Online Appendix for "When Do You Get Economists as Policy-Makers?"

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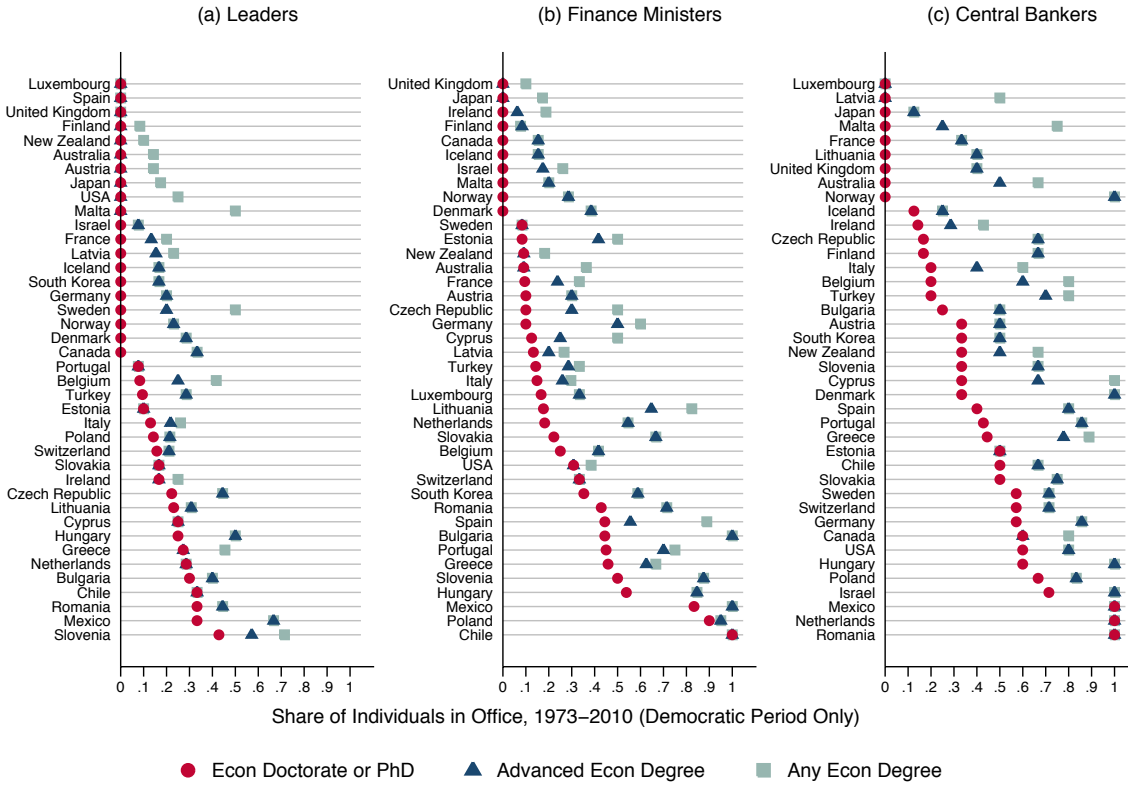
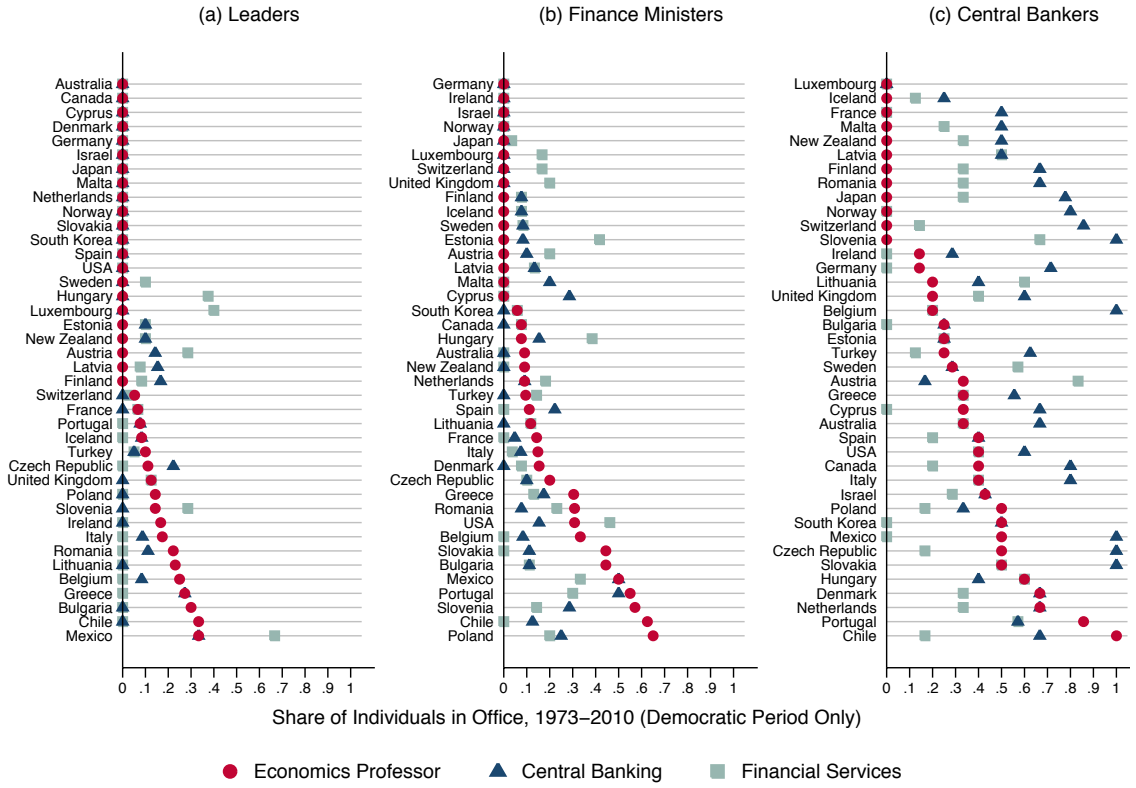
Figure A1: Economics Training by Category of Policy-Maker and Country



