Online APPENDIX

Table A1: Variables: definition and sources

|  |  |  |
| --- | --- | --- |
| Variable | Definition | Source |
| NULC total economy | Annual NULC changes, measured as percentage change from previous year, overall economy. | OECD (2015c) |
| NULC manufacturing | Annual NULC changes, measured as percentage change from previous year, manufacturing sector. | OECD (2015c) |
| Growth *t-1* | Growth of real GDP, measured as percentage change from previous year. | Armingeon et al. (2015) |
| Population *t-1* | Size of total population (in 1000s). | Armingeon et al. (2015) |
| Unemployment rate *t-1* | Percentage of unemployed civilians in the total labor force. | Armingeon et al. (2015) |
| Elderly *t-1* | Population over 65 as a percentage of total population. | Armingeon et al. (2015) |
| Service sector *t-1* | The total of civilian employment in services as a percentage of the total civilian labor force. | Armingeon et al. (2015) |
| GDP per hour worked *t-1* | GDP per capita (in current values). | OECD (2015a) |
| Inflation *t-1* | Growth of harmonized consumer price index, all items, percent change from previous year. | Armingeon et al. (2015) |
| Left government *t-1* | Cabinet portfolio held by social-democratic and other left parties as a percentage of total cabinet posts at time point *t.* | Armingeon et al. (2015) |
| Employment protection *t-1* | Strictness of employment protection – individual and collective dismissals (regular contracts). | OECD (2015b) |
| Time (ln) | Logged number of years from 1999–2008. | Own calculation |
| Union density rate *t-1*  | Net union membership as a proportion of wage and salary earners in employment. | Visser (2015) |
| Employers’ organization density *t-1* | Employers’ organization density as a proportion of the total number of employees in employment. | Visser (2015) |
| Bargaining coverage *t-1* | Percentage of employees covered by wage bargaining agreements as a fraction of all wage and salary earners in employment, adjusted for possible sectors without the right to bargain. | Visser (2015) |
| Wage coordination *t-1* | Kenworthy’s five-scale index of wage coordination: 1 = fragmented wage bargaining, 3 = industry wide coordination, 5 = nationally encompassing coordination (2 and 4 = mix types). | Visser (2015) |
| Wage centralization *t-1* | OECD’s five-scale index of wage centralization: 1 = company- and plant-level, 3 = industry-level, 5 = central-level wage agreements (2 and 4 = mix types). | OECD (2004: 151) |
| Corporatism | Schmidt’s (1983) five-scale corporatism measure: 1 = weak or totally absent corporatism, 5 = strong corporatism. | Siaroff (1999: Table 1) |
| Integrated economy | Siaroff’s (1999) integrated economy index: The index measures the extent of social partnership based on eight indicators (in particular wage coordination, conflict intensity of wage bargaining, codetermination, concertation). Timeframe: 1990s.  | Siaroff (1999: Table 4c) |
| Coordinated capitalism | Hall and Gingerich’s (2009) index combines data on labor market fluctuation, wage bargaining coordination, shareholders’ rights, diffused firm ownership, and stock market size. Missing data for Greece and Luxembourg. | Hall and Gingerich (2009) |
| Organized capitalism | Höpner’s “*organized capitalism*” index consists of data on firm ownership held by the state and by other firms, on employees’ codetermination rights, and on the density of trade unions and employers’ associations. Missing data for Greece and Luxembourg. | Höpner (2007: 12-17) |
| Employees’ codetermination rights | This four-scale index covers the 2000s and measures employees’ codetermination rights at the board level of large firms: 4 = employee representatives constitute more than one third of the board, 3 = employee representatives constitute up to one third of the board, 2 = employees’ participation without voting power, and 1 = no board-level codetermination. | Höpner (2004: 40) |

