**The changing meaning of left and right: supply- and demand-side effects on the perception of party positions**

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**Online Appendices**

**Appendix A: Question wording of core variables[[1]](#footnote-1)**

*Dependent variable: Left-right party placement*

**Question text:**

In politics, people sometimes talk about left and right. Where would you place the following parties on a scale from 1 to 11 where 1 means left and 11 means right?

**Items:**

(A) CDU

(B) CSU

(C) SPD

(D) FDP

(E) DIE LINKE

(F) GRÜNE

(G) PIRATEN

(H) AfD (Alternative für Deutschland)

**Scale:**

(1) 1 left

(2) 2

(3) 3

(4) 4

(5) 5

(6) 6

(7) 7

(8) 8

(9) 9

(10) 10

(11) 11 right

(-98) Don’t know

(-99) No answer

*Core independent variables:*

**Economic sub-dimension**

Some people want lower taxes, even if this means a reduction in the benefits offered by the social state, others want more benefits offered by the social state, even if this means an increase in taxation. What do you think is the opinion of the following political parties regarding this issue? Please use this scale from 1 to 11.

**Items:**

(A) CDU

(B) CSU

(C) SPD

(D) FDP

(E) DIE LINKE

(F) GRÜNE

(G) PIRATEN

(H) AfD (Alternative für Deutschland)

**Scale:**

(1) 1 lower taxes, even if this means a reduction in the benefits offered by the social state

(2) 2

(3) 3

(4) 4

(5) 5

(6) 6

(7) 7

(8) 8

(9) 9

(10) 10

(11) 11 more benefits offered by the social state, even if this means an increase in taxation

(-98) Don’t know

(-99) No answer

**Cultural sub-dimensions**

And now about immigration. Should immigration be facilitated or restricted? What do you think is the opinion of the following political parties regarding this issue? Please use this scale from 1 to 11.

**Items:**

(A) CDU

(B) CSU

(C) SPD

(D) FDP

(E) DIE LINKE

(F) GRÜNE

(G) PIRATEN

(H) AfD (Alternative für Deutschland)

**Scale:**

(1) 1 immigration should be facilitated

(2) 2

(3) 3

(4) 4

(5) 5

(6) 6

(7) 7

(8) 8

(9) 9

(10) 10

(11) 11 immigration should be restricted

(-98) Don’t know

(-99) No answer

**Personal issue emphasis**

If you now consider the current political situation – in your opinion, what are the two most important political

problems facing Germany at the moment? For a start, only name the utmost important problem, please.

**Scale:**

<most important problem>

(-98) Don’t know

(-99) No answer

And what is the second most important political problem facing Germany at the moment? Please name only one

problem.

**Scale:**

<second most important problem>

(-98) Don’t know

(-99) No answer

**Appendix B: Missing values for the issue (sub-)dimensions**

As we did not use hot deck imputation for any variable other than the three party positions regarding the issue (sub-)dimensions, the following tables only refer to cases for which there are no missing values for any of the remaining variables used in this study. We only imputed values if the respondent gave a valid answer to at least one of the three survey items and ended up with 2,345 observations for the analyses. Proportions below are based on all cases providing substantive information for all remaining variables included in our main analyses (N = 2,612).

**Table B.1: Overview of missing values of core variables**

|  |  |
| --- | --- |
| Issue (sub-)dimension | Proportion of respondents with valid answers |
|  |  |
|  |  |
| Left-right | 85.3 |
| Economic issue | 55.9 |
| Cultural issue | 73.4 |
|  |  |

|  |  |
| --- | --- |
| Number of missing issue  (sub-)dimensions | Proportion of respondents |
|  |  |
|  |  |
| 0 | 49.7 |
| 1 | 25.5 |
| 2 | 14.7 |
| 3 | 10.2 |
|  |  |