Note: The data appendix provides variable definitions and sources. Democratic years are defined as those with a positive Polity score. Years prior to the independence or creation of a country are excluded.

Figure A2: Occupational Background by Category of Policy-Maker and Country



Note: The data appendix provides variable definitions and sources. Democratic years are defined as those with a positive Polity score. Years prior to the independence or creation of a country are excluded.

Table A1: Economists as Policy-Makers, Conditional Logits

	(1)	(2)	(3)	(4)	(5)
	Adv Econ Degree	Econ PhD	Econ Professor	Central Banking	Financial Services
A. Finance Minister					
Crisis	-0.422	-0.106	0.150	0.572	-0.969**
	(0.414)	(0.439)	(0.502)	(0.367)	(0.472)
Left	0.353	1.556**	0.999	2.547**	-2.892**
	(0.617)	(0.696)	(0.864)	(1.174)	(1.157)
Observations	388	287	250	249	295
B. Head of Central Bank					
Crisis	1.227	0.622	0.824	0.464	-0.694
	(0.911)	(0.705)	(0.854)	(0.817)	(0.687)
Left	3.476**	-0.850	1.910	2.293	-0.367
	(1.684)	(1.440)	(1.535)	(1.551)	(1.298)
Observations	125	117	100	118	118

Notes: The estimates are from conditional (fixed effects) logit models with decade fixed effects (not reported). Standard errors clustered by country are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table A2: Economists as Policy-Makers, Banking Crisis Data from Reinhart and Rogoff (2009)

