**Online Appendix for:**

**The Politics of (De)Liberalization: Studying Partisan Effects Using Mixed-Effects Models**

Julian Garritzmann, [garritzmann@soz.uni-frankfurt.de](mailto:garritzmann@soz.uni-frankfurt.de)

Kilian Seng, [kilian.seng@zu.de](mailto:kilian.seng@zu.de)

**Table A**: Descriptive Statistics

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | |
| Statistic | N | Mean | St. Dev. | Min | Pctl(25) | Pctl(75) | Max |
|  | | | | | | | |
| Liberalization a | 795 | 3.73 | 4.56 | 0 | 1.0 | 5.0 | 71 |
| Deliberalization a | 795 | 2.16 | 2.33 | 0.00 | 0.33 | 3.00 | 16.00 |
| Institutional constraints b | 795 | 2.40 | 1.45 | 0 | 1 | 3 | 5 |
| Voter turnout b | 795 | 76.25 | 13.86 | 35.00 | 69.30 | 86.80 | 95.80 |
| Government duration c | 795 | 1,160.99 | 373.18 | 365 | 888 | 1,457.5 | 1,849 |
| Government succession c | 795 | 0.77 | 0.42 | 0 | 1 | 1 | 1 |
| Trade openness b | 775 | 69.59 | 41.07 | 15.92 | 48.02 | 77.77 | 319.55 |
| Unemployment rate b | 795 | 6.69 | 4.04 | 0.002 | 3.88 | 8.59 | 25.13 |
| Elder population b | 795 | 14.04 | 2.60 | 7.51 | 12.01 | 15.81 | 21.08 |
| Deindustrialization d | 794 | 64.29 | 9.60 | 33.88 | 57.45 | 72.09 | 82.23 |
| Union density g | 752 | 41.32 | 21.41 | 7.60 | 24.20 | 54.90 | 99.10 |
| Public debt b | 729 | 61.27 | 29.32 | 6.29 | 40.14 | 76.03 | 179.87 |
| Public deficit b | 765 | -0.16 | 3.71 | -28.03 | -2.13 | 2.08 | 16.10 |
| GDP per capita e | 776 | 24.78 | 9.75 | 8.09 | 17.52 | 30.25 | 67.46 |
| GDP growth b | 795 | 2.46 | 2.53 | -8.54 | 1.17 | 3.97 | 11.31 |
| Inflation b | 795 | 5.54 | 6.06 | -4.48 | 1.99 | 7.21 | 49.30 |
| Left cabinet strength b | 795 | 36.93 | 39.32 | 0 | 0 | 78.0 | 100 |
| Social dem. cabinet strength b | 795 | 0.40 | 0.42 | 0 | 0 | 1 | 1 |
| Christian dem. cabinet strength b | 795 | 0.15 | 0.27 | 0 | 0 | 0.2 | 1 |
| Cabinet econ. Position f | 795 | 48.87 | 17.21 | 0.40 | 40.00 | 61.06 | 93.21 |

Data sources:

a Liberalization Database (Armingeon et al. 2019)

b Comparative Political Data Set (Armingeon et al. 2014)

c Own calculation based on [www.ParlGov.org](http://www.ParlGov.org)

d OECD Stats

e Penn World Table

f Röth (2018) based on data from the Comparative Manifestos Project Dataset

g ICTWSS <https://www.ictwss.org>

**Table B**: Results for deliberalization and conservative party cabinet strength 1993 - 2012

|  |  |  |
| --- | --- | --- |
| *Predictors* | *Estimates* | *p* |
| (Intercept) | -7858.358 | 0.255 |
| Institutional constraints | -0.102 | 0.653 |
| Voter turnout | -0.016 | 0.433 |
| Government duration | 0.001 | **0.018** |
| Government succession | -0.609 | 0.094 |
| Trade openness | -0.001 | 0.877 |
| Unemployment rate | -0.001 | 0.990 |
| Elder population | -0.041 | 0.757 |
| Deindustrialization | -0.006 | 0.905 |
| Public debt | 0.007 | 0.397 |
| Public deficit | -0.038 | 0.375 |
| GDP per capita | -0.033 | 0.375 |
| GDP growth | -0.029 | 0.639 |
| Inflation | 0.035 | 0.699 |
| Spline 1 | 3.959 | 0.254 |
| Spline 2 | -2.631 | 0.260 |
| Conservative cabinet strength | -0.837 | **0.034** |
| **Random Effects** | | |
| σ2 | 4.96 | |
| τg00 (government) | 0.17 | |
| τ0c0 (country) | 1.20 | |
| τ00t (time) | 0.00 | |
| ICC | 0.22 | |
| Ngovernment | 23 | |
| Ncountry | 144 | |
| Ntime | 19 | |
| Observations | 394 | |
| Marginal R2 / Conditional R2 | 0.070 / 0.272 | |

