A   Online Appendix

Included below are additional empirical results mentioned in the main text of the manuscript; these are intended to be included with the online appendix for the paper.

Table 6: Sovereign Bond Issuance and Alternative Measures of Democracy (1990-2016)

VARIABLES	(1) No OECD	(2) No OECD	(3) No OECD	(4) No OECD
Polity	0.002	0.017		
	(0.040)	(0.051)		
Polity X UST	0.012**	0.012*		
	(0.005)	(0.007)		
Democracy dummy			-0.261	-0.113
			(0.489)	(0.494)
Democ. dummy X UST			0.128*	0.175*
			(0.075)	(0.093)
US treasury rate	-0.048	-0.036	-0.070	-0.093
	(0.030)	(0.038)	(0.051)	(0.067)
GDP per capita	0.528**	0.657**	0.541**	0.649**
	(0.258)	(0.278)	(0.260)	(0.275)
GDP growth (annual %)	0.002	0.002	0.002	0.002
	(0.009)	(0.009)	(0.009)	(0.009)
Current account balance (% of GDP)	0.010	0.021**	0.012*	0.022**
	(0.007)	(0.010)	(0.007)	(0.010)
Chinn-Ito index	-0.000	-0.108	0.011	-0.092
	(0.089)	(0.089)	(0.087)	(0.089)
Public debt (% GDP)	-0.004	-0.002	-0.005	-0.002
	(0.004)	(0.003)	(0.004)	(0.003)
Regional peer issuance	0.894*	0.296	0.837*	0.204
	(0.514)	(0.518)	(0.487)	(0.494)
MSCI peer issuance	-0.472	-0.507	-0.446	-0.432
	(0.467)	(0.368)	(0.453)	(0.355)
CBI Garriga (weighted)		-0.407		-0.218
		(0.469)		(0.518)
Regime duration		0.023***		0.029***
		(0.006)		(0.006)
Pegged XR		-0.022		0.000
		(0.119)		(0.114)
Oil rents (% of GDP)		-0.040**		-0.040**
		(0.018)		(0.016)
IMF prog. in place		0.182		0.183
		(0.122)		(0.124)
Inflation crisis		-0.037		-0.000
		(0.197)		(0.205)
Default crisis		-0.732***		-0.721***
		(0.279)		(0.275)
Observations	20,964	17,352	21,432	17,544
Log likelihood	-9896	-8159	-10025	-8226
Pseudo-R2	0.301	0.307	0.304	0.308
Countries	88	78	90	79

Robust standard errors, clustered by country, in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This table reports results of probit regressions using sovereign bond issuance as the dependent variable. Country and year fixed effects, as well as MSCI ratings and region dummies, are suppressed for presentation.

Table 7: Sovereign Bond Issuance and Alternative Time Trends (1990-2016)

VARIABLES	(1) No OECD	(2) No OECD	(3) No OECD	(4) No OECD
Democracy (VDem)	-1.494	-1.506	-1.569*	-1.571*
	(0.940)	(0.940)	(0.948)	(0.950)
Democ. X UST	0.533***	0.522***	0.529***	0.528***
	(0.138)	(0.141)	(0.144)	(0.144)
US treasury rate	-0.341***	-0.346***	-0.306***	-0.294***
	(0.080)	(0.080)	(0.085)	(0.085)
GDP per capita	0.340	0.400*	0.403*	0.434*
	(0.218)	(0.237)	(0.237)	(0.247)
GDP growth (annual %)	-0.004	-0.005	-0.002	-0.003
	(0.008)	(0.008)	(0.008)	(0.008)
Chinn-Ito index	0.060	0.049	0.057	0.058
	(0.085)	(0.088)	(0.087)	(0.087)
Current account balance (% of GDP)	0.006	0.006	0.007	0.007
	(0.007)	(0.007)	(0.007)	(0.007)
Public debt (% GDP)	-0.005	-0.005	-0.005	-0.006
	(0.004)	(0.004)	(0.004)	(0.004)
MSCI peer issuance	0.913*	0.745	0.465	0.470
	(0.473)	(0.468)	(0.451)	(0.448)
	(0.508)	(0.517)	(0.522)	(0.525)
Time	0.000	0.003	0.026***	0.011
	(0.002)	(0.004)	(0.009)	(0.018)
$Time^2$		-0.000	-0.000***	0.000
		(0.000)	(0.000)	(0.000)
$Time^3$			0.000***	-0.000
			(0.000)	(0.000)
$Time^4$				0.000
				(0.000)
Observations	20,822	20,822	20,822	20,822
Log likelihood	-9749	-9743	-9706	-9703
Pseudo-R2	0.305	0.306	0.308	0.309
Countries	91	91	91	91