	(1) Adv Econ Degree	(2) Econ PhD	(3) Econ Professor	(4) Central Banking	(5) Financial Services
A. Finance Minister					
Crisis (RR)	-0.075	-0.004	-0.065	0.040	-0.105**
	(0.060)	(0.044)	(0.040)	(0.041)	(0.047)
Left	0.059	0.169*	0.147	0.214*	-0.258**
	(0.131)	(0.095)	(0.101)	(0.112)	(0.121)
R-squared	0.330	0.364	0.327	0.167	0.165
Observations	371	371	371	371	371
B. Head of Central Bank					
Crisis (RR)	0.124	0.230*	0.016	-0.050	0.038
	(0.100)	(0.118)	(0.128)	(0.162)	(0.112)
Left	0.335	-0.319	0.168	0.482	0.031
	(0.332)	(0.297)	(0.297)	(0.429)	(0.399)
R-squared	0.438	0.400	0.370	0.299	0.283
Observations	134	134	133	133	133

Notes: The estimates are from linear probability models with country and decade fixed effects (not reported). Standard errors clustered by country are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table A3: Economists as Policy-Makers, Broader Crisis Measure from Laeven and Valencia (2012)

	(1)	(2)	(3)	(4)	(5)
	Adv Econ Degree	Econ PhD	Econ Professor	Central Banking	Financial Services
A. Finance Minister					
Crisis (Broad)	-0.042	0.021	0.023	0.049	-0.108**
	(0.057)	(0.049)	(0.054)	(0.041)	(0.045)
Left	0.077	0.184**	0.106	0.212**	-0.272**
	(0.118)	(0.087)	(0.102)	(0.094)	(0.112)
R-squared	0.336	0.352	0.317	0.161	0.183
Observations	433	433	432	432	432
B. Head of Central Bank					
Crisis (Broad)	0.152	0.009	0.003	-0.026	-0.023
	(0.134)	(0.157)	(0.130)	(0.152)	(0.137)
Left	0.520*	-0.201	0.175	0.485	-0.093
	(0.296)	(0.298)	(0.240)	(0.352)	(0.324)
R-squared	0.434	0.372	0.385	0.336	0.280
Observations	156	156	155	155	155

Notes: The estimates are from linear probability models with country and decade fixed effects (not reported). Standard errors clustered by country are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table A4: Economists as Policy-Makers, Interactions

	(1) Adv Econ Degree	(2) Econ PhD	(3) Econ Professor	(4) Central Banking	(5) Financial Services
A. Finance Minister					
Crisis	0.042	0.193	-0.016	0.034	-0.056
	(0.148)	(0.150)	(0.078)	(0.097)	(0.117)
Left	0.112	0.259***	0.095	0.209**	-0.265**
	(0.116)	(0.083)	(0.101)	(0.096)	(0.107)
Left × Crisis	-0.279	-0.509	0.088	0.060	-0.119
	(0.367)	(0.330)	(0.168)	(0.251)	(0.215)
Left | Crisis = 1	-0.166	-0.250	0.184	0.269	-0.384
	(0.351)	(0.324)	(0.185)	(0.250)	(0.235)
R-squared	0.338	0.358	0.317	0.161	0.181
Observations	433	433	432	432	432
B. Head of Central Bank					
Crisis	-0.165	0.183	0.065	0.040	-0.560*
	(0.407)	(0.354)	(0.344)	(0.320)	(0.303)
Left	0.429	-0.195	0.172	0.455	-0.219
	(0.335)	(0.337)	(0.278)	(0.354)	(0.332)
Left × Crisis	0.703	-0.125	-0.025	0.106	0.929
	(0.757)	(0.680)	(0.601)	(0.821)	(0.687)
Left | Crisis = 1	1.132*	-0.320	0.148	0.561	0.710
	(0.653)	(0.576)	(0.519)	(.814)	(0.633)
R-squared	0.440	0.377	0.387	0.339	0.297
Observations	156	156	155	155	155

