**Supporting Information for ‘The policy agenda effects of problem indicators’**

**Supporting Information I**

**Table SI 1** Years included in the analysis by issue and country (based on model 1 in table 3)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Attention categories** | **Denmark  1960-2012** | **France**  **1988-2007** | **Belgium**  **1988-2010** | **Italy  1996-2014** | **Spain  1977-2015** | **Germany**  **1978-2013** | **Australia**  **1980-2013** |
| Unemployment | 1960-2012 | 1988-2007 | 1988-2010 | 1996-2014 | 1977-2015 | 1978-2013 | 1980-2013 |
| GDP Growth | 1961-2012 | 1988-2007 | 1988-2010 | 1996-2014 | 1977-2015 | 1978-2013 | 1980-2013 |
| Inflation | 1961-2012 | 1988-2007 | 1988-2010 | 1996-2014 | 1977-2015 | 1978-2013 | 1980-2013 |
| Government Deficit | 1971-2012 | 1988-2007 | 1988-2010 | 1996-2014 | 1977-2015 | 1978-2013 | 1980-2013 |
| Pharmaceutical Expenditure | 1980-2012 | 1988-2007 | 1988-2010 | 1996-2014 | 1980-2015 | 1978-2013 | 1980-2013 |
| Health Manpower | 1992-2012 | 1998-2007 |  |  | 1980-2014 | 2000-2013 | 1980-2013 |
| Water and Soil Quality | 1990-2012 | 1990-2007 | 2000-2010 | 1996-2014 | 1990-2015 | 1990-2013 | 1990-2013 |
| Waste | 1980-2012 | 1989-2007 | 1988-2010 | 1996-2014 | 1995-2015 | 1990-2013 | 1980-2013 |
| Oil Price | 1980-2012 | 1992-2007 | 1988-2010 | 1996-2014 | 1980-2014 | 1980-2013 | 1980-2013 |
| Global Warming | 1960-2012 | 1988-2007 | 1988-2010 | 1996-2014 | 1977-2015 | 1978-2013 | 1980-2013 |
| Immigration | 1980-2012 | 1988-2007 | 1988-2010 | 1996-2014 | 1980-2015 | 1980-2013 | 1989-2013 |
| Roads and Traffic Accidents | 1970-2012 | 1988-2007 | 1988-2010 | 1996-2014 | 1977-2015 | 1978-2013 | 1980-2013 |
| Crime | 1960-2007 | 1993-2007 |  | 1996-2007 | 1980-2007 | 1978-2007 |  |
| Poverty and Inequality | 1980-2012 | 1988-2007 | 1990-2010 | 1996-2014 | 1980-2015 | 1980-1990 |  |
| Elderly | 1960-2012 | 1988-2007 | 1988-2010 | 1996-2014 | 1977-2014 | 1978-2013 | 1980-2013 |
| Bankruptcies | 1990-2012 | 1990-2007 | 1998-2010 | 2001-2014 | 2005-2015 | 2003-2013 | 1999-2013 |
| Foreign Trade | 1970-2012 | 1988-2007 | 1988-2010 | 1996-2014 | 1977-2015 | 1978-2013 | 1980-2013 |

Note:Years denote the early and latest year in which data for both the indicator and CAP data is available in one of the countries.

**Supporting Information 2**

Although the country codebooks are largely similar, the different country projects within CAP have adapted the original codebook, developed by Baumgartner and Jones in the US, to national political contexts. To account for this, we went through each country’s codebook and identified all the issue categories that were relevant to each indicator based on a similar definition. Table SI 2 presents a crosswalk of the problem indicators and issue categories in the seven countries. The CAP codes refer to issue categories that can be found here: <https://www.comparativeagendas.net/pages/master-codebook>