**Table C**: Results for liberalization of taxes

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Predictors* | *Estimates* | *p* | *Estimates* | *p* | *Estimates* | *p* | *Estimates* | *p* |
| (Intercept) | 21.944 | 0.630 | 17.054 | 0.707 | 15.987 | 0.725 | 12.120 | 0.793 |
| Institutional constraints | 0.048 | 0.451 | 0.052 | 0.419 | 0.061 | 0.336 | 0.057 | 0.362 |
| Voter turnout | -0.002 | 0.788 | -0.002 | 0.732 | -0.002 | 0.774 | -0.001 | 0.874 |
| Government duration | -0.000 | 0.570 | -0.000 | 0.600 | -0.000 | 0.567 | -0.000 | 0.609 |
| Government succession | 0.171 | 0.130 | 0.175 | 0.123 | 0.162 | 0.162 | 0.159 | 0.160 |
| Trade openness | -0.002 | 0.313 | -0.002 | 0.331 | -0.002 | 0.297 | -0.002 | 0.274 |
| Unemployment rate | -0.002 | 0.896 | -0.005 | 0.788 | -0.003 | 0.874 | -0.003 | 0.854 |
| Elder population | 0.003 | 0.937 | -0.001 | 0.969 | -0.011 | 0.746 | -0.010 | 0.769 |
| Deindustrialization | -0.005 | 0.686 | -0.005 | 0.692 | -0.004 | 0.763 | -0.003 | 0.790 |
| Union density | -0.002 | 0.616 | -0.002 | 0.610 | -0.002 | 0.691 | -0.002 | 0.712 |
| Public debt | 0.001 | 0.689 | 0.001 | 0.622 | 0.002 | 0.534 | 0.002 | 0.534 |
| Public deficit | 0.025 | 0.076 | 0.024 | 0.083 | 0.024 | 0.086 | 0.024 | 0.096 |
| GDP per capita | 0.011 | 0.441 | 0.010 | 0.486 | 0.012 | 0.389 | 0.012 | 0.404 |
| GDP growth | 0.044 | 0.050 | 0.045 | **0.049** | 0.043 | 0.056 | 0.044 | 0.052 |
| Inflation | 0.021 | 0.163 | 0.022 | 0.159 | 0.022 | 0.147 | 0.022 | 0.153 |
| Spline 1 | -0.011 | 0.643 | -0.008 | 0.723 | -0.008 | 0.738 | -0.006 | 0.805 |
| Spline 2 | 0.010 | 0.574 | 0.009 | 0.637 | 0.008 | 0.683 | 0.007 | 0.723 |
| Left cabinet strength | -0.002 | 0.080 |  |  |  |  |  |  |
| Social dem. cabinet strength |  |  | -0.183 | 0.134 |  |  |  |  |
| Christian dem. cabinet strength |  |  |  |  | -0.022 | 0.910 |  |  |
| Cabinet econ. position |  |  |  |  |  |  | -0.002 | 0.631 |
| **Random Effects** | | | | | | | | |
| σ2 | 0.66 | | 0.66 | | 0.67 | | 0.67 | |
| τg00 (government) | 0.01 | | 0.01 | | 0.01 | | 0.01 | |
| τ0c0 (country) | 0.06 | | 0.07 | | 0.06 | | 0.06 | |
| τ00t (time) | 0.01 | | 0.00 | | 0.00 | | 0.00 | |
| ICC | 0.11 | | 0.11 | | 0.10 | | 0.09 | |
| Ngovernment | 23 | | 23 | | 23 | | 23 | |
| Ncountry | 192 | | 192 | | 192 | | 192 | |
| Ntime | 39 | | 39 | | 39 | | 39 | |
| Observations | 372 | | 372 | | 372 | | 372 | |
| Marginal R2 / Conditional R2 | 0.076 / 0.176 | | 0.074 / 0.180 | | 0.068 / 0.157 | | 0.068 / 0.155 | |

