

Appendix to:

Age and Vote Choice: Is There a Conservative Shift among Older Voters?

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Table A.1. Ranking of Norwegian parties on left-right dimension

| Party name | Left-right rank |
|----------------------------|------------------------|
| Red Party | 1 |
| Green Party | 2 |
| Socialist Left Party | 2 |
| Labour Party | 3 |
| Christian Democratic Party | 4 |
| Liberal Party | 4 |
| Center Party | 4 |
| Other parties | 4 |
| Conservative Party | 5 |
| Progress Party | 6 |

Notes. This table shows our ranking of the political parties on the left-right political spectrum. The Green Party is given the same rank as the Socialist Left Party. The centrist parties – the Christian Democratic Party, the Liberal Party, and the Center Party – are ranked together. The other party group is ranked together with the centrist parties.

Table A.2. Summary statistics

| | Min | Max | Mean | N |
|-----------------------------------|------|-------|---------|-------|
| <i>dVote</i> | -1 | 1 | 0.02 | 15418 |
| No shift in vote choice | 0 | 1 | 0.71 | 15418 |
| Shift in vote choice to the right | 0 | 1 | 0.16 | 15418 |
| Shift in vote choice to the left | 0 | 1 | 0.14 | 15418 |
| Voter turnout (survey) | 0 | 1 | 0.88 | 20607 |
| Voter turnout (register) | 0 | 1 | 0.85 | 20297 |
| Political interest | 0 | 3 | 1.65 | 18234 |
| Public services vs tax cuts | 0 | 4 | 2.73 | 15804 |
| Immigration policy preferences | 0 | 10 | 6.58 | 15805 |
| Environmental policy preferences | 0 | 10 | 5.55 | 15699 |
| District policy preferences | 0 | 10 | 3.84 | 11373 |
| Election year | 1977 | 2017 | 1997.27 | 22001 |
| Birthyear | 1900 | 1999 | 1952.16 | 22001 |
| Age | 17 | 79 | 45.10 | 22001 |
| Gender | 0 | 1 | 0.48 | 22001 |
| Retired (=1) | 0 | 1 | 0.20 | 22001 |
| Young Children (age<=16) | 0 | 9 | 0.60 | 18314 |
| Education level | 1 | 3 | 2.04 | 21447 |
| Household gross income | 0 | 10050 | 366.83 | 20004 |

Notes. The variable *dVote* indicates whether an individual's vote choice across consecutive elections involves a shift between parties of a different rank on the left-right ideological spectrum codes -1 for a shift to the left, +1 for a shift to the right and 0 for not shift). The next three rows show each of these constitutive terms separately.

Table A.3 Main analysis and robustness tests on respondent selection

| | (1) | (2) | (3) | (4) |
|--------------|--------------------------|--------------------------|-------------------------|--------------------------|
| | All respondents | Census checked | Rotating panel | Recall question |
| Intercept | -0.07396*** (0.01517) | -0.06596*** (0.01605) | -0.04145** (0.01956) | -0.12457*** (0.02421) |
| Age | 0.00153*** (0.00028) | 0.00136*** (0.00030) | 0.00087** (0.00038) | 0.00253*** (0.00044) |
| Observations | 15,418 | 13,622 | 9,991 | 5,427 |
| R-squared | 0.00183 | 0.00145 | 0.00052 | 0.00625 |

Notes. The table displays our main results as well as several robustness checks of our baseline model. The detrended within-person change in respondents' vote choice is the response variable (see Figure A.2). Column (1) shows the baseline estimates (as reported in Figure 2 in the main text). Column (2) estimates the model for respondents where register data show they have voted, column (3) employs data from the rotating panels only, while column (4) uses the recall question in the survey to measure party shifts. Robust standard errors are presented in parentheses. Significance: *** p<0.01, ** p<0.05, * p<0.1

Table A.4 Significance test of heterogeneous effects

| | Gender | Education levels | Income levels |
|-------------------|----------|------------------|---------------|
| Chi square | 0.02 (1) | 1.78 (2) | 5.59 (3) |
| Prob > Chi square | 0.88 | 0.41 | 0.13 |

Notes. The table displays a significance test on the homogeneity of the estimated life-cycle effects in Table 3. The columns show two-sided chi square test statistics (degrees of freedom in parentheses) and associated significance probabilities. The tests relate to the similarity of, respectively, age effects for men and women, for persons with different levels of education, and for persons with different levels of income.

