**Not always on an equal footing: Power, partiality and the conditional effect of multiparty government on public spending**

Supplementary material

*Construction of the expenditure rule index*

The calculation of the index largely follows the procedure described by Schaechter, et al. (2012) and is based on data provided by the International Monetary Fund (2016). The index is a sum of several components:

Expenditure rule index = formal enforcement procedure (0–1) + coverage (0–2) + legal basis (0–5) + multi-year expenditure ceilings (0–1) + independent body sets budget assumptions (0–1) + independent body monitors implementation (0–1) + transparency and accountability legislation (0–1),

where the numbers in brackets refer to the original range of values. ‘Coverage’ and ‘legal basis’ were rescaled so that they can obtain values between 0 and 1. The theoretical minimum and maximum values of the index are 0 and 7, larger values indicating stronger rules. The first year covered in the IMF dataset is 1985. However, using the information that only Germany had an expenditure rule before 1990 (introduced in the early 1980s), the data can be extended to cover 1984 as well.

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| Table S1. Variable descriptions and sources of data | | |
| Variable | Definition | Source |
| Spending | Total general government outlays, % of GDP | OECD and AMECO databases via Armingeon, et al. (2015) |
| Number of government parties | The number of cabinet parties | Own calculations based on Döring and Manow (2016) |
| Dispersion of power | The standard deviation of cabinet parties’ Shapley-Shubik indices | Own calculations based on Döring and Manow (2016) |
| Quality of government | A composite index of i) corruption, ii) law and order and iii) bureaucracy quality | International Country Risk Guide via Teorell, et al. (2015) |
| Left-right | The weighted mean of cabinet parties’ left-right scores, weighted by cabinet parties’ shares of parliamentary seats held by the government | Own calculations based on Döring and Manow (2016) and Volkens, et al. (2017) |
| Caretaker | The fraction of a year a caretaker cabinet was in office | Own calculations based on Döring and Manow (2016) |
| Effective number of parliamentary parties | Laakso-Taagepera index of party system fractionalisation in the (lower house of the) parliament | Own calculations based on Döring and Manow (2016) |
| Effective number of government parties | Laakso-Taagepera index of party system fractionalisation in the cabinet | Own calculations based on Döring and Manow (2016) |
| Expenditure rules | Index of the strength of numerical expenditure rules | Own calculations based on IMF (2016) |
| GDP per capita | Expenditure-side real GDP at chained purchasing power parities, thousands of 2011 US dollars per capita | Own calculations based on Penn World Table (Feenstra. Inklaar and Timmer, 2015) |
| Age dependency ratio | Ratio of people younger than 15 or older than 64 to the working age population, measured as the proportion of dependents per 100 working-age population | World Bank (2016) |
| Unemployment | Unemployment rate, % of civilian labour force | AMECO via Armingeon, et al. (2015) |
| Trade openness | Exports, % of GDP + imports, % of GDP | Penn World Table via Armingeon, et al. (2015) |
| Maastricht | Dummy variable indicating whether the Treaty on European Union (Maastricht Treaty) was in force |  |
| Level of democracy | Index of the level of democracy based on Freedom House and Polity data, ranges 0 to 10 where larger values indicate higher levels of democracy; variable ‘fh\_ipolity2’ in the Quality of Government dataset | Teorell, et al. (2015) |
| Regime durability | Number of years since the last regime change or the end of a transition period; variable ‘p\_durable’ in the Quality of Government dataset | Teorell, et al. (2015) |
| Real GDP growth | Growth of real GDP, % change from previous year | OECD Economic Outlook database and AMECO via Armingeon, et al. (2015) |

