# ONLINE APPENDIX

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# Appendix 1: Full interaction models

1. Interaction between deregulation of temporary employment and union density:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | Δ Wage share (quintiles) | | |  |
|  | Bottom | Lower-middle | Middle | Upper-middle | Top |
| Lagged wage share level | -0.34\*\*\* | -0.23\*\*\* | -0.22\*\*\* | -0.22\*\*\* | -0.24\*\*\* |
|  | (0.06) | (0.05) | (0.04) | (0.05) | (0.05) |
| Deregulation of | -0.43\*\*\* | -0.17\*\*\* | -0.17\*\*\* | -0.08 | 0.78\*\*\* |
| temporary employment | (0.14) | (0.05) | (0.06) | (0.08) | (0.27) |
| Unemployment rate | -0.04\*\* | -0.00 | 0.00 | 0.00 | 0.03 |
|  | (0.02) | (0.01) | (0.01) | (0.01) | (0.03) |
| Trade openness | 0.58\*\*\* | 0.37\*\*\* | 0.28\*\*\* | 0.10 | -1.08\*\*\* |
|  | (0.18) | (0.11) | (0.09) | (0.07) | (0.33) |
| Union density | 2.28\*\* | 0.69\*\* | 0.63\*\* | 0.15 | -3.44\*\* |
|  | (0.99) | (0.34) | (0.25) | (0.37) | (1.41) |
| Centralization of wage | -0.03 | 0.01 | -0.04 | -0.02 | 0.07 |
| bargaining | (0.06) | (0.05) | (0.03) | (0.03) | (0.12) |
| Government partisanship | 0.00 | 0.00\* | 0.00 | -0.00 | -0.00 |
| (left-wing parties in cabinet) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) |
| Real GDP growth | -0.01 | -0.02 | -0.01 | -0.02 | 0.02 |
|  | (0.02) | (0.02) | (0.01) | (0.01) | (0.05) |
| Deregulation of temporary | 0.69\* | 0.17 | 0.22\* | 0.17 | -1.16\* |
| employment \* union density | (0.39) | (0.14) | (0.12) | (0.20) | (0.64) |
| Constant | 1.79\*\*\* | 2.43\*\*\* | 3.26\*\*\* | 4.66\*\*\* | 11.49\*\*\* |
|  | (0.36) | (0.57) | (0.74) | (1.07) | (2.44) |
| N | 166 | 166 | 166 | 166 | 166 |
| R2 | 0.24 | 0.21 | 0.24 | 0.17 | 0.21 |

*Notes*: OLS estimates with panel-heteroskedastic standard errors (in parentheses) and panel-specific AR(1) processes estimated with Prais-Winsten transformation. \* *p*<0.1; \*\* *p*<0.05; \*\*\* *p*<0.01.

1. Interaction between deregulation of temporary employment and employment protection for permanent contracts:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | Δ Wage share (quintiles) | | |  |
|  | Bottom | Lower-middle | Middle | Upper-middle | Top |
| Lagged wage share level | -0.33\*\*\* | -0.30\*\*\* | -0.24\*\*\* | -0.22\*\*\* | -0.29\*\*\* |
|  | (0.06) | (0.05) | (0.05) | (0.05) | (0.06) |
| Deregulation of | -0.48 | -0.17 | -0.04 | 0.09 | 0.78\* |
| temporary employment | (0.32) | (0.16) | (0.10) | (0.15) | (0.44) |
| Unemployment rate | -0.02 | -0.00 | 0.00 | 0.01 | 0.00 |
|  | (0.02) | (0.01) | (0.01) | (0.01) | (0.03) |
| Trade openness | 0.20 | 0.25\* | 0.22\*\* | 0.15\* | -0.49 |
|  | (0.18) | (0.13) | (0.10) | (0.08) | (0.37) |
| Union density | 0.91 | 0.51\*\*\* | 0.18 | -0.11 | -1.41\*\* |
|  | (0.58) | (0.18) | (0.11) | (0.18) | (0.71) |
| EPL permanent contracts | 0.30\*\* | 0.26\*\*\* | 0.12\* | -0.05 | -0.76\*\*\* |
|  | (0.14) | (0.09) | (0.06) | (0.06) | (0.25) |
| Centralization of wage | -0.02 | -0.00 | -0.02 | -0.01 | -0.01 |
| bargaining | (0.06) | (0.05) | (0.03) | (0.03) | (0.12) |
| Government partisanship | 0.00 | 0.00 | 0.00 | -0.00 | -0.00 |
| (left-wing parties in cabinet) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) |
| Real GDP growth | 0.01 | 0.00 | -0.01 | -0.02 | -0.02 |
|  | (0.02) | (0.02) | (0.01) | (0.01) | (0.05) |
| Deregulation of temporary | 0.15 | 0.04 | -0.00 | -0.04 | -0.26 |
| employment \* EPL permanent | (0.13) | (0.07) | (0.04) | (0.06) | (0.20) |
| Constant | 1.76\*\*\* | 3.07\*\*\* | 3.54\*\*\* | 4.88\*\*\* | 13.67\*\*\* |
|  | (0.36) | (0.58) | (0.76) | (1.10) | (2.63) |
| N | 166 | 166 | 166 | 166 | 166 |
| R2 | 0.24 | 0.27 | 0.25 | 0.17 | 0.23 |

