

Online Appendix
“Voting Rights and Immigrant Incorporation:
Evidence from Norway” (BJPS)

Jeremy Ferwerda, Henning Finseraas[†] and Johannes Bergh[‡]

Dartmouth College, email: Jeremy.A.Ferwerda@dartmouth.edu

[†]Institute for Social Research, Pbox 3233 Elisenberg, 0208 Oslo, Phone: +47 48283631, Norway
e-mail: henning.finseraas@samfunnsforskning.no.

[‡]Institute for Social Research, Pbox 3233 Elisenberg, 0208 Oslo, Phone: +47 , Norway e-mail:
johannes.bergh@samfunnsforskning.no.

Online Appendix

The 27 municipalities within the sample are (ordered by population size, from large to small): Oslo, Bergen, Trondheim, Stavanger, Bærum, Fredrikstad, Drammen, Sandnes, Sarpsborg, Asker, Skien, Skedsmo, Bodø, Sandefjord, Larvik, Tønsberg, Karmøy, Porsgrunn, Haugesund, Ålesund, Mandal, Vefsn, Hammerfest, Re, Tynset, Radøy, and Bremanger. As seen in the table below, the immigrants in these 27 municipalities had on average higher earnings and much higher employment levels in 2013 than immigrants residing elsewhere in Norway. These differences partly reflect labor market differences (there are differences in the same direction if we compare native Norwegians), but the main reason is that the cities attract a much higher number of labor immigrants.

Table A-1: Characteristics of immigrants born before 1994 which arrived in Norway in 2008. Outcomes are measured in 2013.

| | Municipality included | |
|----------------------------|-----------------------|----------------|
| | in our sample | Rest of Norway |
| Employed | .63 | .39 |
| Total earnings (NOK) | 255106 | 141019 |
| University level education | .33 | .18 |
| Age | 36.49 | 37.24 |

Employed is defined as having earnings above 1 G. G (grunnbeløp) is a cut-off point used to calculate pension benefits. The number is adjusted by the Norwegian Storting each year. In 2013 it was 85245 NOK.

Table A-2: RD on pre-determined covariates using the optimal bandwidth from the voting analysis

| Covariate | Bandwidth (Days) | Treatment coefficient | SE | p-value |
|-----------------------|---------------------|--------------------------|-------|---------|
| Age | 63 | -0.476 | 0.611 | .44 |
| Male | 63 | 0.015 | 0.033 | .46 |
| Unmarried | 63 | -0.022 | 0.031 | .49 |
| European country | 63 | -0.033 | 0.031 | .29 |
| East European country | 63 | -0.040 | 0.033 | .23 |
| African country | 63 | 0.018 | 0.015 | .22 |
| Asian country | 63 | 0.027 | 0.028 | .34 |
| Expected turnout | 63 | -0.005 | 0.006 | .40 |

Local polynomial (single order).

Table A-3: Descriptive statistics for outcomes in tables 1-6

| | Eff. N | Mean | Std. Dev. |
|--|--------|------|-----------|
| Tables 1-2. | | | |
| Vote | 4,092 | .22 | .41 |
| Male | 3,498 | .54 | .50 |
| Age | 3,032 | 38 | 9 |
| Unmarried | 4,203 | .31 | .46 |
| European country | 2,439 | .65 | .48 |
| East Eur. country | 2,915 | .49 | .50 |
| Asian country | 3,929 | .21 | .41 |
| African country | 2,653 | .06 | .23 |
| Expected turnout | 3,032 | .29 | .09 |
| Weak democratic culture, tables 3-5. | | | |
| Vote | 4,656 | .17 | .37 |
| Social assistance | 6,538 | .10 | .30 |
| Union member | 9,990 | .12 | .32 |
| Employment | 7,528 | .62 | .49 |
| Continuing education | 6,303 | .11 | .31 |
| Strong democratic culture, tables 3-5. | | | |
| Vote | 1,407 | .36 | .48 |
| Social assistance | 964 | .06 | .24 |
| Union member | 1,907 | .13 | .33 |
| Employment | 2,792 | .64 | .48 |
| Continuing education | 1,868 | .10 | .30 |
| Not born in democracy, tables 3-5. | | | |
| Vote | 4879 | .17 | .38 |
| Social assistance | 6,325 | .09 | .29 |
| Union member | 7,970 | .12 | .32 |
| Employment | 7,607 | .62 | .49 |
| Continuing education | 6,139 | .11 | .31 |
| Born in democracy, tables 3-5. | | | |
| Vote | 897 | .37 | .48 |
| Social assistance | 1,088 | .06 | .23 |
| Union member | 1,659 | .10 | .30 |
| Employment | 1,113 | .65 | .47 |
| Continuing education | 1,052 | .10 | .30 |
| Survey data, Table 6. | | | |
| Political interest | 564 | .41 | .49 |
| Contacted local politician | 567 | .05 | .21 |
| Influence municipal council | 554 | .07 | .26 |
| Political trust | 567 | .47 | .50 |
| Civic participation | 571 | .11 | .12 |

