Online Appendix of the article:

**The Contexts of Electoral Accountability:**

**Electoral Integrity Performance Voting in 23 Democracies**

Published in *Government and Opposition: An International Journal of Comparative Politics*

(Author: Andrea Fumarola)

Coding of variables

*Individual level variables*

**Vote intention (V228)**: "If there were a national election tomorrow, for which party on this list would you vote?" (Vote for opposition parties = 0) (Vote for government parties = 1).

**Vote count (V228A)**: "In your view, how often do the following things occur in this country’s elections? Votes are counted fairly: Very often, fairly often, not often, not at all often?" (Very often = 4) (Fairly often = 3) (Not often = 2) (Not at all often = 1).

**Media coverage (V228E)**: "In your view, how often do the following things occur in this country’s elections? Journalists provide fair coverage of elections: Very often, fairly often, not often, not at all often?" (Very often = 4) (Fairly often = 3) (Not often = 2) (Not at all often = 1).

**Election officials (V228F)**: "In your view, how often do the following things occur in this country’s elections? Election officials are fair: Very often, fairly often, not often, not at all often?" (Very often = 4) (Fairly often = 3) (Not often = 2) (Not at all often = 1).

**Electoral competition (V228I)**: "In your view, how often do the following things occur in this country’s elections? Voters are offered a genuine choice in the elections: Very often, fairly often, not often, not at all often?" (Very often = 4) (Fairly often = 3) (Not often = 2) (Not at all often = 1).

**Gender (V240)**: coded as (Male=1) (Female=2)

**Age of respondent (V242):** no code

**Education (V248):** “What is the highest educational level that you have attained?” (No formal education = 1) (Incomplete primary school = 2) (Complete primary school = 3) (Incomplete secondary school: technical/vocational type = 4) (Complete secondary school: technical/vocational type = 5) (Incomplete secondary school: university-preparatory type = 6) (Complete secondary school: university-preparatory type = 7) (Some university-level education without degree = 8) (University-level education with degree = 8)

**Political interest (V84):** “How interested would you say you are in politics: Very interested, somewhat interested, not very interested, not at all interested?” (4 = Vey interested) (3 = Somewhat interested) (2 = Not very interested) (1 = Not at all interested)

**Partisanship (V29):** "Could you tell me whether you are an active member, an inactive member or not a member of a political party?" (Not a member=0) (Inactive/Active member=1)

*Contextual Variables*

**Government clarity** is based on an additive index measuring government responsibility. It is built on three important features of government responsibility: parliamentary support (minority government = 0) (majority government = 1); diversion of power (coalition government = 0) (single-party government = 1); government stability (less than two years in power = 0) (two or more years in power = 1). For each aspect considered clear 1 point is assigned. Scores for each aspect are then summarized and divided by three. Consequently, countries are coded as having values ranging from 0 (low clarity) to 1 (high clarity).

**Press freedom** is based on Reporters without Borders’ World Press Freedom Index. This index ranks each country on a scale from 0 to 100 according to their media system, with 0 being the best possible score and 100 the worst. We inverted the original index so that: (Highly free = 100) (Not at all free = 0)

**Unemployment** is taken from World Development Indicators (World Bank WDI 2015).

**Corruption** is measured using the reversed Transparency International’s Corruption Perception Index (CPI), so that higher values - on a 0-100 scale - indicate more corrupted countries.

TABLE A.1. SUMMARY STATISTICS AND OPERATIONALIZATION

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | Description | N | Code | Mean | SD | Min | Max | S.E. |
| *Dependent variable* | | | | | | | | |
| V228 | National vote intention | 19893 | 0-1 | 0.46 | 0.50 | 0 | 1 | 0.00 |
| *Independent individual-level variables* | | | | | | | | |
| PEI | Individual perceptions of electoral integrity (see Table 1) | 19893 | 0-10 | 5.41 | 3.10 | 0 | 10 | 0.02 |
| V228A | Votes are counted fairly | 19893 | 1-4 | 2.96 | 0.98 | 1 | 4 | 0.01 |
| V228E | Journalists provide fair coverage of elections | 19893 | 1-4 | 2.82 | 0.94 | 1 | 4 | 0.01 |
| V228F | Election officials are fair | 19893 | 1-4 | 2.83 | 0.97 | 1 | 4 | 0.01 |
| V228I | Voters are offered a genuine choice in the elections | 19893 | 1-4 | 2.92 | 0.97 | 1 | 4 | 0.01 |
| V29 | Partisanship | 19893 | 0-1 | 0.26 | 0.44 | 0 | 1 | 0.00 |
| V84 | Political Interest | 19893 | 1-4 | 2.55 | 0.97 | 1 | 4 | 0.01 |
| V242 | Age | 19893 | - | 41.39 | 16.62 | 16 | 98 | 0.12 |
| V248 | Highest attained educational level | 19893 | 1-9 | 5.68 | 2.31 | 1 | 9 | 0.02 |
| V240 | Gender | 19893 | 1-2 | 1.52 | 0.50 | 1 | 2 | 0.00 |
| *Independent country-level variables* | | | | | | | | |
| CLARITY | Government clarity | 23 | 0-1 | 0.67 | 0.31 | 0 | 1 | 0.00 |
| FREEPRESS | World press freedom index | 23 | 0-100 | 73.00 | 12.83 | 49 | 94 | 0.09 |
| CORRUPTION | Corruption perception index | 23 | 0-100 | 53.02 | 19.91 | 15 | 79 | 0.14 |
| UNEMPLOYMENT | Annual % Unemployment rate | 23 | - | 9.13 | 4.66 | 3.2 | 19.2 | 0.03 |