Figure A.1. Left-right self-placement by party choice



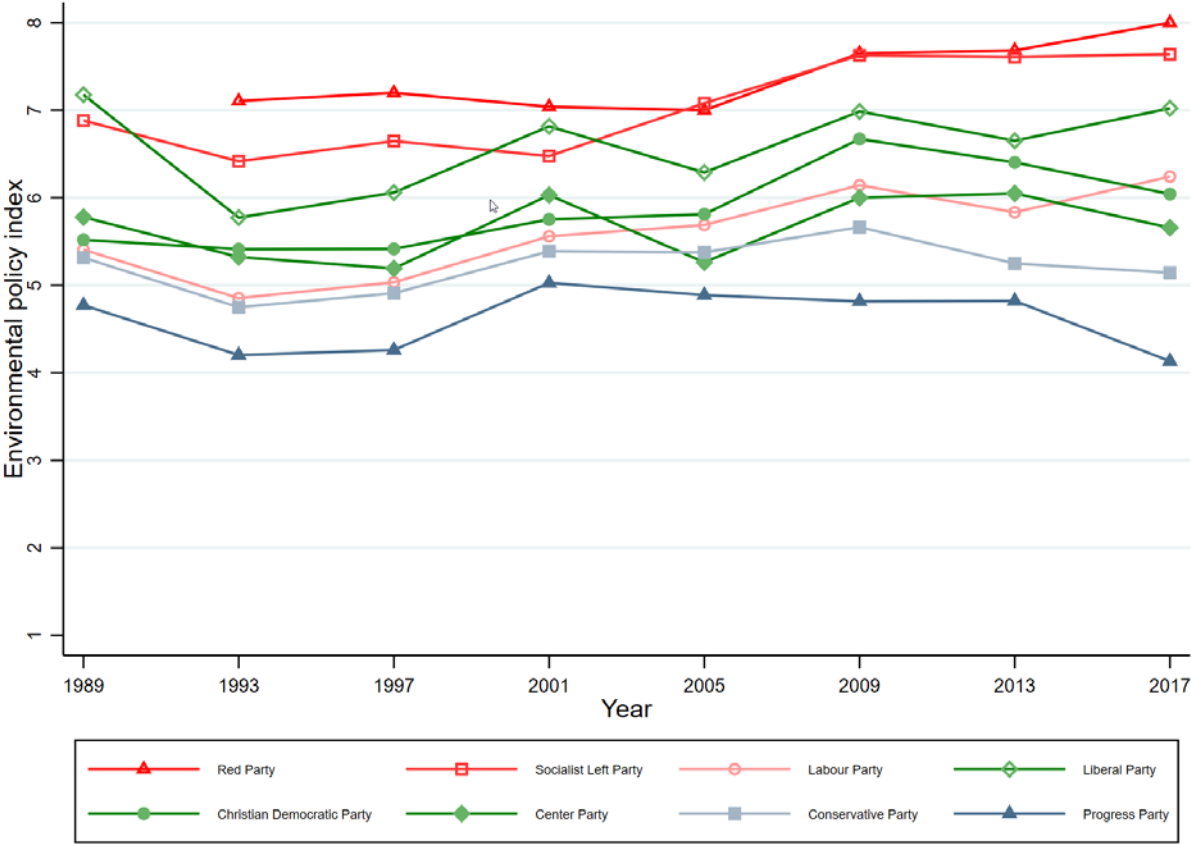
Notes. The diagram shows average left-right self-placements in each political party over the election years 1985-2017. All Election Studies include the standard left-right question: “In political discussions people frequently talk about ‘the left’ and ‘the right.’ Below is a scale where 0 represents those who are at the far left and 10 represents those who are at the far right. Where would you position yourself on such a scale?”