Notes: The estimates are from linear probability models with country and decade fixed effects (not reported). Standard errors clustered by country are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table A5: Economists as Finance Ministers, Expanded Controls

	(1)	(2)	(3)	(4)	(5)
	Adv Econ Degree	Econ PhD	Econ Professor	Central Banking	Financial Services
Crisis	-0.123	0.034	0.040	0.114	-0.151***
	(0.096)	(0.075)	(0.064)	(0.076)	(0.044)
Left	0.058	0.306**	0.233*	0.240**	-0.341***
	(0.177)	(0.118)	(0.135)	(0.092)	(0.110)
Debt	0.000	-0.001**	-0.001	-0.001	-0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Central Bank Independence	0.390	0.358**	0.333	0.062	0.070
	(0.247)	(0.172)	(0.202)	(0.149)	(0.143)
Coalition Government	0.062	0.099*	0.016	0.065	-0.024
	(0.065)	(0.051)	(0.051)	(0.047)	(0.066)
Political Constraints	-0.432	-0.083	0.418	-0.696**	-0.291
	(0.351)	(0.474)	(0.349)	(0.302)	(0.299)
Bureaucratic Quality	-0.161	-0.023	0.001	-0.020	-0.062
	(0.140)	(0.063)	(0.053)	(0.076)	(0.081)
Capital Account Openness	-0.221	-0.238**	-0.131	-0.166	-0.060
	(0.163)	(0.106)	(0.132)	(0.116)	(0.105)
R-squared	0.420	0.456	0.381	0.214	0.260
Observations	335	335	336	336	336

Notes: Finance ministers only. The estimates are from linear probability models with country and decade fixed effects (not reported). Standard errors clustered by country are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table A6: Economists as Central Bankers, Expanded Controls

	(1)	(2)	(3)	(4)	(5)
	Adv Econ Degree	Econ PhD	Econ Professor	Central Banking	Financial Services
Crisis	-0.034	0.164	-0.119	0.089	0.006
	(0.189)	(0.159)	(0.149)	(0.229)	(0.124)
Left	0.300	-0.277	0.236	0.741	0.121
	(0.330)	(0.351)	(0.271)	(0.470)	(0.462)
Debt	0.003	0.000	-0.001	0.001	-0.002
	(0.002)	(0.001)	(0.002)	(0.002)	(0.003)
Central Bank Independence	-0.163	-0.392	0.091	0.203	0.138
	(0.502)	(0.428)	(0.511)	(0.465)	(0.446)
Coalition Government	-0.102	-0.175	-0.088	-0.010	0.082
	(0.142)	(0.116)	(0.146)	(0.188)	(0.175)
Political Constraints	-0.568	-1.399	-2.194**	-2.592***	1.322
	(0.994)	(1.054)	(0.884)	(0.675)	(1.164)
Bureaucratic Quality	-0.435**	0.093	0.057	0.163	0.461**
	(0.211)	(0.219)	(0.195)	(0.231)	(0.180)
Capital Account Openness	-0.120	-0.429	-0.532	-0.556	0.327
	(0.332)	(0.430)	(0.319)	(0.363)	(0.407)
R-squared	0.566	0.534	0.428	0.442	0.411
Observations	115	115	114	114	114

Notes: Central bank heads only. The estimates are from linear probability models with country and decade fixed effects (not reported). Standard errors clustered by country are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table A7: Economists as Policy-Makers, Reduced Sample

	(1) Adv Econ Degree	(2) Econ PhD	(3) Econ Professor	(4) Central Banking	(5) Financial Services
A. Finance Minister					
Crisis	-0.005	-0.023	-0.042	-0.016	-0.113***
	(0.106)	(0.082)	(0.044)	(0.056)	(0.037)
Left	0.147	0.130	0.110	0.235	-0.262**
	(0.160)	(0.125)	(0.126)	(0.146)	(0.112)
R-squared	0.232	0.242	0.241	0.182	0.183
Observations	288	288	288	288	288
B. Head of Central Bank					
Crisis	0.149	0.135	-0.011	0.095	0.054
	(0.214)	(0.228)	(0.151)	(0.276)	(0.187)
Left	0.290	-0.300	0.193	0.336	-0.030
	(0.358)	(0.348)	(0.309)	(0.440)	(0.423)
R-squared	0.446	0.434	0.438	0.277	0.271
Observations	111	111	111	111	111