Table A2: Summary statistics of all variables

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | Obs | Mean | Std. Dev. | Min | Max |
| NULC total economy | 120 | 2.18 | 1.91 | -2.5 | 9.5 |
| NULC manufacturing | 120 | 0.87 | 4.30 | -9.3 | 21.6 |
| Growth *t-1* | 120 | 3.2 | 2.03 | -0.93 | 10.18 |
| Population *t-1* | 120 | 25648.34 | 26406.92 | 424.7 | 82502 |
| Unemployment rate *t-1* | 120 | 7.39 | 2.83 | 1.9 | 16.4 |
| Elderly *t-1* | 120 | 15.99 | 2.16 | 10.8 | 20.2 |
| Service sector *t-1* | 120 | 62.58 | 7.13 | 48.51 | 76.33 |
| GDP per hour worked *t-1* | 120 | 4.42 | 2.68 | -3.94 | 12.88 |
| Inflation *t-1* | 120 | 2.3 | 1.01 | 0.2 | 5.6 |
| Left government *t-1* | 120 | 38.25 | 36.35 | 0 | 100 |
| Employment protection *t-1* | 120 | 2.56 | 0.73 | 1.27 | 4.58 |
| Time (ln) | 120 | 1.75 | 0.53 | 0.69 | 2.4 |
| Union density rate *t-1*  | 120 | 32.43 | 17.3 | 7.55 | 78 |
| Employers’ organization density *t-1* | 120 | 69.67 | 14.05 | 43 | 100 |
| Bargaining coverage *t-1* | 120 | 78.97 | 15.61 | 41.7 | 98 |
| Wage coordination *t-1* | 120 | 3.55 | 1.13 | 2 | 5 |
| Wage centralization *t-1* | 100 | 3.2 | 0.88 | 2 | 5 |
| Corporatism | 120 | 2.17 | 1.29 | 1 | 5 |
| Integrated economy | 120 | 3.27 | 0.95 | 2 | 4.63 |
| Coordinated capitalism | 100 | 0.72 | 0.19 | 0.29 | 1 |
| Organized capitalism | 100 | 0.38 | 0.78 | -0.54 | 1.87 |
| Employees’ codetermination rights | 120 | 2 | 1.08 | 1 | 4 |

 Note: Summary statistics based on country-year data

of twelve Euro countries, 1999–2008

Table A3: Correlation matrix of all variables

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 1 | NULC total economy | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | NULC manufacturing | 0.58 | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Growth *t-1* | 0.47 | -0.07 | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Population *t-1* | -0.24 | 0.19 | -0.35 | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Unemployment rate *t-1* | -0.19 | -0.01 | -0.11 | 0.50 | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Elderly *t-1* | -0.31 | 0.27 | -0.58 | 0.61 | 0.52 | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Service sector *t-1* | -0.05 | -0.05 | -0.04 | -0.09 | -0.44 | -0.31 | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | GDP per hour worked *t-1* | 0.09 | -0.04 | 0.34 | -0.18 | -0.22 | -0.26 | 0.11 | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Inflation *t-1* | 0.45 | 0.24 | 0.24 | -0.25 | -0.24 | -0.32 | -0.19 | 0.23 | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Left government *t-1* | -0.16 | 0.04 | -0.13 | 0.35 | 0.25 | 0.37 | -0.12 | 0.07 | -0.28 | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | Employment protection *t-1* | -0.10 | 0.17 | -0.40 | 0.09 | -0.02 | 0.39 | -0.43 | -0.03 | 0.02 | 0.16 | 1.00 |  |  |  |  |  |  |  |  |  |  |  |
| 12 | Time (ln) | 0.04 | 0.22 | -0.27 | 0.02 | -0.16 | 0.19 | 0.26 | 0.18 | 0.16 | -0.14 | -0.02 | 1.00 |  |  |  |  |  |  |  |  |  |  |
| 13 | Union density rate *t-1*  | -0.06 | -0.27 | 0.15 | -0.52 | 0.00 | -0.10 | -0.02 | -0.01 | -0.16 | 0.01 | -0.36 | -0.07 | 1.00 |  |  |  |  |  |  |  |  |  |
| 14 | Employers’ organization density *t-1* | -0.24 | -0.08 | -0.09 | -0.23 | -0.41 | -0.11 | 0.49 | -0.03 | -0.24 | -0.22 | -0.12 | 0.02 | -0.07 | 1.00 |  |  |  |  |  |  |  |  |
| 15 | Bargaining coverage *t-1* | -0.31 | 0.04 | -0.44 | -0.05 | 0.16 | 0.44 | 0.23 | -0.24 | -0.45 | 0.09 | 0.14 | -0.03 | 0.15 | 0.58 | 1.00 |  |  |  |  |  |  |  |
| 16 | Wage coordination *t-1* | -0.04 | -0.27 | 0.27 | -0.46 | -0.29 | -0.41 | 0.32 | 0.10 | 0.00 | -0.06 | -0.65 | 0.10 | 0.64 | 0.14 | -0.20 | 1.00 |  |  |  |  |  |  |
| 17 | Wage centralization *t-1* | 0.10 | -0.31 | 0.37 | -0.65 | -0.11 | -0.44 | -0.25 | 0.24 | 0.17 | -0.04 | 0.01 | 0.00 | 0.60 | -0.25 | -0.28 | 0.40 | 1.00 |  |  |  |  |  |
| 18 | Corporatism | -0.46 | -0.26 | -0.15 | -0.27 | -0.36 | 0.01 | 0.31 | -0.03 | -0.40 | 0.02 | -0.12 | 0.00 | 0.40 | 0.73 | 0.44 | 0.45 | 0.14 | 1.00 |  |  |  |  |
| 19 | Integrated economy | -0.46 | -0.30 | -0.15 | -0.20 | -0.32 | 0.03 | 0.31 | -0.02 | -0.43 | 0.07 | -0.14 | 0.00 | 0.57 | 0.49 | 0.30 | 0.52 | 0.23 | 0.92 | 1.00 |  |  |  |
| 20 | Coordinated capitalism | -0.55 | 0.02 | -0.59 | 0.37 | 0.09 | 0.73 | -0.11 | -0.24 | -0.52 | 0.29 | 0.38 | 0.00 | 0.05 | 0.37 | 0.59 | -0.22 | -0.33 | 0.59 | 0.57 | 1.00 |  |  |
| 21 | Organized capitalism | -0.47 | -0.26 | -0.15 | -0.13 | -0.21 | 0.10 | 0.22 | -0.06 | -0.44 | 0.04 | -0.11 | 0.00 | 0.44 | 0.66 | 0.42 | 0.40 | 0.16 | 0.94 | 0.93 | 0.63 | 1.00 |  |
| 22 | Employees’ codetermination rights | -0.53 | -0.30 | -0.18 | 0.24 | -0.14 | 0.06 | 0.31 | 0.05 | -0.47 | 0.19 | 0.04 | 0.00 | 0.07 | 0.40 | 0.15 | 0.13 | 0.10 | 0.69 | 0.74 | 0.52 | 0.77 | 1.00 |