Figure A.2a. Immigration policy index by party choice



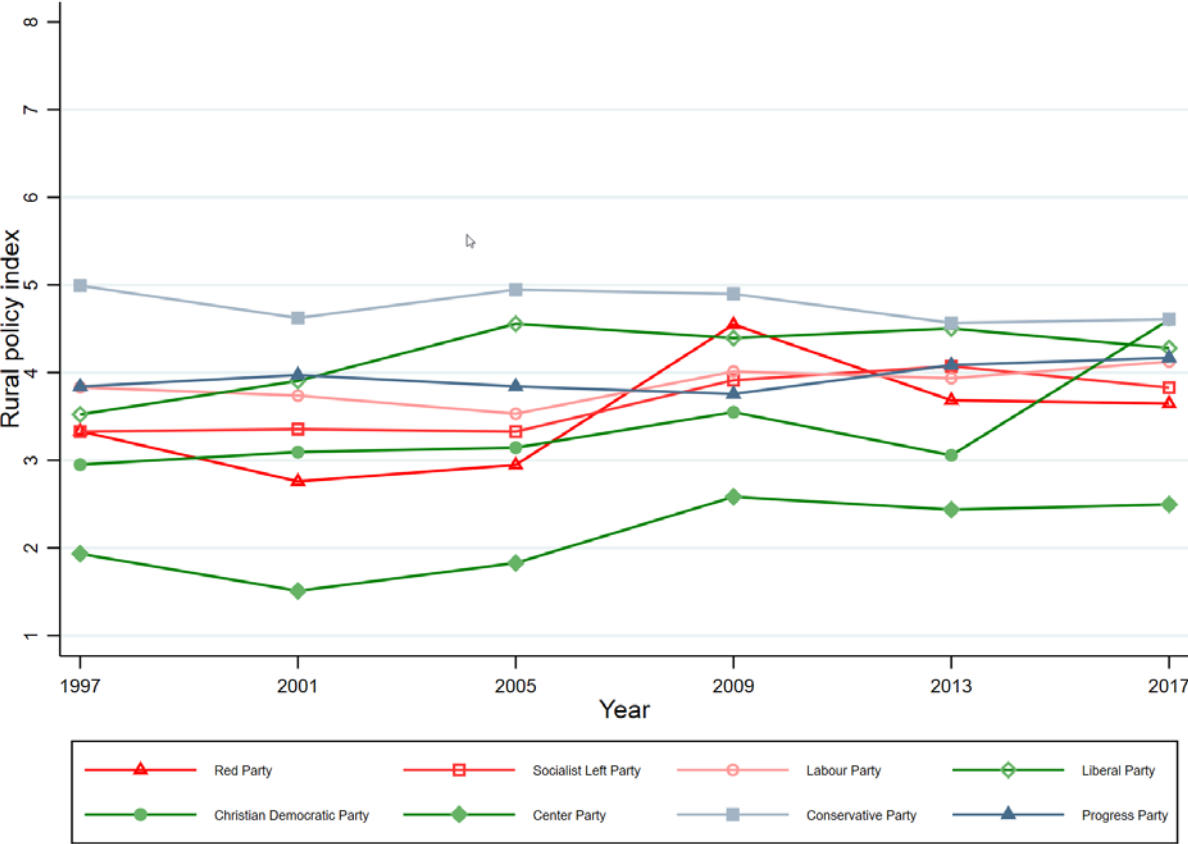
Notes. The diagram shows average positions on immigration policy in each political party over the election years 1989-2017. All Election Studies include in the period were asked to state their opinion on the statement: “How would you place yourself on a scale from 0 to 10 where 0 means that we should relax immigrants’ access to Norway, and 10 implies that number of immigrants to Norway should be more restricted than to day?”.

Figure A.2b.Environmental policy index by party choice



Notes. The diagram shows average positions on immigration policy in each political party over the election years 1989-2017. All Election Studies include in the period were asked to state their opinion on the statement: “How would you place yourself on a scale from 0 to 10 where 0 means that environmental protection should not reduce our standard of living, and 10 implies that we should enhance environmental protection even if it implies a lower living standard for all, including yourself?”.