Notes: The sample contains policy-makers from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and the United States. The estimates are from linear probability models with country and decade fixed effects (not reported). Standard errors clustered by country are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table A8: Economists as Policy-Makers, Left Interacted with Debt

	(1) Adv Econ Degree	(2) Econ PhD	(3) Econ Professor	(4) Central Banking	(5) Financial Services
A. Finance Minister					
Crisis	-0.076	0.017	0.034	0.065	-0.095**
	(0.071)	(0.059)	(0.061)	(0.042)	(0.042)
Left	0.191	0.428**	0.201	0.122	-0.444**
	(0.202)	(0.158)	(0.222)	(0.170)	(0.188)
Left × Debt	-0.003	-0.004	-0.001	0.001	0.003
	(0.003)	(0.002)	(0.003)	(0.004)	(0.003)
Debt	0.002	0.001	0.001	-0.001	-0.001
	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)
R-squared	0.344	0.377	0.327	0.170	0.207
Observations	413	413	413	413	413
B. Head of Central Bank					
Crisis	0.064	0.083	0.066	0.085	-0.073
	(0.163)	(0.176)	(0.145)	(0.152)	(0.130)
Left	0.155	-0.980**	0.086	0.301	-0.870
	(0.636)	(0.475)	(0.413)	(0.612)	(0.603)
Left × Debt	0.003	0.010	0.001	0.004	0.012
	(0.008)	(0.006)	(0.005)	(0.011)	(0.009)
Debt	0.002	-0.001	0.000	-0.001	-0.006
	(0.002)	(0.003)	(0.003)	(0.005)	(0.005)
R-squared	0.457	0.403	0.396	0.368	0.300
Observations	145	145	144	144	144

Notes: The estimates are from linear probability models with country and decade fixed effects (not reported). Standard errors clustered by country are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table A9: Economists as Policy-Makers, Left Interacted with Political Constraints

	(1)	(2)	(3)	(4)	(5)
	Adv Econ Degree	Econ PhD	Econ Professor	Central Banking	Financial Services
A. Finance Minister					
Crisis	-0.063	-0.002	0.023	0.052	-0.098**
	(0.063)	(0.052)	(0.052)	(0.043)	(0.047)
Left	0.179	-0.351	0.071	1.039	0.149
	(0.727)	(0.631)	(0.679)	(0.814)	(0.399)
Left × Political Constraints	-0.288	1.201	0.108	-1.798	-0.867
	(1.569)	(1.413)	(1.464)	(1.648)	(0.824)
Political Constraints	-0.219	-0.488	-0.067	0.239	0.319
	(0.551)	(0.461)	(0.567)	(0.740)	(0.389)
R-squared	0.338	0.352	0.312	0.183	0.186
Observations	431	431	430	430	430
B. Head of Central Bank					
Crisis	0.159	0.124	0.064	0.087	-0.136
	(0.159)	(0.172)	(0.149)	(0.164)	(0.138)
Left	0.874	0.227	-0.199	0.600	0.290
	(1.048)	(1.176)	(0.939)	(1.447)	(1.372)
Left × Political Constraints	-0.843	-1.096	0.655	-0.274	-0.816
	(2.193)	(2.369)	(2.261)	(3.407)	(3.330)
Political Constraints	-0.180	-0.461	-1.180	0.129	0.767
	(0.766)	(1.039)	(0.898)	(1.203)	(1.107)
R-squared	0.441	0.395	0.422	0.334	0.290
Observations	155	155	154	154	154

