Appendices

This document contains the supplementary appendix for *Empowering Women in Central Banking*.

A Empirical Analysis: Additional Results

Descriptive Statistics

We report descriptive statistics in Table I.

Table I: Variable descriptions and descriptive statistics

Variable	Description	Obs	Mean	Sd	Min	Max
Women's appointment	Binary variable indicating whether at least one woman was appointed to the governing board of the central bank (Masciandaro, Profeta and Romelli, 2023).	1336	0.148	0.356	0.000	1.000
Financial crisis	Binary variable indicating the incidence of any financial crisis (Laeven and Valencia, 2013)	1214	0.030	0.172	0.000	1.000
Sovereign debt crisis	Binary variable indicating the incidence of a sovereign debt crisis (Laeven and Valencia, 2013)	1214	0.006	0.076	0.000	1.000
Banking crisis	Binary variable indicating the incidence of a systemic banking crisis (Laeven and Valencia, 2013)	1214	0.011	0.103	0.000	1.000
Currency crisis	Binary variable indicating the incidence of a currency crisis (Laeven and Valencia, 2013)	1214	0.019	0.136	0.000	1.000
Women's dismissal	Binary indicator for whether at least one woman was dismissed from the governing board of the central bank (Masciandaro, Profeta and Romelli, 2023)	1336	0.118	0.322	0.000	1.000
Women's board share	Share of women in the central bank governing board (Masciandaro, Profeta and Romelli, 2023). This variable is always included with a one-year lag relative to women's appointment as the outcome variable.	1336	0.134	0.173	0.000	1.000
IMF program	Binary variable indicating whether a country is under an IMF program at any point in the year, drawn from the IMF Monitor Database (Kentikelenis, Stubbs and King, 2016)	1336	0.251	0.434	0.000	1.000
IMF program onset	Binary variable indicating whether a country is in its first year of an IMF program, drawn from the IMF Monitor Database (Kentikelenis, Stubbs and King, 2016)	1336	0.090	0.286	0.000	1.000
Ongoing IMF program	Binary variable indicating whether a country is in an IMF program and was in the same program any time in the previous year, drawn from the IMF Monitor Database (Kentikelenis, Stubbs and King, 2016)	1336	0.167	0.373	0.000	1.000
Government is led by a woman	Binary variable indicating whether the prime minister or president is a woman (Nyrup and Bramwell, 2020)	1270	0.080	0.271	0.000	1.000
Finance minister is a woman	Binary variable indicating whether the finance minister is a woman (Nyrup and Bramwell, 2020)	1268	0.054	0.227	0.000	1.000
Gender equality index	V-Dem Women's Political Empowerment Index (?), available from Quality of Government database (Teorell et al., 2021)	1258	0.768	0.171	0.100	0.971
Left-wing government	Binary variable capturing whether the government has a left-wing political ideology, drawn from the Database of Political Institutions (Teorell et al., 2021)	1287	0.273	0.446	0.000	1.000
GDP per capita	Natural logarithm of GDP per capita, drawn from the World Development Indicators (WDI, 2021)	1297	8.844	1.360	5.272	11.425
Political rights and civil liberties	Sum of Freedom House scores for political rights and civil liberties, rescaled as 14-PR-CL so that higher values indicate better democratic governance, drawn from Quality of Government dataset (Teorell et al., 2021)	1293	7.729	3.598	0.000	12.000
Foreign direct investment	Natural logarithm of foreign direct investment inflows in percent of GDP, drawn from the World Development Indicators (World Bank 2021)	1107	1.706	1.039	-3.471	4.620
Credit to government	Credit to government, drawn from the Global Financial Development Database (WDI, 2021)	1257	11.522	10.809	0.015	73.587
Credit to private sector	Credit to private sector, drawn from the Global Financial Development Database (WDI, 2021)	1291	59.309	47.120	0.186	308.978
Public-sector corruption	V-Dem public-sector corruption index (Coppedge et al., 2016)	1156	0.459	0.289	0.010	0.936
M2/GDP	Broad money (M2) in percent of GDP, drawn from the World Development Indicators (WDI, 2021)	1256	65.499	41.609	8.483	260.064
Inflation growth	Change in inflation, based on the CPI inflation rate, drawn from the World Development Indicators (WDI, 2021)	1263	1.967	1.120	-4.796	6.234

