidence interval for b_p with $b_{age} = 0.02$

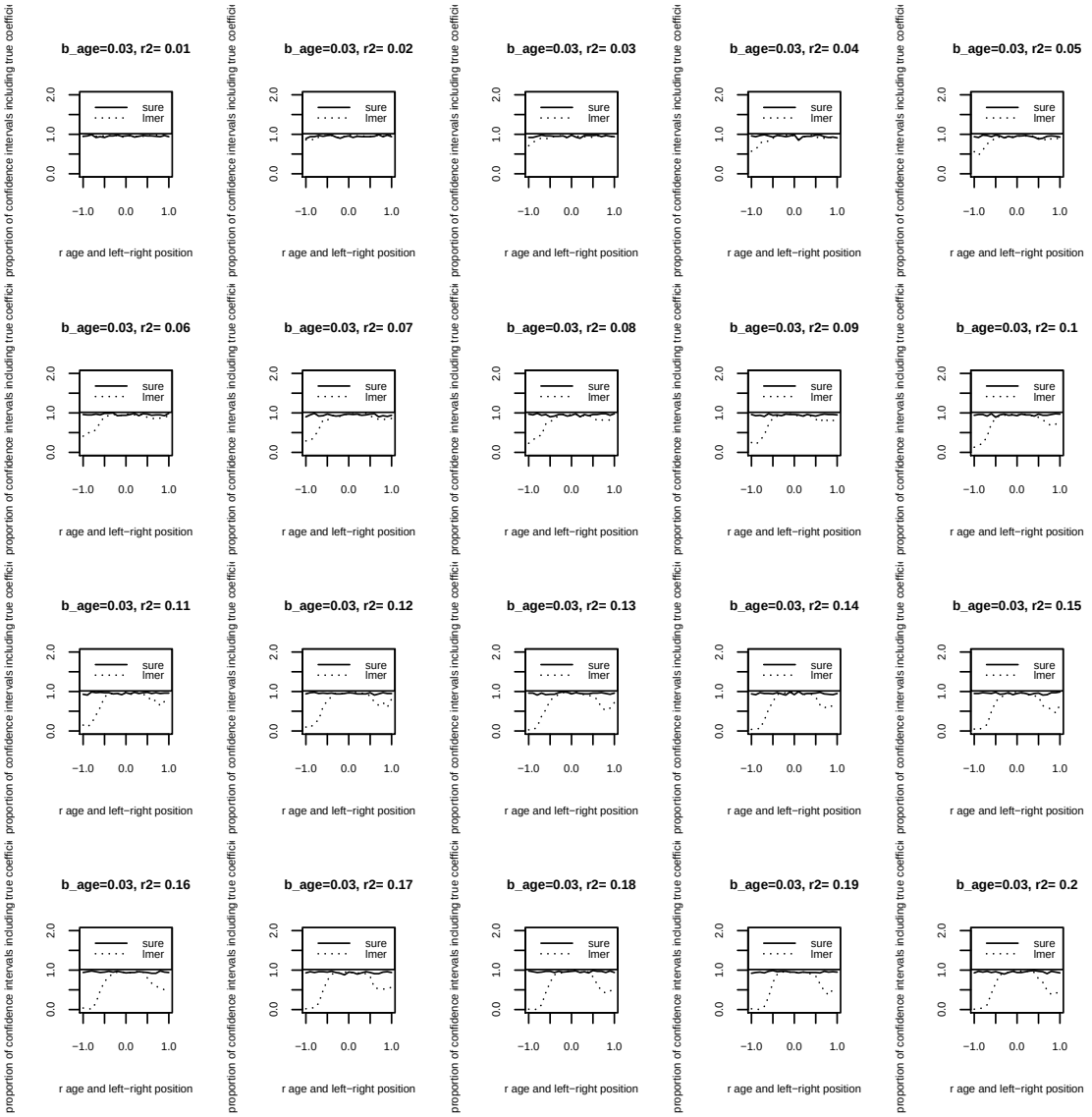

Figure 7: Coverage of confidence interval for b_p with $b_{age} = 0.03$

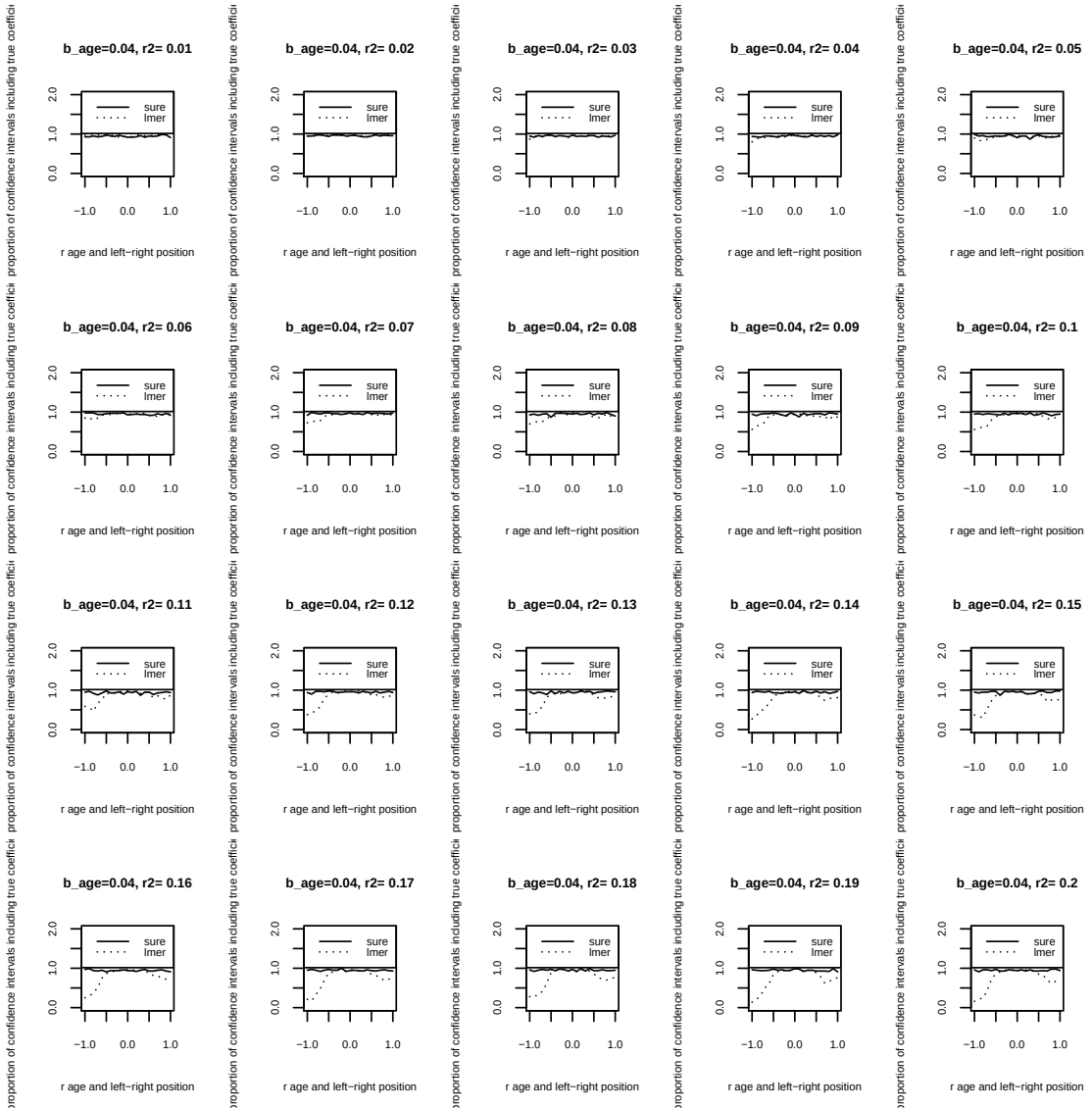

Figure 8: Coverage of confidence interval for b_p with $b_{age} = 0.04$

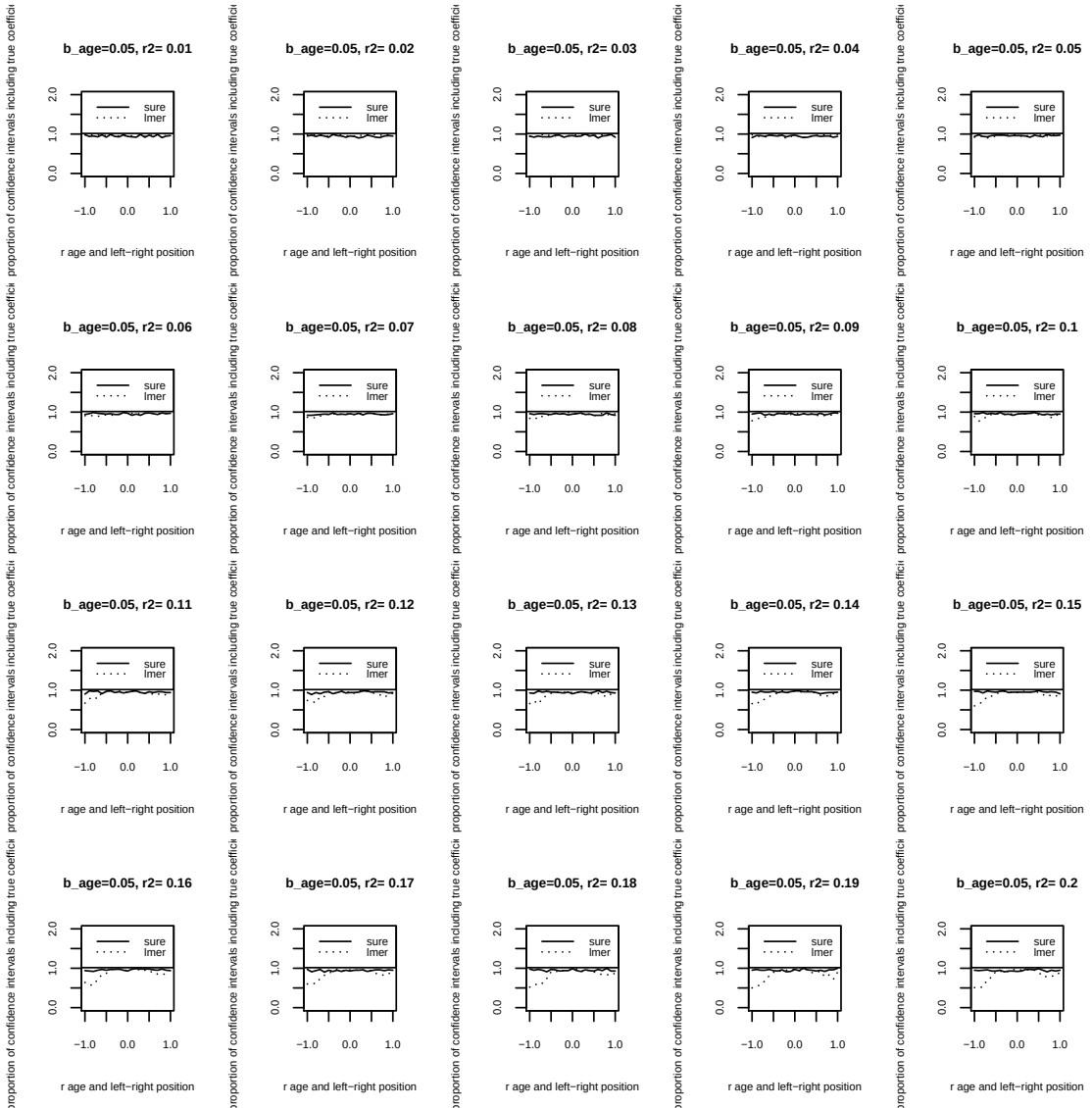

Figure 9: Coverage of confidence interval for b_p with $b_{age} = 0.05$

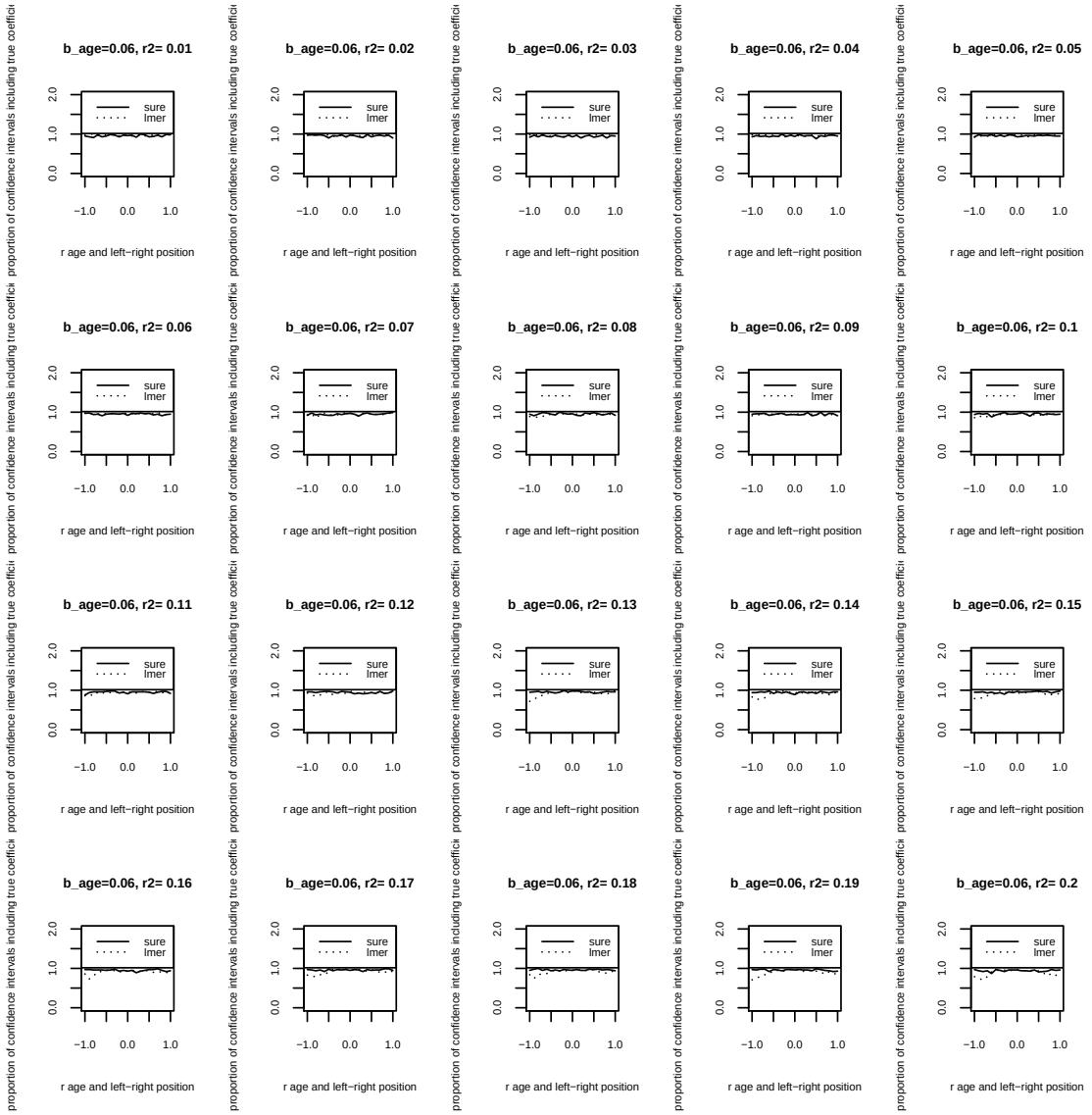

Figure 10: Coverage of confidence interval for b_p with $b_{age} = 0.06$

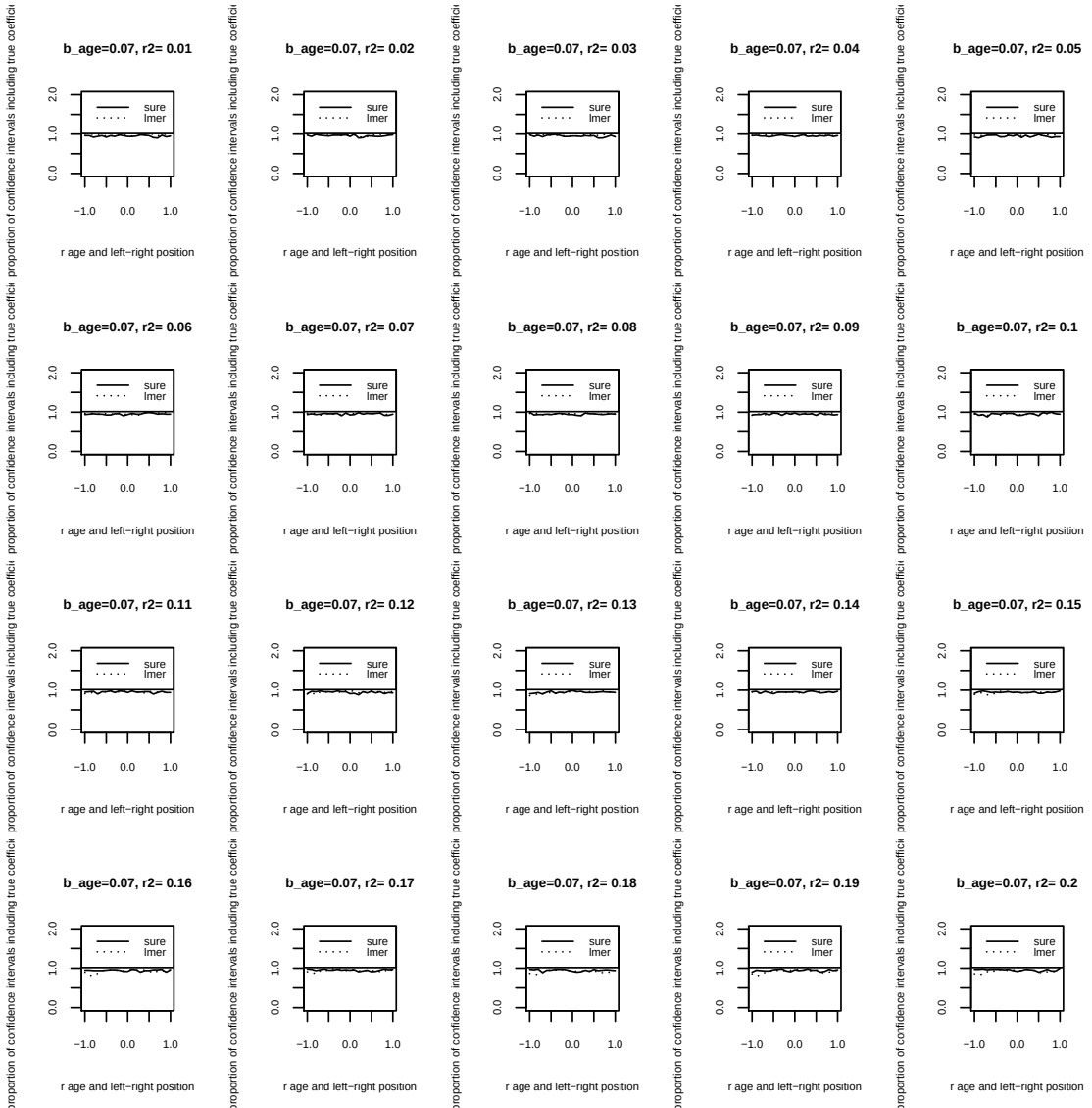

Figure 11: Coverage of confidence interval for b_p with $b_{age} = 0.07$

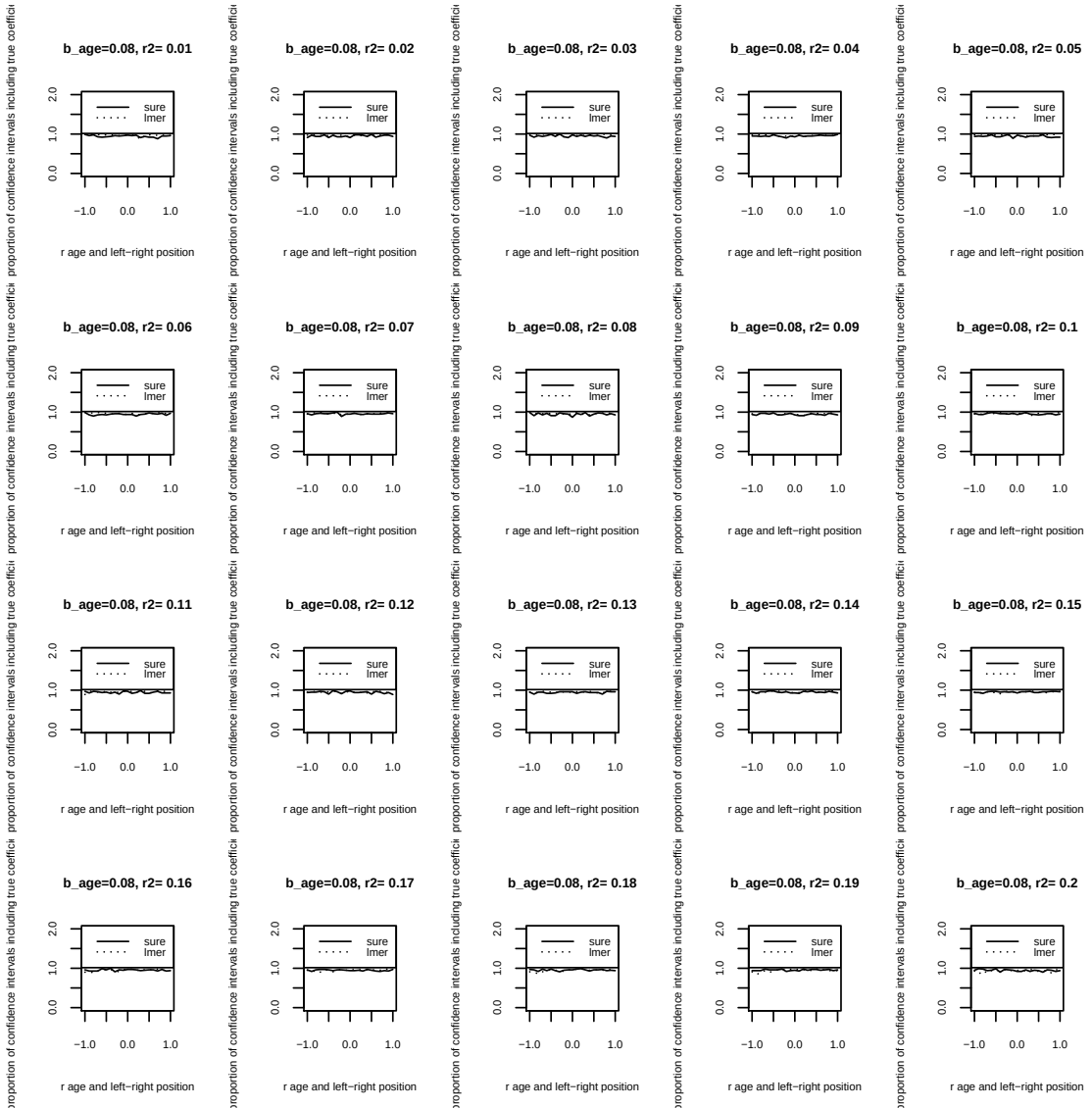

Figure 12: Coverage of confidence interval for b_p with $b_{age} = 0.08$

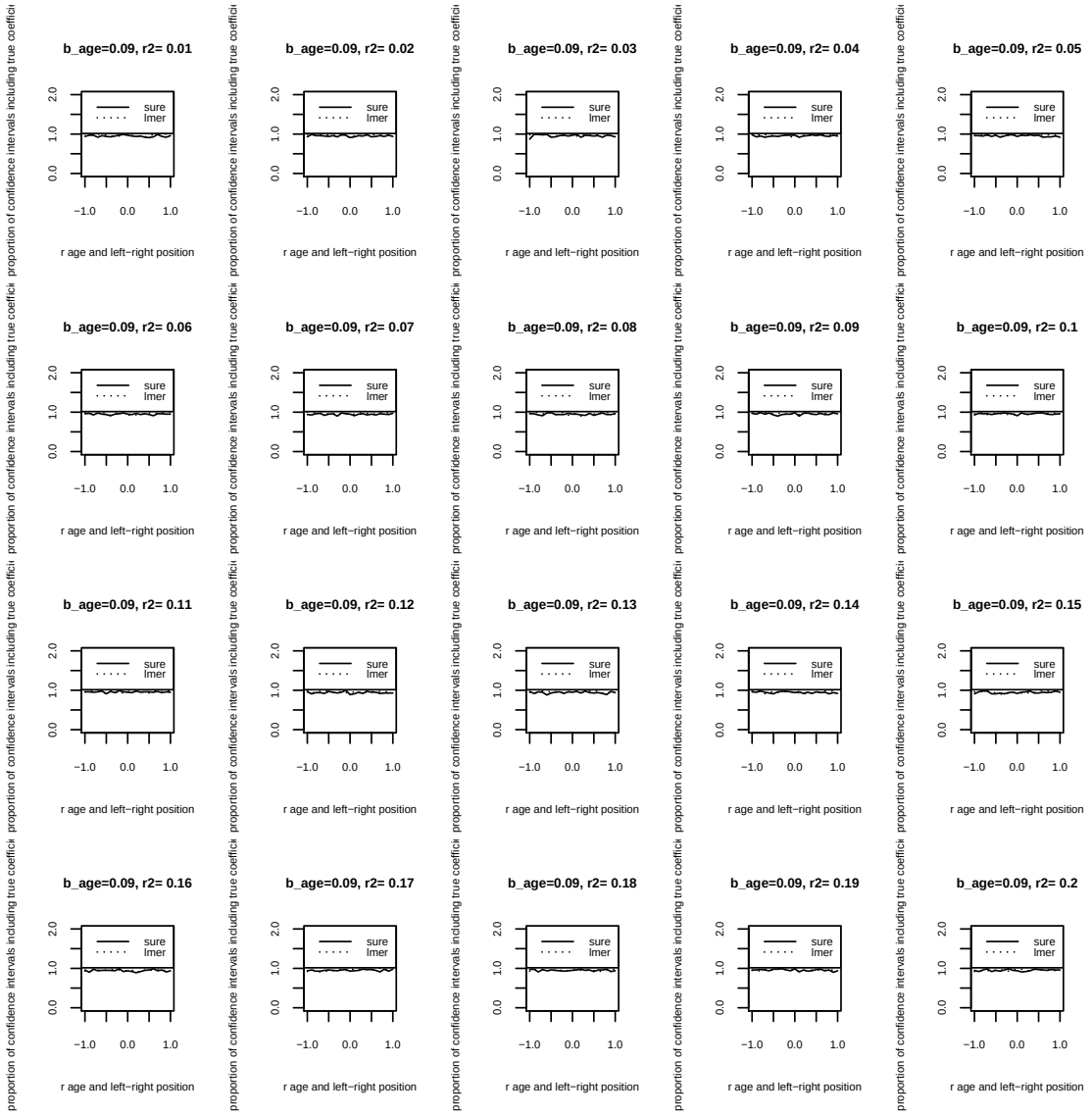

Figure 13: Coverage of confidence interval for b_p with $b_{age} = 0.09$

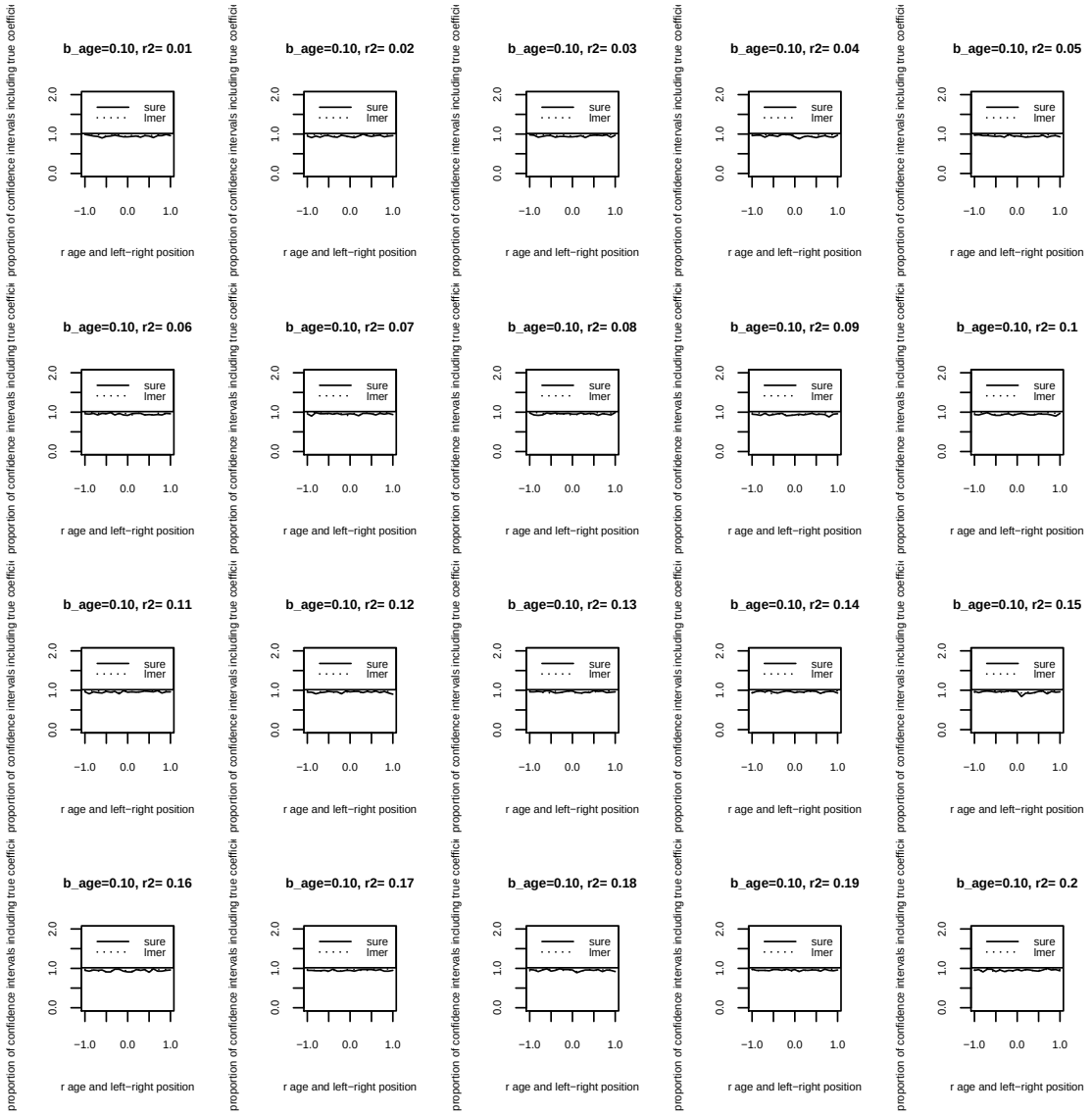

Figure 14: Coverage of confidence interval for b_p with $b_{age} = 0.10$

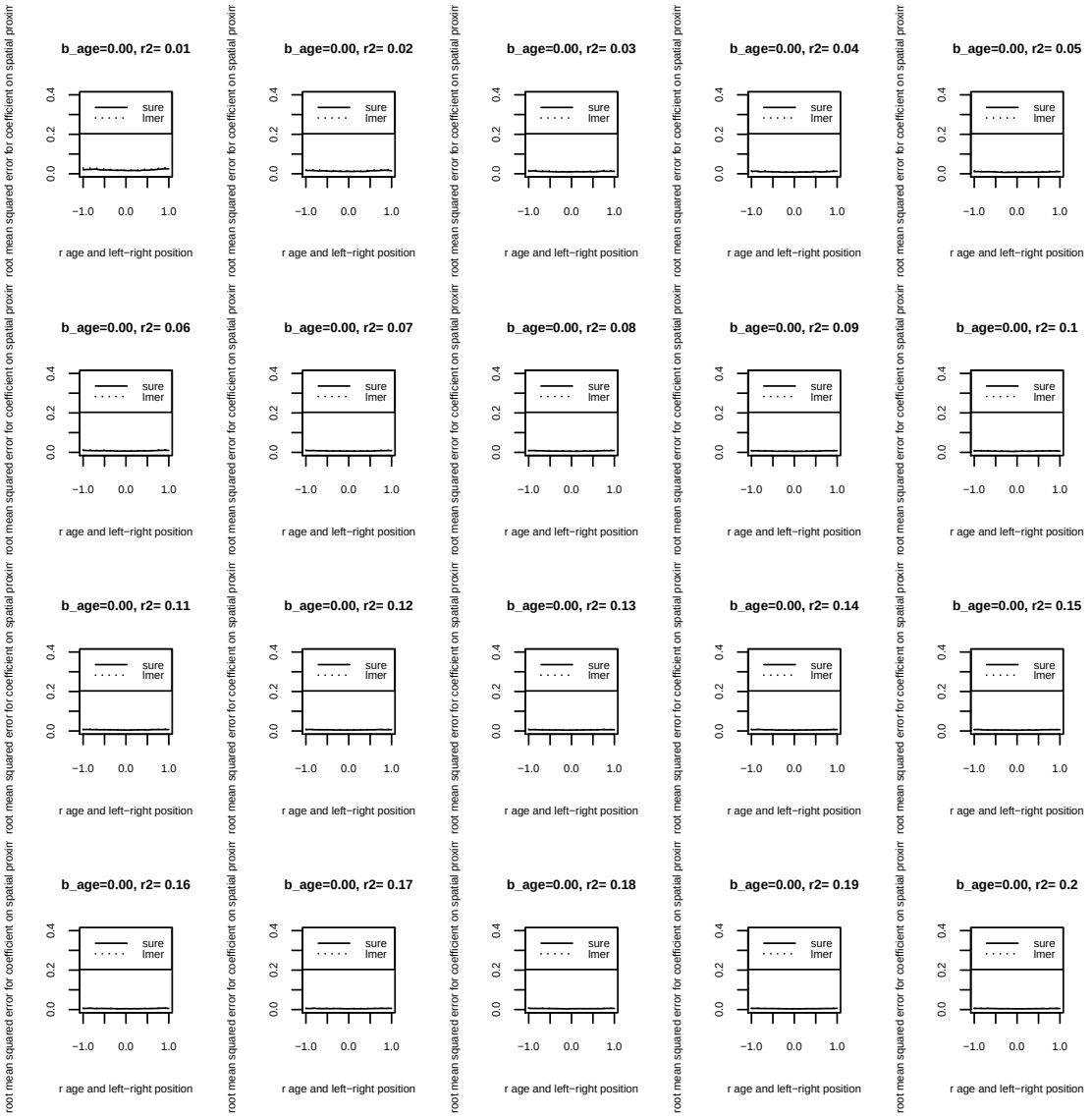

Figure 15: Root mean squared error for b_p with $b_{age} = 0.00$