**Table SI 2** Problems, indicators, and sub-issue categories from the Comparative Agendas Project’s codebook

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Issue attention categories** | **Denmark** | **France** | **Belgium** | **Italy** | **Spain** | **Germany** | **Australia** |
| Unemployment | 103  502 506  507  508 | 103 502 503 506 | 103 502 506 | 103 502 503 506 | 103 502 503 506 | 103 502 503 506 | 103 502 503 506 |
| GDP Growth | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Inflation | 101  110 | 101 110 | 101 110 | 101 110 | 101 110 | 101 110 | 101 110 |
| Government Deficit | 105 | 105 | 105 | 105 | 105 | 105 | 105 |
| Pharmaceutical Expenditure | 321  335 | 321 335 | 321 335 | 321 335 | 321 335 | 321 335 | 321 335 |
| Health Manpower | 325 | 325 | 325 | 325 | 325 | 325 | 325 |
| Water and Soil Quality | 407  701  704  711 | 701 704 711 | 407 701 704 711 | 701 704 711 | 701 704 711 | 407 701 704 711 | 701 704 711 |
| Waste | 703  707 | 703 707 | 703 707 | 703 707 | 703 707 | 703 707 | 703 707 |
| Oil Price | 803 | 803 | 803 | 803 | 803 | 803 | 803 |
| Global Warming | 700  705 800  801  802  805  806  807  898  899 | 700 705 800 801 802 805 806 807 898 899 | 700 705 800 801 802 805 806 807 898 899 | 700 705 800 801 802 805 806 807 898 899 | 700 705 800 801 802 805 806 807 898 899 | 700 705 800 801 802 805 806 807  898 899 | 700 705 800 801 802 805 806 807 898 899 |
| Immigration | 529  900 | 900  929 930  931 932 933 999 | 900  929  930  931  932  933  999 | 900 929 931 932  933 940  941  999 | 529 900 | 230 529 | 529  230  530 |
| Roads and Traffic Accidents | 1002 | 1002 1006 | 1002 1006 | 1002 | 1002 | 1002 | 1002 1006 |
| Crime | 1200  1201  1202  1203  1204  1205  1206  1207  1208  1210  1211  1299 | 1200 1201  1202 1204  1205 1206 1207 1209 1210 1211 1212 1213 1214 1215 1230 1299 | 1200 1201  1203 1204  1205 1206 1207 1209 1210 1211 1212  1213  1214  1215  1230  1299 | 1200 1201  1203 1204  1205 1206 1207 1208 1210 1211 1212 1213 1214  1230 1299 | 1200 1201 1202  1203 1204  1205 1206 1207 1208 1210 1211 1299 | 1200 1201 1202  1203 1204  1205 1206 1207 1208 1209 1210 1211 1299 | 1200 1201 1202  1203 1204  1205 1206 1207 1208 1209  1210 1211  1299 |
| Poverty and Inequality | 1300  1301  1302  1406 | 1300 1301 1302 1406 | 1300 1302 1406 | 1300 1302 1406 | 1300 1302 1406 | 1300  1301 1302 1406 | 1300 1301 1302 1406 |
| Elderly | 334  1303  1408 | 334 1303 1408 | 334 1303 1408 | 334 1303 1408 | 334 1303 1408 | 334 1303 1408 | 334 1303 1408 |
| Bankruptcies | 108 1500 1501 1502 1507 1521 | 108 1500 1501 1502 1507 1521 | 108 1500 1501 1502 1507 1521 | 108 1500 1501 1502 1507 1521 | 108 1500 1501 1502 1507 1521 | 108 1500 1501 1502 1507 1521 | 108 1500 1501 1502 1507 1521 |
| Foreign Trade | 1800-1899 | 1800-1899 | 1800-1899 | 1800-1899 | 1800-1900 | 1800-1901 | 1800-1899 |

**Supporting Information 3: Statistical test connected to time-series-cross-sectional data**

**Wooldridge test for autocorrelation in panel data:**

F = 26.8

Prob > F = 0.000

Carried out using the user written program xtserial in Stata

**Modified Wald test for panel-level heteroskedasticity**

Chi2 = 1.5e+06

P > chi2 = 0.000

Carried out using the user written program xttest3 in Stata

**Supporting Information 4**

**Table SI 3** Testing for an asymmetric effect of negative and positive changes in indicators on the parliamentary questioning

|  |  |
| --- | --- |
|  | (1) |
|  | Model 1 |
| Policy agendat-1 | 0.420\*\*\* |
|  | (0.047) |
|  |  |
| ∆ Indicator | -0.362 |
|  | (0.733) |
|  |  |
| ∆ Negative | -0.055 |
|  | (0.070) |
|  |  |
| ∆ Indicator X ∆ Negative | 2.964\* |
|  | (1.329) |
|  |  |
| Indicatort-1 | 0.858\*\*\* |
|  | (0.247) |
|  |  |
| ∆ Single-party government | -0.073 |
|  | (0.250) |
|  |  |
| Single-party governmentt-1 | -0.040 |
|  | (0.087) |
|  |  |
| ∆ Election year | -0.050 |
|  | (0.060) |
|  |  |
| Election yeart-1 | -0.034 |
|  | (0.085) |
|  |  |
| Constant | 0.759\*\*\* |
|  | (0.136) |
| Adj. R2 | 0.202 |
| N | 3004 |

Cluster robust standard errors in parentheses. + *p* < 0.10, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001.