Table II: List of Countries

Aruba	Afghanistan	Angola
Albania	United Arab Emirates	Armenia
Australia	Bangladesh	Bulgaria
Bahamas	Bosnia and Herzegovina	Belarus
Belize	Bolivia	Brazil
Brunei Darussalam	Botswana	Canada
Switzerland	Chile	Democratic Republic of the Congo
Colombia	Costa Rica	Cuba
Czech Republic	Denmark	Dominican Republic
Algeria	Ethiopia	United Kingdom
Ghana	Honduras	Croatia
Hungary	Indonesia	India
Iran (Islamic Republic of)	Iceland	Israel
Jamaica	Jordan	Japan
Kenya	Cambodia	Republic of Korea
Kuwait	Lebanon	Sri Lanka
Lithuania	Latvia	Macao SAR
Morocco	Maldives	Mexico
Mauritania	Mauritius	Malaysia
Nigeria	Nicaragua	Norway
Nepal	New Zealand	Oman
Pakistan	Peru	Philippines
Papua New Guinea	Poland	Paraguay
Romania	Russian Federation	Saudi Arabia
Sudan	Singapore	Sierra Leone
Serbia	Slovakia	Slovenia
Sweden	Thailand	Trinidad and Tobago
Tunisia	Turkey	Tanzania
Ukraine	Uruguay	United States of America
Venezuela	Yemen	Zambia

Table III: Comparison of In-group and Out-group Means

Variable	In-group mean	Out-group mean	Difference	p-value
GDP per capita	8.741	8.267	0.475	0.030
Gini coefficient	39.149	40.683	-1.535	0.291
Population	16.304	14.388	1.916	0.000
Trade openness	67.918	66.087	1.831	0.747
FDI inflows	3.913	7.709	-3.796	0.005
Gender equality	0.757	0.715	0.042	0.124
Polyarchy index	0.564	0.480	0.084	0.030
Corruption index	0.482	0.575	-0.093	0.033
Quality of government	0.557	0.502	0.055	0.126
CBI index	0.615	0.652	-0.037	0.170

A Addressing Varying Modeling Assumptions

Table IV: Fixed-effects logit model

	(1)		(2)		(3)	
Financial crisis	0.520	(0.429)				
Sovereign debt crisis			1.629*	(0.897)	1.547*	(0.890)
Banking crisis			-0.485	(0.821)	-0.658	(0.853)
Currency crisis					0.600	(0.588)
Women's board share	-1.089	(0.846)	-1.107	(0.847)	-1.120	(0.850)
Women's dismissal	0.123	(0.247)	0.116	(0.248)	0.120	(0.248)
Observations	1185		1185		1185	
Countries	81		81		81	

Note: The dependent variable is 1 if any woman is appointed to the central bank governing board. Estimates are obtained using conditional-logit estimations with country-fixed effects and predictors (except dismissal) twice-lagged. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

B Additional results: Main analysis

Table V: Pseudo-Poisson maximum-likelihood model

	(1)		(2)		(3)	
Financial crisis	0.090	(0.404)				
Sovereign debt crisis			0.572**	(0.286)	0.573**	(0.284)
Banking crisis			-0.782	(1.014)	-0.824	(1.037)
Currency crisis					0.145	(0.550)
Women's board share	-2.062**	(0.808)	-2.026**	(0.796)	-2.032**	(0.806)
Women's dismissal	-0.148	(0.179)	-0.166	(0.184)	-0.164	(0.185)
Observations	902		902		902	

Note: The dependent variable counts the number of women appointed to the central bank governing board. Estimates are obtained using pseudo-Poisson maximum-likelihood with year- and country-fixed effects included and all predictors (except dismissal) once-lagged. Robust standard errors clustered on countries in parentheses. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