Figure A.2c. Rural policy index by party choice



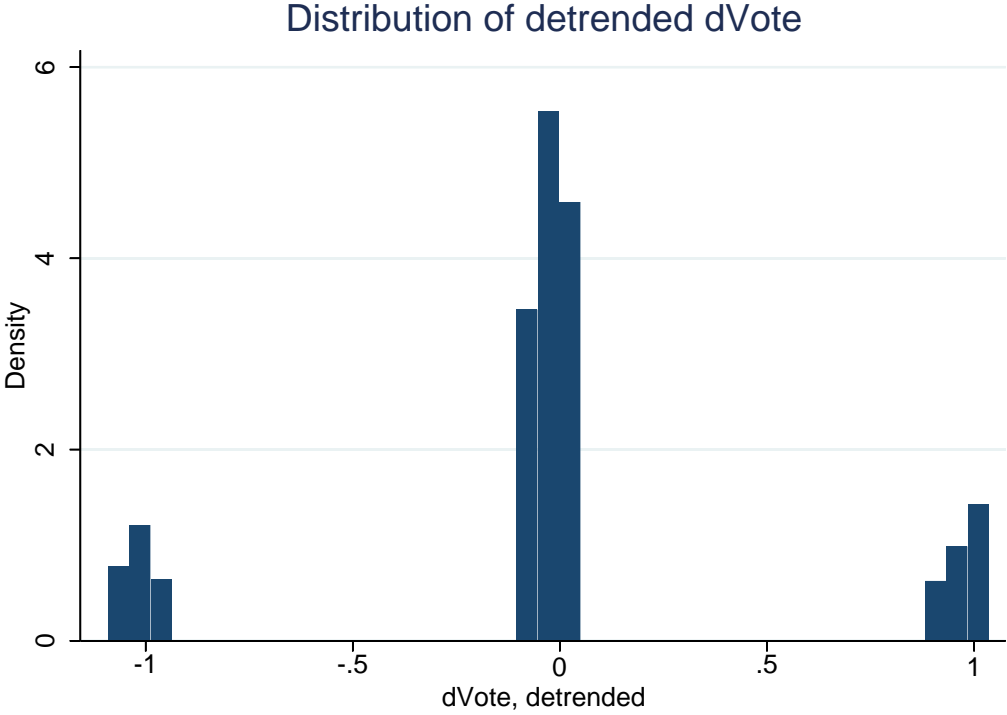
Notes. The diagram shows average positions on immigration policy in each political party over the election years 1997-2017. All Election Studies include in the period were asked to state their opinion on the statement: “How would you place yourself on a scale from 0 to 10 where 0 means that central authorities do not pay sufficient attention to rural districts in Norway, and 10 implies that central government cater too much for rural districts?”.

Figure A.2d. Fiscal policy index by party choice



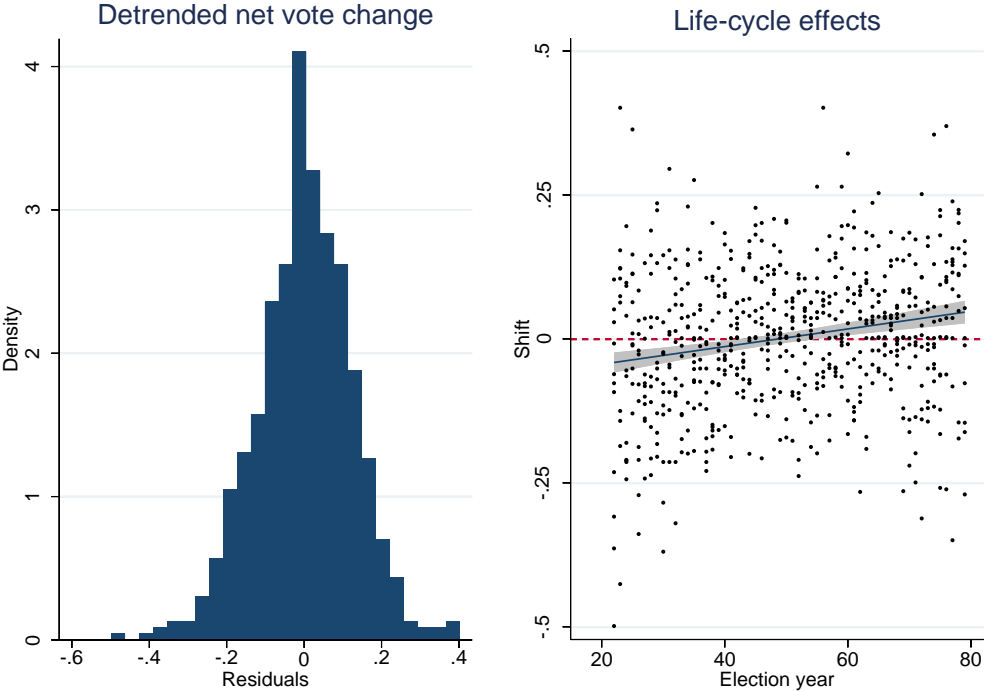
Notes. The diagram shows average positions on fiscal policy in each political party over the election years 1985-2017. All Election Studies include in the period were asked to state their opinion on the statement: “It is more important to develop public services than to cut taxes.” (recoded on a five-point scale from disagree completely (0) to agree completely (5)).