**Table SI 4** Testing for an asymmetric effect of negative and positive benchmarks on the parliamentary questioning

|  |  |
| --- | --- |
|  | (1) |
|  | Model 1 |
| Policy agendat-1 | -0.580\*\*\* |
|  | (0.049) |
|  |  |
| ∆ Benchmark | 0.661 |
|  | (0.833) |
|  |  |
| Benchmarkt-1 | 1.974\*\* |
|  | (0.655) |
|  |  |
| Benchmark negative | -0.135 |
|  | (0.095) |
|  |  |
| Benchmarkt-1 X Benchmark negative | -0.057 |
|  | (0.913) |
|  |  |
| ∆ Election year | -0.022 |
|  | (0.066) |
|  |  |
| Election yeart-1 | 0.016 |
|  | (0.094) |
|  |  |
| ∆ Single party government | 0.017 |
|  | (0.284) |
|  |  |
| Single party governmentt-1 | -0.020 |
|  | (0.110) |
|  |  |
| Constant | 1.138\*\*\* |
|  | (0.103) |
| Adj. R2 | 0.306 |
| N | 2590 |

Cluster robust standard errors in parentheses. + *p* < 0.10, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001.

**Table SI 5** Replicating Table 3 with countries where government parties ask questions (Belgium, Italy, and Spain)

|  |  |  |  |
| --- | --- | --- | --- |
|  | (1) | (2) | (3) |
|  | Model 1 | Model 2 | Model 3 |
| Political agendat-1 | -0.640\*\*\* | -0.648\*\*\* | -0.648\*\*\* |
|  | (0.072) | (0.076) | (0.077) |
|  |  |  |  |
| ∆ Indicator | 1.060 |  | 1.009+ |
|  | (0.691) |  | (0.539) |
|  |  |  |  |
| Indicatort-1 | 0.925\* |  | 0.0813 |
|  | (0.420) |  | (0.396) |
|  |  |  |  |
| ∆ Benchmark |  | 1.214 | 0.359 |
|  |  | (1.006) | (0.909) |
|  |  |  |  |
| Benchmarkt-1 |  | 1.829\* | 1.764+ |
|  |  | (0.789) | (0.913) |
|  |  |  |  |
| ∆ Single-party government | 0.134 | 0.268 | 0.269 |
|  | (0.173) | (0.184) | (0.186) |
|  |  |  |  |
| Single-party governmentt-1 | -0.119 | -0.090 | -0.084 |
|  | (0.132) | (0.159) | (0.161) |
|  |  |  |  |
| ∆ Election year | -0.0523 | 0.050 | 0.041 |
|  | (0.084) | (0.072) | (0.071) |
|  |  |  |  |
| Election yeart-1 | -0.162 | -0.009 | -0.021 |
|  | (0.128) | (0.111) | (0.113) |
|  |  |  |  |
| Constant | 0.721\*\* | 0.950\*\*\* | 0.917\*\*\* |
|  | (0.224) | (0.147) | (0.188) |
| Adj. R2 | 0.411 | 0.436 | 0.435 |
| N | 856 | 765 | 765 |

Cluster robust standard errors in parentheses. + *p* < 0.10, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001.

**Table SI 6** Replicating Table 3 only with Australia

|  |  |  |  |
| --- | --- | --- | --- |
|  | (1) | (2) | (3) |
|  | Model 1 | Model 2 | Model 3 |
| Political agendat-1 | -0.451\*\*\* | -0.455\*\*\* | -0.451\*\*\* |
|  | (0.038) | (0.038) | (0.042) |
|  |  |  |  |
| ∆ Indicator | 3.509\* |  | 8.429\* |
|  | (1.342) |  | (3.468) |
|  |  |  |  |
| Indicatort-1 | 2.210\* |  | 1.209 |
|  | (0.904) |  | (0.727) |
|  |  |  |  |
| ∆ Benchmark |  | 0.410 | -4.788 |
|  |  | (2.509) | (3.880) |
|  |  |  |  |
| Benchmarkt-1 |  | 5.037\* | 3.849 |
|  |  | (2.301) | (2.443) |
|  |  |  |  |
| ∆ Single-party government | -0.323 | -0.283 | -0.374 |
|  | (0.540) | (0.609) | (0.562) |
|  |  |  |  |
| Single-party governmentt-1 | 0.059 | 0.100 | 0.072 |
|  | (0.110) | (0.148) | (0.139) |
|  |  |  |  |
| ∆ Election year | -0.037 | -0.136 | -0.053 |
|  | (0.159) | (0.184) | (0.205) |
|  |  |  |  |
| Election yeart-1 | 0.215 | 0.197 | 0.292 |
|  | (0.286) | (0.332) | (0.338) |
|  |  |  |  |
| Constant | 0.179 | 1.214\*\*\* | 0.702+ |
|  | (0.354) | (0.132) | (0.333) |
| Adj. R2 | 0.216 | 0.223 | 0.238 |
| N | 453 | 388 | 388 |

Cluster robust standard errors in parentheses. + *p* < 0.10, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001.