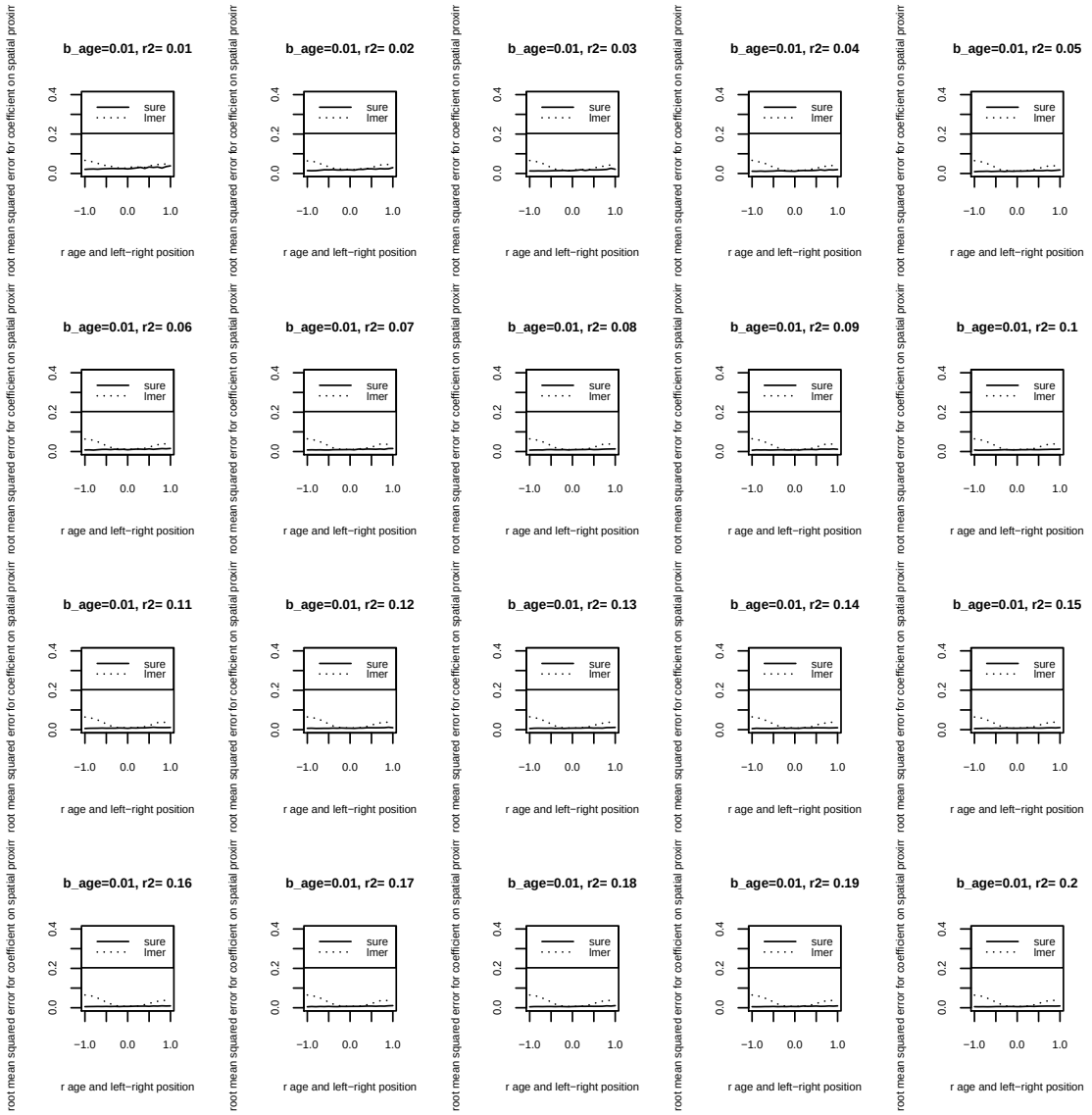

Figure 16: Root mean squared error for b_p with $b_{age} = 0.01$

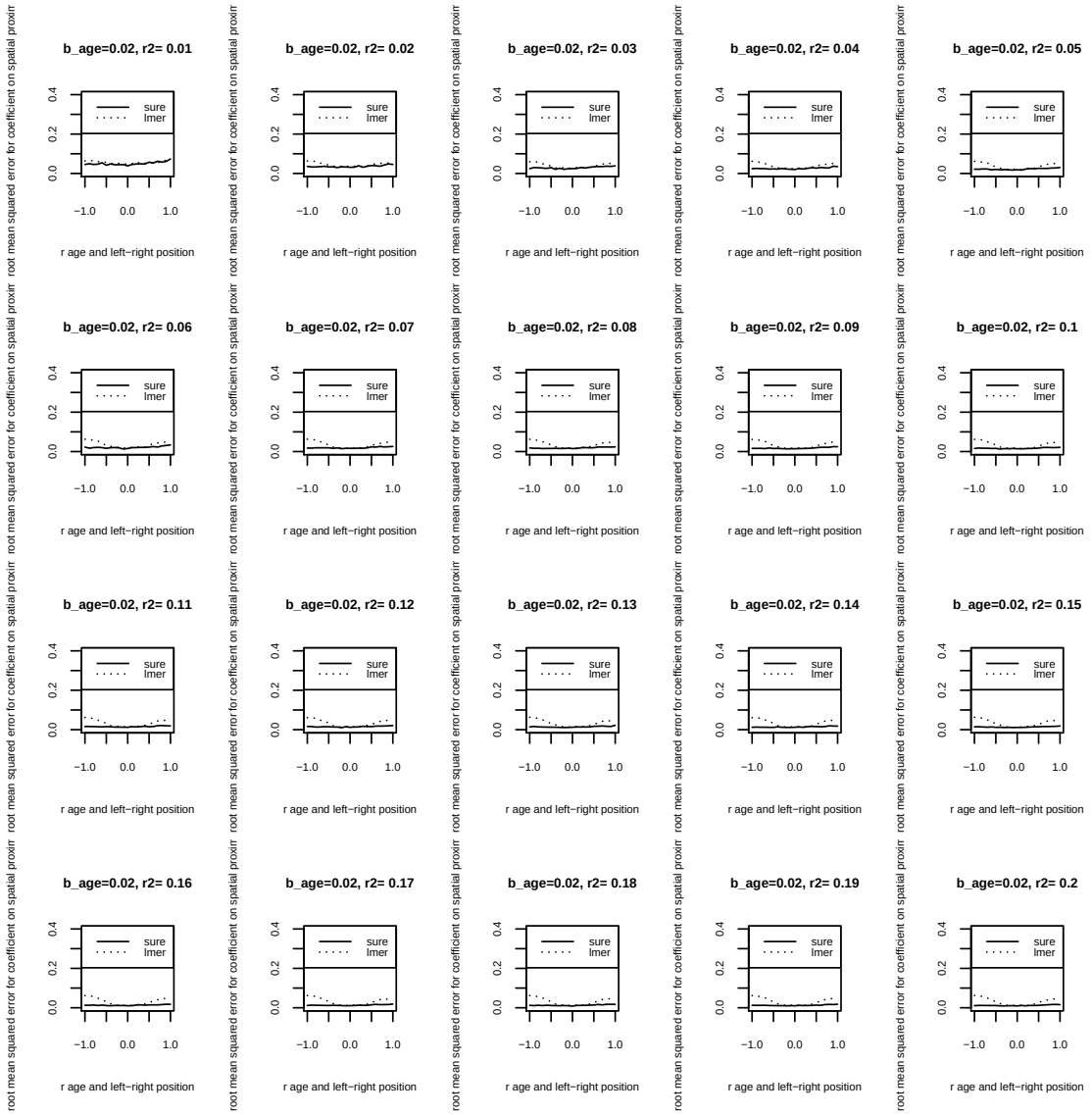

Figure 17: Root mean squared error for b_p with $b_{age} = 0.02$

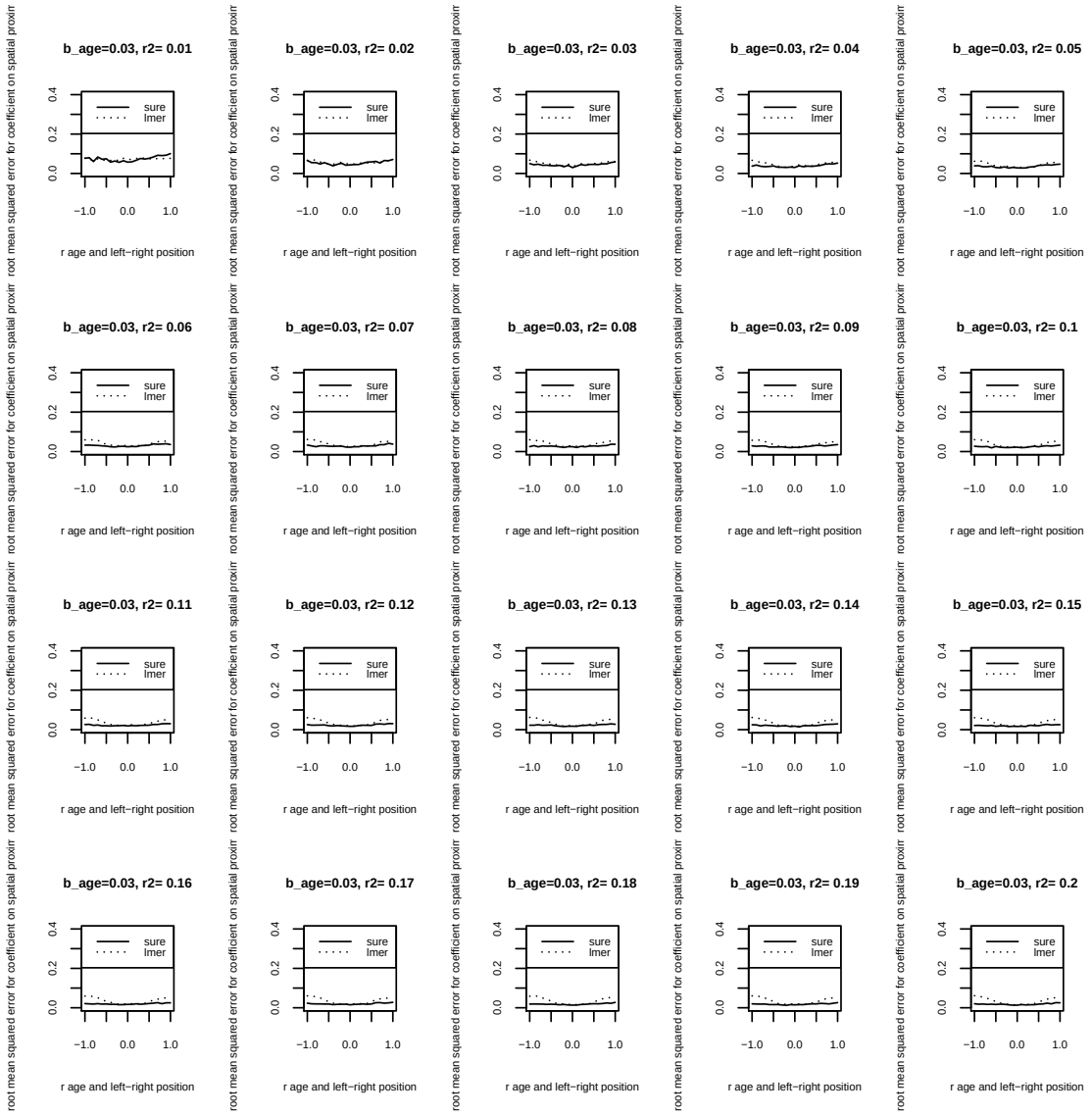

Figure 18: Root mean squared error for b_p with $b_{age} = 0.03$

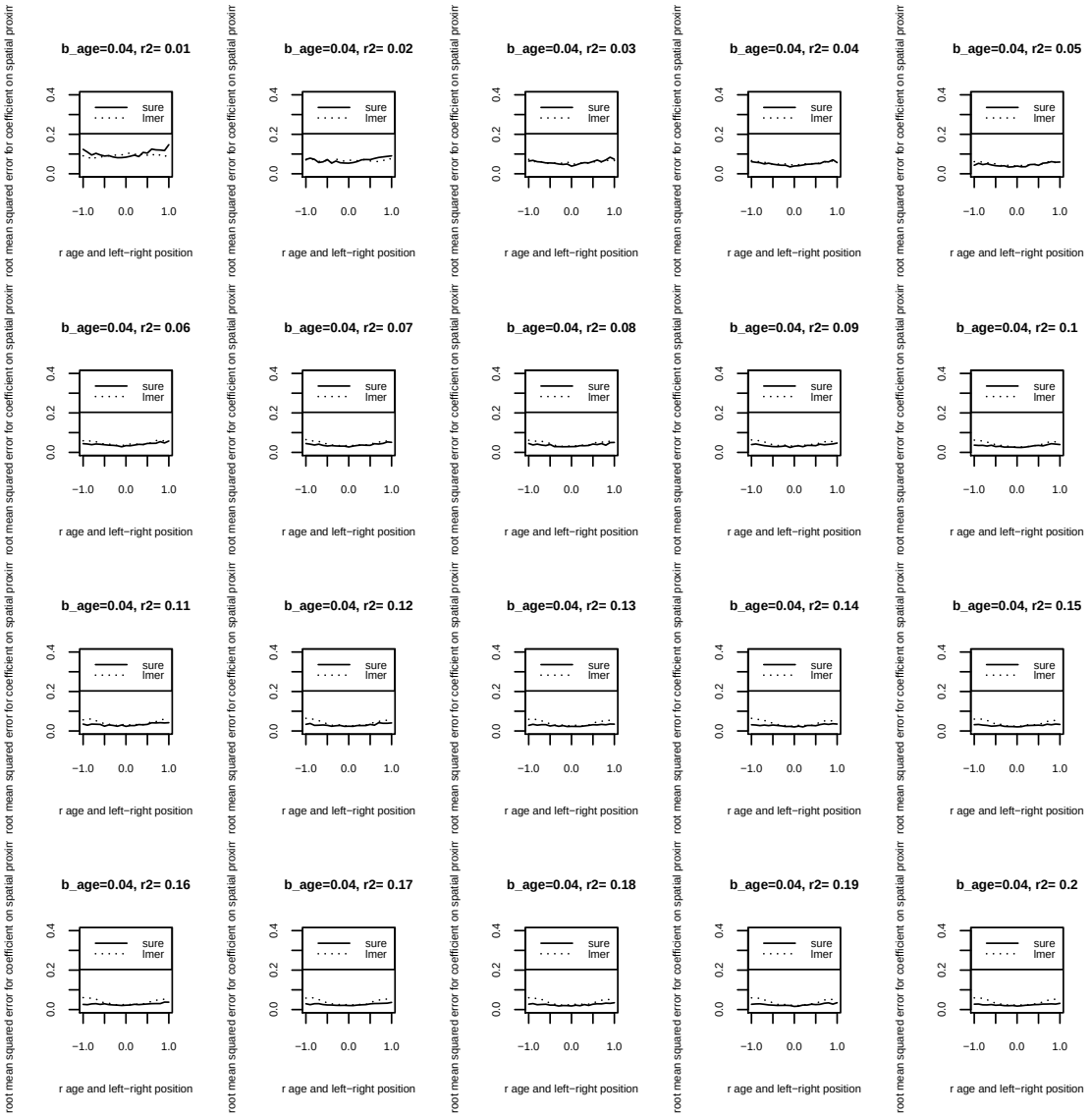

Figure 19: Root mean squared error for b_p with $b_{age} = 0.04$

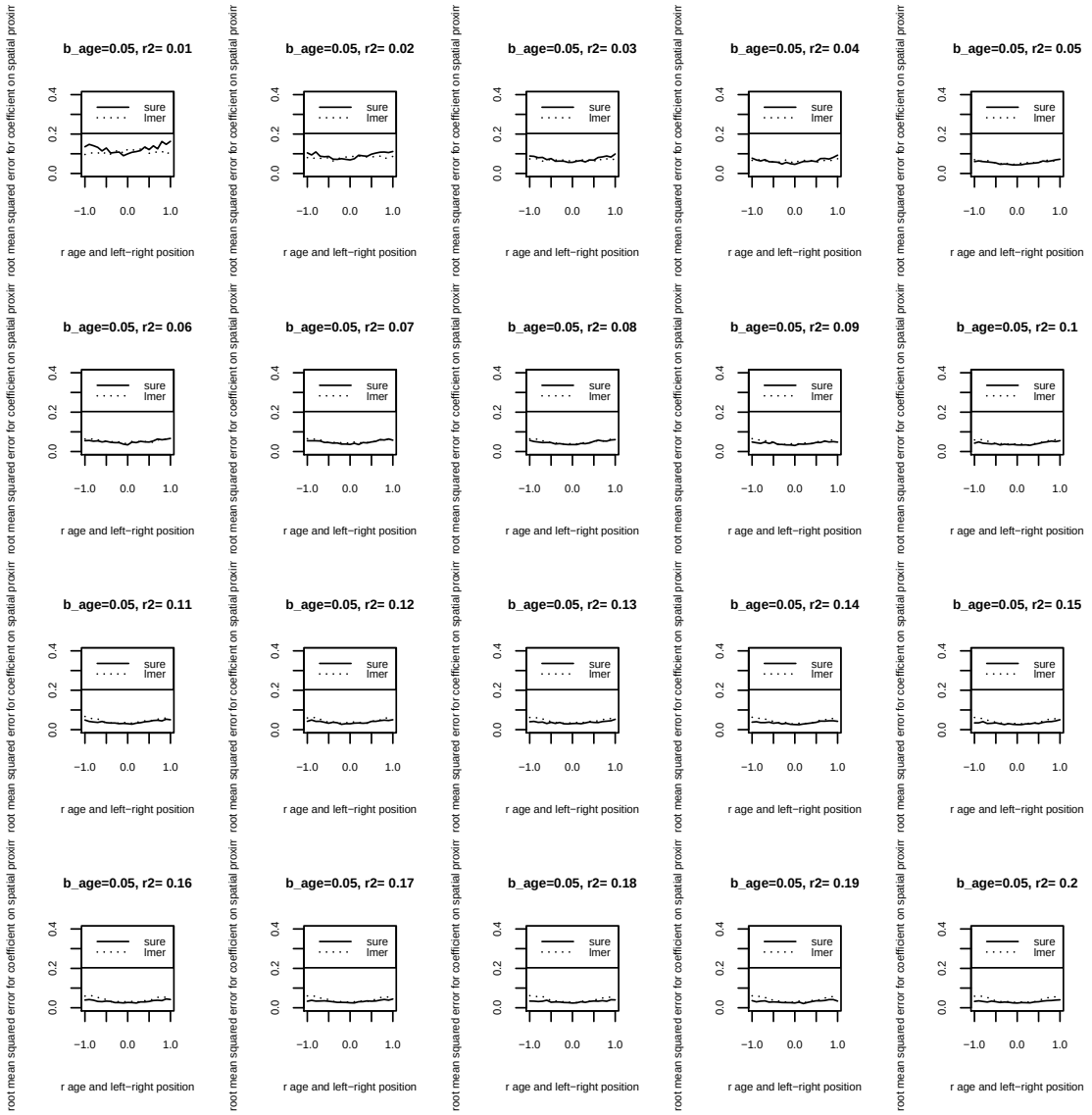

Figure 20: Root mean squared error for b_p with $b_{age} = 0.05$

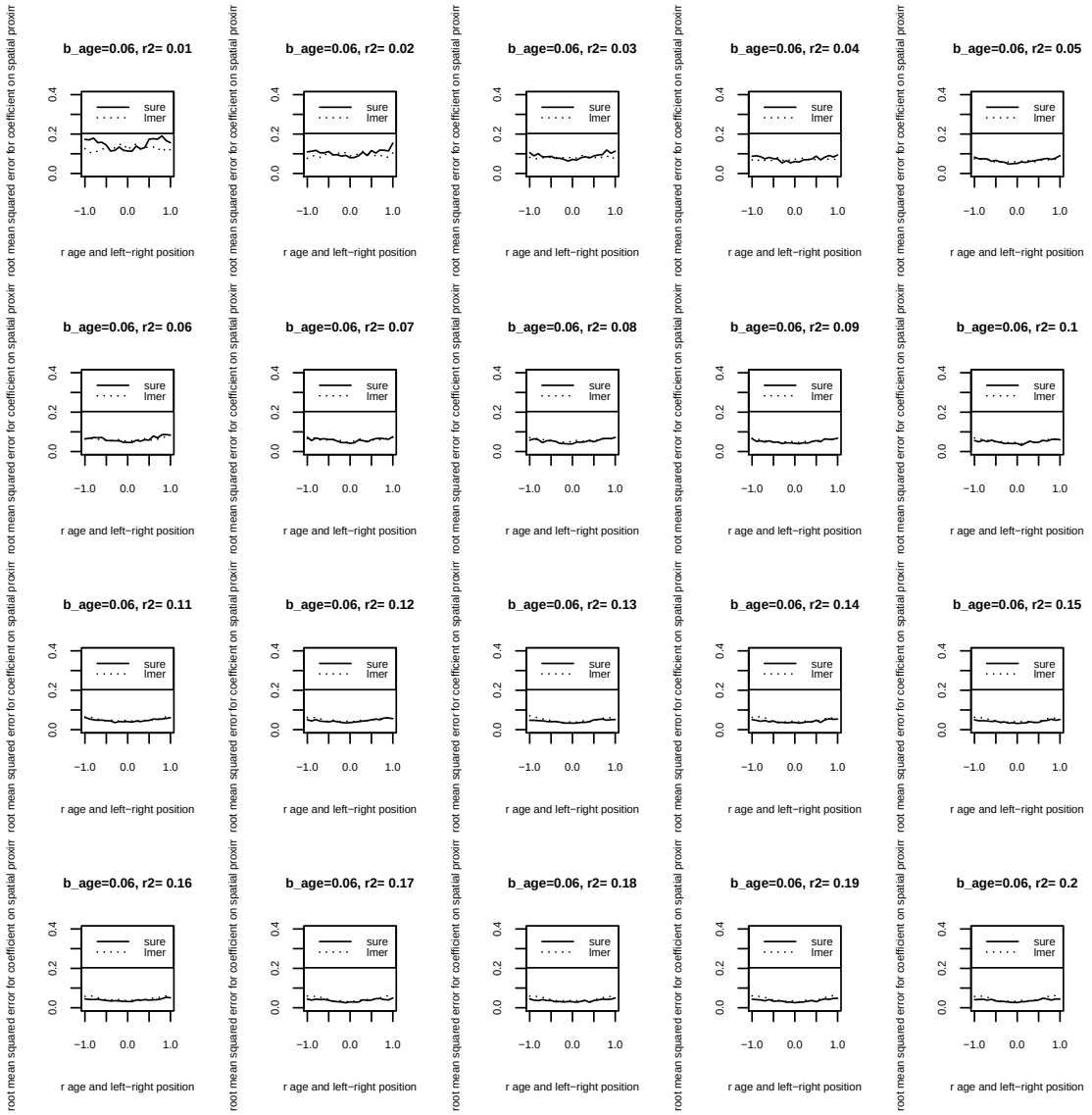

Figure 21: Root mean squared error for b_p with $b_{age} = 0.06$

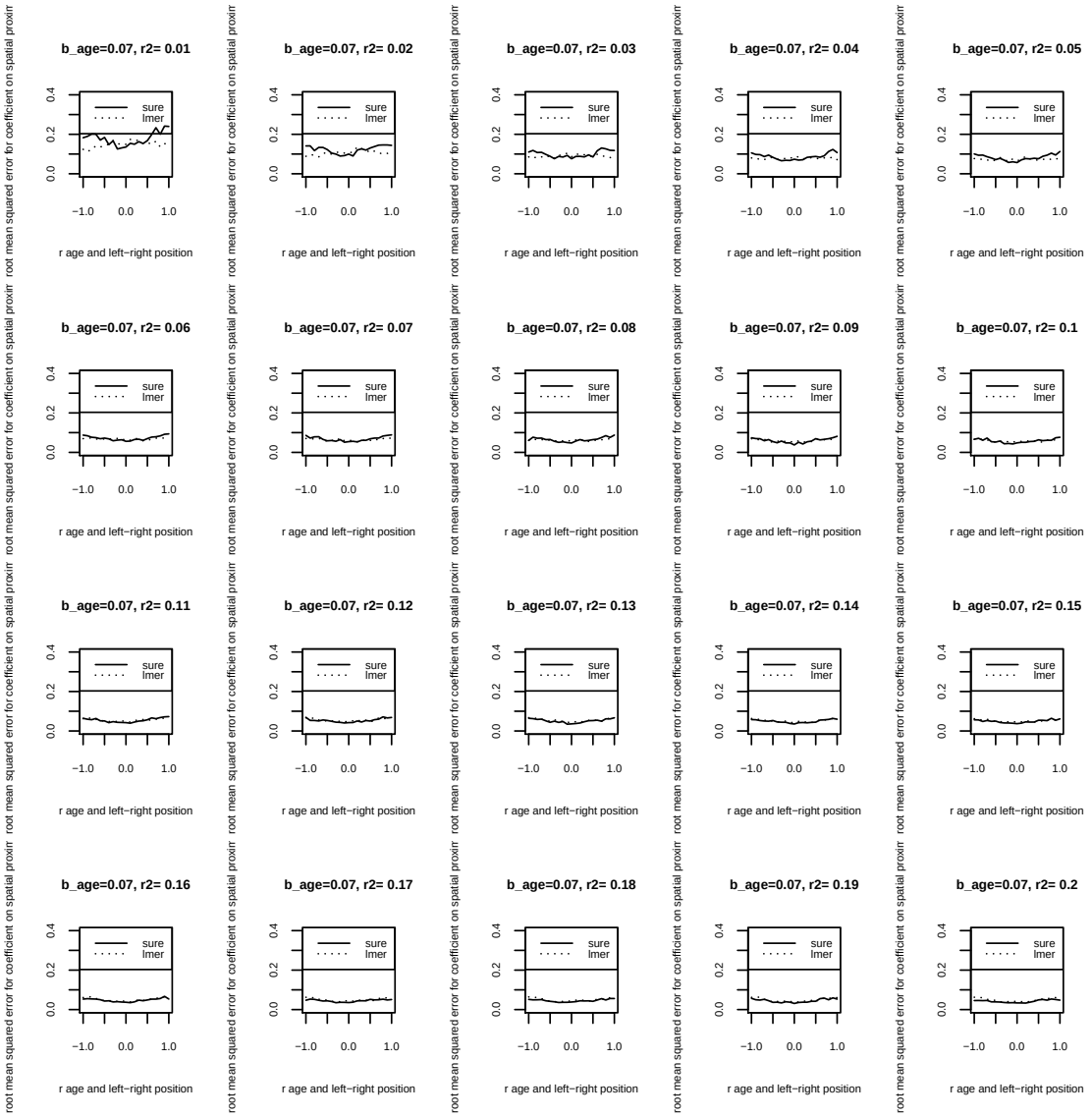

Figure 22: Root mean squared error for b_p with $b_{age} = 0.07$

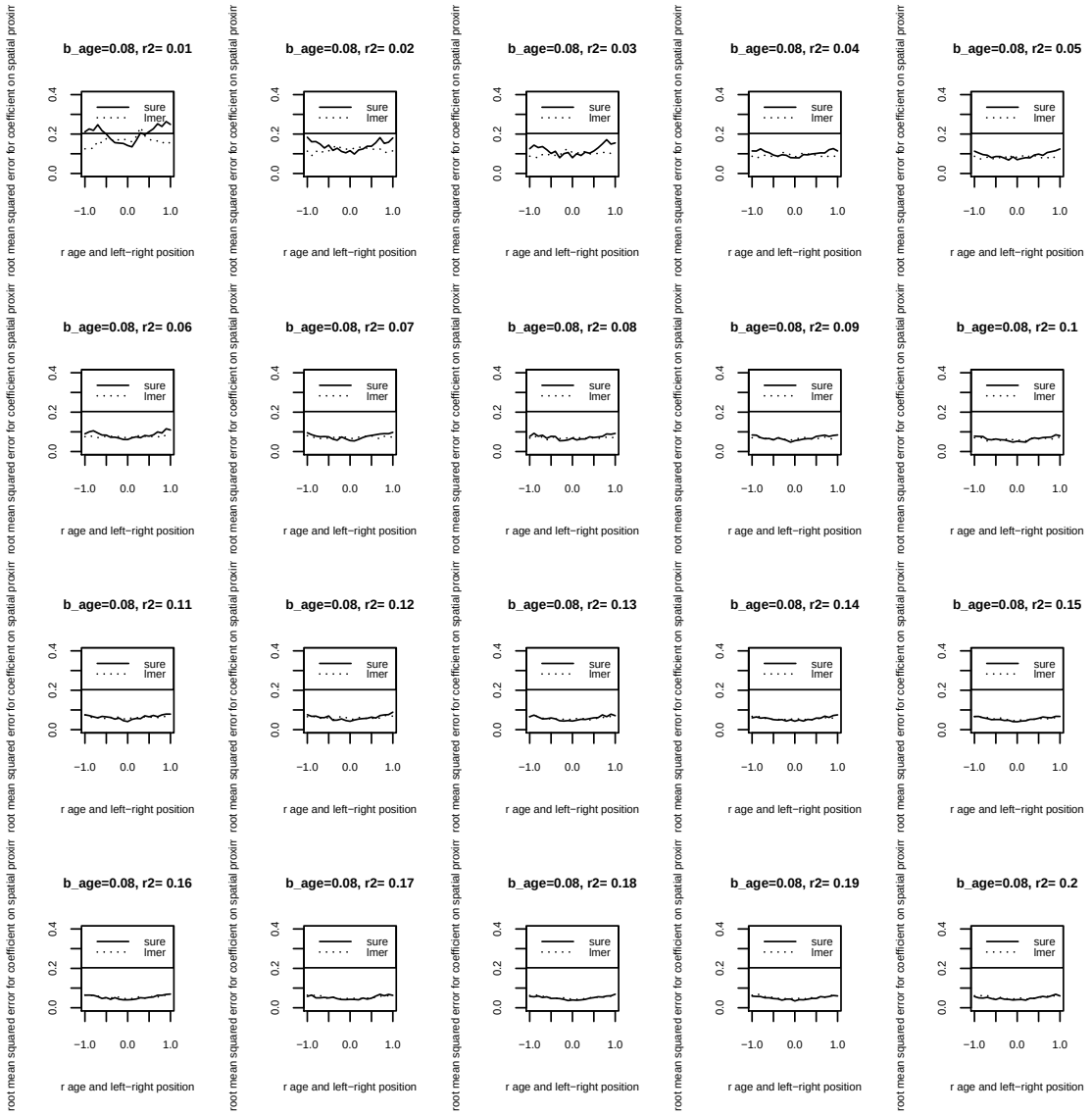

Figure 23: Root mean squared error for b_p with $b_{age} = 0.08$

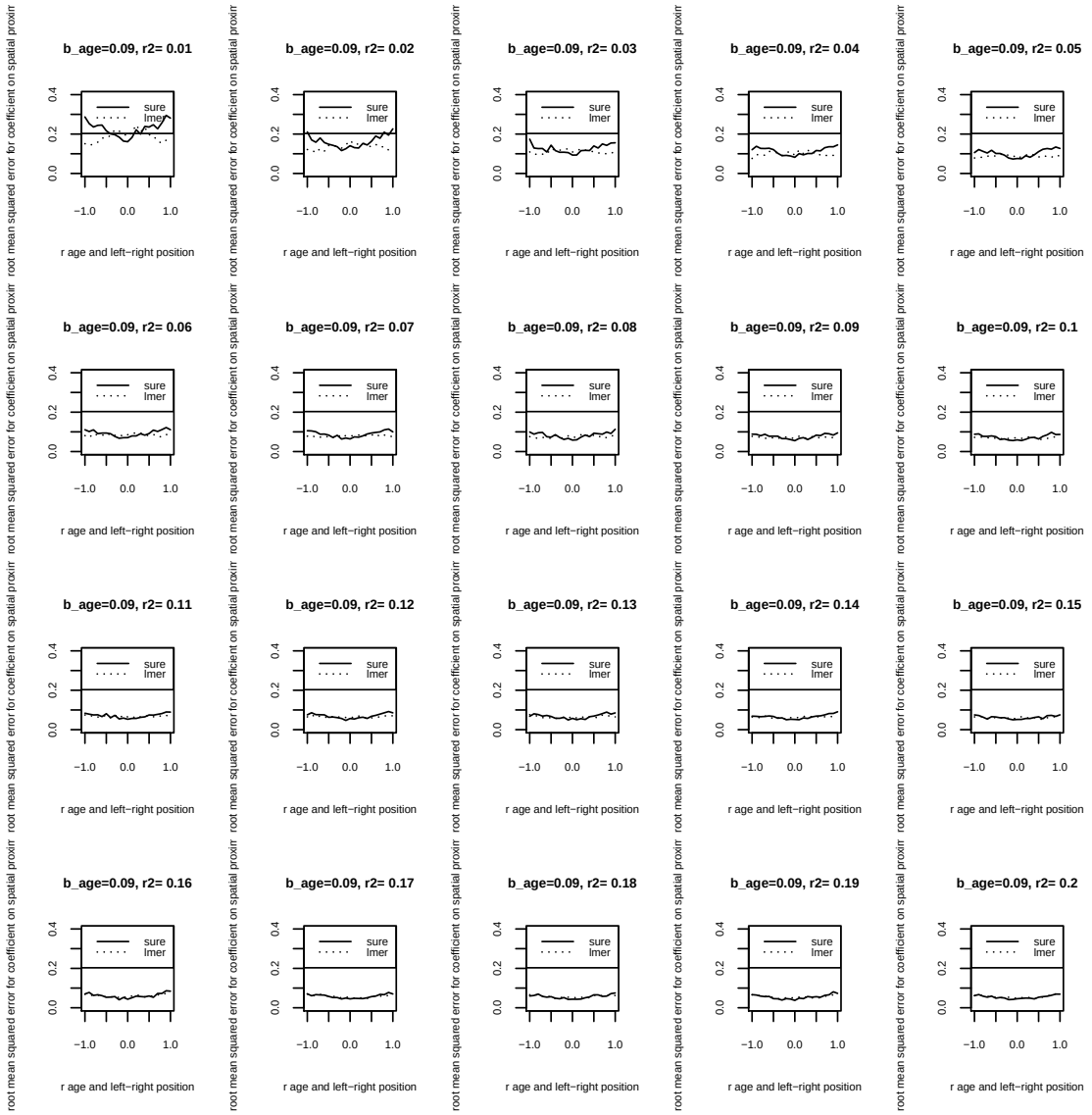

Figure 24: Root mean squared error for b_p with $b_{age} = 0.09$

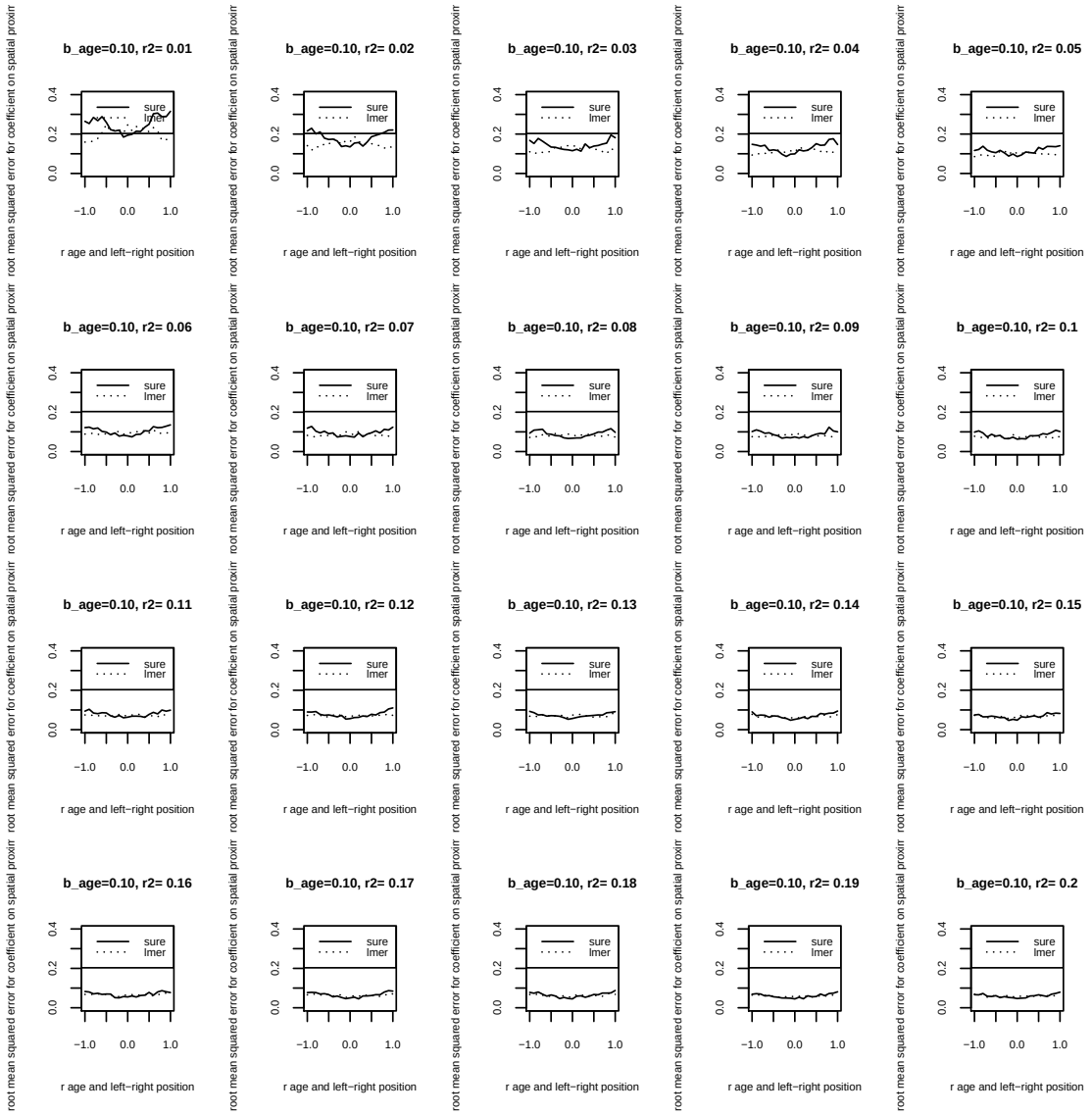

Figure 25: Root mean squared error for b_p with $b_{age} = 0.10$