TABLE A.2. SAMPLE

|  |  |  |
| --- | --- | --- |
| Country | Survey year | Respondents |
| Argentina | 2013 | 430 |
| Australia | 2012 | 914 |
| Brazil | 2014 | 377 |
| Chile | 2011 | 347 |
| Colombia | 2012 | 654 |
| Estonia | 2011 | 869 |
| Georgia | 2014 | 385 |
| Germany | 2013 | 1405 |
| Ghana | 2011 | 1130 |
| India | 2014 | 1061 |
| Kyrgyzstan | 2011 | 1161 |
| Mexico | 2012 | 1328 |
| Netherlands | 2012 | 1056 |
| Nigeria | 2011 | 1590 |
| Pakistan | 2012 | 1049 |
| Peru | 2012 | 529 |
| Philippines | 2012 | 937 |
| Poland | 2012 | 442 |
| Romania | 2012 | 669 |
| South Africa | 2013 | 2066 |
| Taiwan | 2012 | 776 |
| Tunisia | 2013 | 283 |
| Uruguay | 2011 | 435 |
| Total |  | **19893** |

Note: Sample: Democracies in World Values Survey 6 with – 23 countries

TABLE A.3. SAMPLE COUNTRIES AND CONTEXTUAL VARIABLES

|  |  |  |  |
| --- | --- | --- | --- |
| Country | Survey year | Government Clarity | Press Freedom Index |
| Argentina | 2013 | 1 | 75 |
| Australia | 2012 | 0.66 | 85 |
| Brazil | 2014 | 0.66 | 68 |
| Chile | 2011 | 0.33 | 74 |
| Colombia | 2012 | 0.66 | 63 |
| Estonia | 2011 | 0.33 | 91 |
| Georgia | 2014 | 1 | 72 |
| Germany | 2013 | 0.66 | 90 |
| Ghana | 2011 | 1 | 83 |
| India | 2014 | 0.66 | 60 |
| Kyrgyzstan | 2011 | 0.33 | 68 |
| Mexico | 2012 | 0.66 | 55 |
| Netherlands | 2012 | 0 | 94 |
| Nigeria | 2011 | 1 | 66 |
| Pakistan | 2012 | 0.33 | 49 |
| Peru | 2012 | 1 | 68 |
| Philippines | 2012 | 0.66 | 57 |
| Poland | 2012 | 0.66 | 87 |
| Romania | 2012 | 0 | 77 |
| South Africa | 2013 | 1 | 77 |
| Taiwan | 2012 | 1 | 76 |
| Tunisia | 2013 | 0.66 | 62 |
| Uruguay | 2011 | 1 | 84 |

Table A.4. Alternative OPERATIONALIZATION OF THE DEPENDENT VARIABLE (ELECTORAL INTEGRITY)

|  |  |
| --- | --- |
|  | MODEL 1A |
| INDIVIDUAL-LEVEL VARIABLES |  |
| PEI Index (aggregate level) | 0.065\*\* (0.025) |
|  |  |
| CONTROL VARIABLES |  |
| Education level | -0.025\*\*\* (0.007) |
| Political interest | 0.068\*\*\* (0.017) |
| Gender | -0.058 (0.031) |
| Age | -0.002\* (0.001) |
| Unemployment | -0.140\*\*\* (0.029) |
| Corruption | 0.029\* (0.013) |
|  |  |
| Intercept | -4.039 (2.190) |
| Variance (countries) | 0.394 |
| Rho | 0.11 |
|  |  |
| N: countries | 23 |
| N: individuals | 19893 |
| Log Likelihood | -12402.2 |
| Akaike Information Criterion (AIC) | 24822.4 |