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| Table S2. Descriptive statistics | | | | |
|  | Mean | SD | Min. | Max. |
| Spending | 45.81 | 6.86 | 30.50 | 70.21 |
| Parties in government | 2.36 | 1.24 | 0.00 | 8.35 |
| Dispersion of power | 0.10 | 0.11 | 0.00 | 0.50 |
| Quality of government | 8.13 | 1.59 | 4.12 | 10.00 |
| Left-right | -0.98 | 14.12 | -36.67 | 36.74 |
| Caretaker time | 0.02 | 0.10 | 0.00 | 1.00 |
| Effective number of parliamentary parties | 3.89 | 1.39 | 2.00 | 9.05 |
| Effective number of government parties | 1.81 | 0.85 | 0.00 | 5.48 |
| Expenditure rules | 0.49 | 0.84 | 0.00 | 4.00 |
| GDP per capita | 28.39 | 12.41 | 6.74 | 90.92 |
| Age dependency | 49.13 | 4.19 | 38.10 | 69.00 |
| Unemployment | 8.21 | 4.18 | 0.80 | 24.80 |
| Trade openness | 91.56 | 48.44 | 33.97 | 348.39 |
| Level of democracy | 9.71 | 0.44 | 6.67 | 10.00 |
| Regime durability | 38.78 | 28.72 | 0 | 132 |
| Real GDP growth | 2.71 | 3.26 | -14.81 | 11.74 |