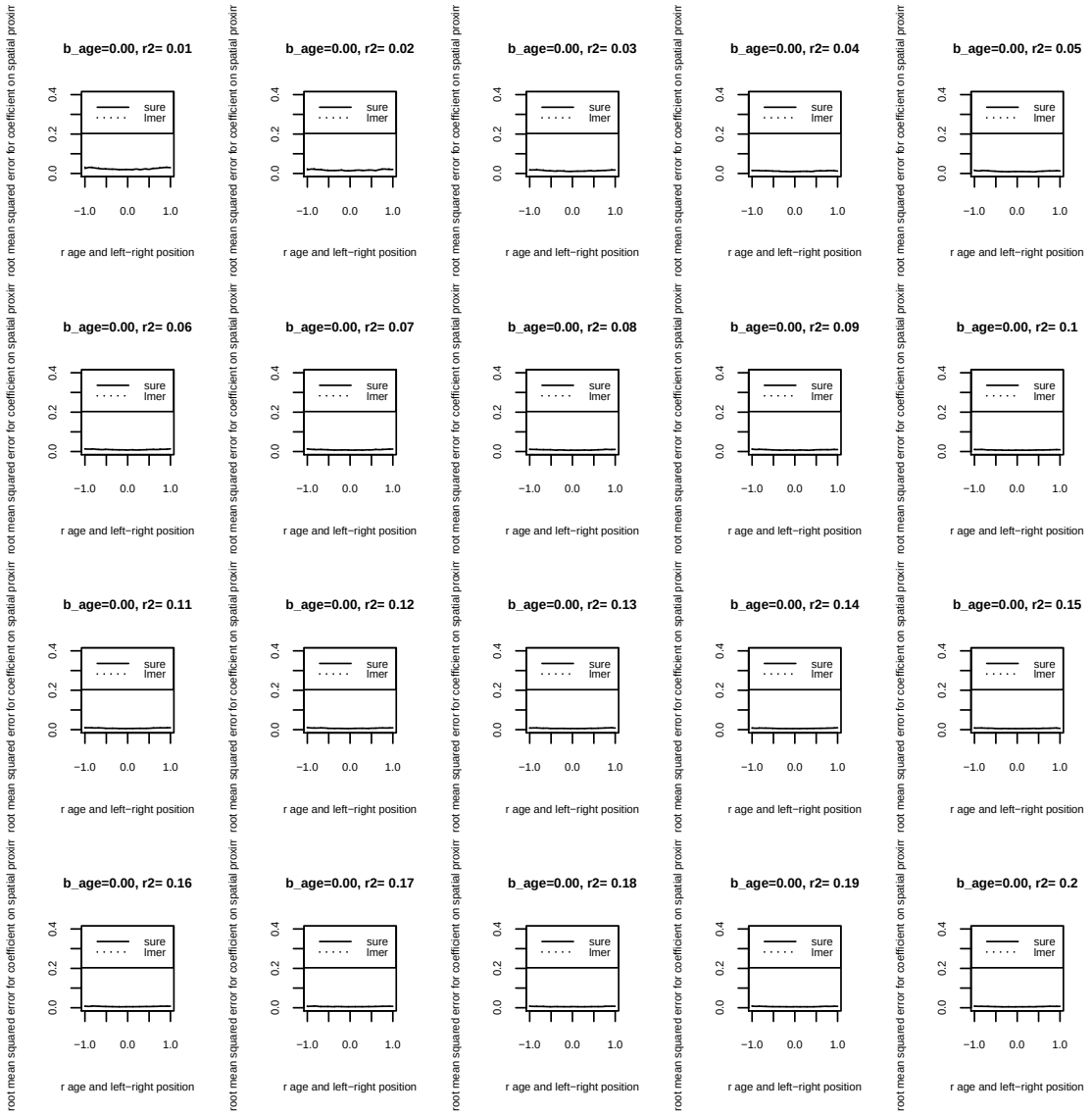

Figure 26: Root mean squared error for b_p with $b_{age} = 0.00$

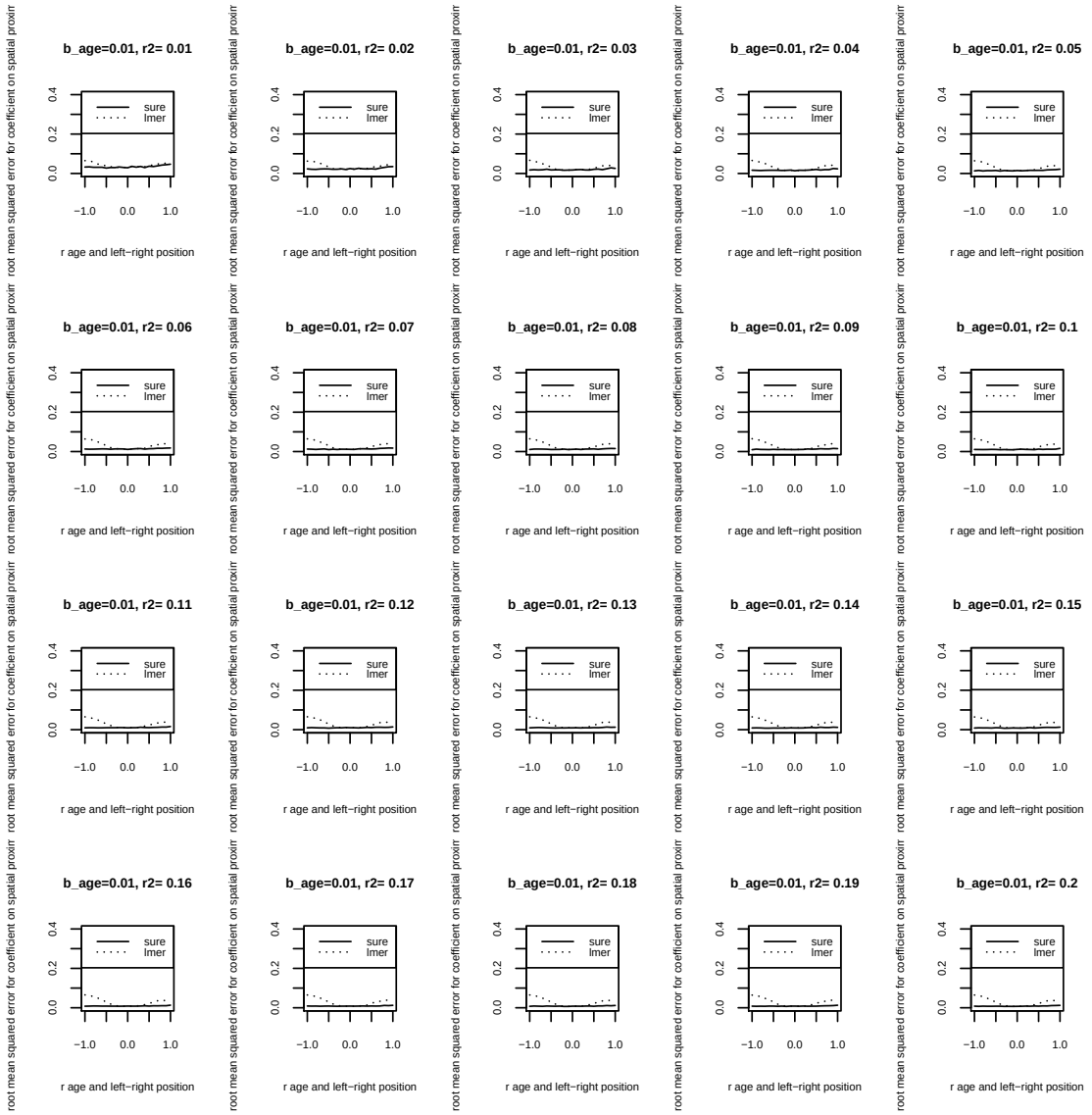

Figure 27: Root mean squared error for b_p with $b_{age} = 0.01$

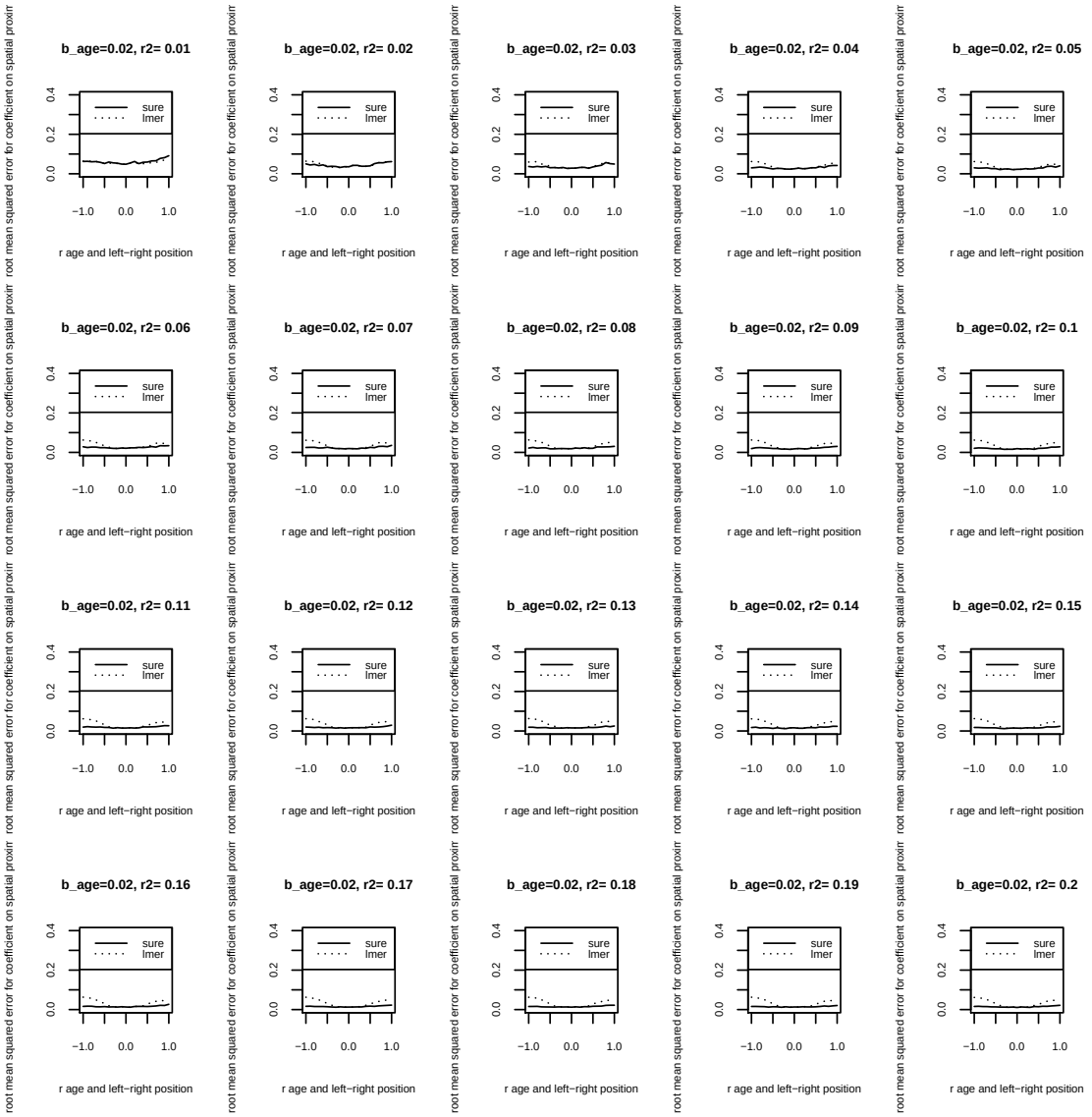

Figure 28: Root mean squared error for b_p with $b_{age} = 0.02$

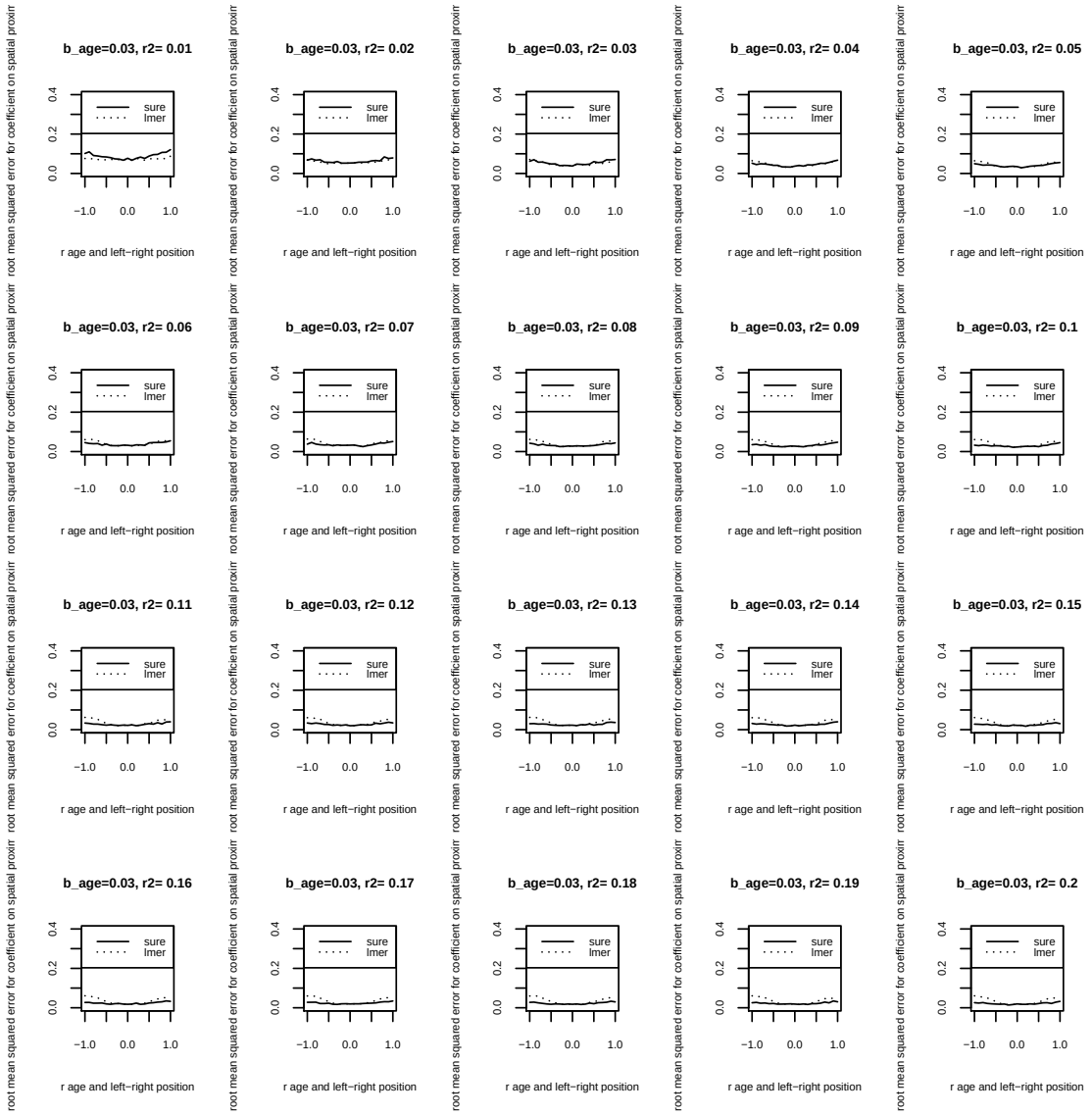

Figure 29: Root mean squared error for b_p with $b_{age} = 0.03$

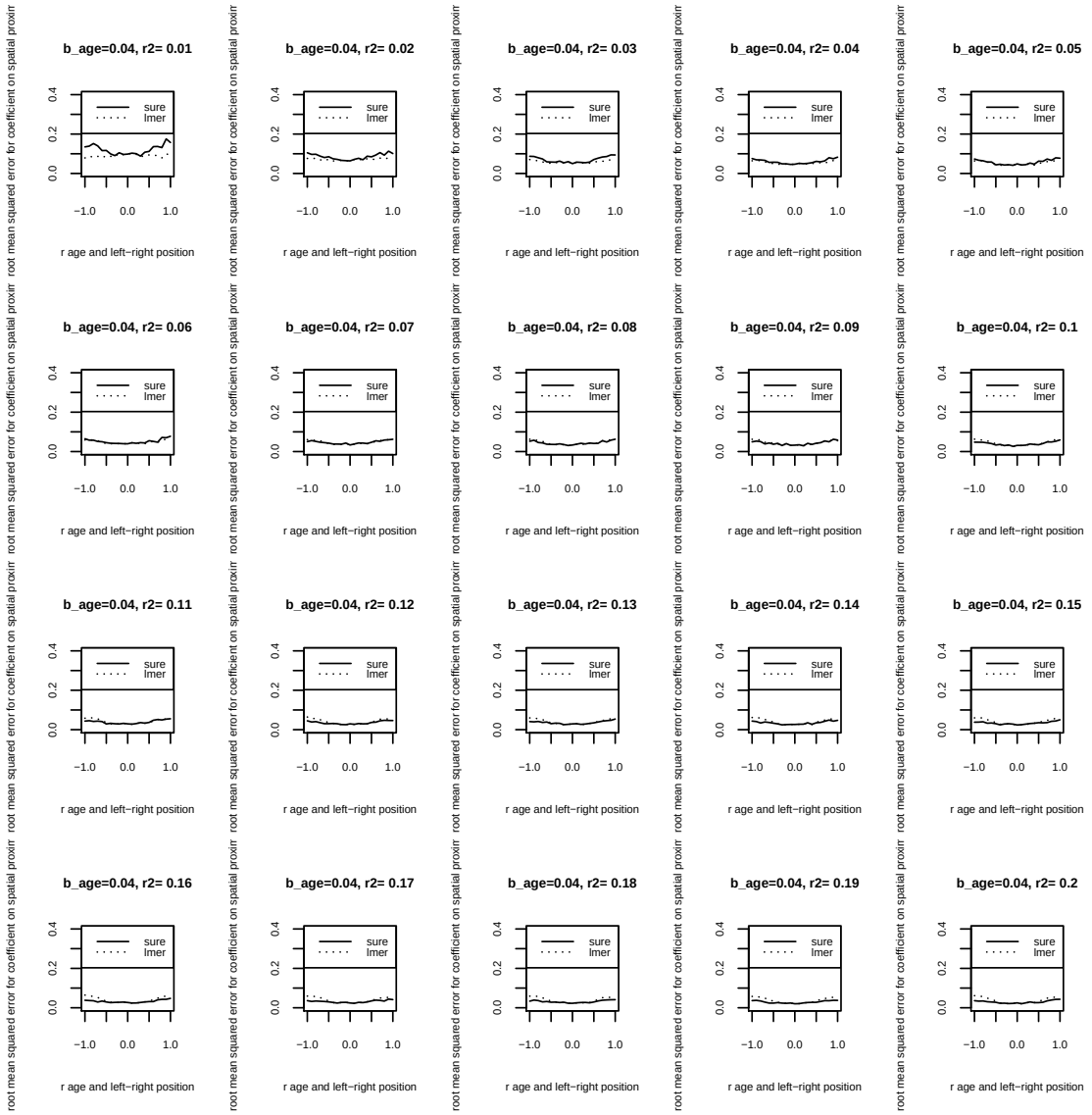

Figure 30: Root mean squared error for b_p with $b_{age} = 0.04$

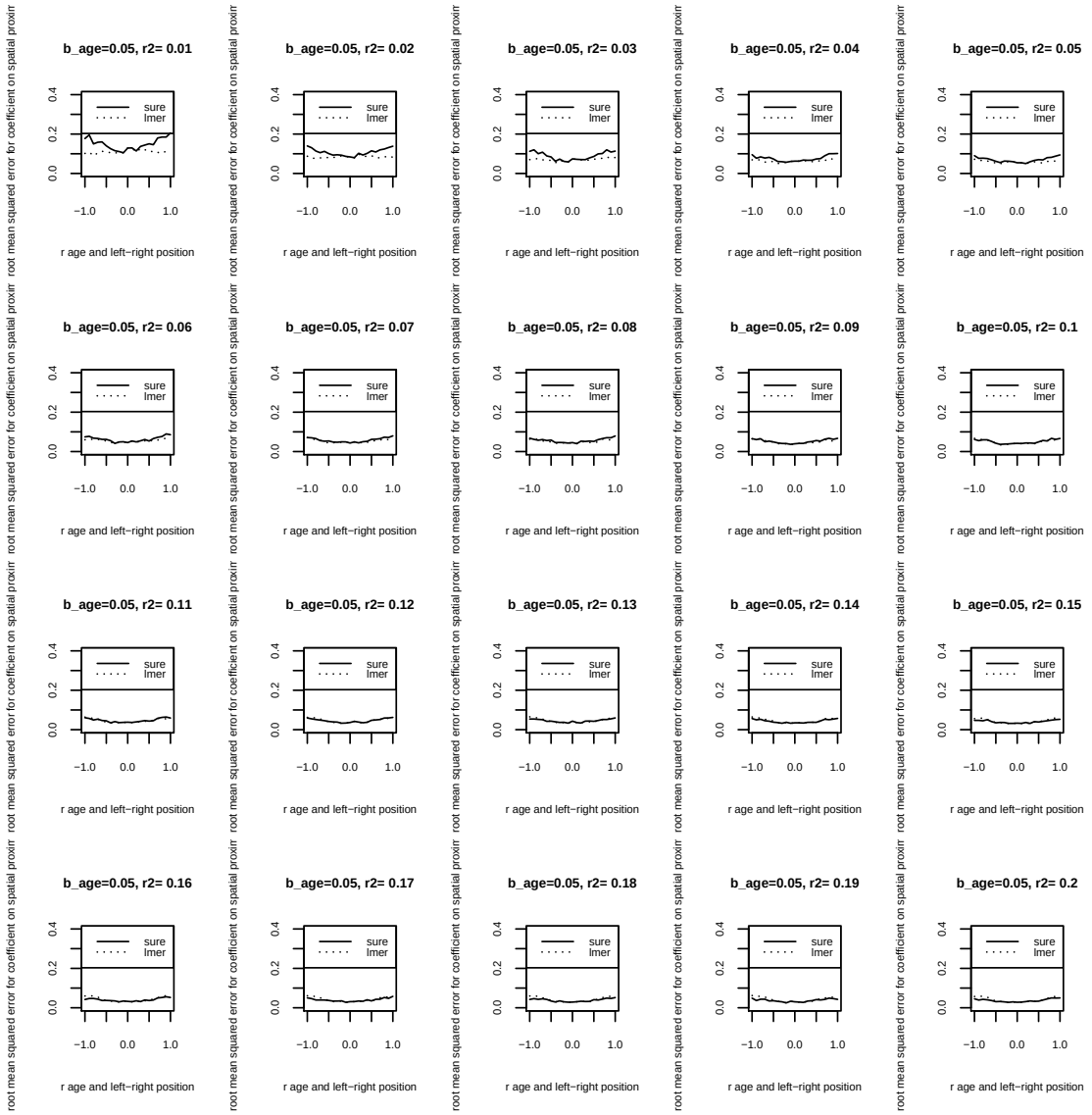

Figure 31: Root mean squared error for b_p with $b_{age} = 0.05$

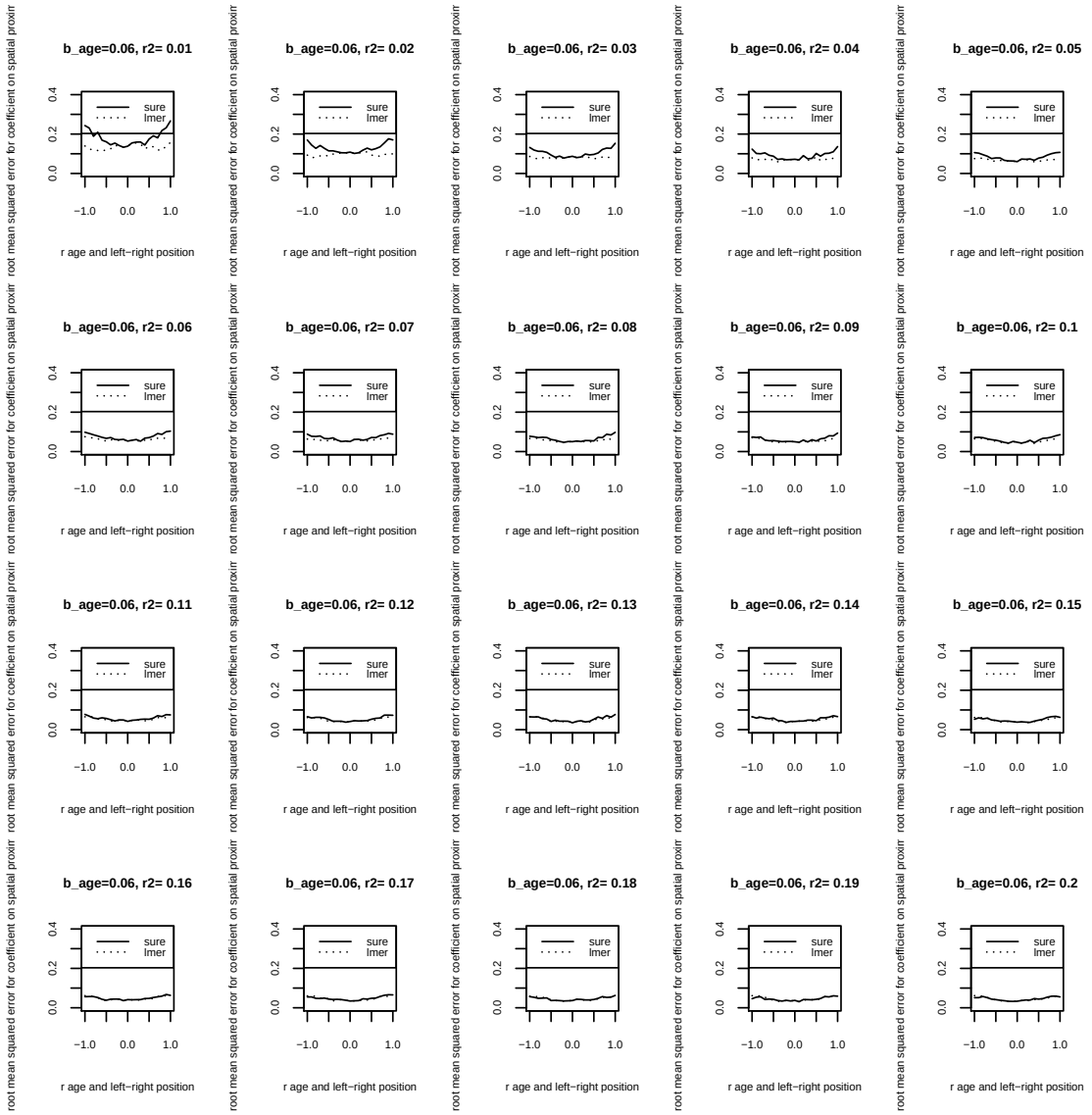

Figure 32: Root mean squared error for b_p with $b_{age} = 0.06$

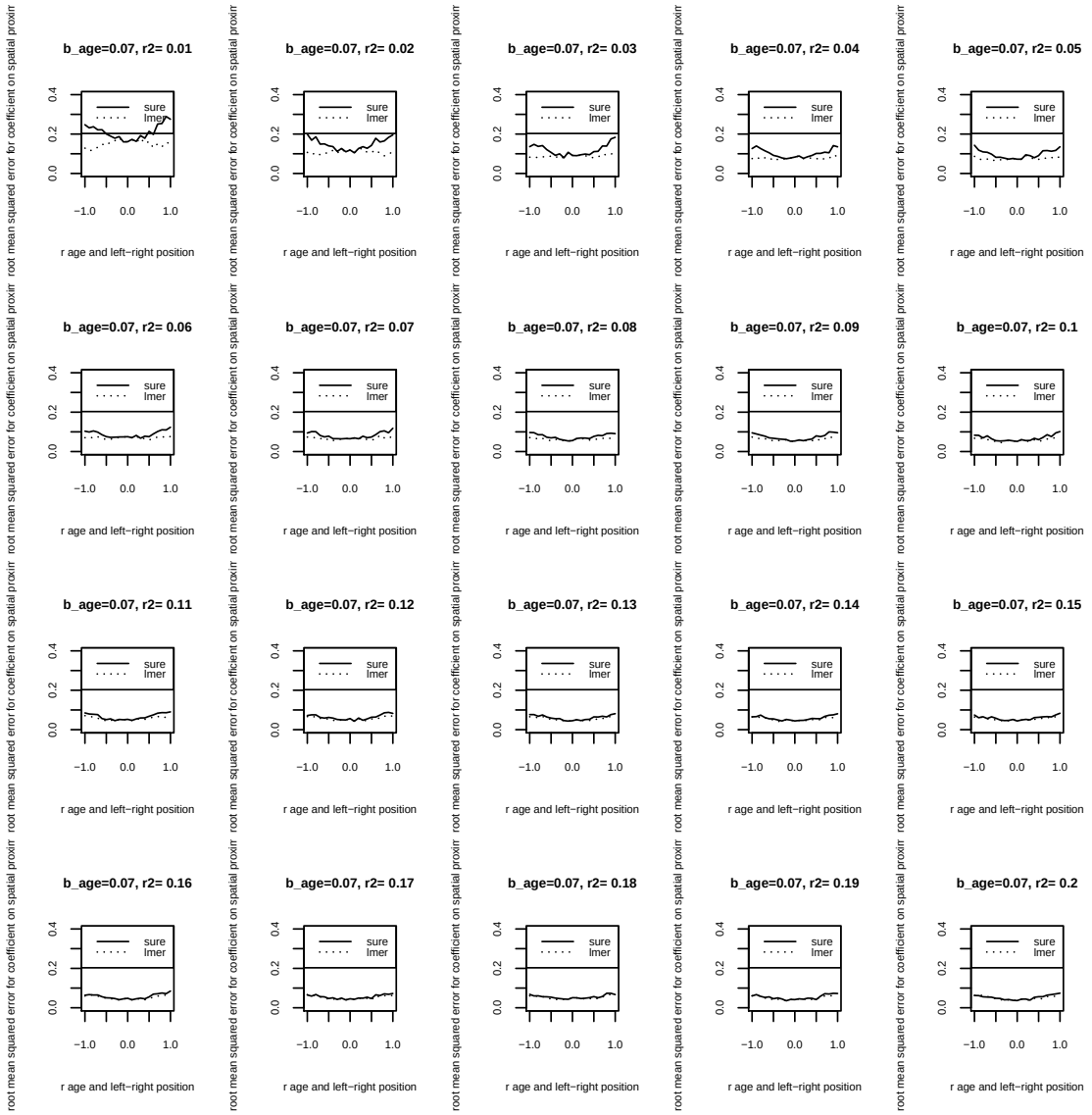

Figure 33: Root mean squared error for b_p with $b_{age} = 0.07$

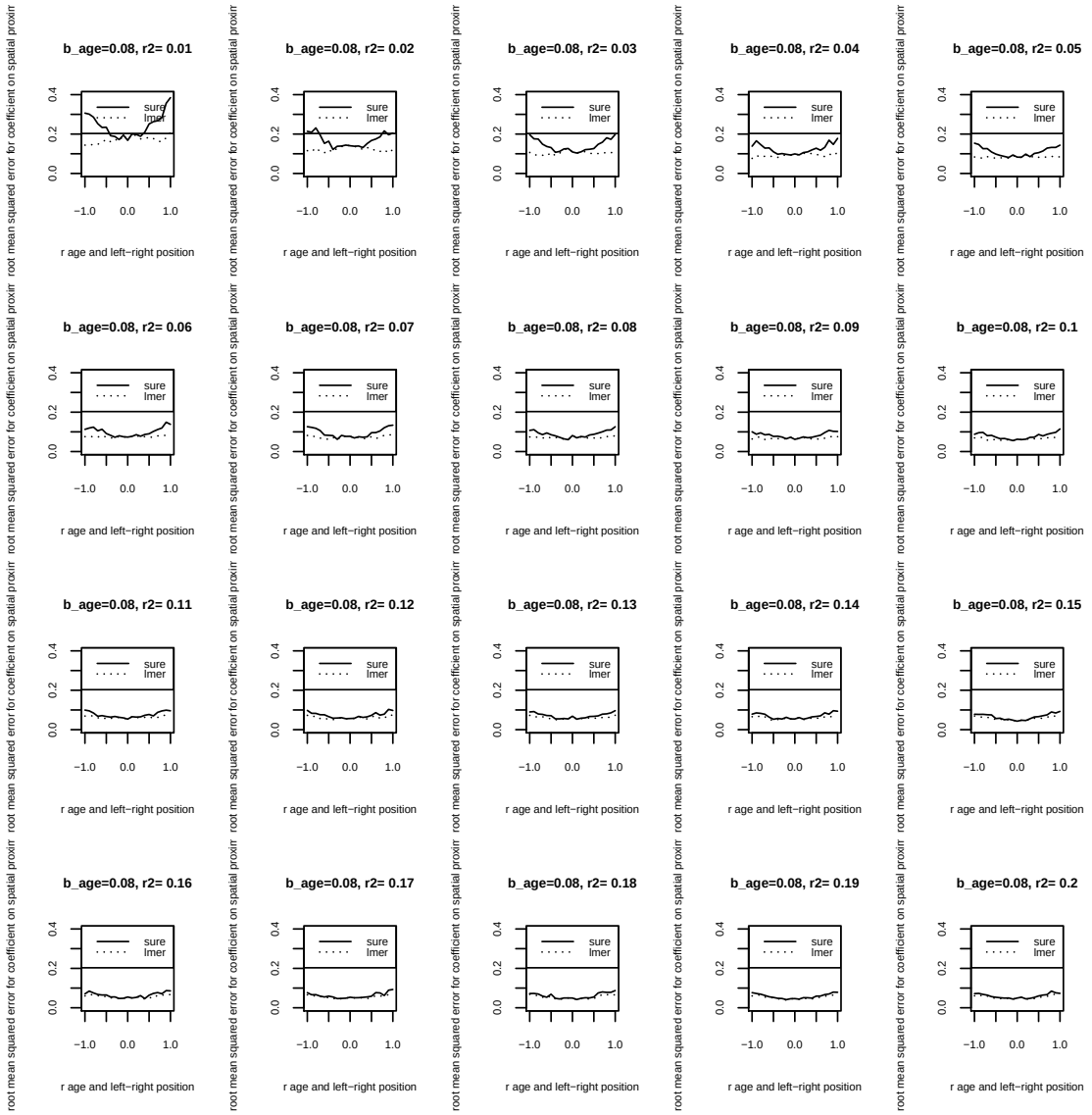

Figure 34: Root mean squared error for b_p with $b_{age} = 0.08$

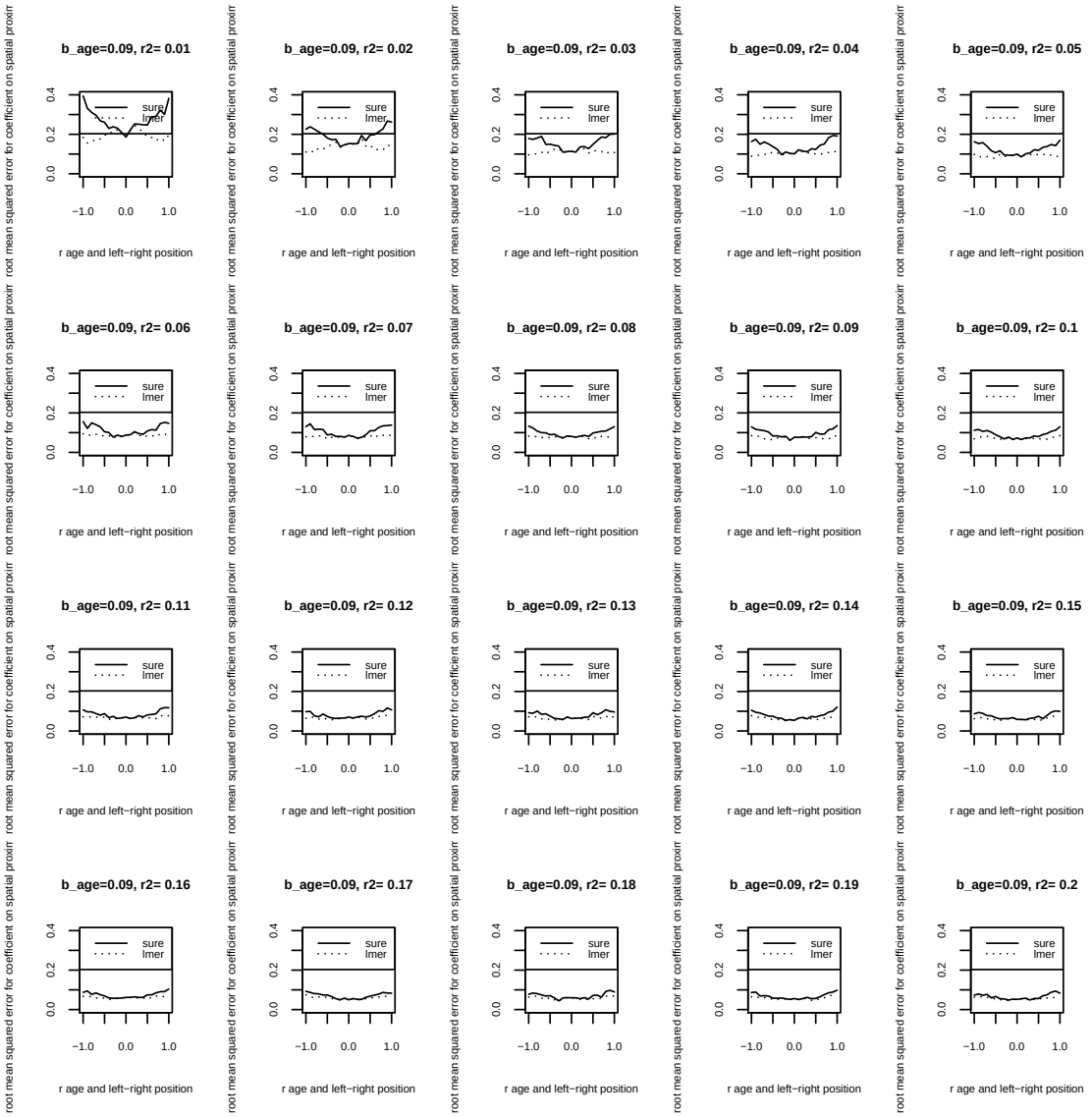

Figure 35: Root mean squared error for b_p with $b_{age} = 0.09$