Table A-4: Voter turnout for selected immigrant countries, 2003-2015.

| | 2003 | 2007 | 2011 | 2015 |
|-------------------------|------|------|------|------|
| Total turnout | 59 | 62 | 65 | 60 |
| Foreign nationals (all) | 34 | 36 | 32 | 29 |
| Western nationals | 39 | 42 | 33 | 28 |
| Non western nationals | 25 | 30 | 30 | 28 |
| Large sending countries | | | | |
| Afghanistan | - | 32 | 35 | 32 |
| Bosnia-Herzegovina | 20 | 18 | 18 | 15 |
| France | 45 | 45 | 46 | 50 |
| Germany | 51 | 48 | 39 | 40 |
| Iraq | 19 | 23 | 23 | 27 |
| Iran | 23 | 24 | - | 30 |
| Netherlands | 47 | 53 | 56 | - |
| Pakistan | 40 | 36 | 44 | 33 |
| Poland | 25 | 23 | 8 | 7 |
| Russia | 20 | 27 | 26 | 21 |
| Serbia and Montenegro | 17 | 16 | 16 | - |
| Somalia | 23 | 36 | 51 | 48 |
| Thailand | 23 | 31 | 33 | 33 |
| Turkey | 24 | 22 | 23 | 32 |
| United Kingdom | 40 | 41 | 46 | 43 |
| United States | 46 | 45 | 46 | 42 |

Source: Election statistics, Statistics Norway. The sample size for each election is between 200-250 for each country group.

Figure A-1: RD on pre-determined covariates, first order polynomials. Optimal bandwidths (CCT)

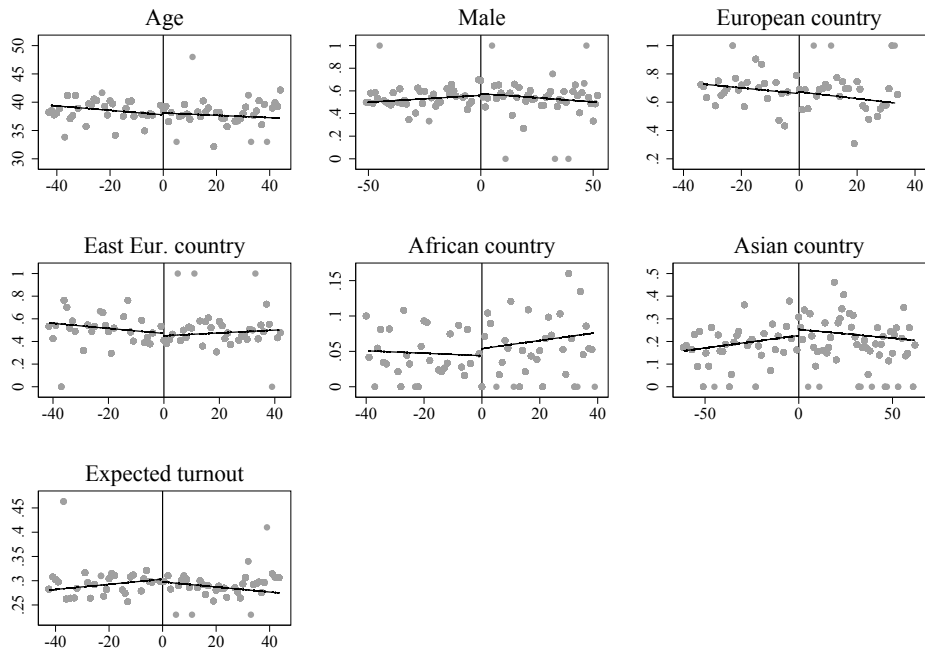


Figure A-2: RD on pre-determined covariates, second order polynomials. Optimal bandwidths (CCT)