**Table SI 7** Replicating Table 3 with an alternative model specification

|  |  |  |  |
| --- | --- | --- | --- |
|  | (1) | (2) | (3) |
|  | Model 1 | Model 2 | Model 3 |
| ∆ Indicator | 0.853+ |  | 1.944+ |
|  | (0.476) |  | (1.115) |
|  |  |  |  |
| Indicatort-1 | 1.530\*\*\* |  | 1.235\*\* |
|  | (0.444) |  | (0.429) |
|  |  |  |  |
| ∆ Benchmark |  | 0.550 | -0.950 |
|  |  | (0.874) | (1.493) |
|  |  |  |  |
| Benchmarkt-1 |  | 2.410\*\* | 1.387 |
|  |  | (0.834) | (0.954) |
|  |  |  |  |
| Single party government | -0.068 | -0.008 | -0.017 |
|  | (0.170) | (0.199) | (0.196) |
|  |  |  |  |
| Election year | -0.042 | -0.024 | -0.027 |
|  | (0.047) | (0.053) | (0.053) |
|  |  |  |  |
| Constant | 1.325\*\*\* | 1.848\*\*\* | 1.371\*\*\* |
|  | (0.168) | (0.033) | (0.175) |
| Adj. R2 | 0.016 | 0.020 | 0.030 |
| N | 3004 | 2590 | 2590 |

Cluster robust standard errors in parentheses. + *p* < 0.10, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001.

**Table SI 8** Replicating Table 3 using logged indicators

|  |  |  |  |
| --- | --- | --- | --- |
|  | (1) | (2) | (3) |
|  | Model 1 | Model 2 | Model 3 |
| Political agendat-1 | -0.581\*\*\* | -0.577\*\*\* | -0.578\*\*\* |
|  | (0.048) | (0.052) | (0.052) |
|  |  |  |  |
| ∆ Indicator | 0.300\*\* |  | 0.709\*\* |
|  | (0.110) |  | (0.246) |
|  |  |  |  |
| Indicatort-1 | 0.379\*\*\* |  | 0.207\* |
|  | (0.080) |  | (0.084) |
|  |  |  |  |
| ∆ Benchmark |  | 0.146 | -0.457 |
|  |  | (0.176) | (0.300) |
|  |  |  |  |
| Benchmarkt-1 |  | 0.571\*\*\* | 0.395\* |
|  |  | (0.148) | (0.165) |
|  |  |  |  |
| ∆ Single-party government | -0.056 | 0.018 | 0.006 |
|  | (0.250) | (0.282) | (0.281) |
|  |  |  |  |
| Single-party governmentt-1 | -0.059 | -0.044 | -0.045 |
|  | (0.087) | (0.104) | (0.104) |
|  |  |  |  |
| ∆ Election year | -0.046 | -0.022 | -0.025 |
|  | (0.058) | (0.065) | (0.065) |
|  |  |  |  |
| Election yeart-1 | -0.028 | 0.017 | 0.0100 |
|  | (0.083) | (0.094) | (0.094) |
|  |  |  |  |
| Constant | 0.224 | 1.071\*\*\* | 0.629\*\*\* |
|  | (0.204) | (0.094) | (0.185) |
| Adj. R2 | 0.308 | 0.306 | 0.309 |
| N | 3038 | 2618 | 2618 |

Cluster robust standard errors in parentheses. + *p* < 0.10, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001.

**Table SI 9** Excluding countries one-by-one

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|  | Australia | Belgium | Denmark | France | Germany | Italy | Spain |
| ∆ Indicator | 0.792\* | 2.348\* | 2.652\* | 2.292\* | 2.581\* | 2.093\* | 2.416+ |
|  | (0.362) | (1.159) | (1.156) | (1.110) | (1.175) | (1.146) | (1.265) |
|  |  |  |  |  |  |  |  |
| Indicatort-1 | 0.685\*\* | 0.672\*\* | 0.516\* | 0.554\* | 0.646\* | 0.529\* | 0.759\*\* |
|  | (0.252) | (0.254) | (0.254) | (0.241) | (0.281) | (0.242) | (0.247) |
|  |  |  |  |  |  |  |  |
| ∆ Benchmark | 0.109 | -1.449 | -1.398 | -1.452 | -1.733 | -1.311 | -1.713 |
|  | (0.560) | (1.480) | (1.552) | (1.432) | (1.523) | (1.455) | (1.612) |
|  |  |  |  |  |  |  |  |
| Benchmarkt-1 | 0.740 | 1.151+ | 1.699\* | 1.216\* | 1.191+ | 1.204\* | 0.986 |
|  | (0.493) | (0.594) | (0.679) | (0.573) | (0.699) | (0.558) | (0.648) |