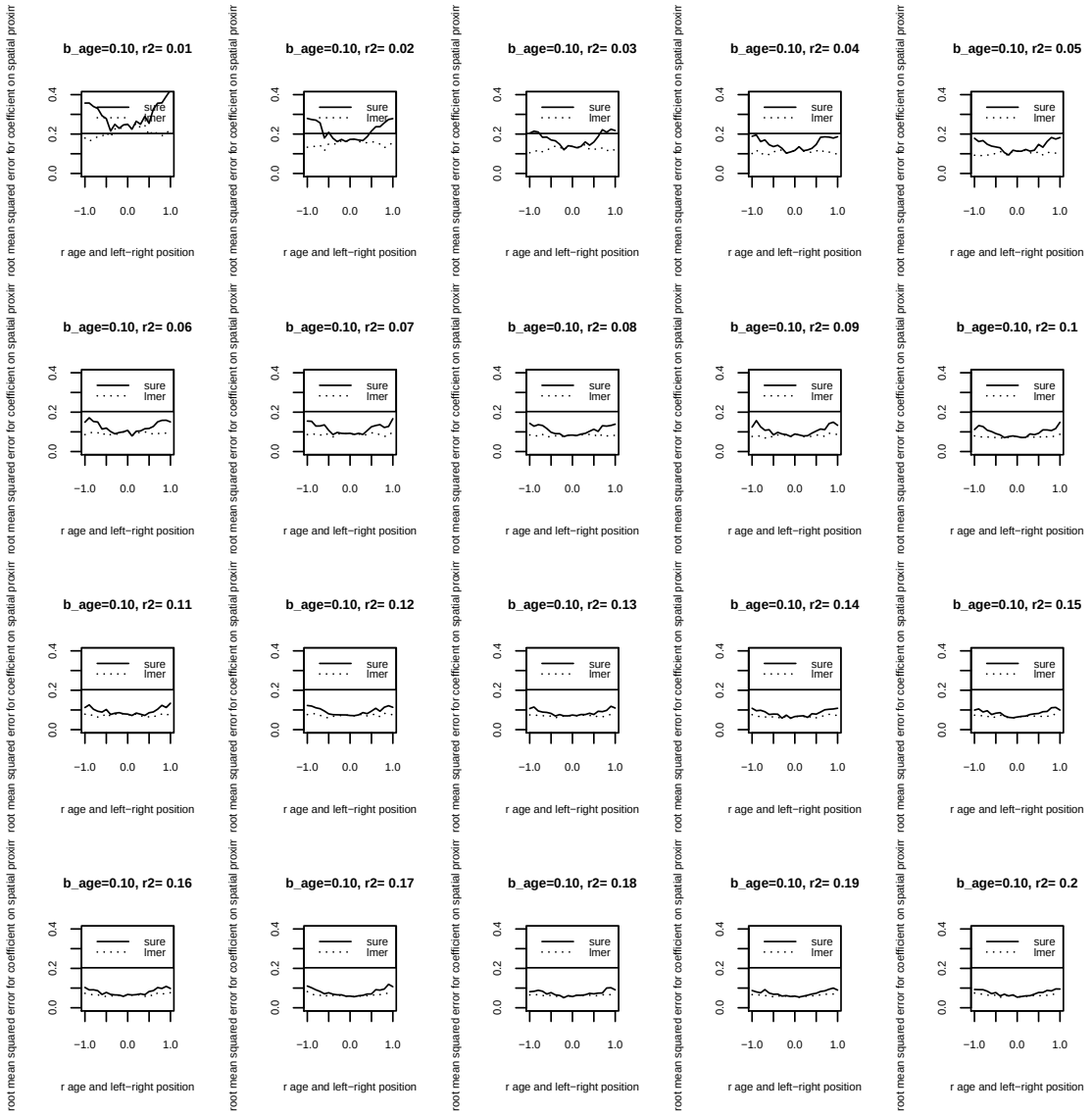

Figure 36: Root mean squared error for b_p with $b_{age} = 0.10$

References

Achen, Christopher H. 2005. "Two-Step Hierarchical Estimation: Beyond Regression Analysis." *Political Analysis* 13(4):447–456.

Angrist, Joshua D. and Jorn-Steffen Pischke. 2008. *Mostly Harmless Econometrics: An Empiricist's Companion*. Princeton: Princeton University Press.

Bélanger, Eric and Bonnie M. Meguid. 2008. "Issue Salience, Issue Ownership, and Issue-Based Vote Choice." *Electoral Studies* 27(3):477–491.

De Angelis, Andrea and Diego Garzia. 2013. "Individual level dynamics of PTV change across the electoral cycle." *Electoral Studies* 32(4):900–904.

De Sio, Lorenzo and Mark Franklin. 2011. "PTVTOOLS: Stata module contining various tools for PTV analysis." Boston College Department of Economics, Statistical Software Components.

De Sio, Lorenzo and Mark N Franklin. 2012. "Strategic incentives, issue proximity and party support in Europe." *West European Politics* 35(6):1363–1385.