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| Table S3. Robustness tests: model specification and case selection. Dependent variable: total general government spending (% of GDP). | | | | | | |
|  | Ia | IIa | IIIb | IVa, c | Va, d | VIa, e |
| *Lagged* |  |  |  |  |  |  |
| Number of gov’t parties | 2.205 \*\*\*  (0.826) | 1.089 \*  (0.580) | 1.915 \*\*\*  (0.647) | 2.816 \*\*\*  (0.792) | 3.132 \*\*  (1.269) | 1.671 \*\*  (0.756) |
| Dispersion of power | 38.202 \*\*  (17.482) | 31.337 \*\*  (12.493) | 42.453 \*\*\*  (15.365) | 54.375 \*\*\*  (17.226) | 47.200  (32.238) | 25.647  (18.896) |
| Quality of government | 0.501 \*\*  (0.244) | 0.351 \*\*  (0.160) | 0.848 \*\*\*  (0.311) | 0.699 \*\*  (0.321) | 1.344 \*\*  (0.560) | 0.395  (0.261) |
| Number of gov’t parties × Dispersion of power | -17.225 \*\*  (8.040) | -12.754 \*\*  (5.948) | -15.852 \*\*  (6.601) | -24.082 \*\*\*  (7.708) | -23.942 \*\*  (12.029) | -14.529 \*  (7.811) |
| Number of gov’t parties × Quality of gov’t | -0.248 \*\*  (0.102) | -0.111  (0.070) | -0.190 \*\*  (0.075) | -0.333 \*\*\*  (0.094) | -0.442 \*\*\*  (0.152) | -0.203 \*\*  (0.089) |
| Dispersion of power × Quality of gov’t | -4.532 \*\*  (2.263) | -3.497 \*\*  (1.614) | -4.749 \*\*  (2.136) | -6.702 \*\*\*  (2.238) | -7.142 \*  (3.853) | -3.448  (2.334) |
| Number of gov’t parties × Dispersion of power × Quality of gov’t | 2.066 \*  (1.056) | 1.456 \*  (0.769) | 1.747 \*\*  (0.886) | 3.057 \*\*\*  (1.018) | 3.488 \*\*  (1.474) | 1.929 \*  (0.998) |
| Left-right | -0.019 \*\*  (0.007) | -0.018 \*\*\*  (0.006) | -0.023 \*\*  (0.010) | -0.017 \*\*  (0.008) | -0.020 \*\*  (0.009) | -0.017 \*\*  (0.007) |
| Caretaker time | 0.990  (1.236) | 1.370  (1.160) | 1.532  (1.054) | 1.469  (1.346) | -0.219  (1.540) | 0.849  (1.182) |
| Effective number of parliamentary parties | -0.349 \*\*  (0.158) | -0.003  (0.082) | -0.024  (0.127) | -0.313 \*  (0.169) | -0.412 \*\*  (0.199) | -0.360 \*\*  (0.152) |
| Expenditure rules | -0.288  (0.179) | -0.095  (0.104) | -0.172  (0.138) | -0.236  (0.191) | -0.189  (0.220) | -0.162  (0.171) |
| GDP per capita | 0.638 \*\*\*  (0.080) | 0.555 \*\*\*  (0.084) | 0.640 \*\*\*  (0.116) | 0.535 \*\*\*  (0.088) | 0.524 \*\*\*  (0.100) | 0.537 \*\*\*  (0.084) |
| Age dependency | 0.432 \*  0.230) | -0.184  (0.155) | -0.476 \*  (0.275) | -0.228  (0.282) | -0.203  (0.284) | -0.247  (0.246) |
| Unemployment | -0.351 \*\*\*  (0.086) | -0.186 \*\*  (0.075) | -0.301 \*\*\*  (0.101) | -0.252 \*\*\*  (0.087) | -0.354 \*\*\*  (0.105) | -0.279 \*\*\*  (0.081) |
| Trade openness | 0.016  (0.014) | -0.026 \*  (0.015) | 0.023  (0.020) | -0.031 \*  (0.017) | -0.015  (0.019) | -0.016  (0.015) |
| Spending | 0.709 \*\*\*  (0.030) | 0.889 \*\*\*  (0.013) | 0.804 \*\*\*  (0.068) | 0.670 \*\*\*  (0.032) | 0.623 \*\*\*  (0.036) | 0.710 \*\*\*  (0.029) |
| *Current* |  |  |  |  |  |  |
| GDP per capita | -0.636 \*\*\*  (0.083) | -0.540 \*\*\*  (0.083) | -0.631 \*\*\*  (0.124) | -0.546 \*\*\*  (0.095) | -0.519 \*\*\*  (0.107) | -0.555 \*\*\*  (0.086) |
| Age dependency | 0432 \*  (0.230) | 0.190  (0.158) | 0.524 \*  (0.286) | 0.290  (0.288) | 0.242  (0.292) | 0.289  (0.253) |
| Unemployment | -0.351 \*\*\*  (0.086) | 0.137 \*  (0.075) | 0.274 \*\*\*  (0.089) | 0.293 \*\*\*  (0.092) | 0.448 \*\*\*  (0.119) | 0.292 \*\*\*  (0.082) |
| Trade openness | -0.017  (0.014) | 0.019  (0.014) | -0.029  (0.019) | 0.033 \*  (0.018) | 0.021  (0.020) | 0.016  (0.016) |
| Maastricht | -0.120  (0.234) | 0.359 \*  (0.203) | 0.292  (0.330) | -0.246  (0.367) | -0.139  (0.411) | -0.377  (0.312) |
| Country effects | Yes | No | Yes | Yes | Yes | Yes |
| Year effects | No | Yes | No | Yes | Yes | Yes |
| Adjusted R2 | 0.696 | 0.897 |  | 0.584 | 0.593 | 0.651 |
| N | 661 | 661 | 1292 | 535 | 417 | 644 |
| Significance levels: \*\*\* *p* < 0.01, \*\* *p* < 0.05, \* *p* < 0.10.  a Panel corrected standard errors in parentheses.  b One-step Blundell-Bond (1998) generalised method of moments estimation; robust standard errors in parentheses. To limit the number of instruments, the instruments were collapsed and the number of lagged instruments was limited to two (*t* – 2 and *t* – 3).  c Countries with an average number of government parties smaller than 1.5 are excluded.  d Countries with an average number of government parties smaller than 2.0 are excluded.  e Bulgaria excluded. | | | | | | |