Cluster robust standard errors in parentheses. + *p* < 0.10, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001.

**Table SI 10** Excluding issues one-by-one

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ∆ Indicator | Indicatort-1 | ∆ Benchmark | Benchmarkt-1 |
| Unemployment | 2.173\*  (1.034) | 0.615\*  (0.236) | -1.316  (1.352) | 1.162\*  (0.559) |
| GDP Growth | 1.281  (0.822) | 0.578\*  (0.236) | -0.056  (0.855) | 1.322\*  (0.586) |
| Inflation | 2.184+  (1.106) | 0.661\*  (0.253) | -1.403  (1.420) | 1.189\*  (0.599) |
| Government Deficit | 2.182+  (1.125) | 0.611\*  (0.249) | -1.403  (1.497) | 1.033+  (0.586) |
| Pharmaceutical Expenditure | 2.165\*  (1.045) | 0.625\*\*  (0.238) | -1.285  (1.375) | 1.182\*  (0.572) |
| Health Manpower | 2.169\*  (1.035) | 0.617\*\*  (0.237) | -1.315  (1.355) | 1.163\*  (0.562) |
| Water and Soil Quality | 2.246\*  (1.052) | 0.603\*  (0.237) | -1.350  (1.393) | 1.204\*  (0.570) |
| Waste | 2.210\*  (1.037) | 0.615\*  (0.239) | -1.293  (1.363) | 1.255\*  (0.585) |
| Oil Price | 2.327+  (1.331) | 0.925\*  (0.373) | -1.471  (1.570) | 0.896  (0.637) |
| Global Warming | 2.624\*\*  (0.983) | 0.572\*\*  (0.205) | -1.810  (1.297) | 0.887\*  (0.405) |
| Immigration | 2.162+  (1.122) | 0.656\*\*  (0.239) | -1.355  (1.523) | 0.966  (0.593) |
| Roads and Traffic Accidents | 2.150\*  (1.044) | 0.602\*  (0.246) | -1.339  (1.376) | 1.013+  (0.538) |
| Crime | 2.219\*  (1.033) | 0.586\*  (0.231) | -1.385  (1.348) | 1.146\*  (0.554) |
| Poverty and Inequality | 2.152\*  (1.037) | 0.608\*  (0.236) | -1.277  (1.361) | 1.188\*  (0.562) |
| Elderly | 2.170\*  (1.035) | 0.553\*  (0.256) | -1.266  (1.363) | 1.286\*  (0.598) |
| Bankruptcies | 2.067\*  (1.045) | 0.610\*  (0.234) | -1.237  (1.375) | 1.230\*  (0.574) |
| Foreign Trade | 2.402\*  (1.071) | 0.630\*  (0.249) | -1.203  (1.527) | 1.640\*  (0.672) |

Cluster robust standard errors in parentheses. + *p* < 0.10, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001.

**Supporting Information 5: Categorization of Indicators**

*Number of People Affected*

Problems that affect a large number of people may generate more political attention than those that affect few (Rochefort and Cobb 1994). If politicians are motivated to vote maximize, it makes sense for them to focus on the problems that could potentially harm the largest voter groups. By doing so, they can hope to gain a reputation of competency among that group or at least anticipate electoral sanctions from large shares of the electorate. Furthermore, if politicians respond to a problem because they actually care about solving it, they should also prioritize those that affect a large number of people because their actions will have the largest impact there. No matter which mechanism is at play, the expectation is the same.

|  |  |
| --- | --- |
| *Number of People Affected* | *Indicators in the category* |
| Few (0) | Global Warming, Water and Soil Quality, Waste, Foreign Trade, Bankruptcies, Immigration, Crime, Roads and Traffic Accidents, Pharmaceutical Expenditure |
| Many (1) | Inflation, Unemployment, Oil Price, Health Manpower, Elderly, Poverty and Inequality, GDP Growth, Government Deficit |

Note: 0 and 1 in the first column mark the score on the dummy for the group of indicators in this row.