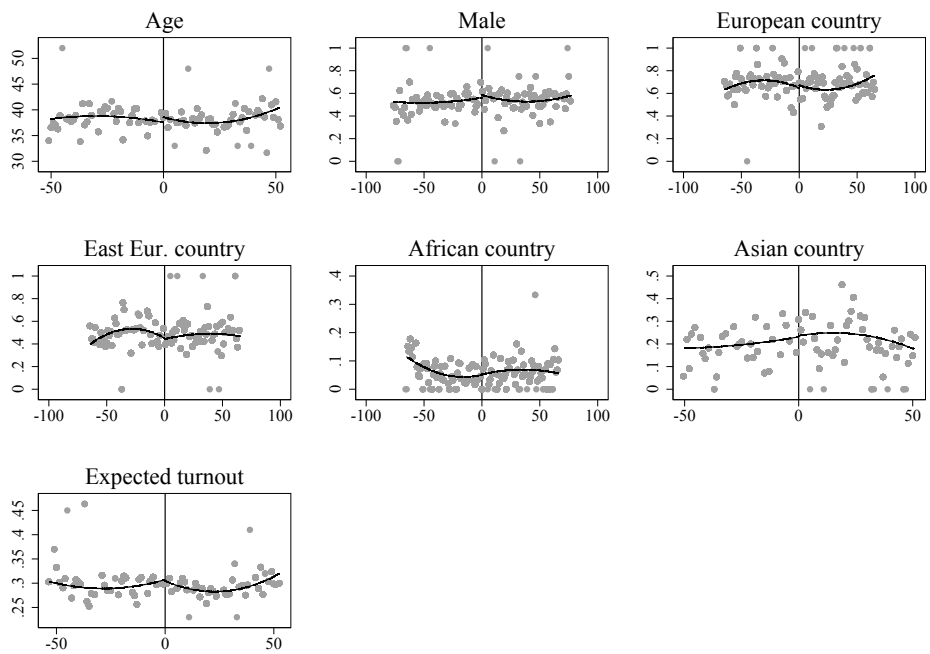
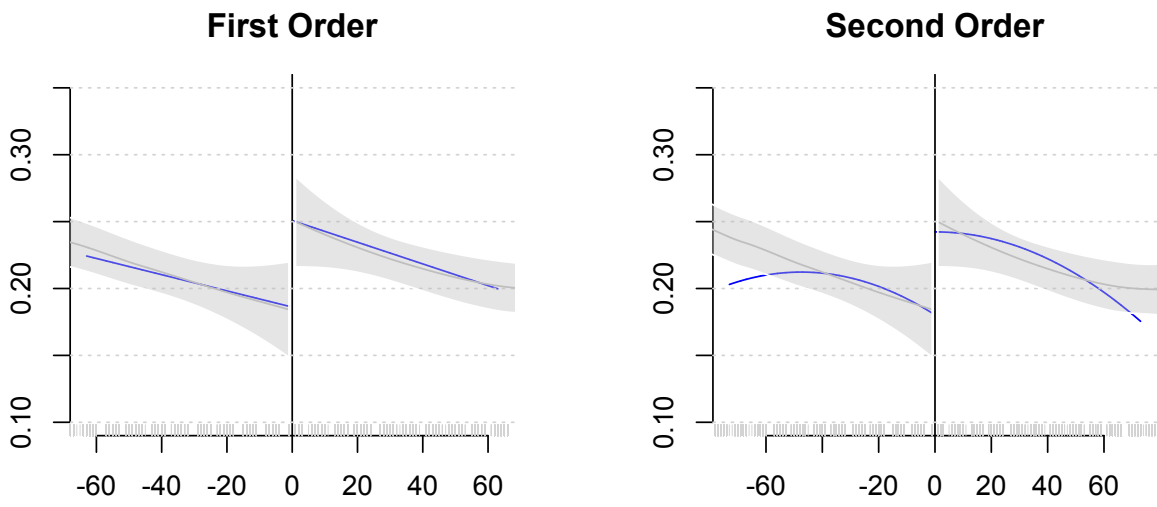
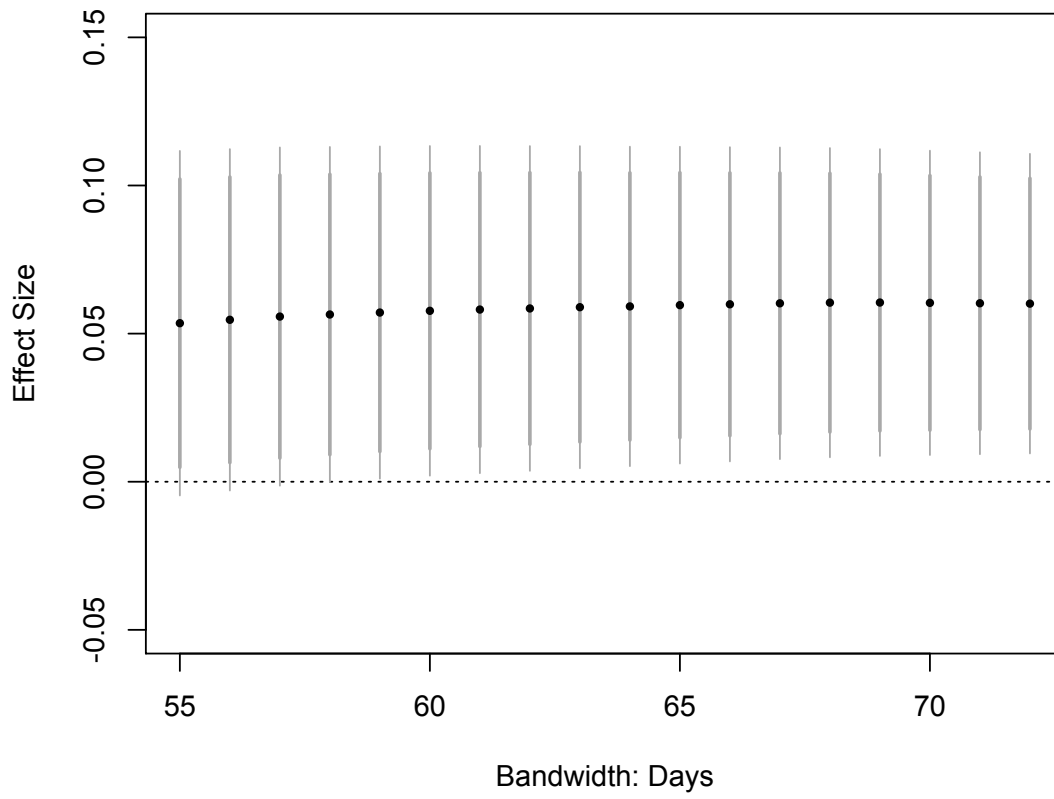


