APPENDIX

**Table A: Sample of countries and elections**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Country | First Cycle | Last Cycle | # of Electoral Cycles | Country | First Cycle | Last Cycle | # of Electoral Cycles |
| Argentina | 1993-95 | 2003-05 | 11 | Japan | 1979-80 | 1996-2000 | 7 |
| Armenia | 1999-2003 | 2003-07 | 2 | Latvia | 1993-95 | 2010-11 | 6 |
| Australia | 1977-80 | 2007-10 | 12 | Lithuania | 1992-96 | 2004-08 | 4 |
| Austria | 1979-93 | 2006-08 | 9 | Luxembourg | 1979-84 | 2004-09 | 6 |
| Bahamas | 2002-07 | -- | 1 | Macedonia | 2002-06 | 2008-11 | 3 |
| Belgium | 1978-81 | 2007-10 | 9 | Malawi | 1994-99 | 1999-04 | 2 |
| Bolivia | 1979-80 | 2005-05 | 7 | Malta | 1976-81 | 2003-08 | 7 |
| Brazil | 1986-90 | 2006-10 | 6 | Mexico | 1985-88 | 2006-09 | 8 |
| Bulgaria | 1990-94 | 2005-09 | 6 | Moldova | 1998-2001 | 2009-10 | 5 |
| Canada | 1979-80 | 2008-11 | 10 | Netherlands | 1977-81 | 2006-10 | 9 |
| Cape Verde | 1991-95 | 2006-11 | 4 | New Zealand | 1978-81 | 2008-11 | 11 |
| Chile | 1989-93 | 2005-09 | 5 | Nicaragua | 1990-96 | 2006-11 | 4 |
| Colombia | 1978-82 | 2002-06 | 8 | Norway | 1977-81 | 2005-09 | 8 |
| Costa Rica | 1978-82 | 2006-10 | 8 | Panama | 1994-99 | 2004-09 | 3 |
| Croatia | 1992-95 | 2005-09 | 5 | Peru | 1981-85 | 2006-11 | 7 |
| Cyprus | 1985-91 | 2006-11 | 5 | Poland | 1991-93 | 2007-11 | 6 |
| Czech Rep | 1990-92 | 2006-10 | 6 | Portugal | 1979-80 | 2009-11 | 11 |
| Denmark | 1979-81 | 2007-11 | 11 | Romania | 1990-92 | 2004-08 | 5 |
| Dominican Rep | 1978-82 | 2006-10 | 8 | Sierra Leone | 1996-02 | 2002-07 | 2 |
| Ecuador | 1979-84 | 2002-06 | 10 | Slovakia | 1990-92 | 2006-10 | 6 |
| El Salvador | 1985-88 | 2006-09 | 8 | Slovenia | 1992-96 | 2008-11 | 5 |
| Estonia | 1992-95 | 2007-11 | 5 | South Korea | 1988-92 | 2000-04 | 4 |
| Finland | 1979-83 | 2007-11 | 8 | Spain | 1979-82 | 2004-08 | 8 |
| France | 1979-81 | 2002-07 | 7 | Sri Lanka | 1989-94 | 2001-04 | 4 |
| Germany | 1976-80 | 2005-09 | 9 | Sweden | 1979-82 | 2006-10 | 9 |
| Greece | 1977-81 | 2007-09 | 11 | Switzerland | 1979-83 | 2007-11 | 8 |
| Guinea Bissau | 2004-08 | -- | 1 | Trinidad and Tobago | 1976-81 | 2007-10 | 9 |
| Hungary | 1990-94 | 2006-10 | 5 | Turkey | 1991-95 | 2007-11 | 5 |
| Iceland | 1979-81 | 2007-11 | 8 | Ukraine | 1994-98 | 2006-07 | 4 |
| Ireland | 1977-81 | 2007-11 | 9 | UK | 1979-83 | 2005-10 | 7 |
| Israel | 1977-81 | 1999-2003 | 7 | United States | 1978-80 | 2008-10 | 16 |
| Italy | 1979-83 | 2006-08 | 8 | Uruguay | 1984-89 | 2004-09 | 5 |
| Jamaica | 1976-80 | 2007-11 | 8 | Venezuela | 1978-83 | 2005-10 | 7 |