*Intensity of Effect*

Some problems affect few but have intensive and intrusive effects on those affected. Such problems are likely to generate more political attention (Rochefort and Cobb 1994) because those affected are likely to mobilize politically. Problems with intensive effects will thus create a strong incentive among those affected to pressure politicians to devote attention to a problem.

|  |  |
| --- | --- |
| *Intensity of Effect* | *Indicators in the category* |
| Low (0) | GDP Growth, Water and Soil Quality, Government Deficit, Foreign Trade, Pharmaceutical Expenditure, Global Warming, Oil Price, Elderly, Waste, Health Manpower |
| High (1) | Inflation, Unemployment, Bankruptcies, Immigration, Poverty and Inequality, Crime, Roads and Traffic Accidents |

Note: 0 and 1 in the first column mark the score on the dummy for the group of indicators in this row.

*Valence: Problem Agreed/Disagreed Upon?*

In some instances, politicians will disagree upon whether an indicator even measures a problem or not. Some problems are thus agreed upon, while others are not. Problems that are agreed upon across political differences are likely to generate attention (Jones and Baumgartner 2005), whereas disagreed-upon problems are primarily likely to receive attention from those that recognize it. In other words, whether a problem attracts attention should depend on the political preferences of politicians.

|  |  |
| --- | --- |
| *Valence* | *Indicators in the category* |
| Agreed upon (1) | Roads and Traffic Accidents, Bankruptcies, Crime, Inflation, Unemployment, Elderly, Health Manpower, Government Deficit, Foreign Trade, GDP Growth |
| Disagreed upon (0) | Immigration, Poverty and Inequality, Global Warming, Oil Price, Pharmaceutical Expenditure, Water and Soil Quality, Waste |

Note: 0 and 1 in the first column mark the score on the dummy for the group of indicators in this row.

*Obtrusiveness*

Obtrusiveness refers to problems that are highly visible to people; for instance, when they have everyday experience with the problem (Soroka 2002). To take the example of global warming (non-obtrusive) vs. the unemployment rate (obtrusive), we focus on the heavy weather that comes from global warming such as drought, flooding, heat waves, and storms. These are all relatively local events that happen irregularly, and therefore tend to be less visible in people’s everyday lives especially compared to unemployment which many people encounter on a more regular basis during an economy downturn. According to Soroka, obtrusive problems are more likely to generate attention: “If it [the issue] is obtrusive, the possibility for public agenda-setting effects is considerably diminished – the public will simply respond to real-world indicators” (Soroka 2002: 19-20). The obtrusiveness of a problem is a characteristic that has received a great deal of interest and criticism in the literature. For instance, it can be argued that indicators should have a weak effect for problems that most people have experience with themselves because they do not need indicators to evaluate the severity of the problems. Findings have also offered mixed support for the obtrusiveness hypothesis. Because of its prominent role in the literature and the mixed empirical findings, we opted to include it.

|  |  |
| --- | --- |
| *Obtrusiveness* | *Indicators in the category* |
| Unobtrusive (0) | Immigration, Poverty and Inequality, Roads and Traffic Accidents, Water and Soil Quality, Waste, Bankruptcies, Crime, GDP Growth, Government Deficit, Foreign Trade, Pharmaceutical Expenditure, Global Warming |
| Obtrusive (1) | Inflation, Unemployment, Oil Price, Health Manpower, Elderly |

Note: 0 and 1 in the first column mark the score on the dummy for the group of indicators in this row.

*Concreteness*

Abstract problems are difficult for people to understand and visualize. Abstract problems may generate less attention because individuals find it difficult to attach salience to something that they do not comprehend (Soroka 2002). Concrete problems should thus have a larger potential for agenda-setting effects.

|  |  |
| --- | --- |
| *Concreteness* | *Indicators in the category* |
| Abstract (0) | Water and Soil Quality, Waste, GDP Growth, Government Deficit, Foreign Trade, Pharmaceutical Expenditure |
| Concrete (1) | Immigration, Poverty and Inequality, Roads and Traffic Accidents, Bankruptcies, Crime, Global Warming, Inflation, Unemployment, Oil Price, Health Manpower, Elderly |

Note: 0 and 1 in the first column mark the score on the dummy for the group of indicators in this row.

