Supplementary Appendices for "Are IMF Lending Programs Good or Bad for Democracy?"

The following is a summary of the appendices offering additional details on a number of robustness checks discussed in the main manuscript.

- **Supplementary Appendix A: Summary of Countries Included in the Analysis.** Table A1 provides a list of all the countries included in the analysis, the years they were included in the overall sample, as well as the years they were under an IMF program.
- **Supplementary Appendix B: Summary Statistics**. Tables B1 and B2 provide summary statistics for the main set of covariates used in the post-matched data sets that are used in the regression models for the Polity and Freedom House democracy outcomes (Tables 1 and 2 in the main paper).
- **Supplementary Appendix C: Studies of Determinants of IMF Program Participation that Include Democracy Measure(s) as a Covariate**. Table C1 describes findings from 22 statistical studies in which an indicator for regime type was included as a covariate of IMF program participation. In only 3 of the 22 studies was the democracy indicator a positive and significant determinant of IMF loans.
- **Supplementary Appendix D: Analysis using Alternative Matching Routines.** In order to ensure our results were not a function of the particular choice of the matching routine, we reran the matching procedures using several alternatives. Tables D1 and D2 report results from nearest neighbor matching with replacement using a logit estimator for the propensity score for the Polity and Freedom House indicators respectively. Tables D3 and D4 replicate the genetic matching routine used in the main analysis but without replacement. The results for the IMF program coefficient are substantively the same to those from the main analysis presented in the paper.
- **Supplementary Appendix E: Analysis Limited to Concessional IMF Loans.** To test for whether the relationship between IMF programs and democracy may differ for concessional loans in particular, we reran the analysis with the treatment group limited to countries that received a concessional IMF program in a given year. Because the IMF only began to offer conditional lending programs at concessional terms with the Structural Adjustment Fund in 1986, we limited the analysis from this starting year to 2007. Furthermore, we wanted to avoid inadvertently including other countries receiving non-concessional IMF lending in the sample, as this could bias the results. The control group thus involved countries that did not participate in any IMF lending arrangement for a given year over the time period in question. The results for both democracy measures are presented in Tables E1 and E2. Despite the significantly reduced sample size, the coefficient for IMF programs remains positive in both cases, and remains statistically significant in the case of the Freedom House outcome measure.
- **Supplementary Appendix F: Analysis using Additional Macroeconomic and U.S. Influence Variables.** While we included several macroeconomic covariates in our main analysis, as a robustness check we ran matching routines and pre-

processed regression models including additional economic measures. The two indicators included are the current account balance measured as a percentage of GDP, and trade openness measured as imports plus exports as a percentage of GDP. We derived the current account balance indicator from the World Banks' World Development Indicators (available at <http://data.worldbank.org/data-catalog/world-development-indicators>) and the IMF's World Economic Outlook database (October 2013 version, available at http://www.imf.org/external/pubs/ft/weo/2013/02/weodata/index.aspx>). Furthermore, past research has pointed to the impact of high politics on the lending decisions of the IMF (e.g. Dreher and Jensen 2007; Thacker 1999). To take into account the possible role of U.S. influence on both a country's likelihood of receiving an IMF loan and its level of democracy, we include an ideal point estimate of a country's preferences relative to the United States. The measure, constructed by Bailey et al. (2015), recovers countries' foreign policy preferences from their voting records in the United Nations General Assembly. In order to be as comprehensive as possible, we reran the analysis using all three additional covariates. The results are presented in Tables F1 and F2. While the coefficient for IMF programs remains statistically significant in the case of the Freedom House measure, the coefficient stays positive but its statistical significance is attenuated for the Polity outcome. The coefficient for trade volumes did not achieve standard levels of statistical significance in either model, while increases in both current account balances and UN ideal point estimates are associated with higher levels of democracy and are statistically significant, as expected.

- **Supplementary Appendix G: Analysis using Alternative Measures for Political Violence.** Given the multitude of measures for political violence, and the likely implications both for the prospects of a country turning to the IMF as well as its level of democracy, we reran our analysis, substituting alternative indicators for the violence index from Marshall (2010) used for the main results. Because the Marshall (2010) index includes elements of both internal and external conflict, we included two variables capturing each type of conflict individually using data drawn from the UCDP-PRIO armed conflict dataset (Gleditsch et al. 2002). *PRIO Interstate Conflict* is a dichotomous variable equal to one if a country is involved in an interstate conflict involving at least 25 battle deaths in a given year, and 0 otherwise. *PRIO Intrastate Conflict* is a similar variable equal to 1 if a country is involved in a civil war involving at least 25 battle deaths in a given year, and 0 otherwise. Tables G1 and G2 report the results using the alternative political violence indicators, and if anything the results for IMF program are even stronger for both democracy outcomes. In the case of the conflict measures, both PRIO coefficients are negative and statistically significant in the Freedom House model, while they have no discernable association with democracy when the amended Polity2 score is the outcome. As an additional robustness check, we reran the analysis using conflict data from the Correlates of War (COW) project, which has a higher threshold of 1,000 battle deaths (Sarkees and Wayman 2010). *COW Interstate War* and *COW Intrastate War* are equivalent dichotomous variables for each type of conflict. Tables G3 and Table G4 present the results for both democracy outcomes using the COW conflict measures. While the coefficient for

IMF programs remains positive and statistically significant for Freedom House, the coefficient for Polity2 is no longer statistically significant. As expected, the coefficients for both sets of war variables are negative, though the coefficient for civil wars failed to achieve statistical significance in the Polity2 model. As a final test for political violence, we used several measures of domestic unrest from the widely used Databanks Cross-National Time-Series Data Archive (Databanks 2012). The Databanks dataset records the number of episodes of domestic conflict from articles in *The New York Times*. *Strikes* are defined in the Bank dataset as "any strike of 1,000 or more industrial or service workers that involves more than one employer and that is aimed at national government policies or authority." The *Riots* variable records "any violent demonstration or clash of more than 100 citizens involving the use of physical force." A *Government Crisis* is defined as "any rapidly developing situation that threatens to bring the downfall of the present regime – excluding situations of revolt aimed at such overthrow." Tables G5 and G6 present the results when substituting the Databanks domestic unrest indicators. The coefficient for IMF programs continues to be statistically significant in both models. Only strikes are statistically significant, and are actually associated with higher levels of democracy on average.

- **Supplementary Appendix H: Analysis including Foreign Aid as a Covariate.** In the models reported in Tables H1 and H2 we included foreign aid (as a proportion of GDP) given by the OECD Development Assistance Committee (DAC) members as one of the covariates on which we matched. Foreign aid from DAC members was positively linked to Freedom House and Polity2 scores in Kersting and Kilby's (2014) study. Including the foreign aid variable in the matching procedure and in the regressions does not change the main finding: in both models (reported in Tables H1 and H2) the IMF program participation measure is a positive and significant covariate of democracy scores.