Notes: Dependent variable: National vote intention for incumbent government parties (0-1)

Standard errors in parentheses. Coefficients: \**p ≤* 0.05; \*\**p ≤* 0.01; \*\*\**p ≤* 0.001

Table A.5. Alternative operationalization of economic performance (FULL MODEL)

|  |  |  |
| --- | --- | --- |
|  | MODEL 7 | Unemployment | MODEL 8 | GDP growth |
|  |  |  |
| INDIVIDUAL-LEVEL VARIABLES |  |  |
| Perceptions of Electoral Integrity (pei) | -0.579\*\*\* (0.038) | -0.580\*\*\* (0.038) |
| Partisanship | 0.719\*\*\* (0.083) | 0.720\*\*\* (0.083) |
|  |  |  |
| COUNTRY-LEVEL VARIABLES |  |  |
| Government clarity | -1.532\*\* (0.512) | -1.581\* (0.678) |
| Press Freedom Index | -0.029 (0.020) | -0.039 (0.025) |
|  |  |  |
| INTERACTION TERMS |  |  |
| Pei \* Partisanship | -0.195\*\*\* (0.013) | -0.196\*\*\* (0.013) |
| Pei \* Clarity | 0.407\*\*\* (0.021) | 0.408\*\*\* (0.021) |
| Pei \* Freepress | 0.010\*\*\* (0.000) | 0.010\*\*\* (0.000) |
|  |  |  |
| CONTROL VARIABLES |  |  |
| Education level | -0.045\*\*\* (0.008) | -0.044\*\*\* (0.008) |
| Political Interest | 0.065\*\*\* (0.019) | 0.065\*\*\* (0.019) |
| Gender | -0.069\* (0.034) | -0.070\* (0.034) |
| Age | -0.004\*\*\* (0.001) | -0.004\*\*\* (0.001) |
| Corruption | 0.029\* (0.013) | 0.016 (0.018) |
| National economy | 0.126\*\*\* (0.033) | 0.014 (0.058) |
|  |  |  |
| Intercept | 1.168 (1.957) | 1.393 (2.574) |
|  |  |  |
| Variance (Countries) | 0.521 | 0.857 |
| Variance (pei) | 0.102 | 0.103 |
| Rho | 0.13 | 0.15 |
|  |  |  |
| N: countries | 23 | 23 |
| N: individuals | 19893 | 19893 |
| Log Likelihood | -10530.2 | -10535.8 |
| Akaike Information Criterion (AIC) | 21090.4 | 21101.6 |
|  |  |  |

Notes: Dependent variable: National vote intention for incumbent government parties (0-1). Standard errors in parentheses. Coefficients: \**p ≤* 0.05; \*\**p ≤* 0.01; \*\*\**p ≤* 0.001

Table A.6. Fixed-effects models of incumbent voting

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | MODEL 1B | MODEL 2B | MODEL 3B | MODEL 4B |
|  |  |  |  |  |
| INDIVIDUAL-LEVEL VARIABLES |  |  |  |  |
| Perceptions of Electoral Integrity (pei) | 0.220\*\*\* (0.005) | 0.272\*\*\* (0.007) | 0.112\*\*\* (0.012) | 0.042 (0.031) |
| Partisanship |  | 0.661\*\*\* (0.072) |  |  |
|  |  |  |  |  |
| COUNTRY-LEVEL VARIABLES |  |  |  |  |
| Government clarity |  |  |  |  |
| Press Freedom Index |  |  |  |  |
|  |  |  |  |  |
| INTERACTION TERMS |  |  |  |  |
| Pei \* Partisanship |  | -0.162\*\*\* (0.011) |  |  |
| Pei \* Clarity |  |  | 0.153\*\*\* (0.017) |  |
| Pei \* Freepress |  |  |  | 0.002\*\*\* (0.000) |
|  |  |  |  |  |
| CONTROL VARIABLES |  |  |  |  |
| Education level | -0.014\* (0.007) | -0.014\* (0.007) | -0.012 (0.007) | -0.026\*\*\* (0.007) |
| Political Interest | 0.008 (0.016) | 0.026 (0.016) | 0.015 (0.016) | -0.012 (0.016) |
| Gender | -0.071\* (0.031) | -0.068\* (0.031) | -0.070\* (0.031) | -0.050 (0.031) |
| Age | -0.002 (0.001) | -0.002 (0.001) | -0.001 (0.001) | -0.002\* (0.001) |
| Unemployment | -0.090\*\*\* (0.004) | -0.090\*\*\* (0.004) | -0.085\*\*\* (0.004) | -0.108\*\*\* (0.003) |
| Corruption | 0.022\*\*\* (0.001) | 0.025\*\*\* (0.001) | 0.020\*\*\* (0.001) | 0.039\*\*\* (0.002) |
|  |  |  |  |  |
| Intercept | -1.503\*\*\* (0.115) | -1.893\*\*\* (0.119) | -1.013\*\*\* (0.134) | -3.351\*\*\* (0.257) |
|  |  |  |  |  |
| FIXED EFFECT |  |  |  |  |
| Country-level | yes | yes | yes | yes |
|  |  |  |  |  |
| N: countries | 23 | 23 | 23 | 23 |
| N: individuals | 19893 | 19893 | 19893 | 19893 |
| Log Likelihood | -12466.3 | -12338.7 | -12419.1 | -12354.7 |
| Akaike Information Criterion (AIC) | 24948.5 | 24697.5 | 24858.2 | 24729.3 |
|  |  |  |  |  |