**Appendix C: Tobit regression results (with and without imputation)**

| DV: Perceived left-right placement AfD | (1) | (2) |
| --- | --- | --- |
|  | Main model | No imputation |
| Party position: economy | 0.517\*\*\* | 0.607\*\* |
|  | (0.115) | (0.205) |
| Party position: culture | 0.263 | 0.397+ |
|  | (0.218) | (0.208) |
|  |  |  |
| *H1* |  |  |
| Party issue emphasis: economy | -6.209+ | -4.664 |
|  | (3.209) | (3.183) |
| Party issue emphasis: economy X party position: economy | 0.114 | -0.067 |
|  | (0.124) | (0.076) |
| Party issue emphasis: culture | -2.136 | -1.085 |
|  | (4.830) | (3.287) |
| Party issue emphasis: culture X party position: culture | 0.717\* | 0.493\*\*\* |
|  | (0.299) | (0.0774) |
|  |  |  |
| *H2* |  |  |
| Personal issue emphasis: economy | -1.054 | -1.582 |
|  | (0.766) | (1.043) |
| Personal issue emphasis: economy X party position: economy | 0.167+ | 0.206 |
|  | (0.0918) | (0.130) |
| Personal issue emphasis: culture | -2.420+ | -3.348 |
|  | (1.353) | (2.663) |
| Personal issue emphasis: culture X party position: culture | 0.283\* | 0.407+ |
|  | (0.116) | (0.223) |
| *Control variables* |  |  |
|  |  |  |
| Personal issue position: economy | 1.150\* | 1.246\* |
|  | (0.450) | (0.524) |
| Personal issue position: economy X party position: economy | -0.160\*\* | -0.173\* |
|  | (0.055) | (0.067) |
| Personal issue position: economy X personal issue position: economy | -0.086\* | -0.096+ |
|  | (0.037) | (0.051) |
| Personal issue position: economy X personal issue position: economy X party position: economy | 0.011\* | 0.012+ |
|  | (0.004) | (0.007) |
| Personal issue position: culture | 0.300 | 0.464 |
|  | (0.594) | (0.578) |
| Personal issue position: culture X party position: culture | -0.022 | -0.034 |
|  | (0.058) | (0.048) |
| Personal issue position: culture X personal issue position: culture | -0.020 | -0.031 |
|  | (0.041) | (0.038) |
| Personal issue position: culture X personal issue position: culture X party position: culture | 0.000 | 0.001 |
|  | (0.004) | (0.003) |
| Self-placement: left-right | 0.202\*\*\* | 0.164\*\*\* |
|  | (0.044) | (0.038) |
| Party sympathy | -1.031\*\*\* | -0.809\*\*\* |
|  | (0.169) | (0.161) |
| Party sympathy X self-placement: left-right | 0.134\*\*\* | 0.102\*\*\* |
|  | (0.018) | (0.012) |
| *Reference: education low* |  |  |
|  |  |  |
| Education: medium | 0.674\*\*\* | 0.543+ |
|  | (0.133) | (0.309) |
| Education: high | 1.081\*\*\* | 0.871\*\* |
|  | (0.076) | (0.275) |
| Female | -0.198+ | -0.118 |
|  | (0.111) | (0.105) |
| Age | 0.014\*\*\* | 0.013\*\* |
|  | (0.004) | (0.005) |
| *Reference: blue collar* |  |  |
|  |  |  |
| Lower middle class | -0.265 | -0.187 |
|  | (0.170) | (0.399) |
| Middle class | -0.176 | -0.218 |
|  | (0.164) | (0.378) |
| Upper class | 0.197\* | 0.002 |
|  | (0.089) | (0.364) |
| Former East Germany | 0.216 | 0.134 |
|  | (0.215) | (0.241) |
| Constant | 1.009 | -0.235 |
|  | (3.078) | (3.976) |
| Sigma | 3.308\*\*\* | 3.078\*\*\* |
|  | (0.372) | (0.301) |
| Observations | 2,345 | 1,297 |
| Log Likelihood | -4440.6 | -2384.1 |

Standard errors in parentheses, SEs clustered by year (survey);+ *p* < 0.1, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001.

**Appendix D: Tobit regression results (with and without a European issue dimension and issue extremism)**

A key assumption of our argument is that political conflict derives from two major issue areas: the economy and socio-cultural issues. In this appendix, we also include a third issue dimension on European integration: while some think integration should be pushed, further, others think that integration already went too far.

To test whether including a European integration dimension affects our results, we re-run the model with covariates that capture European politics. Voter perceptions of the AfD’s policy position on European integration are measured on a 1-11 scale where respondents indicate whether the AfD prefers to push European integration further (1) or that it already has gone too far (11). Their own policy preferences are measured on the same 1-11 scale. The importance of European integration for individuals has been coded from the same (open-ended) ‘most important issue’ questions as for the other two issue dimensions. To measure the effect of changes in the party’s issue agenda (H1), we interact the perceived party’s policy position with the AfD’s emphasis on economic and cultural issues (and expect a negative interaction effect). While it would be possible to include a separate covariate measuring the AfD’s focus on Europe, we would end up with three party-specific covariates and 4 different years.

The results are similar to those in the paper. Table D.1 shows the results of the extended model including a European issue dimension (Model 2) next to the ones reported in the paper (Model 1). Figures D.1 and D.2 show the marginal effects for both hypotheses. The major take-away messages are the same: the importance of each issue sub-dimension depends both on a party’s issue agenda (supply side; Figure D.1) and the citizens’ issue concerns (demand side; Figures D.2). The effects of issue importance are strongest for cultural issues (Figures D.1 & D.2).