- **Supplementary Appendix I: Instrumental Variables**. In table I1 we report results from regressing the IMF program indicator on three candidates for instruments for IMF loans (debt-weighted foreign interest rates, temporary UNSC membership, and foreign policy "ideal points" in UNGA voting patterns). In tables I2 and I3 we describe results from the two other variables that we tried (and ultimately rejected) as valid instruments for IMF program participation (UNSC temporary membership and foreign policy ideal points revealed by UNGA voting patterns). In tables I4 and I5 we present results using an alternative, interacted instrument suggested by Lang (2015).

- **Supplementary Appendix J: Regression results from unmatched datasets.** We report specifications with the same list of covariates as in Tables 1 and 2 in the main paper; the results reported in tables J1 and J2 come from the unmatched datasets.

Supplementary Appendix A: Summary of Countries Included in the Sample

Country	Years in the Sample	Years under IMF programs
Albania	1995-2007	1994-95; 1998-2000; 2002-07
Algeria	1971-2007	1989-1992
Angola	1995-2007	[None]
Argentina	1971-2007	1976-77; 1983-2001; 2003-05
Armenia	1994-2007	1995-99; 2001-04
Azerbaijan	1994-2007	1995-2005
Bahrain	1980-2007	[None]
Bangladesh	1973-2007	1974-76; 1979-83; 1986-1993; 2004-07
Belarus	1995-2007	1995-96
Benin	1971-2007	1989-2007
Bhutan	1983-2007	[None]
Bolivia	1971-2007	1973-74; 1980-81; 1986-2002; 2003-06
Botswana	1976-2007	[None]
Brazil	1971-2007	1971-73; 1983-86; 1988-90; 1992-93; 1998-2005
Bulgaria	1991-2007	1991-2007
Burkina Faso	1971-2007	1991-2007
Burundi	1971-2007	1971; 1986-89; 1991-94; 2004-07
Cambodia	1995-2007	1995-97; 1999-2002
Cameroon	1971-2007	1988-92; 1994-2007
Cape Verde	1987-2007	1998-2000; 2002-07
Cent. Af. Rep.	1971-2007	1980-81; 1983-90; 1994-95; 1998-2001; 2007
Chad	1971-2007	1987-90; 1994-2003; 2005-07
Chile	1971-2007	1974-76; 1983-90
China	1977-2007	1981; 1986-87
Colombia	1971-2007	1971-74; 1999-2006
Comoros	1980-2007	1991-94
Rep. Congo	1971-2007	1977; 1979-80; 1986-88; 1990-92; 1994-99; 2004-07

Country	Years in Dataset	Years under IMF programs
Costa Rica	1971-2007	1976-77; 1980-97
Cote d'Ivoire	1971-2007	1981-92; 1994-2005
Croatia	1992-2007	1994-2006
Czech Rep.	1993-2007	1993-94
DRC	1971-2007	1975-76; 1979-1990; 2002-05
Djibouti	1991-2007	1996-2003
Dom. Republic	1971-2007	1983-86; 1991-94; 2003-07
Ecuador	1971-2007	1972-73; 1983-92; 1994-96; 2000-01; 2003-04
Egypt	1971-2007	1977-81; 1987-88; 1991-98
El Salvador	1971-2007	1971-73; 1980-83; 1990-2000
Eq. Guinea	1985-2007	1985-91; 1993-96
Eritrea	1995-2007	[None]
Estonia	1992-2007	1992-2002
Ethiopia	1981-2007	1981-82; 1992-99; 2001-04
Fiji	1971-2007	1974-75
Gabon	1971-2007	1978-82; 1986-2002; 2004-05; 2007
Gambia	1971-2007	1977-80; 1982-91; 1998-2005; 2007
Georgia	1995-2007	1995-99; 2001-07
Ghana	1971-2007	1979-80; 1983-92; 1995-2006
Guatemala	1971-2007	1971-73; 1981-84; 1988-90; 1992-94; 2002-04
Guinea	1991-2007	1991-2004; 2007
Guinea Bissau	1986-2007	1987-90; 1995-98; 2001-03
Guyana	1971-2007	1971-83; 1990-2006
Haiti	1971-2007	1971-90; 1995-99; 2007
Honduras	1971-2007	1971-73; 1979-83; 1990-97; 1999-2002; 2004-07
Hungary	1984-2007	1984-85; 1988-94; 1996-98
India	1971-2007	1981-84; 1991-93

Country	Years in Dataset	Years under IMF programs
Indonesia	1971-2007	1971-74; 1997-2003
Iran	1971-82	[None]
Jamaica	1971-2007	1973-74; 1977-96
Jordan	1971-2007	1989-2004
Kazakhstan	1994-2007	1994-2002
Kenya	1971-2007	1975-86; 1988-94; 1996-2003
South Korea	1971-2007	1971-77; 1980-87; 1998-2000
Kuwait	1971-2007	[None]
Kyrgyz Rep.	1994-2007	1994-2007
Laos	1988-2007	1989-97; 2001-04
Latvia	1994-2007	1994-2002
Lesotho	1980-2007	1988-97; 2001-04
Liberia	1974-89; 1997-2007	1974-77; 1979-86
Lithuania	1993-2007	1993-97; 2000-03
Macedonia	1993-2007	1995-2007
Madagascar	1971-2007	1977-78; 1980-92; 1996-2007
Malawi	1971-2007	1979-86; 1988-99; 2001-03; 2005-07
Malaysia	1971-2007	[None]
Mali	1971-2007	1971-72; 1982-2007
Mauritania	1971-2007	1977-78; 1980-82; 1985-2007
Mauritius	1980-2007	1981-86
Mexico	1971-2007	1977-79; 1983-93; 1995-97; 1999-2000
Moldova	1993-2007	1993-2003; 2006-07
Mongolia	1992-2007	1992-2005
Morocco	1971-2007	1971-72; 1980-93
Mozambique	1984-2007	1987-2007
Nepal	1971-2007	1976-77; 1985-90; 1992-95; 2003-07
Nicaragua	1970-83; 1987-2007	1971-73; 1979-80; 1991-93; 1994-2007