Figure A.3. Distribution of detrended *dVote*



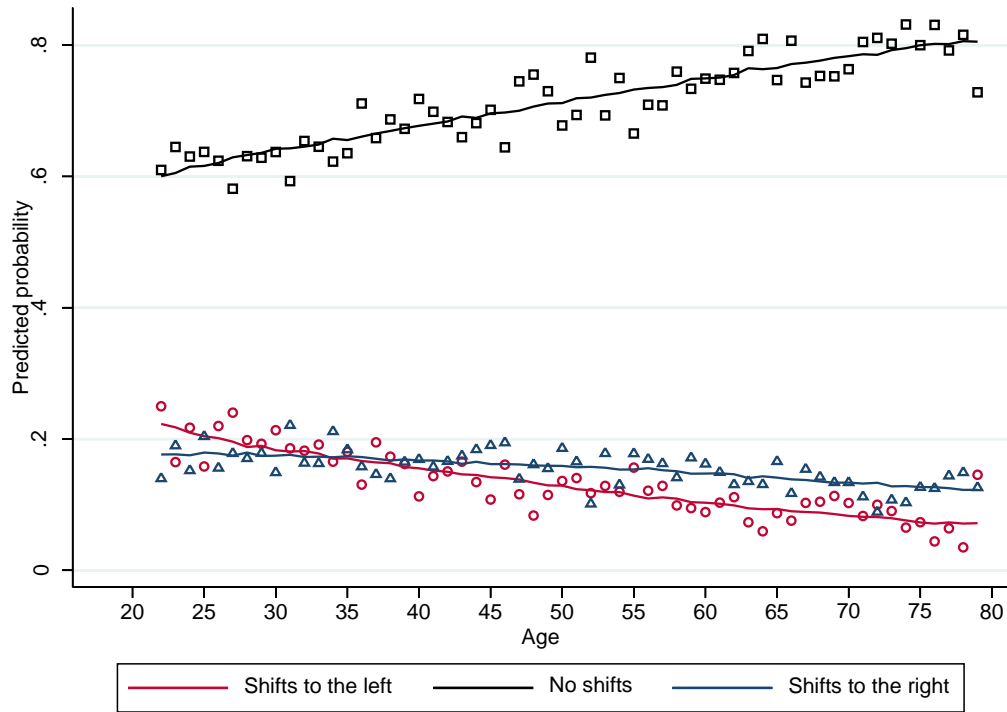
Notes. The variable *dVote* indicates whether an individual's vote choice across consecutive elections involves a shift between parties of a different rank on the left-right ideological spectrum codes -1 for a shift to the left, +1 for a shift to the right and 0 for not shift). The diagram shows the distribution of the residual from stage (1) of our main model, which is the detrended *dVote* variable.