Finally, this section also presents an additional robustness check showing that the exclusion of issue extremism has no effect on our results regarding the hypotheses. Results are presented as Model 3 in Table D.1. While some of the main effects differ between Model 1 and Model 3, we are only interested in interaction effects. Their visual representation (Figure D3 and D4) are very similar to those based on the main model (Figure 2 and 3). Hence, any concerns due to potential multicollinearity of personal issue emphasize and issue extremism as outlined in the main text are irrelevant for this analyses.

**Table D.1: Tobit regression results (with and without a European issue dimension)**

| DV: Perceived left-right placement AfD | (1) | (2) | (3) |
| --- | --- | --- | --- |
|  | Main model | European issue dimension | No issue extremism |
| Party position: economy | 0.517\*\*\* | 0.528\*\*\* | -0.000 |
|  | (0.115) | (0.109) | (0.081) |
| Party position: culture | 0.263 | 0.304 | 0.125 |
|  | (0.218) | (0.181) | (0.077) |
| *H1* |  |  |  |
| Party issue emphasis: economy | -6.209+ | -7.661\*\* | -6.176+ |
|  | (3.209) | (2.378) | (3.268) |
| Party issue emphasis: economy X party position: economy | 0.114 | 0.078 | 0.126 |
|  | (0.124) | (0.089) | (0.077) |
| Party issue emphasis: culture | -2.136 | -2.144 | -1.719 |
|  | (4.830) | (4.379) | (4.229) |
| Party issue emphasis: culture X party position: culture | 0.717\* | 0.713 | 0.702\*\* |
|  | (0.299) | (0.376) | (0.270) |
| *H2* |  |  |  |
| Personal issue emphasis: economy | -1.054 | -1.184 | -1.234 |
|  | (0.766) | (0.842) | (0.811) |
| Personal issue emphasis: economy X party position: economy | 0.167+ | 0.163 | 0.197\* |
|  | (0.092) | (0.111) | (0.085) |
| Personal issue emphasis: culture | -2.420+ | -2.410 | -2.292 |
|  | (1.353) | (1.264) | (1.420) |
| Personal issue emphasis: culture X party position: culture | 0.283\* | 0.265\*\* | 0.251+ |
|  | (0.116) | (0.095) | (0.129) |
| *Control variables* |  |  |  |
| Personal issue position: economy | 1.150\* | 1.198\* |  |
|  | (0.450) | (0.467) |  |
| Personal issue position: economy X party position: economy | -0.160\*\* | -0.157\*\* |  |
|  | (0.055) | (0.054) |  |
| Personal issue position: economy X personal issue position: economy | -0.086\* | -0.088\* |  |
|  | (0.037) | (0.037) |  |
| Personal issue position: economy X personal issue position: economy X party position: economy | 0.011\* | 0.012\* |  |
|  | (0.004) | (0.005) |  |
| Personal issue position: culture | 0.300 | 0.462 |  |
|  | (0.594) | (0.449) |  |
| Personal issue position: culture X party position: culture | -0.022 | -0.037 |  |
|  | (0.058) | (0.044) |  |
| Personal issue position: culture X personal issue position: culture | -0.020 | -0.027 |  |
|  | (0.041) | (0.028) |  |
| Personal issue position: culture X personal issue position: culture X party position: culture | 0.000 | 0.001 |  |
|  | (0.004) | (0.002) |  |
| Party position: Europe |  | 0.0269 |  |
|  |  | (0.161) |  |
| Personal issue position: Europe |  | -0.175 |  |
|  |  | (0.231) |  |
| Personal issue position: Europe X party position: Europe |  | 0.010 |  |
|  |  | (0.028) |  |
| Personal issue position: Europe X personal issue position: Europe |  | 0.014 |  |
|  |  | (0.013) |  |
| Personal issue position: Europe X personal issue position: Europe X party position: Europe |  | -0.001 |  |
|  |  | (0.002) |  |
| Party issue emphasis: economy X party position: Europe |  | 0.210 |  |
|  |  | (0.131) |  |
| Party issue emphasis: culture X party position: Europe |  | -0.014 |  |
|  |  | (0.163) |  |
| Personal issue emphasis: Europe |  | -0.383 |  |
|  |  | (1.228) |  |
| Personal issue emphasis: Europe X party position: Europe |  | -0.004 |  |
|  |  | (0.140) |  |
| Self-placement: left-right | 0.202\*\*\* | 0.184\*\*\* | 0.106\*\* |
|  | (0.044) | (0.047) | (0.037) |
| Party sympathy | -1.031\*\*\* | -0.958\*\*\* | -1.115\*\*\* |
|  | (0.169) | (0.166) | (0.184) |
| Party sympathy X self-placement: left-right | 0.134\*\*\* | 0.126\*\*\* | 0.137\*\*\* |
|  | (0.018) | (0.018) | (0.021) |
| *Reference: education low* |  |  |  |
| Education: medium | 0.674\*\*\* | 0.643\*\*\* | 0.727\*\*\* |
|  | (0.133) | (0.090) | (0.152) |
| Education: high | 1.081\*\*\* | 1.070\*\*\* | 1.284\*\*\* |
|  | (0.076) | (0.070) | (0.061) |
| Female | -0.198+ | -0.210 | -0.227+ |
|  | (0.111) | (0.123) | (0.135) |
| Age | 0.014\*\*\* | 0.017\*\*\* | 0.016\*\*\* |
|  | (0.004) | (0.004) | (0.003) |
| *Reference: blue collar* |  |  |  |
| Lower middle class | -0.265 | -0.268\* | -0.198 |
|  | (0.170) | (0.136) | (0.237) |
| Middle class | -0.176 | -0.226 | -0.075 |
|  | (0.164) | (0.174) | (0.184) |
| Upper class | 0.197\* | 0.179\* | 0.256 |
|  | (0.089) | (0.085) | (0.189) |
| Former East Germany | 0.216 | 0.190 | 0.113 |
|  | (0.215) | (0.192) | (0.225) |
| Constant | 1.009 | 0.485 | 5.414\*\*\* |
|  | (3.078) | (1.296) | (1.817) |
| Sigma | 3.308\*\*\* | 3.273\*\*\* | 3.357\*\*\* |
|  | (0.372) | (0.380) | (0.351) |
| Observations | 2,345 | 2,236 | 2,345 |
| Log Likelihood | -4440.6 | -4258.0 | -4469.2 |
|  |  |  |  |