Table VI: Controlling for CBI

	(1)		(2)		(3)	
Sovereign debt crisis	0.378**	(0.149)	0.383*	(0.152)	0.336*	(0.176)
Central bank independence	0.403	(0.348)	0.421	(0.356)	0.415	(0.313)
Women's share in board	-0.368***	(0.131)	-0.385***	(0.133)	-0.367***	(0.130)
Women's dismissal from board	-0.027	(0.038)	-0.028	(0.038)	-0.046	(0.040)
Government is led by a woman			0.063	(0.062)	0.090	(0.059)
Finance minister is a woman			0.008	(0.061)	0.038	(0.065)
Gender Equality Index			0.158	(0.389)	0.170	(0.337)
Left-wing government			-0.033	(0.042)	-0.026	(0.042)
GDP per capita					0.238*	(0.140)
Political rights and civil liberties					0.025	(0.028)
Foreign direct investment					-0.019	(0.012)
Credit to government					0.005	(0.003)
Credit to private sector					0.000	(0.000)
Observations	1059		1043		953	
Countries	73		71		71	
Adjusted-R2	0.140		0.139		0.104	

The dependent variable is coded as 1 if at least one woman is appointed to the central bank governing board. Estimates are obtained using linear probability models with year- and country-fixed effects included. All right-hand side variables were included with a two-year lag. Robust standard errors clustered on countries in parentheses. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

Table VII: Different control variable specification

	(1)		(2)		(3)	
Sovereign debt crisis	0.327**	(0.160)	0.320**	(0.156)	0.402**	(0.166)
Women in parliament	0.001	(0.002)	0.001	(0.002)	0.001	(0.003)
Government led by a woman	0.057	(0.057)	0.048	(0.059)	0.056	(0.061)
Political rights and civil liberties			0.023	(0.023)	0.029	(0.026)
GDP per capita			-0.056	(0.106)	-0.039	(0.108)
Economic growth					0.005	(0.004)
Inflation					-0.033*	(0.019)
Trade openness					0.000	(0.001)
Financial globalization index					0.003	(0.003)
Observations	1161		1152		1110	
Countries	79		79		79	
Adjusted-R2	0.134		0.136		0.142	

The dependent variable is coded as 1 if at least one woman is appointed to the central bank governing board. Estimates are obtained using linear probability models with year- and country-fixed effects included. All right-hand side variables were included with a two-year lag. Robust standard errors clustered on countries in parentheses. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

Table VIII: Extended lag–lead structure

	(1)		(2)		(3)	
Sovereign debt crisis$_{t+2}$	0.313	(0.192)	0.331	(0.300)	0.509	(0.341)
Sovereign debt crisis$_{t+1}$	0.590***	(0.142)	0.666***	(0.169)	0.593***	(0.217)
Sovereign debt crisis	0.019	(0.110)	0.102	(0.138)	0.070	(0.103)
Sovereign debt crisis$_{t-1}$	0.463***	(0.081)	0.463***	(0.101)	0.403**	(0.166)
Sovereign debt crisis$_{t-2}$	0.228	(0.145)	0.361**	(0.141)	0.207	(0.189)
Banking crisis$_{t+2}$	0.032	(0.113)	0.039	(0.111)	0.109	(0.107)
Banking crisis$_{t+1}$	-0.043	(0.095)	-0.055	(0.099)	-0.051	(0.104)
Banking crisis	-0.108	(0.074)	-0.113	(0.078)	-0.071	(0.077)
Banking crisis$_{t-1}$	-0.162**	(0.069)	-0.161**	(0.069)	-0.102	(0.093)
Banking crisis$_{t-2}$	-0.019	(0.097)	-0.034	(0.101)	0.029	(0.098)
Women's share in board	-0.525***	(0.115)	-0.563***	(0.123)	-0.465***	(0.128)
Women's dismissal from board	-0.025	(0.042)	-0.031	(0.042)	-0.053	(0.041)
Government led by a woman			0.035	(0.076)	0.056	(0.077)
Finance minister is a woman			0.065	(0.075)	0.097	(0.080)
Gender Equality Index			-0.056	(0.344)	0.065	(0.331)
Left-wing government			-0.020	(0.037)	-0.016	(0.039)
GDP per capita					0.046	(0.151)
Political rights and civil liberties					0.011	(0.020)
Foreign direct investment					-0.019	(0.012)
Credit to government					0.002	(0.003)
Credit to private sector					0.000	(0.001)
Observations	1038		1006		915	
Countries	81		78		77	
Adjusted-R2	0.156		0.153		0.106	