Figure A.4. Robustness test using one-year age groups and election years



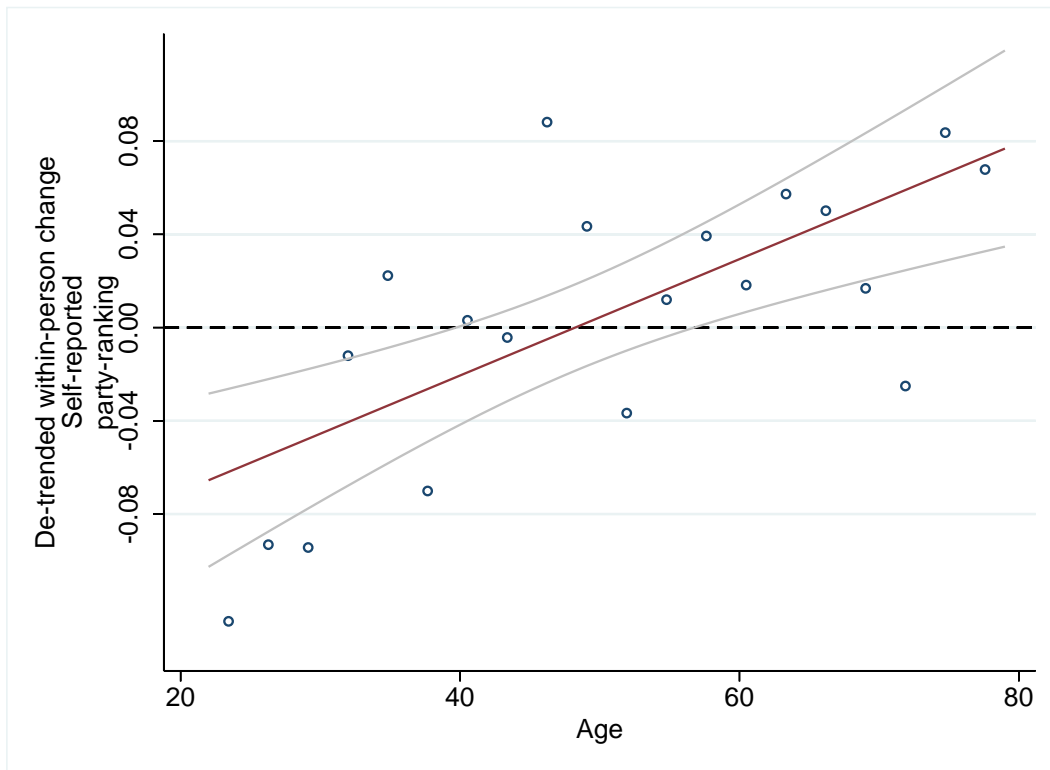
Notes. We collapse the shifts to the right, left and no shifts by one-year age groups and election years. Net vote change is defined by share shifting to the right less share shifting to the left. We regress the (aggregated) net vote change variable against year fixed effects, which defines detrended net change (displayed in the right panel). In the second stage, we regress the detrended net vote change against age, using number of observations in each cell as weights (displayed in the left panel). The scatterplot indicates all observations defined in one-year bins by election years.