Country	Years in Dataset	Years under IMF programs
Niger	1971-2007	1983-91; 1994-99; 2001-07
Nigeria	1971-2007	1987-92; 2000-01; 2005-07
Oman	1971-2007	[None]
Pakistan	1971-2007	1972-75; 1977-78; 1980-83; 1988-91; 1993-2004
Panama	1971-2007	1971-87; 1992-2002
Papua N.G.	1971-2007	1990-91; 1995-97; 2000-01
Paraguay	1971-2007	2003-07
Peru	1971-2007	1971; 1977-80; 1982-85; 1993-2007
Philippines	1971-2007	1971-81; 1983-99
Poland	1990-2007	1990-96
Romania	1989-2007	1991-2006
Russia	1993-2007	1993; 1995-2000
Rwanda	1971-2007	1979-80; 1991-93; 1998-2007
Saudi Arabia	1971-2007	[None]
Senegal	1971-2007	1979-92; 1994-2007
Sierra Leone	1971-2007	1977-89; 1994-98; 2001-07
Slovakia	1993-2007	1994-96
Slovenia	1992-2007	[None]
Somalia	1971-1989	1971; 1979-88
South Africa	1971-2007	1976-77; 1982-83
Sri Lanka	1971-2007	1971-72; 1974-75; 1977-81; 1983-84; 1988-95; 2001-02; 2003-06
Swaziland	1990-2007	[None]
Syria	1970-1988	[None]
Tajikistan	1997-2007	1998-2005
Tanzania	1988-2007	1988-94; 1996-2007
Thailand	1971-2007	1978-79; 1981-83; 1985-86; 1997-2000
Togo	1971-2007	1979-97

Country	Years in Dataset	Years under IMF programs
Tunisia	1971-2007	1986-1992
Turkey	1971-2007	1971; 1978-85; 1994-96; 2000-07
Turkmenistan	1994-2007	[None]
Uganda	1971-2007	1971-72; 1980-84; 1987-2007
Ukraine	1994-2007	1995-2002; 2004-05
Uruguay	1971-2007	1971-73; 1975-87; 1990-93; 1996-2006
Venezuela	1971-2007	1989-93; 1996-97
Vietnam	1995-2007	1995-97; 2001-04
Yemen	1991-2007	1996-2001
Zambia	1971-2007	1973-74; 1976-87; 1995-2007
Zimbabwe	1971-2007	1981-84; 1992-95; 1998-2000

Supplementary Appendix B: Summary Statistics

Table B1: Summary Statistics (Polity Model)

Variable	Observations	Mean	Std. Dev.	Min	Max
Polity2	3244	0.41	6.61	-10	10
Under IMF Program	3244	0.50	0.50	0	1
Military Autocracy	3244	0.27	0.45	0	1
Monarchic Autocracy	3244	0.03	0.16	0	1
Previous Transitions	3244	0.59	0.98	0	5
Oil Producer	3244	0.10	0.30	0	1
Reserves/GNI	3244	0.10	0.08	0.00	0.77
GDP Per Capita	3244	3729.40	2981.05	308.92	20550.07
GDP Growth	3244	1.21	5.96	-41.11	88.75
Currency Crash	3244	0.08	0.27	0	1
Political Violence Index	3244	0.71	1.59	0	11
Middle East & North Africa	3244	0.06	0.24	0	1
Latin American & Caribbean	3244	0.26	0.44	0	1
East Asia & Pacific	3244	0.07	0.25	0	1
Post-Communist	3244	0.12	0.33	0	1
Sub-Saharan Africa	3244	0.44	0.50	0	1

Table B2: Summary Statistics (Freedom House Model)

Variable	Observations	Mean	Std. Dev.	Min	Max
Freedom House	3232	5.53	3.09	0	12
Under IMF Program	3232	0.50	0.50	0	1
Military Autocracy	3232	0.27	0.44	0	1
Monarchic Autocracy	3232	0.03	0.16	0	1
Previous Transitions	3232	0.58	0.98	0	5
Oil Producer	3232	0.10	0.30	0	1
Reserves/GNI	3232	0.10	0.08	0.00	0.77
GDP Per Capita	3232	3739.79	2983.15	308.92	18596.65
GDP Growth	3232	1.24	5.89	-41.11	88.75
Currency Crash	3232	0.08	0.26	0	1
Political Violence Index	3232	0.70	1.58	0	11
Middle East & North Africa	3232	0.06	0.24	0	1
Latin American & Caribbean	3232	0.25	0.43	0	1
East Asia & Pacific	3232	0.06	0.25	0	1
Post-Communist	3232	0.12	0.33	0	1
Sub-Saharan Africa	3232	0.45	0.50	0	1

Supplementary Appendix C: Survey of Previous Studies

Table C1: Findings from 22 Previous Studies in which Democracy was Included as a Possible Determinant of IMF Program Participation

Study	Sample	IMF program-related outcome	Democracy Measure	Finding*
Thacker (1999)	77 countries, 1985-1994	Program participation (SBA or EFF)	Polity and Freedom House indices	0
Przeworski and Vreeland (2000)	135 countries, 1951-1990	Program participation	Dichotomous regime type	0
Vreeland (2001)	135 countries, 1950-1990	Program participation	Dichotomous regime type	0
Vreeland (2003)	135 countries, 1951-1990	Program participation	Dichotomous regime type	–
Hutchison (2003)	67 countries, 1975-97	Program participation (short-term programs)	Polity	0
Sturm et al. (2005)	118 countries, 1971-2000	Program participation and use of Fund credit	Freedom House and Polity (*EXCOMP* component)	0
Trudel (2005)	Number of countries not reported (N = 1,345), 1960-2000	Program participation	Dichotomous regime type	0
Dreher (2006)	98 countries, 1970-2000	Program participation	Polity	–
Harrigan et al. (2006)	11 MENA countries, 1975-2000	Program participation	Freedom House	–
Nooruddin and Simmons (2006)	130 countries, 1980-2000	Program participation	Polity	0
Abouharb and Cingranelli (2007)	131 countries, 1981-2003	Program participation (structural adjustment loans)	Polity	+
Pop-Eleches (2008)	22 Lat.Am. countries, 1982-89; 26 postcomm. countries, 1990-2001 (analyzed separately)	Program participation	Polity	0

Pop-Eleches (2009)	21 Lat.Am. countries, 1982-2001; 26 postcomm. countries, 1990-2001 (analyzed separately)	Program participation	Polity	0
Abouharb and Cingranelli (2009)	131 countries, 1981-2003	Number of years spent under IMF programs	Polity	+
Hartzell et al. (2010)	Number of countries not reported (N = 2,405), 1970-99	Program participation (structural adjustment loans)	Polity	+
Binder and Bluhm (2010)	68 countries, 1975-2005	Program participation (loan-quota ratio)	Dichotomous regime type	–
Moser and Sturm (2011)	165 countries, 1990-2009	Program participation	Freedom House	–
Williams (2012)	Number of countries not reported (N = 784), 1970-99	Program participation	Polity	–
Mumssen et al. (2013)	75 countries, 1986-2010	Long-term program participation (=1 if country has five or more years of program participation in a decade)	Polity	0
Bas and Stone (2014)	104 countries, 1970-2008	Program participation	Dichotomous regime type	0
Pandolfelli et al. (2014)	37 sub-Saharan African countries (1990, 1995, 2000, and 2005)	Program participation (structural adjustment loans)	Polity	0
Papi et al. (2015)	113 countries, 1970-2010	Program participation	Polity and dichotomous regime type	0 (Polity); – (dummy)

* The plus (+) symbol indicates that the democracy measure was positive and significant in the specification(s) reported in the study; the negative symbol (–) denotes that the variable was negative and significant. 0 denotes that the democracy indicator was not statistically significant.