**Table D**: Results for liberalization of employment benefits

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Predictors* | *Estimates* | *p* | *Estimates* | *p* | *Estimates* | *p* | *Estimates* | *p* |
| (Intercept) | -8.831 | 0.956 | -6.998 | 0.965 | -22.671 | 0.886 | 5.987 | 0.970 |
| Institutional constraints | -0.245 | 0.090 | -0.247 | 0.084 | -0.194 | 0.186 | -0.225 | 0.112 |
| Voter turnout | 0.007 | 0.634 | 0.007 | 0.594 | 0.014 | 0.343 | 0.003 | 0.813 |
| Government duration | -0.000 | 0.740 | -0.000 | 0.728 | -0.000 | 0.768 | -0.000 | 0.650 |
| Government succession | -0.207 | 0.510 | -0.217 | 0.490 | -0.278 | 0.377 | -0.186 | 0.555 |
| Trade openness | -0.006 | 0.216 | -0.006 | 0.218 | -0.004 | 0.358 | -0.006 | 0.178 |
| Unemployment rate | 0.136 | **0.005** | 0.137 | **0.004** | 0.126 | **0.009** | 0.138 | **0.004** |
| Elder population | 0.032 | 0.744 | 0.037 | 0.702 | 0.034 | 0.731 | 0.028 | 0.776 |
| Deindustrialization | -0.067 | **0.030** | -0.068 | **0.028** | -0.071 | **0.023** | -0.064 | **0.034** |
| Union density | -0.011 | 0.211 | -0.011 | 0.206 | -0.012 | 0.167 | -0.011 | 0.199 |
| Public debt | 0.012 | 0.068 | 0.012 | 0.067 | 0.012 | 0.062 | 0.012 | 0.068 |
| Public deficit | 0.095 | **0.045** | 0.096 | **0.042** | 0.084 | 0.078 | 0.100 | **0.035** |
| GDP per capita | 0.103 | **0.009** | 0.105 | **0.009** | 0.101 | **0.010** | 0.101 | **0.010** |
| GDP growth | -0.070 | 0.337 | -0.072 | 0.320 | -0.068 | 0.340 | -0.065 | 0.370 |
| Inflation | 0.015 | 0.762 | 0.014 | 0.785 | 0.019 | 0.713 | 0.018 | 0.719 |
| Spline 1 | 0.005 | 0.946 | 0.004 | 0.956 | 0.012 | 0.877 | -0.002 | 0.978 |
| Spline 2 | -0.026 | 0.692 | -0.026 | 0.690 | -0.033 | 0.611 | -0.020 | 0.762 |
| Left cabinet strength | 0.001 | 0.684 |  |  |  |  |  |  |
| Social dem. cabinet strength |  |  | 0.153 | 0.635 |  |  |  |  |
| Christian dem. cabinet strength |  |  |  |  | -0.798 | 0.146 |  |  |
| Cabinet econ. position |  |  |  |  |  |  | 0.008 | 0.405 |
| **Random Effects** | | | | | | | | |
| σ2 | 3.12 | | 3.13 | | 3.13 | | 3.12 | |
| τg00 (government) | 0.26 | | 0.26 | | 0.21 | | 0.26 | |
| τ0c0 (country) | 0.08 | | 0.07 | | 0.08 | | 0.05 | |
| τ00t (time) | 0.08 | | 0.08 | | 0.08 | | 0.09 | |
| ICC | 0.12 | | 0.11 | | 0.11 | | 0.11 | |
| Ngovernment | 22 | | 22 | | 22 | | 22 | |
| Ncountry | 150 | | 150 | | 150 | | 150 | |
| Ntime | 38 | | 38 | | 38 | | 38 | |
| Observations | 260 | | 260 | | 260 | | 260 | |
| Marginal R2 / Conditional R2 | 0.137 / 0.239 | | 0.137 / 0.235 | | 0.146 / 0.236 | | 0.139 / 0.235 | |