Standard errors in parentheses, SEs clustered by year (survey);+ *p* < 0.1, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001.

**Figure D.1: Supply-side effects on issue mapping, party issue emphasis (H1) with EU dimension**

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*Note: Solid lines show the marginal effect of the economic (left panel) and the cultural issue position (right panel) depending on the attention to these issues in the party’s press releases (x-axis). The vertical bars denote the empirical values in party issue emphasis for both sub-dimensions. Shaded areas denote 95% confidence intervals. All estimates based on the Tobit model shown in Table D.1, Model 2.*

**Figure D.2: Demand-side effects on issue mapping, personal issue emphasis (H2) with EU dimension**

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*Note: Solid lines show the marginal effect of the economic (left panel) and the cultural issue position (right panel) depending on the respondents’ issue emphasis (x-axis). The vertical bars denote the empirical values in personal issue emphasis for both sub-dimensions (small jitter added). Shaded areas denote 95% confidence intervals. All estimates based on the Tobit model shown in Table D.1, Model 2.*

**Figure D.3: Supply-side effects on issue mapping, party issue emphasis (H1) without issue extremism**

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*Note: Solid lines show the marginal effect of the economic (left panel) and the cultural issue position (right panel) depending on the attention to these issues in the party’s press releases (x-axis). The vertical bars denote the empirical values in party issue emphasis for both sub-dimensions. Shaded areas denote 95% confidence intervals. All estimates based on the Tobit model shown in Table D.1, Model 3.*

**Figure D.4: Demand-side effects on issue mapping, personal issue emphasis (H2) without issue extremism**

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*Note: Solid lines show the marginal effect of the economic (left panel) and the cultural issue position (right panel) depending on the respondents’ issue emphasis (x-axis). The vertical bars denote the empirical values in personal issue emphasis for both sub-dimensions (small jitter added). Shaded areas denote 95% confidence intervals. All estimates based on the Tobit model shown in Table D.1, Model 3.*

**Appendix E: Measuring the party issue agenda**

We derive estimates for the AfD’s issue emphasis using content analyses of the party press releases. The approach is very similar to that used in previous analyses of German parties’ press releases (Klüver and Sagarzazu 2016; Sagarzazu and Klüver 2017). All following steps and analyses were conducted in *R*.

In January 2017, we downloaded all party press releases that were available at the party’s website (<https://www.alternativefuer.de/>). The sample (N = 1,311) contains press releases published from April 2013 (the AfD was officially founded in February 2013) to December 2016.

We then ‘cleaned’ the raw texts using the following steps: We removed special characters (e.g. slashes) and references to web addresses. Next, we split words connected via a linking “s” and cut off word endings such as ‘ung’, ‘heit’, ‘keit’, etc. Next, we changed all characters to lowercase, removed German stopwords that are frequently used (such as ‘and’, ‘or’, and so on), took out all numbers from the texts, and replaced multiple whitespace characters with single blanks.