Table C1 shows that very few of the previous studies (3 of 22, two of which are by the same authors using similar research designs) report a positive and significant partial correlation between the democracy indicator and IMF program participation.

Supplementary Appendix D: Analysis using Alternative Matching Routines

Table D1: Covariates of Democracy Scores, 1971-2007 (Polity Measure, Nearest Neighbor Matching)

Covariates	DV: Polity2
Under IMF Program	0.72*
	(0.18)
Military Autocracy	-6.64*
	(0.20)
Monarchic Autocracy	-11.87*
	(0.38)
Previous Transitions	0.72*
	(0.10)
Oil Producer	-2.88*
	(0.27)
Reserves/GNI	12.08*
	(1.07)
GDP Per Capita	0.00*
	(0.00)
GDP Growth	0.00
	(0.01)
Currency Crash	0.54
	(0.29)
Political Violence Index	0.05
	(0.05)
Middle East & North Africa	-2.41*
	(0.45)
Latin American & Caribbean	-1.33*
	(0.40)
East Asia & Pacific	-3.39*
	(0.45)
Post-Communist	-1.71*
	(0.47)
Sub-Saharan Africa	-3.48*
	(0.36)
Constant	1.76*
	(0.40)
Observations	3244
R-squared	0.54

Notes: OLS regression using dataset pre-processed by matching. Dependent variable is the amended Polity2 score. Robust standard errors in parentheses below coefficients.

* = $p < 0.05$.

Table D2: Covariates of Democracy Scores, 1972-2007 (Freedom House Measure, Nearest Neighbor Matching)

Covariates	DV: Freedom House
Under IMF Program	0.42*
	(0.09)
Military Autocracy	-2.79*
	(0.10)
Monarchic Autocracy	-3.62*
	(0.22)
Previous Transitions	0.24*
	(0.05)
Oil Producer	-1.60*
	(0.13)
Reserves/GNI	4.22*
	(0.49)
GDP Per Capita	0.00*
	(0.00)
GDP Growth	0.00
	(0.01)
Currency Crash	0.17
	(0.15)
Political Violence Index	-0.13*
	(0.02)
Middle East & North Africa	-1.22*
	(0.22)
Latin American & Caribbean	-0.11
	(0.19)
East Asia & Pacific	-1.40*
	(0.24)
Post-Communist	-0.83*
	(0.24)
Sub-Saharan Africa	-1.79*
	(0.18)
Constant	6.01*
	(0.19)
Observations	3232
R-squared	0.52

Notes: OLS regression using dataset pre-processed by matching. Dependent variable is the transformed Freedom House score. Robust standard errors in parentheses below coefficients.

* = $p < 0.05$.

Table D3: Covariates of Democracy Scores, 1971-2007 (Polity Measure, Genetic Matching No Replacement)

Covariates	DV: Polity2
Under IMF Program	0.669*
	(0.164)
Military Autocracy	-6.486*
	(0.197)
Monarchic Autocracy	-11.55*
	(0.528)
Previous Transitions	0.865*
	(0.0893)
Oil Producer	-2.900*
	(0.329)
Reserves/GNI	14.72*
	(1.345)
GDP Per Capita	0.000228*
	(0.0000398)
GDP Growth	0.0166
	(0.0170)
Currency Crash	1.183*
	(0.311)
Political Violence Index	-0.142*
	(0.0584)
Middle East & North Africa	-1.521*
	(0.509)
Latin American & Caribbean	-1.685*
	(0.385)
East Asia & Pacific	-4.766*
	(0.463)
Post-Communist	-1.526*
	(0.422)
Sub-Saharan Africa	-4.256*
	(0.361)
Constant	2.367*
	(0.390)
Observations	3244
R-squared	0.50

Notes: OLS regression using dataset pre-processed by matching. Dependent variable is the amended Polity2 score. Robust standard errors in parentheses below coefficients.

* = $p < 0.05$.

Table D4: Covariates of Democracy Scores, 1972-2007 (Freedom House Measure, Genetic Matching No Replacement)

Covariates	DV: Freedom House
Under IMF Program	0.293*
	(0.0768)
Military Autocracy	-2.701*
	(0.0923)
Monarchic Autocracy	-2.234*
	(0.302)
Previous Transitions	0.214*
	(0.0453)
Oil Producer	-1.434*
	(0.135)
Reserves/GNI	6.641*
	(0.485)
GDP Per Capita	0.000261*
	(0.0000192)
GDP Growth	0.0112
	(0.00632)
Currency Crash	0.578*
	(0.146)
Political Violence Index	-0.186*
	(0.0257)
Middle East & North Africa	-1.322*
	(0.248)
Latin American & Caribbean	-0.310
	(0.181)
East Asia & Pacific	-1.441*
	(0.228)
Post-Communist	-0.875*
	(0.201)
Sub-Saharan Africa	-1.674*
	(0.167)
Constant	5.747*
	(0.179)
Observations	3232
R-squared	0.51

Notes: OLS regression using dataset pre-processed by matching. Dependent variable is the transformed Freedom House score. Robust standard errors in parentheses below coefficients.

* = $p < 0.05$.

Supplementary Appendix E: Analysis Limited to Concessional IMF Loans

Table E1: Covariates of Democracy Scores, 1971-2007 (Polity Measure, IMF Concessional Programs)

Covariates	DV: Polity2
Under IMF Program	0.403
	(0.236)
Military Autocracy	-5.992*
	(0.276)
Monarchic Autocracy	-11.89*
	(1.590)
Previous Transitions	1.280*
	(0.188)
Oil Producer	-4.637*
	(0.750)
Reserves/GNI	11.88*
	(1.654)
GDP Per Capita	0.0000366
	(0.000127)
GDP Growth	0.0131
	(0.0197)
Currency Crash	1.222*
	(0.383)
Political Violence Index	-0.482*
	(0.0955)
Middle East & North Africa	-0.857
	(1.088)
Latin American & Caribbean	-1.399*
	(0.589)
East Asia & Pacific	-6.250*
	(0.694)
Post-Communist	-1.268*
	(0.622)
Sub-Saharan Africa	-3.042*
	(0.503)
Constant	3.100*
	(0.629)
Observations	1338
R-squared	0.45

Notes: OLS regression using dataset pre-processed by matching. Dependent variable is the amended Polity2 score. Robust standard errors in parentheses below coefficients.

* = p < 0.05.