**Table E**: Results for liberalization of non-employment benefits

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Predictors* | *Estimates* | *p* | *Estimates* | *p* | *Estimates* | *p* | *Estimates* | *p* |
| (Intercept) | -24.959 | 0.633 | -29.483 | 0.570 | -27.425 | 0.604 | -20.684 | 0.684 |
| Institutional constraints | -0.108 | **0.047** | -0.107 | 0.051 | -0.103 | 0.064 |  |  |
| Voter turnout | 0.002 | 0.782 | 0.001 | 0.873 | 0.000 | 0.952 | -0.003 | 0.514 |
| Government duration | 0.000 | 0.318 | 0.000 | 0.291 | 0.000 | 0.330 | 0.000 | 0.369 |
| Government succession | -0.040 | 0.736 | -0.026 | 0.827 | -0.040 | 0.740 | -0.044 | 0.703 |
| Trade openness | -0.002 | 0.179 | -0.002 | 0.173 | -0.002 | 0.176 | -0.003 | 0.111 |
| Unemployment rate | 0.055 | **0.002** | 0.054 | **0.003** | 0.053 | **0.004** | 0.054 | **0.002** |
| Elder population | 0.060 | 0.059 | 0.058 | 0.067 | 0.048 | 0.128 | 0.030 | 0.288 |
| Deindustrialization | 0.004 | 0.730 | 0.004 | 0.732 | 0.006 | 0.586 | 0.008 | 0.423 |
| Union density | 0.000 | 0.925 | 0.000 | 0.950 | 0.001 | 0.828 | 0.002 | 0.389 |
| Public debt | 0.000 | 0.950 | 0.000 | 0.922 | 0.001 | 0.836 | 0.000 | 0.951 |
| Public deficit | 0.013 | 0.367 | 0.012 | 0.385 | 0.013 | 0.375 | 0.014 | 0.333 |
| GDP per capita | 0.021 | 0.085 | 0.020 | 0.104 | 0.021 | 0.093 | 0.019 | 0.089 |
| GDP growth | -0.021 | 0.353 | -0.020 | 0.385 | -0.025 | 0.285 | -0.022 | 0.343 |
| Inflation | -0.005 | 0.754 | -0.004 | 0.837 | -0.005 | 0.778 | 0.007 | 0.686 |
| Spline 1 | 0.012 | 0.648 | 0.014 | 0.584 | 0.013 | 0.619 | 0.010 | 0.706 |
| Spline 2 | -0.017 | 0.446 | -0.018 | 0.418 | -0.018 | 0.409 | -0.015 | 0.480 |
| Left cabinet strength | -0.002 | 0.087 |  |  |  |  |  |  |
| Social dem. cabinet strength |  |  | -0.256 | **0.031** |  |  |  |  |
| Christian dem. cabinet strength |  |  |  |  | 0.113 | 0.587 |  |  |
| Cabinet econ. position |  |  |  |  |  |  | 0.012 | **<0.001** |
| **Random Effects** | | | | | | | | |
| σ2 | 0.56 | | 0.56 | | 0.55 | | 0.56 | |
| τg00 (government) | 0.08 | | 0.07 | | 0.09 | | 0.07 | |
| τ0c0 (country) | 0.02 | | 0.02 | | 0.02 | | 0.01 | |
| τ00t (time) | 0.03 | | 0.03 | | 0.03 | | 0.03 | |
| ICC | 0.18 | | 0.18 | | 0.20 | | 0.16 | |
| Ngovernment | 23 | | 23 | | 23 | | 23 | |
| Ncountry | 199 | | 199 | | 199 | | 199 | |
| Ntime | 39 | | 39 | | 39 | | 39 | |
| Observations | 376 | | 376 | | 376 | | 376 | |
| Marginal R2 / Conditional R2 | 0.127 / 0.287 | | 0.132 / 0.286 | | 0.118 / 0.292 | | 0.141 / 0.279 | |