 Note: n=120 (country-year data), except for variables “wage centralization,” “coordinated capitalism” and “organized capitalism”: n=100

Table A4: Replication of Table 2, regression results for NULC total economy, crisis years added (1999-2014)

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) |  |  | (6) | (7) | (8) | (9) | (10) |
| Growth *t-1* | 0.467\*\*\* | 0.468\*\*\* | 0.470\*\*\* | 0.463\*\*\* | 0.459\*\*\* |  | Growth *t-1* | 0.465\*\*\* | 0.465\*\*\* | 0.423\*\*\* | 0.463\*\*\* | 0.480\*\*\* |
|  | (4.498) | (4.559) | (4.549) | (4.513) | (3.904) |  |  | (4.595) | (4.572) | (3.786) | (4.042) | (4.657) |
| Population *t-1* | 0.002 | -0.026 | -0.001 | -0.057 | -0.010 |  | Population *t-1* | -0.120+ | -0.081 | -0.071 | -0.105+ | 0.007 |
|  | (0.020) | (-0.444) | (-0.013) | (-0.935) | (-0.147) |  |  | (-1.959) | (-1.337) | (-1.305) | (-1.911) | (0.103) |
| Unemployment rate *t-1* | -0.214\* | -0.248\*\* | -0.229\* | -0.281\*\* | -0.185\* |  | Unemployment rate *t-1* | -0.359\*\*\* | -0.357\*\*\* | -0.332\*\* | -0.266\*\* | -0.275\*\* |
|   | (-2.232) | (-2.719) | (-2.495) | (-3.156) | (-2.008) |  |  | (-3.803) | (-3.485) | (-2.928) | (-2.718) | (-3.011) |
| Elderly *t-1* | 0.204 | 0.230+ | 0.175 | 0.282\* | 0.267+ |  | Elderly *t-1* | 0.350\*\* | 0.318\*\* | 0.629\*\*\* | 0.390\*\* | 0.235\* |
|  | (1.593) | (1.862) | (1.252) | (2.249) | (1.883) |  |  | (2.933) | (2.654) | (3.800) | (3.260) | (1.969) |
| Service sector *t-1* | 0.062 | 0.099 | 0.025 | 0.036 | 0.086 |  | Service sector *t-1* | 0.101 | 0.091 | 0.087 | 0.097 | 0.110 |
|  | (0.568) | (0.942) | (0.224) | (0.346) | (0.806) |  |  | (1.058) | (0.969) | (0.971) | (1.096) | (1.230) |
| GDP per hour worked *t-1* | 0.008 | 0.007 | 0.008 | 0.011 | 0.006 |  | GDP per hour worked *t-1* | 0.013 | 0.013 | 0.023 | 0.009 | 0.008 |
|  | (0.103) | (0.091) | (0.105) | (0.153) | (0.077) |  |  | (0.178) | (0.180) | (0.295) | (0.116) | (0.105) |
| Inflation *t-1* | 0.360\*\*\* | 0.344\*\*\* | 0.354\*\*\* | 0.373\*\*\* | 0.356\*\*\* |  | Inflation *t-1* | 0.292\*\*\* | 0.293\*\*\* | 0.294\*\*\* | 0.316\*\*\* | 0.318\*\*\* |
|  | (4.912) | (4.761) | (4.866) | (5.088) | (4.284) |  |  | (4.142) | (4.103) | (3.635) | (3.917) | (4.367) |
| Left government *t-1* | -0.047 | -0.047 | -0.048 | -0.030 | -0.045 |  | Left government *t-1* | -0.024 | -0.036 | -0.027 | -0.028 | -0.031 |
|  | (-0.945) | (-0.949) | (-0.976) | (-0.586) | (-0.844) |  |  | (-0.496) | (-0.732) | (-0.534) | (-0.554) | (-0.642) |