Figure A-3: RD on the probability of voting in the 2015 election (All Immigrants)



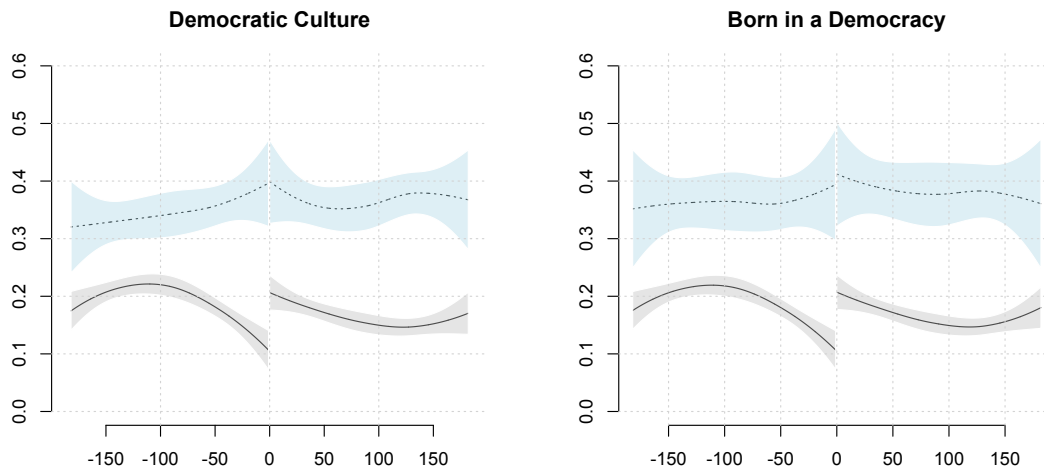
Shaded regions represent loess fits; blue lines indicate first and second order polynomials fit with MSE Optimal Bandwidths.

Figure A-4: RD on the probability of voting in the 2015 election (Multiple bandwidths)



Thick lines: 90% confidence intervals. Thin lines: 95% confidence intervals. The optimal bandwidth according to the CCT algorithm is 63.

Figure A-5: Loess fits: discontinuities for democratic subsets



Note

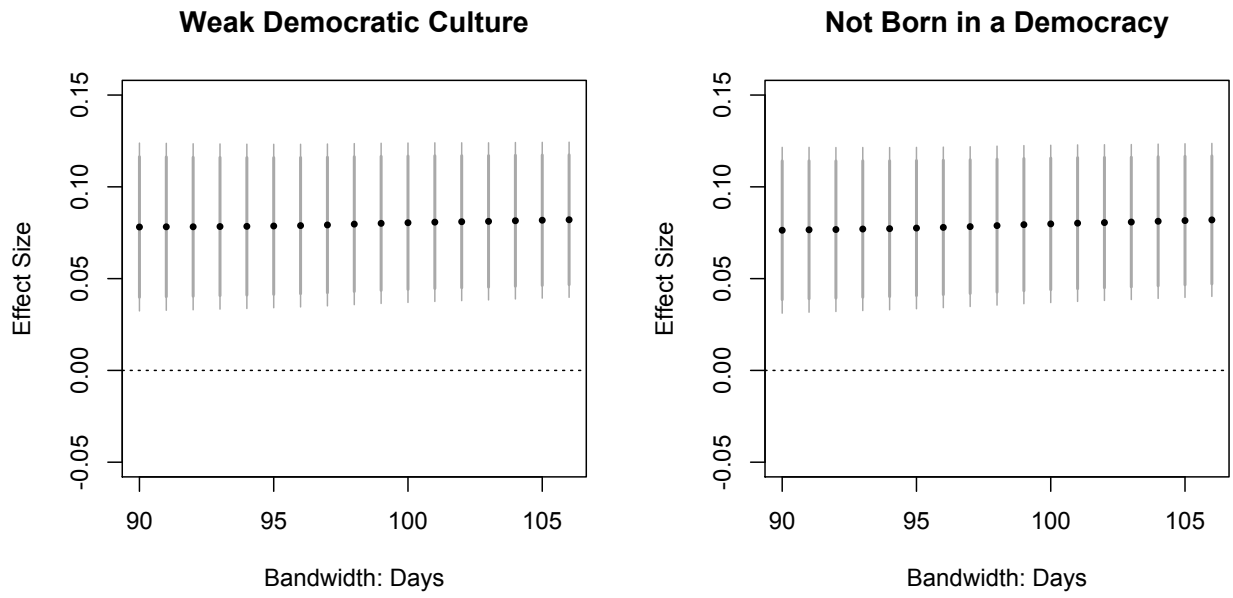
that due to changing immigrant flows over time, the expected level of turnout is not stable across the full distribution. Immigrant background characteristics are only balanced in close proximity to the eligible date.