We then used stemming to get the root of the words. We removed words stems relating to names of parties and politicians, posts (e.g. foreign minister), dates, numbers, and places. Moreover, we did not keep word stems occurring in less than 1 percent of all documents. This left us with about 1,500 words stems.

In the final step, we applied the expressed agenda model developed by Grimmer (2010) to classify party press releases into issue clusters. This unsupervised model technique creates topics of words (or word stems) that cluster together (e.g. ‘euro’, ‘ecb’, ‘bank’, and ‘percent’) and assigns press releases to those topics that fit best. The number of issue categories (or ‘topics’) is not determined by the model. We followed previous research (e.g. Grimmer and Stewart 2013; Klüver and Sagarzazu 2016; Sagarzazu and Klüver 2017) and estimated the model for a varying number of those categories (from 7 to 17). We checked the face validity of the resulting categories and chose the model including the most meaningful and distinct topics.

In the paper, we used results from an expressed agenda model based on 13 issue categories. We assigned names to the 13 topics based on the top ten words (or word stems) in each issue category (see Table E.1).

**Table E.1: Topics and key words**

|  |  |  |
| --- | --- | --- |
|  | **Topic** | **Key words** |
| 1 | Euro (currency) | euro, bank, rescue, billion, currency, eurozone, debt, unit, percent, tax payer |
| 2 | Anti-elite | citizen, member, freedom, old party, protest, democracy, permit, support, person, people |
| 3 | Economic reforms | economy, family, high, state, reform, tax, strong, minimum wage, pension, achievement |
| 4 | European centralism | commission, junker, brussels, govern, democrat, commissioner, esm, future, member state, vote |
| 5 | Procedural  (elections, events, etc.) | politics, media, member, public, democrat, express, opinion, power, established, people |
| 6 | European monetary policy | central bank, draghi, monetary policy, central bank, constitution, save, public finance, bank, currency |
| 7 | Europe | europe, turkey, brussels, poor, member of parliament, interest, once, europe’s, joint, subsidiarity |
| 8 | Greece | greece, greek, debt, euro, eurozone, cut, iwf, rescue, billion, money |
| 9 | Foreign policy | russia, ukraine, nato, russian, sanction, conflict, crisis, east, west, bargain |
| 10 | Law and order | law, explain, muslim, police, protection, society, especially, islamist, constitution |
| 11 | Migration | immigration (several forms), integration, society, asylum seeker, country, migrant, explain, million |
| 12 | Defense | army, soldier, mission, leadership, military force, defense, troops, interior, plan, military |
| 13 | Asylum | refugee, asylum seeker, border, turkey, number, turkish, community, erdogan, flow, dramatic |

*Note: English translation of words instead of word stems. Therefore, some key words consist of two or three words in English.*

To measure the AfD’s issue salience on the economic and the cultural sub-dimensions, we merged issues dealing with its economic policies (topics 1, 3, 6, and 8) and those dealing with its cultural issue stances (topics 10, 11, and 13). Based on quarterly data, Figure E.1 illustrates how the AfD’s issue attention changed over time.[[2]](#footnote-2)

**Figure E.1: Issue attention to economic and cultural issues**

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The data in Figure E.1 has high face validity. In 2013, the AfD mostly focused on economic issues, especially to those related to the Euro and the management of the (Greek) debt crisis. Greece re-emerged on the party’s issue agenda during the debt negotiations between the EU and the Greek government in 2015. After Bernd Lucke, a professor of economics, was replaced as a party leader (and left the party) in July 2015, the AfD’s rhetoric gradually shifted towards the emphasis of anti-immigration issues under the leadership of Frauke Petry.

We also cross-validate the results from the topic model with a manual content analysis of AfD press releases. Franzmann’s (2018) manual content analysis relies on a pre-defined coding scheme to identify policy issues in AfD press releases. He aggregated these policy issues into broader categories: ‘economic’ and ‘societal’ issues. The former captures issues such as market liberalism, while the latter category includes press releases dealing with law and order issues and multiculturalism. Comparing the results of Franzmann’s manual content analysis with those of our topic model leads to rather similar conclusions (Figure E.2). The correlation between both measures is 0.75 for economic issues and 0.94 for cultural issues.

**Figure E.2: Cross-validation with a manual content analysis**

*T:\Paper\Graphs\fig_validation.tifNote: Results from the manual content analysis comes from Franzmann (2018). Each dot represents AfD issue emphasis for a given quarter (e.g. April to June 2013).*

Finally, to match the party issue agenda data with the mass surveys, we pooled the party agenda of the four months before the survey field time to indicate the AfD’s issue agenda. Longer intervals (e.g. one year) would not reflect the AfD’s current agenda; for shorter time periods there might not be sufficient press releases for reliable estimates of the party’s issue agenda. For example, in 2014 the mass survey was in the field from May 9 to May 23. To measure the issue agenda, we use all party press releases from February 1 to May 31 to indicate the party’s current issue agenda.