Figure A.5. Robustness test using a multinomial regression model



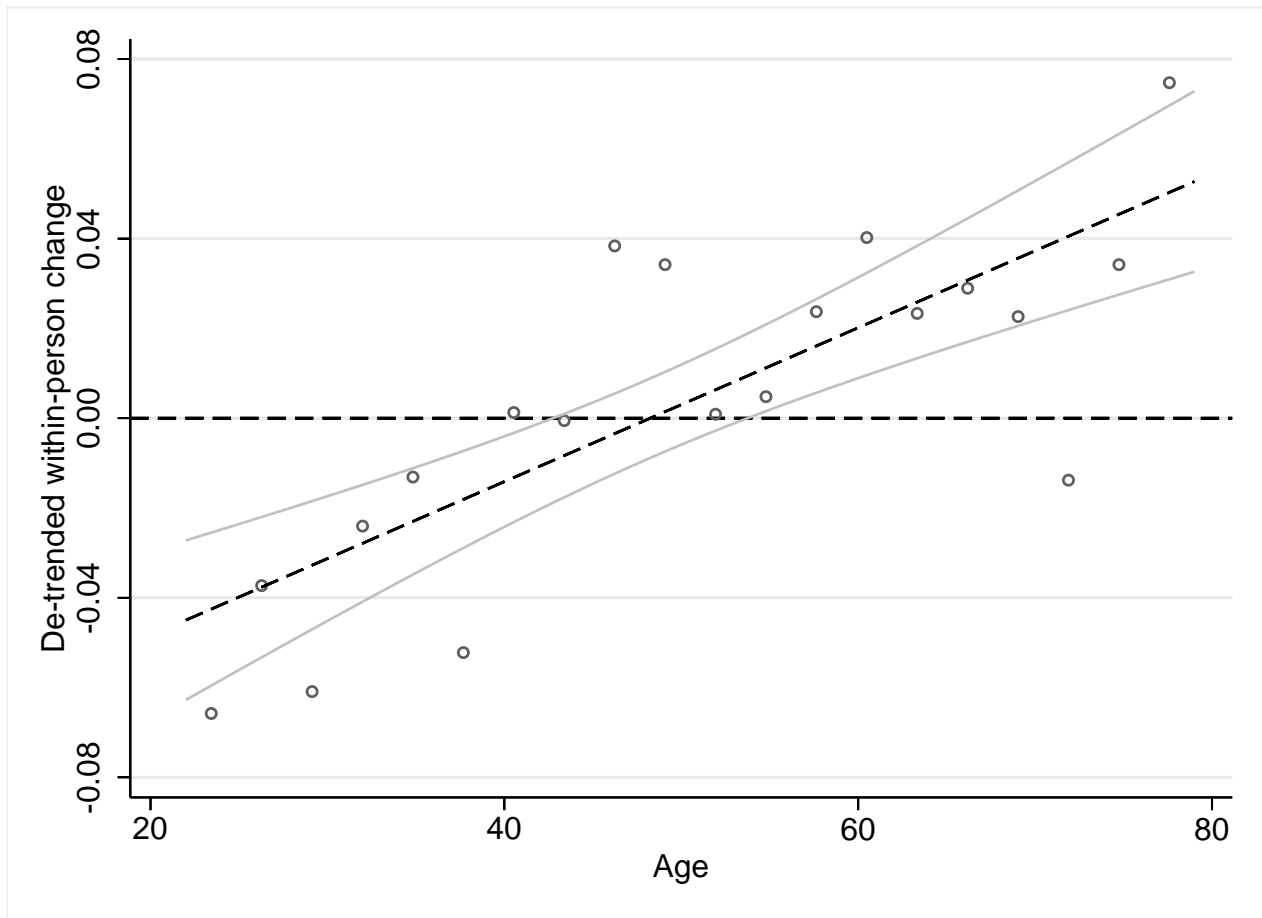
Notes. The lines in the graph displays predicted probabilities from a multinomial regression model using shifts to a more right-leaning party, a more left-leaning party or no shifts as response variable. The model has a linear effect of age and election year fixed effects. The plot displays actual values (change in vote) on the response variable.

Figure A.6. Robustness test using parties' left-right positioning by voters



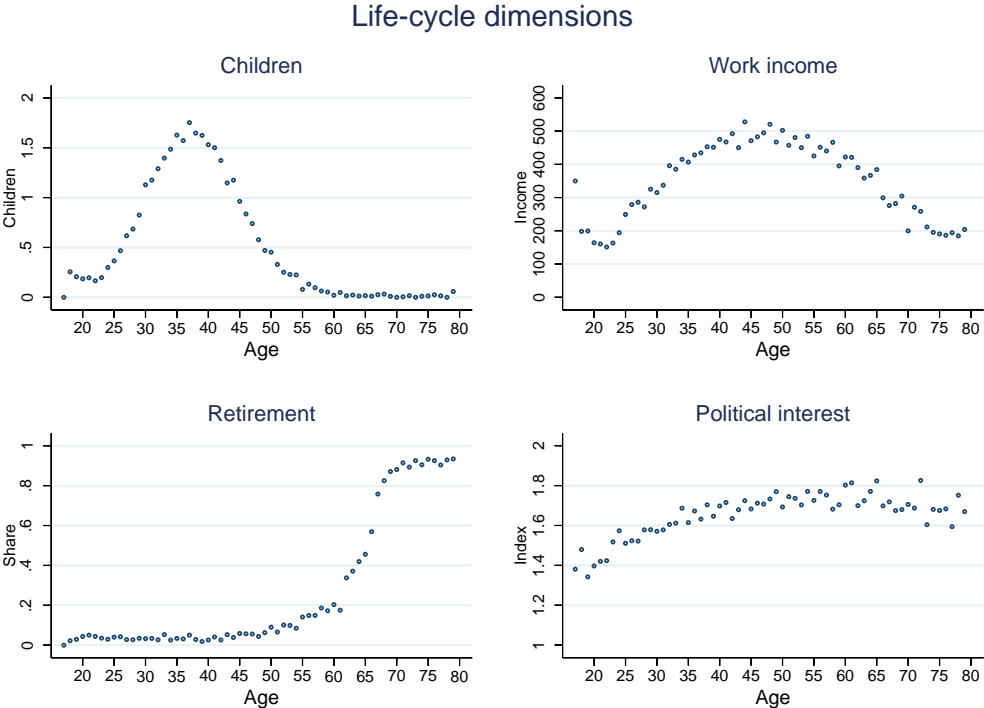
Notes. The diagram replicates Figure 2 in the main text using an adjusted party ranking based on voters' average reported left-right positions of the political parties. The vertical axis depicts the de-trended within-person shift in vote choice (the dependent variable), while the horizontal axis depicts respondents' age (the main explanatory variable). Dots reflect averages in twenty three-year age bins, while the line is a linear function fitted through the underlying data (with 95% confidence intervals). Data cover all available respondents aged 22 or more over the 40-year period from 1977 to 2017.