*Solubility*

Some problems are wicked, which is most often referred to as the solubility of a problem (Peters 2005). They are poorly identified and scoped, constantly changing, unsolvable, and their causes and solutions are disagreed upon. Other problems can to some extent be solved, for instance, by technology. Politicians may prefer to attend to problems with easy solutions and abstain from addressing wicked problems. Regarding non-wicked problems, attention may track the development of the indicator. However, regarding problems that become chronic, the continuous flow of problematic information may prove to wear out politicians’ patience. Politicians wanting to draw attention to the problem will have multiple occasions to draw attention to chronic problems. Yet, in-between these periods of attention, there should also be long periods in which the problem does not generate any attention.

|  |  |
| --- | --- |
| *Solubility* | *Indicators in the category* |
| Low (0) | Immigration, Poverty and Inequality, Inflation, Unemployment, Bankruptcies, Crime, GDP Growth, Government Deficit, Foreign Trade |
| High (1) | Waste, Pharmaceutical Expenditure, Global Warming, Water and Soil Quality, Oil Price, Roads and Traffic Accidents, Elderly, Health Manpower |

Note: 0 and 1 in the first column mark the score on the dummy for the group of indicators in this row.

**Table SI 11** The influence of current changes and lagged levels of indicators on the parliamentary questioning across different types of problems

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
|  | Obtrusive | N. people | Valence | Intensity | Concrete | Solubility |
| Policy agendat-1 | 0.580\*\*\* | 0.580\*\*\* | 0.580\*\*\* | 0.580\*\*\* | 0.579\*\*\* | 0.580\*\*\* |
|  | (0.047) | (0.047) | (0.047) | (0.048) | (0.0474) | (0.047) |
|  |  |  |  |  |  |  |
| ∆ Indicator (characteristic = 0) | 0.655 | -0.261 | -0.230 | 0.607 | 0.822+ | 1.414\*\* |
|  | (0.430) | (0.534) | (0.820) | (0.418) | (0.467) | (0.483) |
|  |  |  |  |  |  |  |
| ∆ Indicator (characteristic = 1) | 2.283\*\* | 1.700\*\*\* | 1.475\*\* | 2.028\* | 1.241+ | -0.177 |
|  | (0.814) | (0.483) | (0.480) | (0.852) | (0.649) | (1.040) |
|  |  |  |  |  |  |  |
| Indicatort-1 (characteristic = 0) | 1.140\*\* | 0.946\* | 1.071\* | 0.932\*\*\* | 0.993\*\* | 1.142\* |
|  | (0.419) | (0.469) | (0.433) | (0.232) | (0.340) | (0.448) |
|  |  |  |  |  |  |  |
| Indicatort-1 (characteristic = 1) | 0.678\*\* | 0.947\*\*\* | 0.976\*\* | 1.098+ | 0.949\*\* | 0.868\*\* |
|  | (0.230) | (0.251) | (0.335) | (0.596) | (0.329) | (0.288) |
|  |  |  |  |  |  |  |
| ∆ Single-party government | -0.058 | -0.065 | -0.062 | -0.065 | -0.062 | -0.064 |
|  | (0.251) | (0.250) | (0.251) | (0.252) | (0.251) | (0.250) |
|  |  |  |  |  |  |  |
| Single-party governmentt-1 | -0.034 | -0.032 | -0.039 | -0.044 | -0.039 | -0.044 |
|  | (0.090) | (0.091) | (0.090) | (0.091) | (0.090) | (0.090) |
|  |  |  |  |  |  |  |
| ∆ Election year | -0.047 | -0.051 | -0.048 | -0.049 | -0.049 | -0.051 |
|  | (0.059) | (0.059) | (0.059) | (0.059) | (0.060) | (0.059) |
|  |  |  |  |  |  |  |
| Election yeart-1 | -0.028 | -0.027 | -0.029 | -0.032 | -0.032 | -0.034 |
|  | (0.084) | (0.084) | (0.083) | (0.084) | (0.084) | (0.084) |
|  |  |  |  |  |  |  |
| Constant | 0.721\*\*\* | 0.745\*\*\* | 0.729\*\*\* | 0.740\*\*\* | 0.740\*\*\* | 0.734\*\*\* |
|  | (0.151) | (0.141) | (0.138) | (0.133) | (0.130) | (0.137) |
| Adj. R2 | 0.307 | 0.307 | 0.307 | 0.307 | 0.306 | 0.307 |
| N | 3004 | 3004 | 3004 | 3004 | 3004 | 3004 |

Cluster robust standard errors in parentheses. + *p* < 0.10, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001.