Franzese, Robert J. Jr. 2005. "Empirical Strategies for Various Manifestations of Multilevel Data." *Political Analysis* 13(4):430–446.

Gelman, Andrew and Donald B Rubin. 1992. "Inference from iterative simulation using multiple sequences." *Statistical science* pp. 457–472.

Gelman, Andrew and Jennifer Hill. 2007. *Data Analysis Using Regression and Multilevel/Hierarchical Models*. New York: Cambridge University Press.

Greene, William H. 2003. *Econometric Analysis (Fifth Edition)*. New York: Prentice Hall.

Hanushek, Eric A. and John E. Jackson. 1977. *Statistical Methods for Social Scientists*. New York: Academic Press.

Jackson, John E. 2002. "A seemingly unrelated regression model for analyzing multiparty elections." *Political Analysis* 10(1):49–65.

Jusko, Karen Long and W. Phillips Shively. 2005. "Applying a Two-Step Strategy to the Analysis of Cross-National Public Opinion Data." *Political Analysis* 13(4):327–344.

King, Gary and Margaret E. Roberts. 2014. "How Robust Standard Errors Expose Methodological Problems They Do Not Fix, and What to Do About it." *Political Analysis* 23(2):159–179.

Kmenta, Jan and Roy F Gilbert. 1968. "Small sample properties of alternative estimators of seemingly unrelated regressions." *Journal of the American Statistical Association* 63(324):1180–1200.

Lewis, Jeffrey B. and Drew A. Linzer. 2005. "Estimating Regression Models in Which the Dependent Variable Is Based on Estimates." *Political Analysis* 13(4):345–364.

Maddala, G.S. 1977. *Econometrics*. New York: McGraw Hills.

Mellon, Jon and Geoffrey Evans. 2015. "Class, Electoral Geography and the Future of UKIP: Labour's Secret Weapon?" *Parliamentary Affairs* 69(2):492–498.

Pardos-Prado, Sergi and Elias Dinas. 2010. "Systemic polarisation and spatial voting." *European Journal of Political Research* 49(6):759–786.

Plummer, Martyn. 2010. "JAGS Version 2.1.0 user manual." International Agency for Research on Cancer Infection and Cancer Epidemiology (ICE) group.

Tillie, Johannes Nicolaas. 1995. *Party Utility and Voting Behavior*. Amsterdam: Het Spinhuis.

van der Brug, Wouter, Cees van der Eijk and Mark Franklin. 2007. *The economy and the vote : economic conditions and elections in fifteen countries*. Cambridge: Cambridge Univ. Press.