Figure A.7. Robustness test separating the three centrist parties



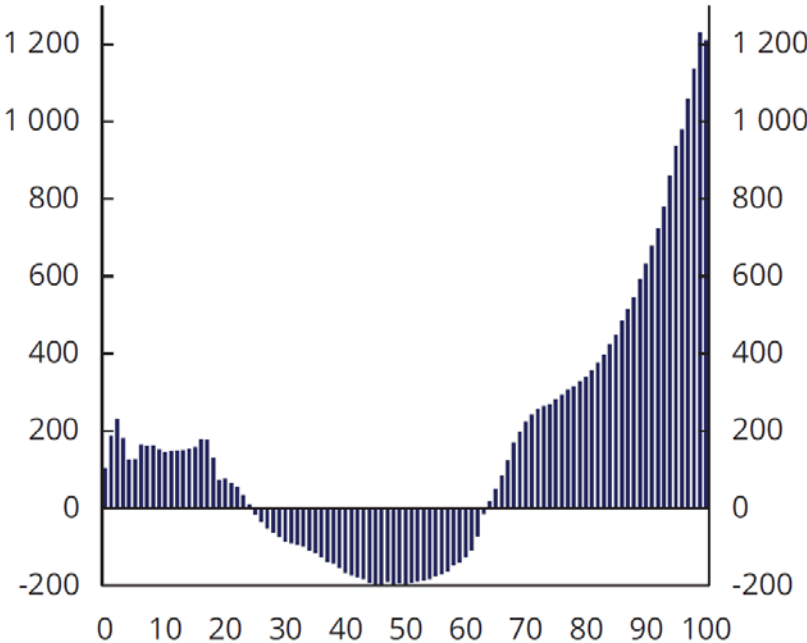
Notes. The diagram replicates Figure 2 in the main text using an adjusted party ranking that separates the three centrist parties and removes the 'other parties' group. The vertical axis depicts the de-trended within-person shift in vote choice (the dependent variable), while the horizontal axis depicts respondents' age (the main explanatory variable). Dots reflect averages in twenty three-year age bins, while the line is a linear function fitted through the underlying data (with 95% confidence intervals). Data cover all available respondents aged 22 or more over the 40-year period from 1977 to 2017.

Figure A.8. Life-cycle dimensions



Notes. The diagrams display Election Study survey data on four variables associated with the life cycle: average number of children aged 16 or less, average household work income, share of respondents living on old-age pension, disability pensions or unemployment benefits, and political interest. Political interest is measured on a four-point scale: 0 (not interested at all), 1 (slightly interested), 2 (moderately interested) and 3 (very interested). The four figures display average scores conditional on respondent age (one year bins).

Figure A.9. Net transfers per person conditional on age



Notes. The diagram shows the net transfers from the public sector conditional on age. The graph is taken from Meld. St. 14 (2020-2021), p. 194, and builds on calculations by Statistics Norway.