Table E2: Covariates of Democracy Scores, 1972-2007 (Freedom House Measure, IMF Concessional Programs)

Covariates	DV: Freedom House
Under IMF Program	0.662*
	(0.114)
Military Autocracy	-2.476*
	(0.126)
Monarchic Autocracy	-3.712*
	(0.721)
Previous Transitions	0.615*
	(0.0911)
Oil Producer	-3.050*
	(0.356)
Reserves/GNI	5.243*
	(0.790)
GDP Per Capita	0.000253*
	(0.0000700)
GDP Growth	0.0154
	(0.00842)
Currency Crash	0.272
	(0.210)
Political Violence Index	-0.381*
	(0.0520)
Middle East & North Africa	-1.425*
	(0.639)
Latin American & Caribbean	-0.942*
	(0.291)
East Asia & Pacific	-4.173*
	(0.378)
Post-Communist	-1.592*
	(0.306)
Sub-Saharan Africa	-1.239*
	(0.256)
Constant	5.581*
	(0.315)
Observations	1358
R-squared	0.43

Notes: OLS regression using dataset pre-processed by matching. Dependent variable is the transformed Freedom House score. Robust standard errors in parentheses below coefficients.

* = $p < 0.05$.

Supplementary Appendix F: Analysis using Additional Macroeconomic and UN Voting Variables)

Table F1: Covariates of Democracy Scores, 1971-2007 (Polity Measure, Additional Macroeconomic and UN Voting Variables)

Covariates	DV: Polity2
Under IMF Program	0.17
	(0.17)
Military Autocracy	-6.61*
	(0.22)
Monarchic Autocracy	-10.60*
	(0.45)
Previous Transitions	0.56*
	(0.09)
Oil Producer	-2.79*
	(0.36)
Reserves/GNI	16.31*
	(1.47)
GDP Per Capita	0.00*
	(0.00)
GDP Growth	0.00
	(0.02)
Currency Crash	0.66*
	(0.33)
Political Violence Index	-0.20*
	(0.06)
Current Account Balance	0.02
	(0.02)
Trade Volume	-0.01
	(0.00)
UNGA Ideal Point	-0.13
	(0.30)
Middle East & North Africa	-1.82*
	(0.47)
Latin American & Caribbean	-0.17
	(0.38)
East Asia & Pacific	-4.62*
	(0.52)
Post-Communist	-0.76
	(0.59)
Sub-Saharan Africa	-4.00*
	(0.36)

Constant	3.46*
	(0.44)
Observations	2886
R-squared	0.54

Notes: OLS regression using dataset pre-processed by matching. Dependent variable is the amended Polity2 score. Robust standard errors in parentheses below coefficients.

* = $p < 0.05$.

Table F2: Covariates of Democracy Scores, 1972-2007 (Freedom House Measure, Additional Macroeconomic and UN Voting Variables)

Covariates	DV: Freedom House
Under IMF Program	0.226*
	(0.0780)
Military Autocracy	-2.622*
	(0.102)
Monarchic Autocracy	-1.813*
	(0.244)
Previous Transitions	0.173*
	(0.0465)
Oil Producer	-1.276*
	(0.157)
Reserves/GNI	6.368*
	(0.673)
GDP Per Capita	0.000211*
	(0.0000182)
GDP Growth	-0.000670
	(0.00682)
Currency Crash	0.200
	(0.155)
Political Violence Index	-0.201*
	(0.0262)
Current Account Balance	0.0173*
	(0.00569)
Trade Volume	-0.000400
	(0.00133)
UNGA Ideal Point	0.514*
	(0.122)
Middle East & North Africa	-1.610*
	(0.228)
Latin American & Caribbean	-0.297
	(0.179)

East Asia & Pacific	-1.724*
	(0.249)
Post-Communist	-1.373*
	(0.259)
Sub-Saharan Africa	-1.910*
	(0.165)
Constant	6.588*
	(0.204)
Observations	2884
R-squared	0.54

Notes: OLS regression using dataset pre-processed by matching. Dependent variable is the transformed Freedom House score. Robust standard errors in parentheses below coefficients.

* = $p < 0.05$.

Supplementary Appendix G: Analysis using Alternative Measures for Political Violence

Table G1: Covariates of Democracy Scores, 1971-2007 (Polity Measure, PRIO Conflict Variables)

Covariates	DV: Polity2
Under IMF Program	0.602*
	(0.166)
Military Autocracy	-6.531*
	(0.198)
Monarchic Autocracy	-11.21*
	(0.491)
Previous Transitions	0.861*
	(0.0940)
Oil Producer	-3.417*
	(0.329)
Reserves/GNI	12.73*
	(1.403)
GDP Per Capita	0.000294*
	(0.0000395)
GDP Growth	0.0335*
	(0.0150)
Currency Crash	1.108*
	(0.289)
PRIO Interstate Conflict	-1.335
	(0.727)
PRIO Intrastate Conflict	0.324
	(0.250)
Middle East & North Africa	-1.472*
	(0.465)
Latin American & Caribbean	-1.621*
	(0.366)
East Asia & Pacific	-3.883*
	(0.457)
Post-Communist	-1.640*
	(0.400)
Sub-Saharan Africa	-3.812*
	(0.332)
Constant	2.043*
	(0.348)
Observations	3246
R-squared	0.49

Table G2: Covariates of Democracy Scores, 1972-2007 (Freedom House Measure, PRIO Conflict Variables)

Covariates	DV: Freedom House
Under IMF Program	0.482*
	(0.0778)
Military Autocracy	-2.646*
	(0.0905)
Monarchic Autocracy	-2.547*
	(0.235)
Previous Transitions	0.231*
	(0.0437)
Oil Producer	-1.682*
	(0.153)
Reserves/GNI	4.982*
	(0.665)
GDP Per Capita	0.000283*
	(0.0000198)
GDP Growth	0.0250*
	(0.00718)
Currency Crash	0.341*
	(0.143)
PRIO Interstate Conflict	-1.621*
	(0.306)
PRIO Intrastate Conflict	-0.399*
	(0.111)
Middle East & North Africa	-1.256*
	(0.226)
Latin American & Caribbean	-0.499*
	(0.188)
East Asia & Pacific	-1.600*
	(0.243)
Post-Communist	-1.738*
	(0.203)
Sub-Saharan Africa	-2.081*
	(0.163)
Constant	5.942*
	(0.174)
Observations	3232

R-squared	0.50

Table G3: Covariates of Democracy Scores, 1971-2007 (Polity Measure, COW War Variables)

Covariates	DV: Polity2
Under IMF Program	0.197
	(0.161)
Military Autocracy	-6.533*
	(0.199)
Monarchic Autocracy	-10.64*
	(0.455)
Previous Transitions	0.929*
	(0.0862)
Oil Producer	-2.475*
	(0.289)
Reserves/GNI	18.67*
	(1.023)
GDP Per Capita	0.000236*
	(0.0000393)
GDP Growth	0.00187
	(0.0151)
Currency Crash	1.287*
	(0.290)
COW Interstate War	-2.381*
	(0.964)
COW Intrastate War	-0.232
	(0.286)
Middle East & North Africa	-3.164*
	(0.461)
Latin American & Caribbean	-2.097*
	(0.379)
East Asia & Pacific	-5.445*
	(0.458)
Post-Communist	-1.958*
	(0.408)
Sub-Saharan Africa	-4.722*
	(0.339)
Constant	2.787*

	(0.352)
Observations	3246
R-squared	0.52

Notes: OLS regression using dataset pre-processed by matching. Dependent variable is the amended Polity2 score. Robust standard errors in parentheses below coefficients.