*Notes*: OLS estimates with panel-heteroskedastic standard errors (in parentheses) and panel-specific AR(1) processes estimated with Prais-Winsten transformation. \* *p*<0.1; \*\* *p*<0.05; \*\*\* *p*<0.01.

# Appendix 2: Robustness tests

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | Δ Wage share (quintiles) | | |  |
| **Marginal effect of deregulation of temporary employment,**  **given the following robustness tests:** | Bottom | Lower-middle | Middle | Upper-middle | Top |
| *Baseline results (Table 1)* | *-0.17\*\** | *-0.11\*\*\** | *-0.07\*\*\** | *-0.01* | *0.32\*\*\** |
| *(0.07)* | *(0.03)* | *(0.03)* | *(0.03)* | *(0.10)* |
| Wage shares of permanent employees only, ECM [N=60] | -0.41\*\*\* | -0.18\*\* | -0.12\*\* | 0.05 | 0.94\*\*\* |
| (0.11) | (0.07) | (0.05) | (0.05) | (0.20) |
| Wage shares of permanent employees only, no ECM (dep. var.: wage share level, no lagged dep. var.) [N=79] | -0.75\*\*\* | -0.40\*\*\* | -0.24\*\*\* | -0.02 | 1.07\*\*\* |
| (0.11) | (0.14) | (0.09) | (0.06) | (0.35) |
| Controlling for the share of temporary workers [N=148] | -0.15\*\* | -0.11\*\*\* | -0.08\*\*\* | -0.02 | 0.35\*\*\* |
| (0.07) | (0.04) | (0.03) | (0.03) | (0.12) |
| LIS wave dummies added | -0.21\*\*\* | -0.11\*\*\* | -0.07\*\* | 0.01 | 0.37\*\*\* |
| (0.07) | (0.04) | (0.03) | (0.03) | (0.11) |
| Year dummies added | -0.19\*\*\* | -0.16\*\*\* | -0.10\*\*\* | -0.01 | 0.49\*\*\* |
| (0.06) | (0.04) | (0.03) | (0.03) | (0.10) |
| Weights adjusted to force that each country weighs equally | -0.16\*\* | -0.11\*\*\* | -0.06\*\*\* | -0.02 | 0.32\*\*\* |
| (0.07) | (0.04) | (0.03) | (0.03) | (0.11) |
| Controlling for unemployment benefit replacement rates [N=145] | -0.15\*\* | -0.08\*\* | -0.06\*\* | -0.01 | 0.21\*\* |
| (0.06) | (0.03) | (0.03) | (0.03) | (0.09) |
| Logarithm of temporary employment regulation (due to right skew)  [coefficient\*-1 to reflect deregulation] | -0.34\*\*\* | -0.25\*\*\* | -0.13\*\*\* | 0.03 | 0.64\*\*\* |
| (0.09) | (0.05) | (0.04) | (0.04) | (0.14) |
|  |  |  |  |  |  |
| *Alternative dependent variable:* |  |  |  |  |  |
|  | Δ Wage decile ratios | | |  |
|  | P90/P10 | P90/P50 | P50/P10 |  |
| ECM without country fixed effects |  | 0.14\*\*\* | 0.02\*\*\* | 0.05\*\* |  |
|  | (0.04) | (0.01) | (0.02) |  |
| ECM with country fixed effects |  | 0.19\*\*\* | 0.02\* | 0.07\*\*\* |  |
|  | (0.06) | (0.01) | (0.02) |  |

*Note*: Robustness tests based on Table 1 with sample size N=166 (unless noted otherwise). OLS estimates with panel-heteroskedastic standard errors (in parentheses) and panel-specific AR(1) processes estimated with Prais-Winsten transformation. \* p<0.1; \*\* p<0.05; \*\*\* p<0.01.