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**Appendix F: Testing Hypothesis 1 using mean perceived policy positions**

Our empirical analysis is based on four survey waves, providing limited variation across years to test Hypothesis 1. To test the robustness of our results, we test Hypothesis 1 on the macro level using mean perceived party positions across years. We first compute mean perceived positions of the AfD on the left-right (*LR*), the economic (*econ*) and the cultural (*cult*) issue dimension for each year (*t*). Next, we express the AfD’s (mean perceived) left-right position as a weighted mean of its economic and its cultural issue position:

*LRt = wt ∙econt + (1 - wt) ∙ cultt*

where *wt* indicates the relative importance of the economic issue dimension on the mean perceived policy position: the higher the parameter *wt*, the closer are the voters’ mean perceptions of the AfD’s economic and its left-right position. Vice versa, the smaller *wt*, the more voters (on average) associate the AfD’s left-right position with its cultural issue position. The assumption is that the mean perceived left-right position is located between its economic and the cultural position. This is indeed the case except for 2013 (the year the party was formed). In 2013, the AfD’s left-right position (7.2) was slightly left of the economic issue position (7.4) but pretty far from its cultural issue stance (8.1). For this year, we set *w2013* to 1.

In a final step, we aim to explain the relative importance of its economic issue position *wt* be the party issue emphasis in the respective year (i.e. Hypothesis 1). Figure F.1 shows the weight parameters *wt* (y-axis) next to the AfD’s emphasis on economic (left panel) and cultural (right panel) issues.

**Figure F.1: Weight of the economic issue dimension for the AfD’s left-right position and party issue emphasis**

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*Note: The y-axis shows the relative weight of the economic issue dimension on the AfD’s left-right position as indicated by a weighted mean (wt). The x-axes indicates how much the AfD emphasizes economc (left panel) and cultural (right panel) issues in the respective year.*

There is indeed a strong positive relationship (r=0.92) between the AfD’s emphasis on economic issues and the relative closeness of the party’s left-right position to its economic issue stances. Vice versa, the more the AfD addresses cultural issues, the lower the weight of its economic issue stances on the perceived left-right position (r=0.88).

This macro-level evidence provides further support for Hypothesis 1. While the analysis is limited to four years only, the relationship is strong and supports the findings reported in the manuscript.

**Appendix G: Logistic regressions to explain vote intention for the AfD**

Vote intention is a binary measure distinguishing between individuals voting for the AfD (= 1) and those voting for any other party (= 0). All respondents with a low self-reported probability to turnout in the next federal election, not knowing whom they would vote for, or refusing to name a party were excluded from the analyses. All control variables and the left-right proximity indicator are coded as described in the main text.

Salience congruence is calculated as follows: First, we measured party issue attention for economic issues as the share of press releases devoted to economic issues in relation to those devoted to economic or cultural issues. Second, we calculated the relevance of economic issues mentioned by the respondent as the most important problems as the proportion of the overall sum of economic and cultural issues. As it is possible that a respondent would not mention economic or cultural issues as the most important current problems and as a division by zero has no meaning in ordinary arithmetic, we had to refine the formula. Moreover, for both demand-side measures, it makes no sense to assign the same value to all individuals if one of the two sub-dimensions equals zero. Hence, we modified the basic formula as outlined in Table G.1 Finally, we defined salience congruence as the absolute difference of the supply- and demand side relevance measure. This value was subtracted from 1 to represent congruence and not incongruence. As a consequence, the value runs from 0 (no congruence) to 1 (perfect congruence).

**Table G.1: Calculation of relative relevance of sub-dimensions**

|  |  |  |
| --- | --- | --- |
|  | **Economic sub-dimension (ESD)** | **Cultural sub-dimension (CSD)** |
|  |  |  |
| **Relative relevance supply side (A)** | | |
|  |  |  |
|  |  |  |
| **Relative relevance demand side (B)** | | |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| **Salience congruence (D)** |  | |
|  | | |

*Note: j refers to the different survey waves while i denotes different respondents.*