Table A-5: RD on pre-determined covariates - Subset Analysis

| Covariate | Bandwidth | Treatment coefficient | SE | p-val |
|--------------------------------|-----------|-----------------------|-------|-------|
| <i>Weak democratic culture</i> | | | | |
| Male | 99 | 0.019 | 0.032 | .55 |
| Age | 111 | -0.541 | 0.549 | .32 |
| Unmarried | 89 | -0.020 | 0.030 | .51 |
| <i>Not Born in a Democracy</i> | | | | |
| Male | 97 | - 0.001 | 0.030 | .96 |
| Age | 104 | -0.806 | 0.536 | .13 |
| Unmarried | 84 | -0.026 | 0.030 | .38 |

Local polynomial (single order). Optimal bandwidths selected according to Calonico, Cattaneo, and Titiunik (2014). We exclude the nation of origin dummies given that we subset directly on national characteristics.

Figure A-6: Subset Results (Multiple bandwidths)



Thick lines: 90% confidence intervals. Thin lines: 95% confidence intervals.

Table A-6: Subset Results with Covariates

| Polynomial order | Criteria | Bandwidth | Treatment coefficient | SE | p-val |
|-------------------------|----------|-----------|--------------------------|-------|-------|
| Weak democratic culture | | | | | |
| 1 | MSE | 97 | 0.079*** | 0.022 | .00 |
| 2 | MSE | 124 | 0.070** | 0.029 | .02 |
| 1 | CER | 60 | 0.072** | 0.029 | .01 |
| Not Born in a Democracy | | | | | |
| 1 | MSE | 99 | 0.078*** | 0.021 | .00 |
| 2 | MSE | 129 | 0.081** | 0.028 | .02 |
| 1 | CER | 61 | 0.067** | 0.028 | .02 |

Second order local polynomials. Optimal bandwidths selected according to Calonico, Cattaneo, and Titiunik (2014). Covariates include age, gender, and marital status. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A-7: Subset Results when sample is restricted to young immigrants

| | Bandwidth | Treatment coefficient | SE | p-val |
|---------------------------|-----------|--------------------------|-------|-------|
| Weak democratic culture | 89 | 0.092*** | 0.031 | .00 |
| Strong democratic culture | 94 | 0.007 | 0.082 | .93 |
| Not Born in a Democracy | 87 | 0.100*** | 0.032 | .00 |
| Born in a Democracy | 135 | -0.009 | 0.080 | .91 |

Local polynomials. Optimal bandwidths selected according to Calonico, Cattaneo, and Titiunik (2014). Young is defined as below the mean age of immigrants (38 years of age). *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A-8: Placebo Tests

| Placebo Cutoff | Bandwidth | Treatment coefficient | SE | p-val |
|----------------------------------|-----------|--------------------------|-------|-------|
| Panel A: Weak democratic culture | | | | |
| Right side placebo | 74 | 0.001 | 0.042 | .97 |
| Left side placebo | 49 | -0.058 | 0.037 | .12 |
| Panel B: Not Born in a Democracy | | | | |
| Right side placebo | 58 | 0.007 | 0.027 | .81 |
| Left side placebo | 44 | -0.049 | 0.039 | .21 |
| Panel C: Nordic immigrants | | | | |
| Sept 11, 2008 placebo | 90 | -0.015 | 0.073 | .83 |

Local polynomial (single order). Optimal bandwidths selected according to Calonico, Cattaneo, and Titiunik (2014). In Panels A and B we follow Imbens and Lemieux (2008: 632) closely and conduct placebo cut-off analyses at both sides of the cut-off. In the right (left) side cut-off analysis we include only observations from the right (left) side of the cut-off to avoid including the true discontinuity in the analysis. The fake cut-off is the median value at each side, which ensures that we maximize the power of the test. In Panel C we estimate the treatment effect for Nordic immigrants. This is a placebo analysis because Nordic citizens were not affected by the cutoff.