The dependent variable is coded as 1 if at least one woman is appointed to the central bank governing board. Estimates are obtained using linear probability models with year- and country-fixed effects included. Control variables were included with a two-year lag. Robust standard errors clustered on countries in parentheses. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

Table IX: Placebo check: Determinants of women's dismissals

	(1)		(2)		(3)	
Sovereign debt crisis	-0.050	(0.102)	0.027	(0.124)	0.038	(0.157)
Women's share in board	0.572***	(0.167)	0.583***	(0.172)	0.665***	(0.147)
Government led by a woman			0.041	(0.033)	0.043	(0.037)
Finance minister is a woman			0.040	(0.063)	0.055	(0.075)
Gender Equality Index			0.265	(0.207)	0.093	(0.234)
Left-wing government			0.011	(0.020)	0.008	(0.023)
GDP per capita					0.115	(0.086)
Political rights and civil liberties					0.013	(0.012)
Foreign direct investment					-0.003	(0.011)
Credit to government					0.006**	(0.003)
Credit to private sector					0.000	(0.000)
Observations	1185		1148		1044	
Countries	81		78		77	
Adjusted-R2	0.131		0.131		0.129	

Note: The dependent variable is 1 if at least one woman is dismissed from the central bank governing board. Estimates are obtained using linear probability models with year- and country-fixed effects included. Robust standard errors clustered on countries in parentheses. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

Table X: Women's appointments to central banks and financial crises

	(1)		(2)		(3)	
Women's central bank appointment	0.017	(0.018)	0.012	(0.019)	0.019	(0.020)
Women's dismissal from board	-0.027**	(0.011)	-0.032***	(0.011)	-0.026**	(0.012)
Government is led by a woman			0.023	(0.021)	0.033	(0.022)
Finance minister is a woman			-0.054***	(0.018)	-0.057***	(0.018)
Gender Equality Index			-0.030	(0.125)	-0.051	(0.147)
Left-wing government			-0.022	(0.015)	-0.031*	(0.016)
GDP per capita					0.115*	(0.058)
Political rights and civil liberties					0.003	(0.005)
Foreign direct investment					0.016***	(0.006)
Credit to government					0.001	(0.001)
Credit to private sector					0.001**	(0.000)
Observations	1144		1106		983	
Countries	81		78		77	
Adjusted-R2	0.071		0.076		0.097	

Linear regression with two-way fixed effects. The dependent variable is binary and indicates the incidence of a financial crisis. All predictors are once-lagged. Robust standard errors clustered on countries in parentheses. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

Table XI: Women's appointments to central banks and IMF programs

	(1)		(2)		(3)	
Women's central bank appointment	0.040	(0.025)	0.036	(0.026)	0.044	(0.029)
Women's dismissal from board	0.021	(0.026)	0.019	(0.029)	0.008	(0.032)
Government led by a woman			0.070	(0.050)	0.066	(0.052)
Finance minister is a woman			-0.071	(0.053)	-0.141**	(0.066)
Gender Equality Index			0.435	(0.450)	0.177	(0.538)
Left-wing government			-0.091	(0.065)	-0.087	(0.067)
GDP per capita					-0.573**	(0.284)
Political rights and civil liberties					0.037	(0.028)
Foreign direct investment					-0.031*	(0.018)
Credit to government					0.007	(0.007)
Credit to private sector					0.002***	(0.001)
Observations	1336		1241		1021	
Countries	89		83		80	
Adjusted-R2	0.455		0.450		0.475	

Linear regression with two-way fixed effects. The dependent variable is binary and indicates whether the country is under an IMF program. All predictors lagged once. Robust standard errors clustered on countries in parentheses. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