**Table G.2: Logistic regression results**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| DV: Vote intention AfD | (1) | | | | | |
|  | Full model | | | | | |
|  | | |  |  | | |
| LR proximity: AfD | | 0.030 | | (0.103) | | |
| Salience congruence | | -1.177 | | (2.134) | | |
| LR proximity: AfD X salience congruence | | 0.206 | | (0.154) | | |
| *Control Variables* | |  | |  | | |
| Party sympathy | | 0.641\*\*\* | | (0.052) | | |
| *Reference: education low* | |  | |  | | |
| Education: medium | | -0.131 | | (0.138) | | |
| Education: high | | -0.200 | | (0.218) | | |
| Female | | -0.807\*\*\* | | (0.208) | | |
| Age | | 0.006\* | | (0.003) | | |
| *Reference: blue collar* | |  | | |  |
| Lower middle class | | 0.227 | | (0.318) | | |
| Middle class | | -0.122 | | (0.361) | | |
| Upper class | | -0.391 | | (0.386) | | |
| Former East Germany | | -0.096 | | (0.151) | | |
| Constant | | -2.198+ | | (1.322) | | |
| Observations | | 2,064 | | | | |
| Pseudo R² | | 0.498 | | | | |
| Log Likelihood | | -345.9 | | | | |

Standard errors in parentheses; + *p* < 0.1, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001.

**Appendix H: Effects for other parties**

In the manuscript, we test the expectation that personal issue attention affects perceptions of party policy positions (Hypothesis 2) for the AfD. Yet, the GLES data allows us to test this argument for seven major parties in the German party system (CDU, CSU, SPD, Greens, FDP, Linke, AfD). Table H.1 shows the regression results for the pooled analysis which includes fixed effects for parties and using clustered standard errors by respondent and survey (year). Figure H.1 shows the corresponding marginal effects.

The findings are very similar to those shown in Figure 3 in the manuscript: the more citizens care about issues related to economic (left panel) or cultural issues (right panel), the stronger the association of that issue dimension with the perceived left-right position of a party. As in the analysis reported in the manuscript, only the marginal effect for the cultural issue dimension is statistically significant at conventional levels.

Yet, the marginal effects in this pooled analysis are substantially weaker than in the analysis reported in the manuscript. This suggests that the AfD might be considered as a special case to observe changes in voter perceptions, as these changes might be most pronounced for rather new parties that also focus on non-economic issues. Moreover, the AfD’s (perceived) policy positions on the economy and culture differ substantially: on average, voters see the AfD as much more extreme on cultural issues than on economic issues (see Figure H.2). Thus, voters who think that cultural issues are more important should also place the party further to the right.

**Table H.1: Explaining voter perceptions of party policy position on the left-right scale**

|  |  |  |
| --- | --- | --- |
|  | coefficient | standard error |
| *DV: Perceived left-right party position* |  |  |
| Party position: economy | 0.155\*\*\* | (0.037) |
| Party position: culture | 0.146\*\*\* | (0.034) |
| *H2* |  |  |
| Personal issue emphasis: economy | -0.053 | (0.144) |
| Personal issue emphasis: economy X Party position: economy | 0.025 | (0.022) |
| Personal issue emphasis: culture | -0.532\*\* | (0.206) |
| Personal issue emphasis: culture X Party position: culture | 0.081\*\* | (0.031) |
| *Control variables* |  |  |
| Personal issue position: economy | 0.031 | (0.082) |
| Personal issue position: economy X Personal issue position: economy | -0.005 | (0.007) |
| Personal issue position: economy X Party position: economy | -0.019 | (0.0124) |
| Personal issue position: economy X Personal issue position: economy X Party position: economy | 0.001 | (0.001) |
| Personal issue position: culture | -0.176\* | (0.073) |
| Personal issue position: culture X Personal issue position: culture | 0.013\* | (0.006) |
| Personal issue position: culture X Party position: culture | 0.025\* | (0.011) |
| Personal issue position: culture X Personal issue position: culture X Party position: culture | -0.003\*\*\* | (0.001) |
| Self-placement: left-right | 0.126\*\*\* | (0.013) |
| Party sympathy | -0.526\*\*\* | (0.024) |
| Party sympathy X self-placement: left-light | 0.093\*\*\* | (0.004) |
| *Education (reference: low)* |  |  |
| medium | 0.144\* | (0.061) |
| high | 0.331\*\*\* | (0.063) |
| Female | -0.023 | (0.040) |
| Age | 0.016\*\*\* | (0.001) |
| *Social class (reference: blue collar)* |  |  |
| Lower middle class | -0.008 | (0.069) |
| Middle class | -0.061 | (0.064) |
| Upper class | -0.123 | (0.079) |
| Former East Germany | 0.084 | (0.051) |
| *Party FEs* | *yes* | |
| Constant | 5.512\*\*\* | (0.325) |
| Sigma | 2.070\*\*\* | (0.024) |
| Observations | 20,309 |  |
| Log Likelihood | -39,947.4 |  |

Standard errors in parentheses, SEs clustered by respondent & year (survey); + *p* < 0.1, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001.