Notes: The estimates are from linear probability models with country and decade fixed effects (not reported). Standard errors clustered by country are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table A10: Economics Training and the Appointment of Other Economists

	(1) Adv Econ Degree	(2) Econ PhD	(3) Econ Professor	(4) Central Banking	(5) Financial Services
A. Finance Minister					
Advanced Econ Degree (Leader)	-0.031	-0.018	0.025	0.084*	0.090**
	(0.076)	(0.055)	(0.063)	(0.044)	(0.042)
Advanced Econ Degree (Head of Central Bank)	0.027	0.017	0.089	0.007	0.010
	(0.043)	(0.049)	(0.060)	(0.049)	(0.040)
Crisis	-0.088	-0.018	0.029	0.047	-0.110**
	(0.065)	(0.050)	(0.049)	(0.037)	(0.054)
Left	0.061	0.180*	0.142	0.194**	-0.295***
	(0.110)	(0.090)	(0.099)	(0.093)	(0.102)
R-squared	0.345	0.357	0.330	0.173	0.198
Observations	425	425	425	425	425
B. Head of Central Bank					
Advanced Econ Degree (Leader)	-0.235**	-0.173**	-0.114	0.044	0.042
	(0.095)	(0.073)	(0.074)	(0.094)	(0.169)
Advanced Econ Degree (Finance Minister)	0.052	-0.117	-0.116	-0.115	-0.311*
	(0.120)	(0.126)	(0.122)	(0.146)	(0.156)
Crisis	0.141	0.153	0.082	0.121	-0.045
	(0.158)	(0.153)	(0.137)	(0.177)	(0.141)
Left	0.534*	-0.218	0.170	0.467	-0.088
	(0.276)	(0.304)	(0.232)	(0.337)	(0.312)
R-squared	0.461	0.399	0.401	0.345	0.333
Observations	156	156	155	155	155

Notes: The estimates are from linear probability models with country and decade fixed effects (not reported). Standard errors clustered by country are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Data Appendix

We present below information about our dataset. The first part of the table defines the independent variables of interest, the second covers our education measures, and the third our occupation measures.

Two research assistants separately coded each policy-maker. As much as possible, they used official sources to collect the information. The sources used include parliamentary archives; finance ministry and central bank websites; websites of international institutions including the European Parliament, European Commission, Organization for Economic Cooperation and Development (OECD), Club of Rome, European Investment Bank, and the United Nations; biographical encyclopedias, including Munzinger, Britannica, and national biographical databases; personal websites of politicians; and newspaper reports. Where no information was available, we wrote to the respective institution and asked for assistance. This was necessary especially for policy-makers from the 1970s.

Our educational background coding is based on the International Standard Classification of Education (ISCED) of the United Nations Educational, Scientific and Cultural Organization (UNESCO). Where an undergraduate degree combined two disciplines, we counted it as an economics education when it included the subject as a major. Degrees combining more than two disciplines including some economics — such as the "Politics, Philosophy and Economics" program at Oxford — are not coded as an economics qualification, since the minimum requirements for studying the subject are in our view too light. We also considered a wider definition of "economics" that included subjects such as accounting or business administration, but the number of individuals involved is small.