Table XII: Women's appointments to central banks and central bank independence

	(1)		(2)		(3)	
Women's appointment	0.000	(0.002)	-0.00	(0.003)	0.001	(0.003)
Women's dismissal	0.007	(0.005)	0.006	(0.005)	0.005	(0.004)
Government led by a woman			0.002	(0.004)	0.003	(0.004)
Finance minister is a woman			-0.009*	(0.005)	-0.009	(0.006)
Gender equality index			0.015	(0.048)	0.004	(0.027)
Left-wing government			0.001	(0.010)	0.001	(0.011)
GDP per capita					0.022	(0.023)
Political rights and civil liberties					-0.003	(0.003)
Foreign direct investment					-0.003	(0.002)
Credit to government					-0.000	(0.000)
Credit to private sector					-0.000	(0.000)
Observations	1122		1070		936	
Countries	80		76		74	
Adjusted-R2	0.981		0.979		0.977	

The dependent variable is the Central Bank Independence index (Romelli, 2022). Linear regression with two-way fixed effects. Robust standard errors clustered on countries in parentheses. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

Table XIII: Change in political leadership and women's appointments to central banks

	Chief executives		Finance ministers	
	(1)	(2)	(3)	(4)
Political leadership transition	0.145* (0.081)	0.148* (0.078)	0.035 (0.062)	0.043 (0.069)
Women's dismissal	0.357*** (0.052)	0.375*** (0.053)	0.361*** (0.052)	0.380*** (0.054)
Women's board share	-0.476*** (0.164)	-0.585*** (0.146)	-0.482*** (0.166)	-0.596*** (0.149)
Gender equality index		0.087 (0.299)		0.091 (0.302)
Left-wing government		-0.005 (0.037)		-0.005 (0.037)
GDP per capita		0.107 (0.116)		0.103 (0.116)
Political rights and civil liberties		0.025 (0.022)		0.025 (0.022)
Foreign direct investment		0.003 (0.014)		0.003 (0.014)
Credit to government		0.002 (0.003)		0.002 (0.003)
Credit to private sector		-0.001** (0.000)		-0.001** (0.000)
Observations	1185	1018	1183	1016
Countries	85	80	85	80
Adjusted-R2	0.198	0.213	0.195	0.210

Linear regression with two-way fixed effects. The dependent variable is women's appointments to the central bank. Political leadership transition indicates a man-to-women change in the office indicated in the column header. Robust standard errors clustered on countries in parentheses. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

Table XIV: Sovereign debt crises, legal CBI provisions on government financing limitations, and women's appointments to central banks

	(1)		(2)		(3)	
Sovereign debt crisis	0.662***	(0.041)	0.703***	(0.054)	0.729***	(0.065)
Government financing prohibiton	-0.001	(0.070)	0.006	(0.068)	0.061	(0.110)
(Interaction)	-0.634***	(0.120)	-0.640***	(0.114)	-0.603***	(0.127)
Banking crisis	-0.140**	(0.068)	-0.133**	(0.066)	-0.092	(0.079)
(Interaction)	0.087	(0.133)	0.068	(0.129)	0.036	(0.125)
Women's share in board	-0.350***	(0.129)	-0.347**	(0.131)	-0.436***	(0.132)
Women's dismissal from board	-0.030	(0.039)	-0.036	(0.040)	-0.032	(0.045)
Government led by a woman			0.121**	(0.060)	0.123**	(0.061)
Finance minister is a woman			-0.069	(0.057)	-0.051	(0.058)
Gender Equality Index			0.194	(0.435)	0.232	(0.418)
Left-wing government			-0.026	(0.040)	-0.025	(0.042)
GDP per capita					0.206	(0.157)
Political rights and civil liberties					0.016	(0.028)
Foreign direct investment					0.011	(0.011)
Credit to government					0.004	(0.003)
Credit to private sector					-0.001**	(0.001)
Observations	1059		1043		937	
Countries	73		71		71	
Adjusted-R2	0.135		0.138		0.144	

The dependent variable is coded as 1 if at least one woman is appointed to the central bank governing board. Estimates are obtained using linear probability models with year- and country-fixed effects included. All right-hand side variables were included with a one-year lag. Robust standard errors clustered on countries in parentheses. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

Table XV: Sovereign debt crises, legal CBI provisions on financial sector regulation, and women's appointments to central banks