**Figure H.1: Demand-side effects on issue mapping, personal issue emphasis (H2)**

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*Note: Solid lines show the marginal effect of the economic (left panel) and the cultural issue position (right panel) depending on the respondents’ issue emphasis (x-axis). The vertical bars denote the empirical values in personal issue emphasis for both sub-dimensions (small jitter added). Shaded areas denote 95% confidence intervals.*

**Figure H.2: Mean perceived party policy positions in Germany**

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*Note: Mean of the perceived party policy positions for all major German parties on the economy and culture (2013-2017). The sold line indicates a 1:1 relationship.*

For most other parties in the party system, the difference between the mean perceived policy position on economic and cultural issues is much smaller (see Figure H.2). Hence, changes in voters’ issue attention should matter less, because the underlying issue positions are roughly the same. The FDP is the exception as voters see the party as being much more conservative on economic (7.6) than on cultural issues (6.3 on a 1-11 scale). We therefore expect stronger results for the FDP and the AFD compared to other parties in the party system.

We test for these party differences using individual models for the seven major German parties. The results (Table H.2) supports this conclusion: changes in the voters’ issue emphasis affect how they map the cultural issue positions of the FDP and the AfD, but there is no significant effect for the remaining parties. As in the analysis reported in the manuscript, the marginal effects for the economic issue dimension are not statistically significant at conventional levels.

**Table H.2: Explaining voter perceptions of party policy position on the left-right scale**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | CDU | CSU | SPD | FDP | Greens | Left | AfD |
| *DV: Perceived left-right party position* |  |  |  |  |  |  |  |
| Party position: economy | 0.100\*\*\* | 0.170\*\*\* | 0.059 | 0.161\*\*\* | 0.072\* | 0.092\*\* | 0.121\* |
|  | (0.022) | (0.039) | (0.036) | (0.019) | (0.028) | (0.034) | (0.054) |
| Party position: culture | 0.147\*\*\* | 0.232\*\*\* | 0.122\*\*\* | 0.130\*\* | 0.113\* | 0.115\*\*\* | 0.482\*\*\* |
|  | (0.028) | (0.039) | (0.035) | (0.040) | (0.057) | (0.010) | (0.098) |
| Personal issue emphasis: economy | 0.663\*\*\* | 0.902\*\* | -0.056 | 0.534\*\*\* | -0.162 | 0.032 | -1.879 |
|  | (0.182) | (0.300) | (0.391) | (0.085) | (0.250) | (0.272) | (1.714) |
| Personal issue emphasis: economy X Party position: economy | -0.014 | -0.042 | 0.0071 | -0.010 | 0.034 | -0.065 | 0.164 |
|  | (0.046) | (0.056) | (0.062) | (0.021) | (0.040) | (0.053) | (0.142) |
| Personal issue emphasis: culture | 0.394 | 0.035 | 0.093 | -0.622\*\*\* | -0.650+ | -0.324 | -1.784\*\*\* |
|  | (0.459) | (0.607) | (0.585) | (0.173) | (0.379) | (0.490) | (0.380) |
| **Personal issue emphasis: culture X Party position: culture** | **-0.072** | **-0.016** | **-0.052** | **0.071\*** | **0.065** | **0.029** | **0.273\*\*** |
|  | **(0.046)** | **(0.062)** | **(0.111)** | **(0.034)** | **(0.117)** | **(0.110)** | **(0.089)** |
| Constant | 4.810\*\*\* | 4.444\*\*\* | 3.694\*\*\* | 4.186\*\*\* | 3.484\*\*\* | 0.480\* | 3.908\*\*\* |
|  | (0.178) | (0.169) | (0.351) | (0.148) | (0.290) | (0.240) | (0.794) |
| Sigma | 2.059\*\*\* | 2.350\*\*\* | 1.708\*\*\* | 2.203\*\*\* | 1.822\*\*\* | 2.658\*\*\* | 3.894\*\*\* |
|  | (0.032) | (0.086) | (0.014) | (0.104) | (0.016) | (0.065) | (0.399) |
| Observations | 3504 | 3490 | 3492 | 3377 | 3432 | 3506 | 2833 |
| Log Likelihood | -7388.2 | -7597.7 | -6760.2 | -7080.5 | -6760.2 | -5737.4 | -5848.5 |

Standard errors in parentheses, SEs clustered by respondent & year (survey); + *p* < 0.1, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001.

1. We present German to English translations on the basis of official documentation by the GLES team. Wording of control variables as well as general information on the study and field work can be found in the official study descriptions. [↑](#footnote-ref-1)
2. The EU issue is measured identically. However, as we used this issue only as a control, we limit the presentation here to the two core sub-dimensions. [↑](#footnote-ref-2)