Notes: Dependent variable: National vote intention for incumbent government parties (0-1)

Standard errors in parentheses. Coefficients: \**p ≤* 0.05; \*\**p ≤* 0.01; \*\*\**p ≤* 0.001

Table A.7. Alternative MODELS SPECIFICATION. Control for THE Level of democracy

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | MODEL 1C | MODEL 2C | MODEL 3C | MODEL 4C |
|  |  |  |  |  |
| INDIVIDUAL-LEVEL VARIABLES |  |  |  |  |
| Perceptions of Electoral Integrity (pei) | 0.240\*\*\* (0.006) | 0.298\*\*\* (0.007) | 0.097\*\*\* (0.014) | -0.389\*\*\* (0.036) |
| Partisanship |  | 0.594\*\*\* (0.077) |  |  |
|  |  |  |  |  |
| COUNTRY-LEVEL VARIABLES |  |  |  |  |
| Government clarity |  |  | -1.048\* (0.507) |  |
| Press Freedom Index |  |  |  | -0.056\*\* (0.020) |
|  |  |  |  |  |
| INTERACTION TERMS |  |  |  |  |
| Pei \* Partisanship |  | -0.174\*\*\* (0.012) |  |  |
| Pei \* Clarity |  |  | 0.313\*\*\* (0.019) |  |
| Pei \* Freepress |  |  |  | 0.010\*\*\* (0.001) |
|  |  |  |  |  |
| CONTROL VARIABLES |  |  |  |  |
| Education Level | -0.036\*\*\* (0.008) | -0.036\*\*\* (0.008) | -0.040\*\*\* (0.008) | -0.049\*\*\* (0.008) |
| Political Interest | 0.039\* (0.017) | 0.065\*\*\* (0.018) | 0.047\*\* (0.018) | 0.037\* (0.018) |
| Gender | -0.055 (0.032) | -0.050 (0.032) | -0.075\* (0.035) | -0.072\* (0.034) |
| Age | -0.002\* (0.001) | -0.002 (0.001) | -0.003\*\*\* (0.001) | -0.004\*\*\* (0.001) |
| Unemployment | -0.098\*\* (0.031) | -0.097\*\* (0.033) | -0.128\*\*\* (0.034) | -0.134\*\* (0.041) |
| Level of Democracy (Polity IV) | -0.236\* (0.092) | -0.259\*\* (0.097) | -0.111 (0.103) | -0.154 (0.154) |
|  |  |  |  |  |
| Intercept | 1.729 (0.928) | 1.597 (0.972) | 1.638 (1.124) | 5.312\*\*\* (1.336) |
| Variance (countries) | 0.434 | 0.473 | 0.525 | 0.737 |
| Variance (pei) | - | - | 0.102 | 0.104 |
| Rho | 0.19 | 0.16 | 0.13 | 0.15 |
|  |  |  |  |  |
| N: countries | 23 | 23 | 23 | 23 |
| N: individuals | 19893 | 19893 | 19893 | 19893 |
| Log Likelihood | -11889.5 | -11731.5 | -10897.9 | -10839.5 |
| Akaike Information Criterion (AIC) | 23797.0 | 23485.0 | 21817.9 | 21700.9 |
|  |  |  |  |  |