Table A-9: Mobilization: RD on alternate outcomes

| Outcome | Bandwidth | Treatment coefficient | SE | p-val | Effective N |
|---------------------------|-----------|-----------------------|-------|-------|-------------|
| Weak democratic culture | | | | | |
| Social assistance | 98 | -0.019 | 0.015 | .23 | 6538 |
| Union member | 149 | 0.015 | 0.013 | .25 | 9990 |
| Strong democratic culture | | | | | |
| Social assistance | 51 | 0.033 | 0.025 | .18 | 964 |
| Union member | 111 | 0.025 | 0.032 | .44 | 1907 |
| Not Born in a Democracy | | | | | |
| Social assistance | 91 | -0.011 | 0.015 | .48 | 6325 |
| Union member | 119 | 0.007 | 0.015 | .61 | 7970 |
| Born in a Democracy | | | | | |
| Social assistance | 108 | -0.033 | 0.027 | .22 | 1088 |
| Union member | 158 | 0.035 | 0.032 | .27 | 1659 |

Local polynomial. Optimal bandwidths selected according to Calonico, Cattaneo, and Titiunik (2014). *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. This sample is based on the total population of immigrants (arriving around the cut-off date in 2008) who lived in Norway in the beginning of 2013. This sample is larger than the one used in the analysis of turnout because of out-migration between January 2013 and September 2015, and because of the eligibility criteria of continued residency in the 2015 sample.

Table A-10: Survey Evidence: Political and Social Integration, 2008 Arrivals (OLS)

| | Political interest | Contacted local politician | Influence municipal council | Political trust | Civic participation |
|--------------|-----------------------|----------------------------------|-----------------------------------|--------------------|------------------------|
| Early Access | 0.099 (0.079) | 0.024 (0.031) | 0.061 (0.037) | 0.132* (0.078) | 0.045** (0.021) |
| Observations | 180 | 181 | 176 | 180 | 182 |
| Controls | Yes | Yes | Yes | Yes | Yes |
| Survey Dummy | Yes | Yes | Yes | Yes | Yes |

Robust standard errors in parentheses. All regressions include controls for age, gender, level of education, and a survey-year dummy. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Alternate Measures of Democratic Exposure

We use Varieties of Democracy’s “electoral regime index” (Coppedge et al. 2016) to classify country years as being electoral democracies in each year. Using this classification of democratic years, we follow Fuchs-Schündeln and Schündeln (2015) closely and derive an individual level measure of democratic capital in 2008. This stock variable is the accumulated years of democracy over ones’ lifetime, but where previous years of democratic experience depreciates by two percent each year.

Table A-11: RD on the probability of voting in the 2015 election

| Polynomial order | Criteria | Bandwidth | Treatment coefficient | p-val |
|----------------------------------|----------|-----------|-----------------------|-------|
| Low level of democratic capital | | | | |
| 1 | MSE | 67 | .091* | .06 |
| 2 | MSE | 77 | .073 | .27 |
| 1 | CER | 67 | .091* | .06 |
| High level of democratic capital | | | | |
| 1 | MSE | 56 | .021 | .69 |
| 2 | MSE | 84 | .020 | .72 |
| 1 | CER | 37 | .018 | .83 |

Optimal bandwidths selected according to Calonico, Cattaneo, and Titiunik (2014). *** p<0.01, ** p<0.05, * p<0.1.

Examining the last 30 years, we use the Boix-Miller-Rosato (2013) dichotomous dataset to code countries as dictatorships (0 years of democracy), stable democracies (30 years of democracy), or new democracies (>0, <30 years of democracy).

Table A-12: RD on the probability of voting in the 2015 election.

| Polynomial order | Criteria | Bandwidth | Treatment coefficient | SE | p-val |
|-----------------------------------|----------|-----------|-----------------------|-------|-------|
| Dictatorships | | | | | |
| 1 | MSE | 81 | 0.109 | 0.067 | .11 |
| 2 | MSE | 112 | 0.153* | 0.086 | .08 |
| 1 | CER | 70 | 0.200* | 0.111 | .07 |
| New Democracies and Dictatorships | | | | | |
| 1 | MSE | 99 | 0.077*** | 0.022 | .00 |
| 2 | MSE | 123 | 0.063** | 0.030 | .03 |
| 1 | CER | 61 | 0.065** | 0.029 | .02 |
| Stable Democracies | | | | | |
| 1 | MSE | 56 | 0.023 | 0.054 | .66 |
| 2 | MSE | 84 | 0.037 | 0.065 | .57 |
| 1 | CER | 37 | 0.039 | 0.065 | .54 |