Robust standard errors clustered on country in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This table reports results of probit regressions using sovereign bond issuance as the dependent variable. Country fixed effects, MSCI ratings dummies, and dummies for quarter are suppressed for presentation.

Table 8: Sovereign Bond Issuance by Decade

VARIABLES	(1) 1990s	(2) 2000s	(3) 2010s	(4) Pre-crisis
Democracy (VDem)	-2.772*	-2.013	-3.494**	-2.987**
	(1.494)	(1.374)	(1.426)	(1.229)
US treasury rate	-0.090	-0.295*	-0.355**	-0.447***
	(0.110)	(0.151)	(0.154)	(0.114)
Democ. X UST	0.338**	0.469**	0.496**	0.725***
	(0.163)	(0.234)	(0.231)	(0.167)
GDP per capita	1.385***	0.536	-0.764	0.563*
	(0.473)	(0.345)	(0.652)	(0.312)
GDP growth (annual %)	-0.021	-0.005	-0.014	-0.007
	(0.015)	(0.013)	(0.015)	(0.011)
Current account balance (% of GDP)	0.036*	0.018	0.006	0.023**
	(0.019)	(0.011)	(0.011)	(0.010)
Chinn-Ito index	-0.060	-0.095	-0.105	0.070
	(0.098)	(0.121)	(0.151)	(0.087)
Public debt (% GDP)	-0.002	-0.004	-0.021**	-0.003
	(0.003)	(0.005)	(0.009)	(0.003)
Proportion of peers issuing by region	-0.987	1.282*	-0.359	-0.224
	(0.652)	(0.672)	(0.584)	(0.502)
MSCI peer issuance	0.506	-0.117	0.499	0.016
	(0.549)	(0.576)	(0.565)	(0.537)
Observations	5,823	11,833	4,332	16,719
Log likelihood	-2375	-5464	-2108	-7579
Pseudo-R2	0.396	0.316	0.298	0.320
Countries	73	104	91	100

Robust standard errors, clustered by country, in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This table reports results of probit regressions using sovereign bond issuance as the dependent variable. Country and year fixed effects, as well as MSCI ratings and region dummies, are suppressed for presentation.

Table 9: Sovereign Bond Issuance and Democracy (using OLS)