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| Table S4. Robustness tests: level of democracy and regime durability. Dependent variable: total general government spending (% of GDP). | | | |
|  | I | IIa | IIIa |
| *Lagged* |  |  |  |
| Number of gov’t parties | 2.274 \*\*\*  (0.729) | 2.058 \*\*\*  (0.723) | 2.084 \*\*\*  (0.728) |
| Dispersion of power | 46.994 \*\*\*  (15.720) | 42.792 \*\*\*  (15.120) | 43.515 \*\*\*  (15.198) |
| Quality of government | 0.631 \*\*\*  (0.241) | 0.602 \*\*  (0.237) | 0.607 \*\*  (0.237) |
| Level of democracy | 0.448  (0.362) |  |  |
| Regime durability |  | -0.007  (0.021) | -0.012  (0.025) |
| Regime durability (squared) |  |  | -0.000  (0.000) |
| Number of gov’t parties × Dispersion of power | -21.102 \*\*\*  (7.137) | -19.016 \*\*\*  (6.846) | -19.292 \*\*\*  (6.883) |
| Number of gov’t parties × Quality of gov’t | -0.271 \*\*\*  (0.087) | -0.241 \*\*\*  (0.087) | -0.244 \*\*\*  (0.088) |
| Dispersion of power × Quality of gov’t | -5.753 \*\*\*  (2.050) | -5.161 \*\*\*  (1.967) | -5.258 \*\*\*  (1.977) |
| Number of gov’t parties × Dispersion of power × Quality of gov’t | 2.671 \*\*\*  (0.945) | 2.396 \*\*\*  (0.907) | 2.433 \*\*\*  (0.911) |
| Left-right | -0.016 \*\*  (0.007) | -0.016 \*\*  (0.007) | -0.015 \*\*  (0.007) |
| Caretaker time | 1.087  (1.188) | 1.119  (1.179) | 1.100  (1.183) |
| Effective number of parliamentary parties | -0.281 \*  (0.158) | -0.221  (0.150) | -0.225  (0.150) |
| Expenditure rules | -0.236  (0.176) | -0.251  (0.172) | -0.256  (0.173) |
| GDP per capita | 0.546 \*\*\*  (0.082) | 0.539 \*\*\*  (0.075) | 0.536 \*\*\*  (0.075) |
| Age dependency | -0.230  (0.255) | -0.297  (0.242) | -0.319  (0.243) |
| Unemployment | -0.219 \*\*\*  (0.076) | -0.219 \*\*\*  (0.073) | -0.219 \*\*\*  (0.073) |
| Trade openness | -0.028 \*  (0.015) | -0.032 \*\*  (0.014) | -0.032 \*\*  (0.014) |
| Spending | 0.699 \*\*\*  (0.030) | 0.717 \*\*\*  (0.030) | 0.718 \*\*\*  (0.030) |
| *Current* |  |  |  |
| GDP per capita | -0.564 \*\*\*  (0.085) | -0.561 \*\*\*  (0.079) | -0.558 \*\*\*  (0.079) |
| Age dependency | 0.287  (0.263) | 0.360  (0.251) | 0.384  (0.251) |
| Unemployment | 0.238 \*\*\*  (0.076) | 0.231 \*\*\*  (0.072) | 0.232 \*\*\*  (0.072) |
| Trade openness | 0.026 \*  (0.015) | 0.033 \*\*  (0.014) | 0.033 \*\*  (0.014) |
| Maastricht | -0.334  (0.307) | 0.014  (0.328) | 0.045  (0.341) |
| Country effects | Yes | Yes | Yes |
| Year effects | Yes | Yes | Yes |
| Adjusted R2 | 0.631 | 0.647 | 0.646 |
| N | 661 | 620 | 620 |
| Significance levels: \*\*\* *p* < 0.01, \*\* *p* < 0.05, \* *p* < 0.10. Panel corrected standard errors in parentheses.  a Data on regime durability is not available for Iceland and Malta. | | | |