Van der Brug, Wouter, Mark Franklin and Gábor Tóka. 2008. "One electorate or many? Differences in party preference formation between new and established European democracies." *Electoral Studies* 27(4):589–600.

Van der Eijk, Cees and Mark Franklin. 2009. *Elections and voters*. Palgrave Macmillan.

Van der Eijk, Cees and Mark Franklin, eds. 1994. *Choosing Europe? The European Electorate and National Politics in the Face of Union*. Ann Arbor: University of Michigan Press.

Van der Eijk, Cees, Mark Franklin and Erik Oppenhuis. 1994. The strategic context: party choice. In *Choosing Europe? The European Electorate and National Politics in the Face of Union*, ed. Cees Van der Eijk and Mark Franklin. University of Michigan Press pp. 332–365.

Van der Eijk, Cees, Wouter van der Brug, Martin Kroh and Mark N. Franklin. 2006. "Rethinking the Dependent Variable in Electoral Behavior: On the Measurement and Analysis of Utilities." *Electoral Studies* 25:424–447.

Vegetti, Federico, Monica Poletti and Paolo Segatti. 2013. "When responsibility is blurred. Italian national elections in times of economic crisis, technocratic government, and ever-growing populism." *Rivista italiana di scienza politica* 43(3):329–352.

Vezzoni, Cristiano and Moreno Mancosu. 2016. "Diffusion Processes and Discussion Networks: An Analysis of the Propensity to Vote for the 5 Star Movement in the 2013 Italian Election." *Journal of Elections, Public Opinion and Parties* 26(1):1–21.

Wall, Matthew, André Krouwel and Thomas Vitiello. 2014. "Do voters follow the recommendations of voter advice application websites? A study of the effects of kieskompas. nl on its users vote choices in the 2010 Dutch legislative elections." *Party Politics* 20(3):416–428.

Webb, Paul, Tim Bale and Monica Poletti. 2017. "All mouth and no trousers? How many Conservative Party members voted for UKIP in 2015 and why did they do so?" *Politics* 37(4):432–444.

Zellner, Arnold. 1962. "An efficient method of estimating seemingly unrelated regressions and tests for aggregation bias." *Journal of the American statistical Association* 57(298):348–368.