VARIABLES	(1) Full sample	(2) No OECD	(3) No OECD	(4) No OECD
Democracy (VDem)	0.405**	0.312*	-0.384	-0.308
	(0.161)	(0.162)	(0.248)	(0.310)
US treasury rate	0.003	0.001	-0.071***	-0.068***
	(0.005)	(0.005)	(0.020)	(0.025)
Democ. X UST			0.132***	0.132***
			(0.037)	(0.044)
GDP per capita	0.191***	0.169**	0.160**	0.199***
	(0.062)	(0.065)	(0.062)	(0.070)
GDP growth (annual %)	0.001	0.000	-0.000	-0.001
	(0.002)	(0.002)	(0.002)	(0.002)
Current account balance (% of GDP)	0.003**	0.003*	0.003*	0.005**
	(0.002)	(0.002)	(0.002)	(0.002)
Chinn-Ito index	0.001	0.003	0.016	-0.013
	(0.023)	(0.024)	(0.023)	(0.025)
Public debt (% GDP)	-0.001	-0.001	-0.001	-0.000
	(0.001)	(0.001)	(0.001)	(0.001)
Regional peer issuance	0.220*	0.266*	0.241*	0.109
	(0.131)	(0.141)	(0.142)	(0.143)
MSCI peer issuance	0.154	-0.097	-0.081	-0.098
	(0.148)	(0.133)	(0.135)	(0.106)
CBI Garriga (weighted)				-0.013
				(0.147)
Regime duration				0.006***
				(0.002)
Pegged XR				0.005
				(0.031)
Oil rents (% of GDP)				-0.008*
				(0.004)
IMF prog. in place				0.047
				(0.034)
Inflation crisis				-0.054
				(0.059)
Default crisis				-0.132
				(0.088)
Observations	26,746	22,196	22,196	17,673
R-squared	0.081	0.100	0.111	0.105
Number of countries	117	97	97	83

Robust standard errors, clustered by country, in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This table reports results of OLS regressions using sovereign bond issuance as the dependent variable. Country and year fixed effects, as well as MSCI ratings and region dummies, are suppressed for presentation.

Table 10: Sovereign Bond Issuance and Democracy (Alternative Global Measures)

VARIABLES	(1) No OECD	(2) No OECD	(3) No OECD	(4) No OECD
Democracy (VDem)	-1.238	0.183	-1.066	0.629
	(0.954)	(0.735)	(0.916)	(0.738)
German 10yr rates	-0.280***			
	(0.088)			
German rates X UST	0.480***			
	(0.147)			
Japanese 10yr rates		-0.242**		
		(0.104)		
Japanese rates X UST		0.390**		
		(0.174)		
Average 10yr rates			-0.303***	
			(0.098)	
Avg. rates X UST			0.532***	
			(0.167)	
Global asset values (Rey)				-0.490**
				(0.192)
Rey X UST				0.894***
				(0.311)
GDP per capita	0.438*	0.472*	0.443*	0.598**
	(0.258)	(0.261)	(0.258)	(0.279)
GDP growth (annual %)	0.002	0.003	0.002	-0.000
	(0.009)	(0.009)	(0.009)	(0.009)
Current account balance (% of GDP)	0.010	0.011	0.010	0.016**
	(0.007)	(0.007)	(0.007)	(0.008)
Chinn-Ito index	0.053	0.032	0.051	0.012
	(0.085)	(0.087)	(0.085)	(0.094)
Public debt (% GDP)	-0.005	-0.005	-0.005	-0.004
	(0.004)	(0.004)	(0.004)	(0.004)
Regional peer issuance	0.958*	1.022*	0.963*	0.694
	(0.536)	(0.540)	(0.539)	(0.502)
MSCI peer issuance	-0.328	-0.340	-0.320	-0.706*
	(0.506)	(0.513)	(0.509)	(0.402)
Observations	21,028	21,028	21,028	18,880
Log likelihood	-9813	-9876	-9822	-8597
Pseudo-R2	0.308	0.304	0.307	0.315
Countries	91	91	91	90

Robust standard errors, clustered by country, in parentheses

*** p<0.01, ** p<0.05, * p<0.1

This table reports results of OLS regressions using sovereign bond issuance as the dependent variable. Country and year fixed effects, as well as MSCI ratings and region dummies, are suppressed for presentation.