Name in Paper	Name in Dataset	Description	Coding	Source
A. Independent Variables				
Crisis	lvbankingall	Dummy variable for whether a country is in a banking crisis or not. Where available, this is dated monthly, otherwise yearly.	0 = no banking crisis; 1 = banking crisis.	Laeven and Valencia (2012). The monthly information is from the "Additional Data" tab of their dataset.
Left	rlpartypm_s	Codes how far left or right the political party of the prime minister or president is, overall, as determined by the Benoit-Laver expert survey in 2002. The original data are coded as follows: 1 = Left to 20 = Right. 55 = Independent; 88 = Transition/Caretaker government; 99 = unknown political party.	We standardise the scores to a theoretical range from 0 = right to 1 = left, with original scores above 20 coded as missing.	Benoit and Laver (2006).
Crisis (RR)	rrbankingcrisis	Dummy variable for whether a country is in a banking crisis or not.	0 = no banking crisis; 1 = banking crisis.	Reinhart and Rogoff (2009), dataset updated to 2010, http://www.carmenreinhart.com/data/browse-by-topic/topics/7/
Crisis (Broad)	lvanycrisis	Dummy variable for whether a country is in a banking, currency, and/or debt crisis or not. This measure uses annual information only.	0 = no crisis; 1 = any crisis.	Laeven and Valencia (2012).
Debt	imfpublicdebtgdp	Gross general government debt in percent of GDP. Where not available, especially for the period before 1980, central government data are reported.	Debt scaled to nominal GDP.	Abbas et al. (2010); 2011 version of the dataset.
Central Bank Independence	CBIweighted	Weighted version of the Cukierman index of central bank independence.	Ranges from 0 = not independent to 1 = full independence.	Bodea and Hicks (2015), based on Cukierman (1992).
Coalition Government	coalition	Dummy variable for coalition government, calculated from the govfrac variable in the World Bank's Database of Political Institutions.	0 = single-party government; 1 = coalition government.	Beck et al. (2001); 2012 version of the dataset.
Political Constraints	polconiii	Political Constraint Index (POLCON).	Ranges from 0 = no constraints to a maximum of .72 in our dataset.	Henisz (2002); 2017 version of the dataset.
Bureaucratic Quality	bureauquality	Bureaucratic Quality measure from the International Country Risk Guide (ICRG) database, including data for years prior to 1984. For France in 1976, we corrected the score to 4 (from 4.2).	Ranges from 0 = lowest to 4 = highest quality.	Data downloaded from the ICRG database in 2012 for Hallerberg and Scartascini (2015) and updated with data from Bayer and Urpelainen (2016).
Capital Account Openness	ka_open	Capital account openness, known as the Chinn-Ito Index, standardized to run between 0 and 1.	Ranges from 0 = closed to 1 = open.	Based on Chinn and Ito (2006); 2016 version of the dataset.

B. Education Variables				
Any Economics Degree	econdegreepm/fm/cb	Dummy variable for whether the leader/finance minister/central bank governor has any degree in economics, including the undergraduate, masters, or doctoral level; undergraduate degrees with two subjects one of which is economics are coded as economics undergraduate degrees.	0 = no degree; 1 = degree.	See introductory note.
Advanced Economics Degree	econdegreepm2/fm2/cb2	Dummy variable for whether the leader/finance minister/central bank governor has an advanced (graduate) degree in economics, including masters and/or PhD.	0 = no degree; 1 = degree.	See introductory note.
Economics Doctorate or PhD	econphdpm/fm/cb	Dummy variable for whether the leader/finance minister/central bank governor has a doctoral degree or PhD in economics.	0 = no PhD; 1 = PhD.	See introductory note.
C. Occupation Variables				
Economics Professor	econprofpm2/fm2/cb2	Dummy variable for whether the leader/finance minister/central bank governor's professional experiences prior to occupying the office include working as an academic economist in a university or a research institute.	0 = not an academic economist; 1 = academic economist.	See introductory note.
Central Banking	centralbankerpm2/fm2/cb2	Dummy variable for whether the leader/finance minister/central bank governor's professional experiences prior to occupying the office include working in a country's central bank.	0 = no central banking background; 1 = central banking background.	See introductory note.
Financial Services	privatefinancepm/fm/cb	Dummy variable for whether the leader/finance minister/central bank governor's professional experiences prior to occupying the office include working in a commercial bank or the financial services industry more widely. We combine these since some countries have universal banks.	0 = no financial services background; 1 = financial services background.	See introductory note.