* = $p < 0.05$.

Table G4: Covariates of Democracy Scores, 1972-2007 (Freedom House Measure, COW War Variables)

Covariates	DV: Freedom House
Under IMF Program	0.409*
	(0.0778)
Military Autocracy	-2.721*
	(0.0924)
Monarchic Autocracy	-2.074*
	(0.251)
Previous Transitions	0.275*
	(0.0457)
Oil Producer	-1.402*
	(0.150)
Reserves/GNI	5.930*
	(0.588)
GDP Per Capita	0.000274*
	(0.0000200)
GDP Growth	0.0133
	(0.00712)
Currency Crash	0.335*
	(0.144)
COW Interstate War	-1.310*
	(0.360)
COW Intrastate War	-0.981*
	(0.122)
Middle East & North Africa	-1.340*
	(0.229)
Latin American & Caribbean	-0.362*
	(0.176)
East Asia & Pacific	-1.544*
	(0.231)
Post-Communist	-1.270*
	(0.198)
Sub-Saharan Africa	-1.712*

	(0.157)
Constant	5.700*
	(0.168)
Observations	3232
R-squared	0.50

Table G5: Covariates of Democracy Scores, 1971-2007 (Polity Measure, DataBanks Conflict Variables)

Covariates	DV: Polity2
Under IMF Program	0.540*
	(0.162)
Military Autocracy	-6.280*
	(0.195)
Monarchic Autocracy	-10.62*
	(0.466)
Previous Transitions	0.670*
	(0.0951)
Oil Producer	-2.444*
	(0.291)
Reserves/GNI	17.94*
	(1.185)
GDP Per Capita	0.000328*
	(0.0000390)
GDP Growth	0.0294*
	(0.0146)
Currency Crash	0.849*
	(0.318)
Strikes	0.552*
	(0.152)
Government Crisis	0.288
	(0.171)
Riots	0.0776
	(0.0470)
Middle East & North Africa	-2.395*
	(0.483)
Latin American & Caribbean	-2.008*
	(0.387)
East Asia & Pacific	-4.650*

	(0.460)
Post-Communist	-1.781*
	(0.432)
Sub-Saharan Africa	-4.220*
	(0.359)
Constant	1.684*
	(0.370)
Observations	3242
R-squared	0.51

Notes: OLS regression using dataset pre-processed by matching. Dependent variable is the amended Polity2 score. Robust standard errors in parentheses below coefficients. * = p < 0.05.

Table G6: Covariates of Democracy Scores, 1972-2007 (Freedom House Measure, DataBanks Conflict Variables)

Covariates	DV: Freedom House
Under IMF Program	0.311*
	(0.0770)
Military Autocracy	-2.572*
	(0.0916)
Monarchic Autocracy	-1.783*
	(0.256)
Previous Transitions	0.171*
	(0.0471)
Oil Producer	-1.691*
	(0.136)
Reserves/GNI	7.440*
	(0.487)
GDP Per Capita	0.000270*
	(0.0000183)
GDP Growth	0.0175*
	(0.00650)
Currency Crash	0.500*
	(0.162)
Strikes	0.221*
	(0.0732)
Government Crisis	-0.0560
	(0.0895)
Riots	0.00952
	(0.0313)
Middle East & North Africa	-1.434*
	(0.227)

Latin American & Caribbean	-0.205
	(0.180)
East Asia & Pacific	-1.594*
	(0.226)
Post-Communist	-0.740*
	(0.202)
Sub-Saharan Africa	-1.584*
	(0.166)
Constant	5.386*
	(0.170)
Observations	3228
R-squared	0.51

Notes: OLS regression using dataset pre-processed by matching. Dependent variable is the transformed Freedom House score. Robust standard errors in parentheses below coefficients. * = $p < 0.05$.

Supplementary Appendix H: Models with DAC Foreign Aid (%GDP) Included.

Table H1: Covariates of Democracy Scores, 1971-2007 (Polity Measure, DAC Foreign Aid included as a Covariate)

Covariates	DV: Polity2
Under IMF Program	0.356*
	(0.165)
Military Autocracy	-6.362*
	(0.214)
Monarchic Autocracy	-10.743*
	(0.476)
Previous Transitions	0.673*
	(0.091)
Oil Producer	-2.836*
	(0.291)
Reserves/GNI	15.905*
	(1.339)
GDP Per Capita	0.0002*
	(0.00004)
GDP Growth	0.0016
	(0.014)
Currency Crash	0.472
	(0.321)
Political Violence Index	-0.119*
	(0.060)
DAC Foreign Aid	0.067*
	(0.012)
Middle East & North Africa	-1.402*
	(0.498)
Latin American & Caribbean	-0.704
	(0.435)
East Asia & Pacific	-4.689*
	(0.517)
Post-Communist	-0.648
	(0.492)
Sub-Saharan Africa	-4.298*
	(0.400)
Constant	2.089*
	(0.414)
Observations	3110
R-squared	0.51

Notes: OLS regression using dataset pre-processed by matching. Dependent
variable is the amended Polity2 score. Robust standard errors in parentheses
below coefficients.

* = p < 0.05.

Table H2: Covariates of Democracy Scores, 1972-2007 (Freedom House Measure,
Foreign Aid (DAC) included as a Covariate)

Covariates	DV: Freedom House
Under IMF Program	0.387*
	(0.079)
Military Autocracy	-2.463*
	(0.092)
Monarchic Autocracy	-2.016*
	(0.304)
Previous Transitions	0.169*
	(0.045)
Oil Producer	-1.587*
	(0.144)
Reserves/GNI	3.938*
	(0.691)
GDP Per Capita	0.0003*
	(0.00002)
GDP Growth	0.021*
	(0.007)
Currency Crash	0.373*
	(0.148)
Political Violence Index	-0.179*
	(0.027)
Foreign Aid	0.012
	(0.007)
Middle East & North Africa	-1.181*
	(0.253)
Latin American & Caribbean	0.156
	(0.192)
East Asia & Pacific	-1.199*
	(0.232)
Post-Communist	-0.535*
	(0.212)
Sub-Saharan Africa	-1.602*
	(0.173)
Constant	5.671*
	(0.194)

Observations	3156
R-squared	0.48

Notes: OLS regression using dataset pre-processed by matching. Dependent variable is the transformed Freedom House score. Robust standard errors in parentheses below coefficients.