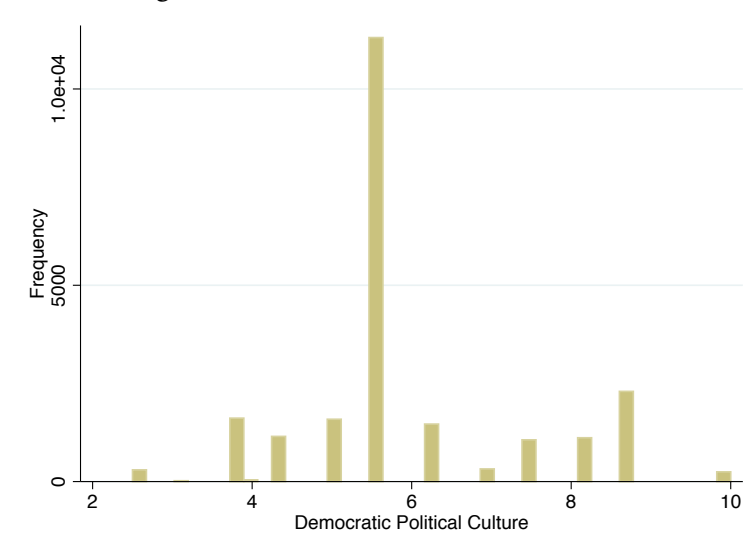
Optimal bandwidths selected according to Calonico, Cattaneo, and Titiunik (2014). *** p<0.01, ** p<0.05, * p<0.1.

Alternate Cutoffs for EIU Index

We use a cutoff of '6.5' on the EIU Democratic Culture Index. This classifies the following origin countries within our sample as having a weak democratic culture:

Afghanistan, Albania, Algeria, Angola, Argentina, Armenia, Azerbaijan, Bangladesh, Belarus, Bhutan, Bolivia, Bosnia and Herzegovina, Brazil, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Chile, China, Colombia, Congo, Congo, Democratic Republic, Cote d'Ivoire, Croatia, Cuba, Cyprus, Djibouti, Dominican Republic, Ecuador, El Salvador, Eritrea, Ethiopia, Fiji, Gambia, Georgia, Ghana, Guatemala, Guinea, Honduras, India, Indonesia, Iran, Iraq, Jordan, Kazakhstan, Kenya, Kosovo, Kyrgyzstan, Laos, Latvia, Lebanon, Liberia, Libya, Lithuania, Macedonia, Malawi, Mexico, Moldova, Mongolia, Montenegro, Morocco, Myanmar, Nepal, Nicaragua, Niger, Nigeria, Pakistan, Panama, Paraguay, Peru, Philippines, Poland, Romania, Russia, Rwanda, Senegal, Serbia, Sierra Leone, Slovakia, Somalia, Sudan, Suriname, Tajikistan, Tanzania, Thailand, Togo, Trinidad and Tobago, Turkey, Turkmenistan, Uganda, Ukraine, Uzbekistan, Venezuela, Vietnam, Yemen, Zambia, Zimbabwe

Figure A-7: Distribution of EIU Scores



Moving the cutoff to a more inclusive definition of democratic culture (6) or more exclusive (7) does not affect the results.

Table A-13: EIU Cutoff of 6

| Polynomial order | Criteria | Bandwidth | Treatment coefficient | SE | p-val |
|---------------------------|----------|-----------|-----------------------|-------|-------|
| Weak democratic culture | | | | | |
| 1 | MSE | 100 | 0.079*** | 0.023 | .00 |
| 2 | MSE | 180 | 0.063* | 0.032 | .05 |
| 1 | CER | 61 | 0.068** | 0.030 | .03 |
| Strong democratic culture | | | | | |
| 1 | MSE | 110 | -0.027 | 0.044 | .54 |
| 2 | MSE | 128 | -0.012 | 0.060 | .84 |
| 1 | CER | 71 | -0.010 | 0.055 | .86 |

Optimal bandwidths selected according to Calonico, Cattaneo, and Titiunik (2014). *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A-14: EIU Cutoff of 7

| Polynomial order | Criteria | Bandwidth | Treatment coefficient | SE | p-val |
|---------------------------|----------|-----------|-----------------------|-------|-------|
| Weak democratic culture | | | | | |
| 1 | MSE | 102 | 0.079*** | 0.022 | .00 |
| 2 | MSE | 119 | 0.059* | 0.030 | .05 |
| 1 | CER | 62 | 0.066** | 0.028 | .02 |
| Strong democratic culture | | | | | |
| 1 | MSE | 93 | 0.000 | 0.058 | .99 |
| 2 | MSE | 129 | 0.016 | 0.071 | .82 |
| 1 | CER | 71 | 0.015 | 0.070 | .84 |

Optimal bandwidths selected according to Calonico, Cattaneo, and Titiunik (2014). *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Nationality Balance

Immigrants within our sample arrived from 153 origin countries. Although the sample sizes are too small to test balance for a majority of these nationalities, in the following table we test balance for nationalities with at least 100 immigrants within the sample. The patterns are inconsistent with clustered arrivals around the eligibility threshold.