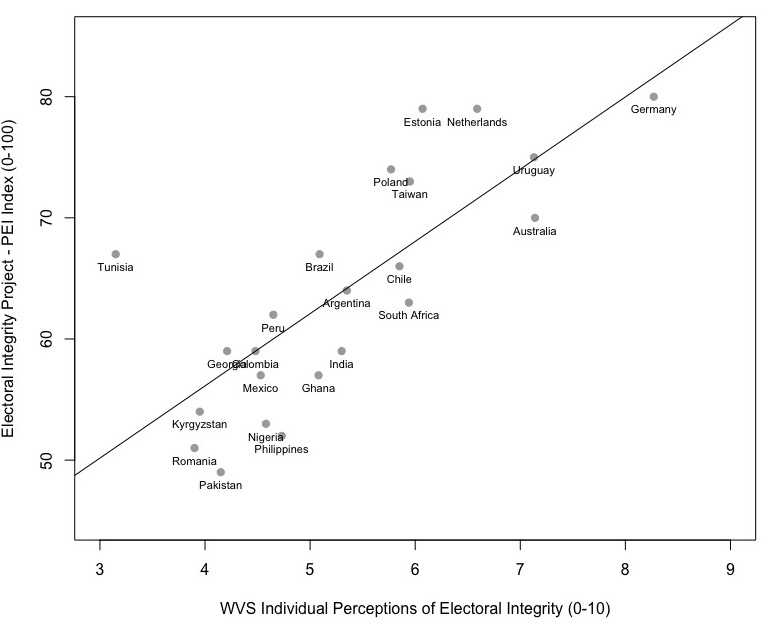
Notes: Dependent variable: National vote intention for incumbent government parties (0-1)

Standard errors in parentheses. Coefficients: \**p ≤* 0.05; \*\**p ≤* 0.01; \*\*\**p ≤* 0.001

TABLE A.8. ROBUSTNESS CHECK FOR CROSS-LEVEL INTERACTIONS (MODEL 3 AND MODEL 4). COUNTRY-WISE JACKKNIFE

|  |  |  |
| --- | --- | --- |
| Excluded country | Model 3 (Government clarity) | Model 4 (Media freedom) |
| Original model | **0.313\*\*\* (0.019)** | **0.010\*\*\* (0.001)** |
| Argentina | 0.332\*\*\*(0.019) | 0.010\*\*\* (0.001) |
| Australia | 0.314\*\*\*(0.019) | 0.010\*\*\* (0.001) |
| Brazil | 0.314\*\*\*(0.019) | 0.010\*\*\* (0.001) |
| Chile | 0.318\*\*\*(0.019) | 0.010\*\*\* (0.001) |
| Colombia | 0.315\*\*\*(0.019) | 0.010\*\*\* (0.001) |
| Estonia | 0.314\*\*\*(0.019) | 0.012\*\*\* (0.001) |
| Georgia | 0.316\*\*\*(0.019) | 0.010\*\*\* (0.001) |
| Germany | 0.306\*\*\*(0.019) | 0.008\*\*\* (0.001) |
| Ghana | 0.223\*\*\*(0.019) | 0.008\*\*\* (0.001) |
| India | 0.314\*\*\*(0.019) | 0.010\*\*\* (0.001) |
| Kyrgyzstan | 0.325\*\*\*(0.019) | 0.010\*\*\* (0.001) |
| Mexico | 0.316\*\*\*(0.019) | 0.010\*\*\* (0.001) |
| Netherlands | 0.356\*\*\*(0.022) | 0.013\*\*\* (0.001) |
| Nigeria | 0.390\*\*\*(0.021) | 0.010\*\*\* (0.001) |
| Pakistan | 0.296\*\*\*(0.020) | 0.010\*\*\* (0.001) |
| Peru | 0.276\*\*\*(0.019) | 0.010\*\*\* (0.001) |
| Philippines | 0.318\*\*\*(0.019) | 0.009\*\*\* (0.001) |
| Poland | 0.310\*\*\*(0.019) | 0.009\*\*\* (0.001) |
| Romania | 0.304\*\*\*(0.021) | 0.010\*\*\* (0.001) |
| South Africa | 0.364\*\*\*(0.020) | 0.010\*\*\* (0.001) |
| Taiwan | 0.287\*\*\*(0.019) | 0.009\*\*\* (0.001) |
| Tunisia | 0.313\*\*\*(0.019) | 0.010\*\*\* (0.001) |
| Uruguay | 0.300\*\*\*(0.019) | 0.009\*\*\* (0.001) |

FIGURE A.1. ELECTORAL INTEGRITY: INDIVIDUAL PERCEPTIONS AND EXPERT EVALUATIONS



Note: Correlation test, r = 0.762\*\*\* (p ≤ 0.001); N = 23

Data: PEI 5.0