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| Table S5. Robustness test: 19 non-post-communist countries. Dependent variable: total general government spending (% of GDP). | | | | |
|  | I | II | III | IV |
| *Lagged* |  |  |  |  |
| Number of gov’t parties | 0.012  (0.118) | -0.148  (0.184) | 0.372  (0.805) | 0.079  (1.290) |
| Dispersion of power | 0.663  (1.439) | -3.225  (3.911) | 0.684  (1.446) | 4.078  (24.910) |
| Quality of government | 0.060  (0.184) | 0.062  (0.186) | 0.146  (0.236) | 0.151  (0.266) |
| Number of gov’t parties × Dispersion of power |  | 2.024  (1.931) |  | 0.590  (12.785) |
| Number of gov’t parties × Quality of gov’t |  |  | -0.043  (0.089) | -0.025  (0.142) |
| Dispersion of power × Quality of gov’t |  |  |  | -0.843  (2.937) |
| Number of gov’t parties × Dispersion of power × Quality of gov’t |  |  |  | 0.154  (1.484) |
| Left-right | -0.015 \*\*  (0.006) | -0.014 \*\*  (0.006) | -0.015 \*\*  (0.006) | -0.014 \*\*  (0.006) |
| Caretaker time | 1.416  (1.310) | 1.231  (1.339) | 1.458  (1.338) | 1.279  (1.395) |
| Effective number of parliamentary parties | -0.401 \*\*\*  (0.154) | -0.376 \*\*  (0.160) | -0.401 \*\*\*  (0.154) | -0.372 \*\*  (0.160) |
| Expenditure rules | -0.182  (0.167) | -0.203  (0.173) | -0.167  (0.169) | -0.203  (0.176) |
| GDP per capita | 0.535 \*\*\*  (0.095) | 0.530 \*\*\*  (0.095) | 0.536 \*\*\*  (0.095) | 0.533 \*\*\*  (0.095) |
| Age dependency | -0.168  (0.243) | -0.143  (0.244) | -0.169  (0.244) | 0.181  (0.251) |
| Unemployment | -0.306 \*\*\*  (0.109) | -0.316 \*\*\*  (0.110) | -0.304 \*\*\*  (0.108) | -0.312 \*\*\*  (0.110) |
| Trade openness | -0.040 \*  (0.021) | -0.039 \*  (0.021) | -0.040 \*  (0.020) | -0.039 \*  (0.021) |
| Spending | 0.744 \*\*\*  (0.033) | 0.740 \*\*\*  (0.034) | 0.744 \*\*\*  (0.033) | 0.740 \*\*\*  (0.034) |
| *Current* |  |  |  |  |
| GDP per capita | -0.535 \*\*\*  (0.096) | -0.530 \*\*\*  (0.096) | -0.531 \*\*\*  (0.096) | -0.532 \*\*\*  (0.096) |
| Age dependency | 0.198  (0.250) | 0.175  (0.252) | 0.198  (0.252) | 0.181  (0.251) |
| Unemployment | 0.321 \*\*\*  (0.113) | 0.334 \*\*\*  (0.115) | 0.323 \*\*\*  (0.113) | 0.332 \*\*\*  (0.114) |
| Trade openness | 0.039 \*  (0.021) | 0.038 \*  (0.021) | 0.039 \*  (0.021) | 0.038 \*  (0.021) |
| Maastricht | -0.569  (0.360) | -0.538  (0.364) | -0.578  (0.360) | -0.554  (0.363) |
| Country effects | Yes | Yes | Yes | Yes |
| Year effects | Yes | Yes | Yes | Yes |
| Adjusted R2 | 0.697 | 0.696 | 0.696 | 0.695 |
| N | 497 | 497 | 497 | 497 |
| Significance levels: \*\*\* *p* < 0.01, \*\* *p* < 0.05, \* *p* < 0.10. Panel corrected standard errors in parentheses. | | | | |