Table A-15: Balance by national origin (optimal bandwidths)

| Country | estimate | se | p-val |
|---------------|----------|-------|-------|
| Afghanistan | -0.006 | 0.016 | 0.72 |
| Brazil | -0.008 | 0.008 | 0.32 |
| Bulgaria | -0.002 | 0.014 | 0.89 |
| China | 0.021 | 0.028 | 0.45 |
| Eritrea | -0.018 | 0.017 | 0.31 |
| France | 0.005 | 0.016 | 0.89 |
| Germany | -0.034 | 0.028 | 0.23 |
| Great Britain | 0.038 | 0.021 | 0.08 |
| India | 0.024 | 0.023 | 0.31 |
| Iran | 0.021 | 0.013 | 0.11 |
| Iraq | 0.024 | 0.020 | 0.22 |
| Latvia | 0.004 | 0.012 | 0.77 |
| Lithuania | -0.008 | 0.029 | 0.79 |
| Netherlands | 0.005 | 0.009 | 0.54 |
| Pakistan | -0.010 | 0.017 | 0.55 |
| Philippines | 0.015 | 0.024 | 0.54 |
| Poland | -0.077 | 0.051 | 0.13 |
| Romania | 0.021 | 0.020 | 0.31 |
| Russia | 0.017 | 0.019 | 0.39 |
| Slovakia | -0.010 | 0.010 | 0.37 |
| Somalia | 0.004 | 0.007 | 0.56 |
| Thailand | -0.034 | 0.018 | 0.05 |
| Turkey | 0.011 | 0.011 | 0.30 |
| USA | -0.010 | 0.007 | 0.13 |

Table A-16: RD on the probability of voting in the 2015 election (Only nationalities with > 100 immigrants in the sample)

| Criteria | Bandwidth (Days) | Treatment coefficient | SE | p-val | Effective N |
|---------------|---------------------|--------------------------|-------|-------|----------------|
| 1 Year Window | 183 | 0.030* | 0.017 | .09 | 8648 |
| MSE | 73 | 0.063** | 0.027 | .02 | 3709 |
| CER | 46 | 0.070* | 0.035 | .05 | 2449 |

Local polynomial. Optimal bandwidths selected according to Calonico, Cattaneo, and Titiunik (2014). *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Survey Evidence: Length of Stay

The specification for the Citizen Survey includes a linear trend for the length of time within Norway. However, in the results that follow, we demonstrate that the number of years spent in the country does not predict an increase in the level of engagement, given that engagement trends are fairly flat across years of arrival. Given heterogeneity in voting eligibility, we restrict our analysis to either the treatment or control group. We report several different windows for each group. Observations in 2008 are separated into treatment and control on the basis of self-reported eligibility.

Table A-17: Effect of Additional Year in Norway

| | Political interest | Contacted local politician | Influence municipal council | Political trust | Civic participation |
|----------------|-----------------------|----------------------------------|-----------------------------------|--------------------|------------------------|
| Treated | | | | | |
| 2007-2008 | -0.054 (0.069) | -0.003 (0.031) | 0.011 (0.039) | -0.113 (0.069) | -0.028 (0.018) |
| 2006-2008 | -0.038 (0.037) | -0.030** (0.012) | -0.022 (0.020) | -0.002 (0.037) | -0.004 (0.011) |
| 2005-2008 | 0.019 (0.024) | 0.022 (0.014) | -0.005 (0.013) | -0.018 (0.024) | -0.008 (0.006) |
| Control | | | | | |
| 2008-2009 | -0.025 (0.063) | -0.014 (0.023) | -0.030 (0.024) | -0.118* (0.062) | -0.000 (0.015) |
| 2008-2010 | -0.006 (0.030) | -0.017 (0.013) | -0.016 (0.013) | -0.037 (0.030) | 0.006 (0.006) |
| 2008-2011 | -0.013 (0.018) | -0.010 (0.008) | 0.001 (0.008) | -0.014 (0.018) | -0.000 (0.004) |

Robust standard errors in parentheses. Coefficients represent the estimated effect of one additional year within Norway. All regressions include controls for age, gender, level of education, and a survey-year dummy. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

References

- Boix, Carles, Michael Miller, and Sebastian Rosato. 2013. "A Complete Data Set of Political Regimes, 1800–2007." *Comparative Political Studies* 46(12): 1523–1554.
- Calonico, Sebastian, Matias D. Cattaneo, and Rocio Titiunik. 2014. "Robust Nonparametric Confidence Intervals for Regression-Discontinuity Designs." *Econometrica* 82(6): 2295–2326.
- Coppedge et al., Michael. 2016. "V-Dem Codebook v6." Varieties of Democracy (V-Dem) Project.
- Fuchs-Schündeln, Nicola, and Matthias Schündeln. 2015. "On the Endogeneity of Political Preferences: Evidence from Individual Experience with Democracy." *Science* 347(6226): 1145–1148.