**Table SI 12** Interactions terms between indicator variables and issue characteristics

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
|  | Obtrusive | N. people | Valence | Intensity | Concrete | Solubility |
| ∆ Indicator X Issue characteristic | 1.629+ | 1.961\*\* | 1.706+ | 1.421 | 0.419 | -1.592 |
|  | (0.920) | (0.719) | (0.940) | (0.958) | (0.793) | (1.141) |
|  |  |  |  |  |  |  |
| Indicatort-1 X Issue characteristic | -0.462 | 0.001 | -0.095 | 0.166 | -0.043 | -0.273 |
|  | (0.048) | (0.538) | (0.566) | (0.648) | (0.434) | (0.544) |
|  |  |  |  |  |  |  |

Cluster robust standard errors in parentheses. + *p* < 0.10, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001.

**Table SI 13** The influence of benchmarks on the parliamentary questioning across different types of problems

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
|  | Obtrusive | N. people | Valence | Intensity | Concrete | Solubility |
| Policy agendat-1 | 0.580\*\*\* | 0.579\*\*\* | 0.582\*\*\* | 0.581\*\*\* | 0.584\*\*\* | 0.579\*\*\* |
|  | (0.050) | (0.050) | (0.048) | (0.050) | (0.049) | (0.049) |
|  |  |  |  |  |  |  |
| ∆ Benchmark (characteristic = 0) | -0.110 | 0.288 | 0.595 | -0.357 | -0.661 | 0.291 |
|  | (0.728) | (0.566) | (1.019) | (0.864) | (0.843) | (0.836) |
|  |  |  |  |  |  |  |
| ∆ Benchmark (characteristic = 1) | 4.039\* | 0.430 | 0.272 | 1.994\* | 2.055\* | 0.391 |
|  | (1.615) | (1.438) | (0.931) | (0.933) | (0.972) | (1.242) |
|  |  |  |  |  |  |  |
| Benchmarkt-1 (characteristic = 0) | 1.720\*\* | 1.718\* | 2.811\* | 1.341\* | 0.839\* | 1.421\*\* |
|  | (0.598) | (0.688) | (1.351) | (0.645) | (0.416) | (0.437) |
|  |  |  |  |  |  |  |
| Benchmarkt-1 (characteristic = 1) | 1.592\* | 1.576\* | 1.270\*\* | 2.331\*\*\* | 2.660\*\* | 2.352+ |
|  | (0.686) | (0.638) | (0.428) | (0.679) | (0.843) | (1.374) |
|  |  |  |  |  |  |  |
| ∆ Single-party government | 0.007 | 0.019 | 0.034 | 0.008 | 0.003 | 0.023 |
|  | (0.283) | (0.282) | (0.275) | (0.284) | (0.286) | (0.280) |
|  |  |  |  |  |  |  |
| Single-party governmentt-1 | -0.018 | -0.020 | -0.007 | -0.029 | -0.036 | -0.020 |
|  | (0.111) | (0.109) | (0.112) | (0.112) | (0.113) | (0.111) |
|  |  |  |  |  |  |  |
| ∆ Election year | -0.019 | -0.024 | -0.020 | -0.021 | -0.018 | -0.023 |
|  | (0.066) | (0.065) | (0.065) | (0.066) | (0.066) | (0.066) |
|  |  |  |  |  |  |  |
| Election yeart-1 | 0.026 | 0.0150 | 0.021 | 0.017 | 0.020 | 0.018 |
|  | (0.095) | (0.094) | (0.094) | (0.095) | (0.095) | (0.095) |
|  |  |  |  |  |  |  |
| Constant | 1.066\*\*\* | 1.069\*\*\* | 1.064\*\*\* | 1.071\*\*\* | 1.070\*\*\* | 1.069\*\*\* |
|  | (0.094) | (0.093) | (0.094) | (0.093) | (0.093) | (0.093) |
| Adj. R2 | 0.308 | 0.306 | 0.307 | 0. 307 | 0. 309 | 0. 306 |
| N | 2590 | 2590 | 2590 | 2590 | 2590 | 2590 |

Cluster robust standard errors in parentheses. + *p* < 0.10, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001.

**Table SI 14** Interactions terms between indicator variables and issue characteristics

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
|  | Obtrusive | N. people | Valence | Intensity | Concrete | Solubility |
| ∆ Benchmark X Issue characteristic | 4.150\* | 0.142 | -0.323 | 2.350+ | 2.715\* | 0.101 |
|  | (1.742) | (1.553) | (1.369) | (1.253) | (1.255) | (1.500) |
|  |  |  |  |  |  |  |
| Benchmarkt-1 X Issue characteristic | -0.128 | -0.142 | -1.541 | 0.991 | 1.821+ | 0.931 |
|  | (0.932) | (0.945) | (1.423) | (0.967) | (0.947) | (1.470) |

Cluster robust standard errors in parentheses. + *p* < 0.10, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001.