**Table B: Descriptive statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variable | Range | N | Mean | Standard Deviation |
| Total volatility | 0.25 to 73.6 | 448 | 19.23 | 14.38 |
| Endogenous Volatility  | 2.04 to 36.73 | 448 | 12.94 | 9.20 |
| Exogenous Volatility  | 0 to 40.21 | 448 | 6.47 | 7.31 |
| Effective number of electoral parties | 1.23 to 16.6 | 447 | 4.34 | 2.05 |
| Gallagher’s Disproportionality | 0.46 to 25.67 | 430 | 6.31 | 4.51 |
| Ethnic fractionalization  | 0.002 to 0.82 | 448 | 0.32 | 0.22 |
| Linguistic fractionalization | 0.002 to 0.81 | 437 | 0.22 | 0.19 |
| Real GDP per capita (Constant Prices: Chain series) | 452.6 to 70119.1 | 448 | 17196.6 | 11694.5 |
| GDP Growth (%) | -22.93 to 27.46 | 442 | 2.98 | 4.08 |
| Inflation (%) | -16.33 to 12338.6 | 442 | 95.57 | 748.78 |
| Year of Democratic Transition | 1869 to 2003 | 448 | 1952 | 41 |
| Years between Elections | 0 to 6 | 448 | 3.55 | 1.13 |
| *Categorical Variable* | *Range* | *N* | *Categories* | *Percentages* |
| Country’s regime type | 1-3 | 442 | Parliamentary Semi-presidential Presidential | 462232 |

**Table C: Explaining exogenous, endogenous and total volatilities**

**(models without the Effective number of electoral parties)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Model 1: Exogenous Volatility | Model 2: Endogenous Volatility | Model 3: Total Volatility |
| *Cross-national Variables* |  |  |  |
| Effective Number of Parties  | n.i. | n.i. | n.i. |
|  |  |  |  |
| Gallagher’s Disproportionality | 0.203 | -0.002 | 0.215 |
|  | (0.171) | (0.187) | (0.318) |
| GDP Growth (%) | -0.509 | -0.018 | -0.451 |
|  | (0.264) | (0.296) | (0.487) |
| Inflation (%) | 0.002 | 0.004 | 0.007 |
|  | (0.002) | (0.002) | (0.004) |
| Real GDP per capita (Log Constant Prices: Chain series) | -0.533 | -0.835 |   -1.217 |
|  | (1.150) | (1.283) | (2.129) |
| *Longitudinal Variables* |  |  |  |
| Effective Number of Parties | n.i | n.i | n.i |
|  |  |  |  |
| Gallagher’s Disproportionality  | 0.289\*\* | 0.314\*\* | 0.619\*\*\* |
|  | (0.088) | (0.109) | (0.156) |
| GDP Growth (%) | -0.023 | -0.391\*\*\* | -0.425\*\* |
|  | (0.078) | (0.097) | (0.138) |
| Inflation (%) | -0.000 | -0.001 | -0.001 |
|  | (0.000) | (0.001) | (0.001) |
| Real GDP per capita (Log Constant Prices: Chain series) | -1.460 | 1.508 | 0.180 |
|  | (1.348) | (1.673) | (2.394) |
| *Time Invariant variables* |  |  |  |
| Year of Democratic Transition | 0.054\* | 0.065\*\* | 0.122\*\* |
|  | (0.022) | (0.024) | (0.041) |
| Years between Elections | 0.932\*\* | 0.819\* | 1.610\*\* |
|  | (0.302) | (0.369) | (0.490) |
| Regime (ref.: parliamentarian) |  |  |  |
| Semi-presidential | 0.525 | 2.490 | 2.626 |
|  | (1.449) | (1.630) | (2.671) |
| Presidential | -1.788 | -1.507 | -3.531 |
|  | (1.790) | (1.966) | (3.330) |
| Ehnic Fractionalization  | 4.550 | 9.063\* | 13.122 |
|  | (4.194) | (4.581) | (7.814) |
| Language Fractionalization | -0.975 | 1.091 | 0.504 |
|  | (4.045) | (4.424) | (7.535) |
| Intercept | -98.915 | -112.353\* | -217.462\* |
|  | (51.006) | (56.253) | (94.760) |
| *Variance Components* |  |  |  |
| Country intercept | 15.7 | 17.3 | 56.1 |
| Electoral period intercept | 12.9 | 28.5 | 82.0 |
| Residual | 13.5 | 12.2 | 1.22 |
|  |  |  |  |
| Log-Likelihood | -1272.3 | -1350.9 | -1501.9 |
| Wald-Chi2 | 71.3\*\*\* | 110.4\*\*\* | 113.5\*\*\* |
| # of country/electoral cycles | 401 | 401 | 401 |
| # of electoral cycles | 23 | 23 | 23 |
| # of countries | 63 | 63 | 63 |

Standard errors in parentheses

\* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001