	(1)		(2)		(3)	
Sovereign debt crisis	0.664***	(0.041)	0.702***	(0.053)	0.726***	(0.065)
Financial regulation power	-0.281**	(0.111)	-0.301**	(0.118)	-0.341***	(0.094)
(Interaction)	-0.534***	(0.168)	-0.535***	(0.151)	-0.512***	(0.160)
Banking crisis	0.010	(0.115)	0.009	(0.109)	0.026	(0.130)
(Interaction)	-0.228*	(0.122)	-0.238**	(0.118)	-0.220	(0.138)
Women's share in board	-0.340***	(0.128)	-0.337**	(0.128)	-0.427***	(0.127)
Women's dismissal from board	-0.032	(0.039)	-0.038	(0.039)	-0.031	(0.045)
Government led by a woman			0.125**	(0.060)	0.127**	(0.061)
Finance minister is a woman			-0.073	(0.057)	-0.052	(0.058)
Gender Equality Index			0.273	(0.439)	0.255	(0.418)
Left-wing government			-0.034	(0.040)	-0.034	(0.043)
GDP per capita					0.216	(0.154)
Political rights and civil liberties					0.016	(0.027)
Foreign direct investment					0.010	(0.010)
Credit to government					0.004	(0.003)
Credit to private sector					-0.001**	(0.001)
Observations	1059		1043		937	
Countries	73		71		71	
Adjusted-R2	0.142		0.146		0.151	

The dependent variable is coded as 1 if at least one woman is appointed to the central bank governing board. Estimates are obtained using linear probability models with year- and country-fixed effects included. All right-hand side variables were included with a one-year lag. Robust standard errors clustered on countries in parentheses. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

Table XVI: Impending IMF programs and women central bankers

	(1)	(2)	(3)	(4)
IMF program	0.034			
	(0.030)			
IMF program onset		0.076*	0.062	0.079*
		(0.045)	(0.046)	(0.047)
Ongoing program		0.016	0.006	0.011
		(0.035)	(0.035)	(0.040)
Women's board share	-0.306***	-0.307***	-0.361***	-0.530***
	(0.086)	(0.087)	(0.106)	(0.121)
Women's dismissal	-0.030	-0.028	-0.034	-0.035
	(0.034)	(0.034)	(0.036)	(0.041)
Government led by a woman			0.069	0.058
			(0.055)	(0.054)
Finance minister is a woman			-0.058	-0.054
			(0.055)	(0.058)
Gender equality index			-0.224	-0.570*
			(0.308)	(0.338)
Left-wing government			-0.042	-0.021
			(0.032)	(0.033)
GDP per capita				0.034
				(0.140)
Political rights and civil liberties				0.016
				(0.022)
Foreign direct investment				0.004
				(0.015)
Credit to government				0.001
				(0.003)
Credit to private sector				-0.002***
				(0.001)
Observations	1302	1302	1212	994
Countries	89	89	83	80
Adjusted-R2	0.134	0.135	0.140	0.156

Note: The dependent variable is women's appointments to the central bank. Estimates are obtained using linear probability models with year- and country-fixed effects included. IMF program variables enter with a one-year lead. Robust standard errors clustered on countries in parentheses. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

Table XVII: Women's central bank leadership transitions in crisis episodes and monetary policy outcomes

	M2/GDP		Credit to government		Private credit		Inflation	
	(1)		(2)		(3)		(4)	
Transition to woman central banker(s)	-3.051**	(1.175)	-1.068	(0.779)	-3.650	(2.781)	-2.158***	(0.707)
Lagged dependent variable	0.750***	(0.101)	0.741***	(0.039)	0.680***	(0.035)	-0.069	(0.080)
Observations	208		211		213		192	
Countries	26		28		28		27	
Adjusted-R2	0.980		0.950		0.965		0.072	

The dependent variables are *M2/GDP*, *Government credit/GDP*, *Private-sector credit/GDP*, and *Inflation*. These were obtained from the World Bank's Development Indicator Database (WDI, 2021). The independent variable captures the transition to a woman central bank governor or co-governor. Estimates are obtained using standard two-way fixed effects models, including year- and country-fixed effects. Robust standard errors clustered on countries in parentheses. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.