$* = p < 0.05$.

Supplementary Appendix I: Instrumental Variables.

Before settling on the debt-weighted foreign interest rate measure as our preferred external instrument for IMF program participation we explored, but ultimately rejected, other candidate instruments that were suggested by the literature on the effects of IMF programs.

Barro and Lee (2005) proposed the share of IMF staff composed by countries' residents and countries' quotas as possible instruments for program participation. Following Dreher and Sturm (2012, 374), we ruled out both variables on practical grounds: the staff share variable is only available in 5-year intervals, and quota shares are collinear with country fixed effects.

The two most commonly used instruments for IMF program participation that are suitable for consideration in this study are: (1) temporary membership on the United Nations security council; and (2) the proximity of countries' foreign policy preferences to the IMF's most powerful member, the United States, as captured by UNGA voting patterns.

Instruments, if they are valid, have to be good predictors of the endogenous variable (in this case, IMF program participation). In Table I1 we compare the results from conditional fixed effect logit models, in which we regressed our measure of IMF program participation on three different candidates for instruments (debt-weighted Northern interest rates, temporary membership on the United Nations Security Council, and countries' foreign policy preferences (measured by the UNGA ideal point indicator) alongside country fixed effects.

Table I1: Potential Instruments as Predictors of IMF Program Participation

Instruments	(1) DV: IMF Program Participation	(2) DV: IMF Program Participation	(3) DV: IMF Program Participation
Debt-Weighted Northern Interest Rate	0.064* (0.022)		
UNSC temporary membership		0.229 (0.167)	
UNGA Ideal Point			-0.280 (0.118)
Number of obs.	1,439	3,022	2,922

Only the weighted interest rate measure is a significant predictor of IMF program involvement for the countries included in our sample. The fact that the coefficients on the other instrumental variable candidates are either statistically insignificant or have the wrong sign suggest that they are less credible than our proposed instrument.

Further, we have doubts about whether the alternative instruments meet the exclusion and ignorability restrictions. In the results reported in Dreher et al. (2014), a dichotomous measure of democracy is a significant predictor of the likelihood of countries' election to the temporary UNSC membership position (though only for some regional subsamples of

the data, and in the post-Cold War period). In line with Nielsen et al. (2011), who consider temporary UNSC membership as an instrument for negative "aid shocks," we think that the chances of meeting the exclusion restriction with this variable is complicated by the fact that the selection process for temporary UNSC members is somewhat opaque. And as we point out in the paper, we are very skeptical that the UNGA ideal point measure can meet the exclusion and ignorability restrictions. Carter and Stone (2015), for example, show that there are systematic differences in the patterns of democratic and non-democratic countries' voting profiles within the UNGA.

Nonetheless, we estimated 2SLS models of democracy scores, using UNSC membership and the foreign policy measure as instruments for IMF program participation. The results are shown in Tables I2 and I3. IMF program participation, instrumented by temporary UNSC membership is a negative but statistically insignificant correlate of democracy scores, and the instrument is very weak (based on the low F-statistics). The UNGA ideal point indicator, by contrast, is a much stronger instrument, and when we instrument for IMF programs using the variable we find a positive coefficient in 3 of the 4 models (and a statistically significant result in one of the models). However, we are skeptical of the validity of this instrument for the reasons discussed in the paper and in this supplementary appendix.

Table I2: Results using Temporary UN Security Council Membership as an Instrument for IMF Program Participation

Instruments	(1) DV: Polity2	(2) DV: Polity2	(3) DV: Fr. House	(4) DV: Fr. House
UNSC temp. member	-4.010	-5.128	-1.649	-1.757
	(6.031)	(7.261)	(3.773)	(3.974)
Kleibergen-Paap F-statistic	1.702	1.401	1.269	1.095
Number of observations	3,333	3,333	3,360	3,360

Notes: All the results reported in Table I2 are 2SLS models. In columns (1) and (3) the models include the battery of covariates from our baseline models (not reported) plus country and year fixed effects; in columns (2) and (4) the models include the battery of covariates from our baseline models (not reported) country and region-year fixed effects. Robust standard errors in parentheses below coefficients.
* = $p < 0.05$

Table I3: Results using UNGA Ideal Points as an Instrument for IMF Program
Participation

Instruments	(1) DV: Polity2	(2) DV: Polity2	(3) DV: Fr. House	(4) DV: Fr. House
UNGA Ideal Point	1.731	-0.477	3.181*	0.672
	(1.723)	(1.310)	(1.073)	(0.842)
Kleibergen-Paap *F*-statistic	29.181	25.853	29.055	26.446
Number of observations	3,249	3,249	3,276	3,276

Notes: All the results reported in Table I3 are 2SLS models. In columns (1) and (3) the
models include the battery of covariates from our baseline models (not reported) plus
country and year fixed effects; in columns (2) and (4) the models include the battery of
covariates from our baseline models (not reported) country and region-year fixed
effects. Robust standard errors in parentheses below coefficients.
* = p < 0.05

Two drawbacks of the debt-weighted Northern interest rate instrument – limited time
coverage (the variable is only available up to 1992) and modest strength (indicated by the
F–test statistics reported in Table 3 in the main paper) – motivated a search for other
possible instruments for IMF program participation. *RIO*'s editor Axel Dreher helpfully
brought a new and promising alternative instrument, proposed in a paper by Lang (2015),
to our attention.

Lang's identification strategy (in a paper on the effect of IMF program participation on
income inequality) follows an empirical approach developed by Nunn and Qian (2014).
Nunn and Qian deal with the selection problem in their study (which explores the effect
of US food aid on civil conflict in recipient countries) by instrumenting for US food aid
with (lagged) US wheat production. (Wheat production in the US is unaffected by the
intensity of civil conflict in aid-recipient countries, and it has a strong correlation with the
amount of food aid given to needy countries.) US wheat production varies over time but
not by country; since all of the variation in the indicator is temporal, it is perfectly
collinear with year fixed effects. To generate an instrument that varies over time *and*
varies by country (thus allowing for the inclusion of country and year fixed effects),
Nunn and Qian interact (lagged) US wheat production with an indicator of countries'
propensities to receive food aid from the US (the share of years across the 36-year sample
period in which the country received any food aid from the US).