| Employment protection *t-1* | -0.005 | -0.035 | -0.029 | -0.103+ | -0.036 |  | Employment protection *t-1* | -0.086 | -0.079 | -0.042 | -0.096 | -0.010 |
|  | (-0.066) | (-0.635) | (-0.534) | (-1.818) | (-0.567) |  |  | (-1.511) | (-1.310) | (-0.669) | (-1.411) | (-0.186) |
| Pre-crisis year dummy | -0.122 | -0.121 | -0.130 | -0.104 | -0.078 |  | Pre-crisis year dummy | -0.129 | -0.133 | -0.058 | -0.080 | -0.130 |
|  | (-0.993) | (-0.994) | (-1.074) | (-0.855) | (-0.621) |  |  | (-1.077) | (-1.106) | (-0.476) | (-0.643) | (-1.069) |
| Time (ln) | -0.039 | -0.055 | -0.023 | -0.042 | -0.057 |  | Time (ln) | -0.078 | -0.072 | -0.147 | -0.085 | -0.053 |
|  | (-0.329) | (-0.470) | (-0.190) | (-0.359) | (-0.464) |  |  | (-0.691) | (-0.633) | (-1.312) | (-0.748) | (-0.455) |
| Union density rate *t-1*  | 0.033 |  |  |  |  |  | Corporatism | -0.247\*\*\* |  |  |  |  |
|  | (0.458) |  |  |  |  |  |  | (-3.869) |  |  |  |  |
| Employers' organization |  | -0.095\* |  |  |  |  | Integrated economy |  | -0.213\* |  |  |  |
|  density *t-1* |  | (-2.154) |  |  |  |  |  |  | (-2.440) |  |  |  |
| Bargaining coverage *t-1* |  |  | 0.059 |  |  |  | Coordinated  |  |  | -0.390\*\* |  |  |
|  |  |  | (1.224) |  |  |  |  capitalism |  |  | (-2.914) |  |  |
| Wage coordination *t-1* |  |  |  | -0.127\* |  |  | Organized |  |  |  | -0.193\* |  |
|  |  |  |  | (-2.055) |  |  |  capitalism |  |  |  | (-2.346) |  |
| Wage centralization *t-1* |  |  |  |  | 0.030 |  | Employees’ co- |  |  |  |  | -0.148+ |
|  |  |  |  |  | (0.377) |  |  determination rights |  |  |  |  | (-1.845) |
| *R2* | 0.497 | 0.502 | 0.499 | 0.506 | 0.493 |  | *R2* | 0.527 | 0.518 | 0.527 | 0.514 | 0.510 |
| *Degrees of freedom* | 12 | 12 | 12 | 12 | 12 |  | *Degrees of freedom* | 12 | 12 | 12 | 12 | 12 |
| *Chi2* | 120.5 | 132.1 | 125.4 | 126.1 | 85.53 |  | *Chi2* | 155.5 | 144.5 | 97.17 | 94.26 | 139.4 |
| *N (countries)* | 12 | 12 | 12 | 12 | 10 |  | *N (countries)* | 12 | 12 | 10 | 10 | 12 |
| *N (country-years)* | 192 | 192 | 192 | 192 | 160 |  | *N (country-years)* | 192 | 192 | 160 | 160 | 192 |

Note: Regression with panel-corrected standard errors on NULC total economy, pre-crisis and crisis years included (1999-2014).

Standardized beta coefficients; *t* statistics in parentheses; + *p* < 0.1, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001 (two-tailed tests). Definitions and sources of variables: See appendix, Table A1.