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| Table S6. Robustness tests: 11 post-communist countries. Dependent variable: total general government spending (% of GDP). | | | | |
|  | I | II | III | IV |
| *Lagged* |  |  |  |  |
| Number of gov’t parties | 0.455 \*  (0.240) | 1.047 \*\*\*  (0.379) | 1.064  (0.970) | 4.512 \*\*\*  (1.423) |
| Dispersion of power | 2.678  (1.938) | 15.025 \*\*  (7.178) | 2.659  (1.925) | 85.507 \*\*  (36.010) |
| Quality of government | 0.615  (0.560) | 0.356  (0.531) | 0.857  (0.769) | 1.339 \*  (0.793) |
| Number of gov’t parties × Dispersion of power |  | -5.834 \*  (3.318) |  | -41.142 \*\*  (16.327) |
| Number of gov’t parties × Quality of gov’t |  |  | -0.098  (0.160) | -0.562 \*\*  (0.239) |
| Dispersion of power × Quality of gov’t |  |  |  | -11.242 \*\*  (5.656) |
| Number of gov’t parties × Dispersion of power × Quality of gov’t |  |  |  | 5.703 \*\*  (2.609) |
| Left-right | -0.066 \*\*\*  (0.022) | -0.072 \*\*\*  (0.023) | -0.063 \*\*\*  (0.021) | -0.074 \*\*\*  (0.022) |
| Caretaker time | 0.109  (1.900) | 0.040  (1.960) | -0.133  (2.002) | -0.128  (2.275) |
| Effective number of parliamentary parties | 0.027  (0.360) | -0.236  (0.386) | 0.017  (0.367) | -0.402  (0.339) |
| Expenditure rules | 0.116  (0.324) | -0.206  (0.332) | 0.106  (0.317) | 0.285  (0.324) |
| GDP per capita | 0.529  (0.340) | 0.574 \*  (0.326) | 0.534  (0.340) | 0.486  (0.320) |
| Age dependency | 0.369  (0.973) | 0.087  (0.970) | 0.338  (0.974) | -0.064  (0.941) |
| Unemployment | -0.149  (0.118) | -0.155  (0.117) | -0.146  (0.118) | -0.201 \*  (0.116) |
| Trade openness | -0.042 \*  (0.026) | -0.053 \*\*  (0.026) | -0.052 \*  (0.027) | -0.061 \*\*  (0.026) |
| Spending | 0.273 \*\*\*  (0.081) | 0.293 \*\*\*  (0.077) | 0.274 \*\*\*  (0.081) | 0.262 \*\*\*  (0.080) |
| *Current* |  |  |  |  |
| GDP per capita | -0.311  (0.304) | -0.362  (0.300) | -0.323  (0.304) | -0.383  (0.286) |
| Age dependency | 0.090  (0.980) | 0.391  (0.976) | 0.131  (0.983) | 0.515  (0.943) |
| Unemployment | 0.257 \*  (0.132) | 0.227 \*  (0.126) | 0.248 \*  (0.131) | 0.282 \*\*  (0.125) |
| Trade openness | 0.002  (0.022) | 0.004  (0.022) | 0.001  (0.022) | 0.018  (0.022) |
| Maastricht | 0.686  (0.836) | 0.583  (0.819) | 0.664  (0.840) | 0.927  (0.773) |
| Country effects | Yes | Yes | Yes | Yes |
| Year effects | Yes | Yes | Yes | Yes |
| Adjusted R2 | 0.306 | 0.320 | 0.302 | 0.328 |
| N | 164 | 164 | 164 | 164 |
| Significance levels: \*\*\* *p* < 0.01, \*\* *p* < 0.05, \* *p* < 0.10. Panel corrected standard errors in parentheses. | | | | |

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| Table S7. Robustness tests: a minimal set of controls. Dependent variable: total general government spending (% of GDP). | |
| *Lagged* |  |
| Number of gov’t parties | 1.625 \*\*  (0.720) |
| Dispersion of power | 31.962 \*\*  (16.233) |
| Quality of government | 0.608 \*\*  (0.240) |
| Number of gov’t parties × Dispersion of power | -12.675 \*  (7.353) |
| Number of gov’t parties × Quality of gov’t | -0.219 \*\*  (0.088) |
| Dispersion of power × Quality of gov’t | -4.088 \*  (2.114) |
| Number of gov’t parties × Dispersion of power × Quality of gov’t | 1.681 \*  (0.971) |
| Spending | 0.740 \*\*\*  (0.026) |
| *Current* |  |
| Real GDP growth | -0.271 \*\*\*  (0.037) |
| Country effects | Yes |
| Year effects | Yes |
| Adjusted R2 | 0.622 |
| N | 668 |
| Significance levels: \*\*\* *p* < 0.01, \*\* *p* < 0.05, \* *p* < 0.10. Panel corrected standard errors in parentheses. | |