Lang suggests that a measure of the IMF's loanable resources – its liquidity ratio, defined
as the amount of liquid resources available to the IMF divided by its liquid liabilities – is
a plausibly exogenous driver of IMF program participation (when the liquidity ratio is
high, the Fund is more generous, and the liquidity ratio itself is driven by organizational
factors that have nothing to do with borrowing country characteristics). Lang generously
shared the IMF liquidity variable that he collected, which we interacted with our own
time-varying measure of countries' propensities to enter into IMF programs. The
probability of program participation is calculated as the share of years between 1972 and

year *t* in which a country was under an IMF arrangement. (For countries that became independent at any point after 1972 or were independent but did not join the IMF until a later date, we calculate the probability using the fraction of years from the date of independence or date of IMF membership.)

We regress the dichotomous IMF program participation variable on the interacted instrument and, as shown in Table I4, found that it was a significant determinant of the likelihood of being under an IMF arrangement (the logit model in Table I4 includes both country and year fixed effect).

Table I4: Correlation between Interaction Instrument (log IMF liquidity ratio$_{t-1}$ × time-variant IMF program probability) and IMF Program Participation

Instrument	DV: IMF Program Participation
(log) IMF liquidity ratio$_{t-1}$ × IMF program probability	0.516*** (0.070)
Number of obs.	2,809

In Table I5 we run the same 2SLS models that we report in Table 3 in the main paper, but instead of the debt-weighted Northern interest rate measure we use, following Nunn and Qian's (2014) strategy, the interacted variable (log IMF liquidity ratio$_{t-1}$ × IMF program probability) as the instrument for our endogenous variable (IMF program participation). (Like Nunn and Qian, we report the coefficients and standard errors for just the interacted instrument across different specifications; as Ahmed (2013) points out (in a study of foreign aid's effect on repression that uses an interaction between partisan fractionalization in the US legislature and the probability of receiving US bilateral economic aid as an instrument for aid disbursements), the constituent terms used in the construction of the instrument are subsumed by the country and year fixed effects in the models.)

The statistical results show that IMF programs, instrumented by the interaction between the IMF liquidity ratio and the probability of being under an IMF arrangement in year *t*, are positively (and significantly) related to borrowers' democracy scores. Further, the test statistics suggest that the instrument has a good deal of power (the Kleibergen-Paap *F*-statistic is well above the commonly-used threshold of 10 for a strong instrument in all of the specifications in Table I5).

Table I5: IMF Program Participation and Democracy Scores: Alternative Instrument (log IMF liquidity ratio$_{(t-1)}$ × IMF program probability$_{(t)}$) for IMF Programs

Covariates	(1) DV: Polity2	(2) DV: Polity2	(3) DV: Fr. House	(4) DV: Fr. House
IMF program (instr.)	4.981***	6.976***	3.462***	2.745***
	(1.055)	(1.815)	(0.646)	(0.820)
Military Autocracy	-7.070***	-6.593***	-2.817***	-2.778***
	(0.263)	(0.306)	(0.143)	(0.136)
Monarchic Autocracy	-7.590***	-7.299***	-2.010***	-2.259***
	(1.066)	(1.143)	(0.639)	(0.526)
Previous Transitions	-1.849***	-1.976***	-0.812***	-0.906***
	(0.390)	(0.431)	(0.188)	(0.170)
Oil Producer	-1.805***	-1.944***	-0.826***	-0.941***
	(0.448)	(0.535)	(0.282)	(0.251)
Reserves/GNI	1.419*	1.261	1.128**	0.779*
	(0.795)	(0.893)	(0.489)	(0.448)
Real GDP Per Capita	0.00008***	0.00007***	0.0001***	0.0001***
	(0.00002)	(0.00003)	(0.00002)	(0.00002)
GDP per capita growth	0.022**	0.029**	0.014***	0.011**
	(0.009)	(0.011)	(0.005)	(0.005)
Currency Crash	0.662***	0.573**	0.399**	0.338***
	(0.228)	(0.264)	(0.131)	(0.119)
Political Violence Index	0.042	0.141	-0.089**	-0.138***
	(0.068)	(0.098)	(0.039)	(0.043)
Kleibergen-Paap F-statistic	55.479	24.666	57.214	25.297
Number of observations	3,136	3,136	3,162	3,162

Notes: Table I5 reports 2SLS estimates. The interaction between the (logged) IMF liquidity ratio (lagged by one year) and the fraction of years up to year *t* that a country has been under IMF programs is used as the instrument for IMF program participation. Models (1) and (3) include country and year fixed effects; models (2) and (4) include country and region-year fixed effects. Robust standard errors in parentheses below coefficients.
* = p < 0.1, ** = p < 0.05, *** = p < 0.01

Supplementary Appendix J: Regression results from unmatched datasets

Table J1: Covariates of Democracy Scores, 1971-2007 (Polity Measure, unmatched dataset)

Covariates	DV: Polity2
Under IMF Program	0.385
	(0.361)
Military Autocracy	-6.972*
	(0.693)
Monarchic Autocracy	-12.113*
	(1.290)
Previous Transitions	0.876*
	(0.351)
Oil Producer	-2.856*
	(1.023)
Reserves/GNI	9.904*
	(2.218)
GDP Per Capita	0.0001*
	(0.00006)
GDP Growth	0.007
	(0.014)
Currency Crash	0.624
	(0.431)
Political Violence Index	-0.019
	(0.138)
Middle East & North Africa	-1.964
	(1.689)
Latin American & Caribbean	-0.621
	(1.362)
East Asia & Pacific	-3.012
	(1.674)
Post-Communist	-0.437
	(1.511)
Sub-Saharan Africa	-3.459*
	(1.264)
Observations	3333
R-squared	0.56

Notes: OLS regression (data is not pre-processed by genetic matching). Dependent variable is the amended Polity2 score. Robust standard errors (clustered by country) in parentheses below coefficients.

* = $p < 0.05$.

Table J2: Covariates of Democracy Scores, 1971-2007 (Freedom House Measure, unmatched dataset)

Covariates	DV: Freedom House
Under IMF Program	0.257
	(0.173)
Military Autocracy	-2.971*
	(0.309)
Monarchic Autocracy	-4.013*
	(0.765)
Previous Transitions	0.333
	(0.178)
Oil Producer	-1.615*
	(0.476)
Reserves/GNI	4.272*
	(1.073)
GDP Per Capita	0.0001*
	(0.00003)
GDP Growth	0.003
	(0.007)
Currency Crash	0.200
	(0.203)
Political Violence Index	-0.159*
	(0.075)
Middle East & North Africa	-1.059
	(0.853)
Latin American & Caribbean	0.236
	(0.776)
East Asia & Pacific	-1.207
	(1.035)
Post-Communist	-0.173
	(0.850)
Sub-Saharan Africa	-1.797*
	(0.695)
Observations	3,360
R-squared	0.51

Notes: OLS regression (data is not pre-processed by genetic matching). Dependent variable is the transformed Freedom House score. Robust standard errors (clustered by country) in parentheses below coefficients.

* = $p < 0.05$.

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