**Table F**: Results for de-liberalization of privatization

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Predictors* | *Estimates* | *p* | *Estimates* | *p* | *Estimates* | *p* | *Estimates* | *p* |
| (Intercept) | 196.437 | 0.113 | 201.747 | 0.103 | 190.483 | 0.125 | 183.586 | 0.139 |
| Institutional constraints | 0.089 | 0.146 | 0.091 | 0.142 | 0.097 | 0.136 | 0.081 | 0.156 |
| Voter turnout | -0.009 | 0.146 | -0.009 | 0.157 | -0.008 | 0.229 | -0.008 | 0.203 |
| Government duration | -0.000 | 0.794 | -0.000 | 0.746 | -0.000 | 0.800 | -0.000 | 0.869 |
| Government succession | -0.168 | 0.103 | -0.175 | 0.092 | -0.172 | 0.101 | -0.172 | 0.095 |
| Trade openness | -0.004 | 0.143 | -0.004 | 0.131 | -0.004 | 0.162 | -0.003 | 0.187 |
| Unemployment rate | -0.011 | 0.511 | -0.010 | 0.558 | -0.011 | 0.530 | -0.011 | 0.456 |
| Elder population | -0.117 | **0.001** | -0.117 | **0.001** | -0.112 | **0.002** | -0.104 | **0.002** |
| Deindustrialization | 0.021 | 0.097 | 0.020 | 0.104 | 0.019 | 0.143 | 0.022 | 0.060 |
| Union density | 0.001 | 0.761 | 0.001 | 0.717 | 0.001 | 0.788 | 0.001 | 0.764 |
| Public debt | 0.004 | 0.062 | 0.004 | 0.066 | 0.004 | 0.077 | 0.004 | 0.074 |
| Public deficit | -0.023 | 0.061 | -0.023 | 0.058 | -0.024 | 0.054 | -0.023 | 0.056 |
| GDP per capita | -0.011 | 0.438 | -0.010 | 0.494 | -0.013 | 0.382 | -0.011 | 0.438 |
| GDP growth | -0.010 | 0.523 | -0.010 | 0.515 | -0.011 | 0.509 | -0.010 | 0.554 |
| Inflation | 0.028 | 0.073 | 0.028 | 0.085 | 0.030 | 0.058 | 0.028 | 0.073 |
| Spline 1 | -0.099 | 0.115 | -0.101 | 0.105 | -0.096 | 0.127 | -0.092 | 0.142 |
| Spline 2 | 0.106 | 0.050 | 0.107 | **0.047** | 0.104 | 0.055 | 0.099 | 0.068 |
| Left cabinet strength | 0.002 | 0.243 |  |  |  |  |  |  |
| Social dem. cabinet strength |  |  | 0.165 | 0.214 |  |  |  |  |
| Christian dem. cabinet strength |  |  |  |  | -0.153 | 0.488 |  |  |
| Cabinet econ. position |  |  |  |  |  |  | -0.005 | 0.145 |
| **Random Effects** | | | | | | | | | |
| σ2 | 0.03 | | 0.03 | | 0.03 | | 0.03 | |
| τg00 (government) | 0.22 | | 0.22 | | 0.22 | | 0.22 | |
| τ0c0 (country) | 0.04 | | 0.05 | | 0.05 | | 0.02 | |
| τ00t (time) | 0.64 | | 0.64 | | 0.64 | | 0.65 | |
| ICC | 0.96 | | 0.96 | | 0.96 | | 0.96 | |
| Ngovernment | 22 | | 22 | | 22 | | 22 | |
| Ncountry | 125 | | 125 | | 125 | | 125 | |
| Ntime | 38 | | 38 | | 38 | | 38 | |
| Observations | 212 | | 212 | | 212 | | 212 | |
| Marginal R2 / Conditional R2 | 0.145 / 0.969 | | 0.145 / 0.969 | | 0.144 / 0.969 | | 0.145 / 0.968 | |

**Table G**: Coding of types of capitalism and growth models

Types of capitalism:

* Coordinated Market Economies: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Italy, Japan, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland
* Liberal Market Economies: Australia, Canada, Ireland, New Zealand, United Kingdom, United States of America

Growth models:

* Export-led: Australia, Austria, Belgium, Canada, Denmark, Finland, Germany, Iceland, Japan, Luxembourg, Netherlands, New Zealand, Norway, Sweden, Switzerland, United Kingdom, United States of America
* Demand-led: France, Greece, Ireland, Italy, Portugal, Spain