Table 11: Sovereign Bond Issuance and Democracy (Bootstrapped Standard Errors)

VARIABLES	(1) Full sample	(2) No OECD	(3) No OECD	(4) No OECD
Elect. democ. (VDem)	1.476***	1.123***	-1.512***	-1.303***
	(0.096)	(0.129)	(0.262)	(0.231)
US treasury rate	0.018	0.012	-0.288***	-0.287***
	(0.027)	(0.034)	(0.048)	(0.041)
Democ. X UST			0.529***	0.543***
			(0.046)	(0.036)
GDP per capita	0.622***	0.488***	0.435***	0.630***
	(0.031)	(0.024)	(0.051)	(0.053)
GDP growth (annual %)	0.003	0.003	0.002	-0.001
	(0.003)	(0.002)	(0.003)	(0.003)
Current account balance (% of GDP)	0.012***	0.012***	0.010***	0.023***
	(0.001)	(0.002)	(0.001)	(0.002)
Chinn-Ito index	-0.000	0.001	0.050***	-0.065***
	(0.016)	(0.011)	(0.012)	(0.014)
Public debt (% GDP)	-0.006***	-0.006***	-0.005***	-0.003***
	(0.000)	(0.000)	(0.000)	(0.001)
Proportion of peers issuing by region	0.456***	0.844***	0.725***	0.293**
	(0.118)	(0.120)	(0.129)	(0.125)
MSCI peer issuance	0.139	-0.650***	-0.600***	-0.640***
	(0.144)	(0.169)	(0.169)	(0.134)
CBI Garriga (weighted)				-0.272***
				(0.099)
Regime duration				0.023***
				(0.002)
Pegged XR				-0.021
				(0.042)
Oil rents (% of GDP)				-0.043***
				(0.006)
IMF prog. in place				0.160***
				(0.039)
Inflation crisis				-0.115**
				(0.049)
Default crisis				-0.548***
				(0.098)
Observations	25,374	21,028	21,028	16,890
Log likelihood	-12298	-9932	-9810	-8010
Pseudo-R2	0.286	0.300	0.308	0.304

Bootstrapped standard errors, resampling by country, in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This table reports results of probit regressions using sovereign bond issuance as the dependent variable, employing bootstrapped standard errors (resampling by country). Country and year fixed effects, as well as MSCI ratings and region dummies, are suppressed for presentation.

Table 12: Sovereign Credit Ratings and Democracy

VARIABLES	(1) Avg. Rating	(2) Moodys	(3) Fitch	(4) S&P
Democracy (VDem)	1.273	1.111	1.392	1.020
	(1.384)	(1.530)	(1.489)	(1.496)
US treasury rate	0.121	0.140	0.078	0.148
	(0.126)	(0.142)	(0.144)	(0.130)
Democ. X UST	-0.087	-0.121	-0.055	-0.122
	(0.193)	(0.215)	(0.211)	(0.194)
GDP per capita	2.751***	3.004***	2.159***	2.748***
	(0.398)	(0.457)	(0.353)	(0.389)
GDP growth (annual %)	0.072***	0.077***	0.071***	0.093***
	(0.020)	(0.024)	(0.019)	(0.022)
Current account balance (% of GDP)	0.004	0.002	-0.001	0.014
	(0.011)	(0.011)	(0.010)	(0.011)
Chinn-Ito index	0.275**	0.313***	0.354**	0.173
	(0.121)	(0.118)	(0.171)	(0.121)
Public debt (% GDP)	-0.023***	-0.021**	-0.037***	-0.041***
	(0.009)	(0.009)	(0.007)	(0.007)
Regional peer issuance	-0.167	0.072	-0.977*	-0.535
	(0.441)	(0.518)	(0.575)	(0.440)
MSCI peer issuance	-0.750	-0.812	-0.539	-0.362
	(0.517)	(0.623)	(0.680)	(0.550)
Observations	20,439	18,055	14,673	17,897
R-squared	0.377	0.357	0.402	0.409
Number of ccode	110	100	90	103
Countries	110	100	90	103

Robust standard errors clustered by country in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This table reports results of OLS regressions using sovereign credit ratings as the dependent variable. Country and year fixed effects, as well as MSCI ratings and region dummies, are suppressed for presentation.

Table 13: Heckman Selection - Rating

EQUATION	VARIABLES	(1) Avg. Rating	(2) Avg. Rating
Average rating	Democracy (VDem)	1.026	1.094
		(1.248)	(1.535)
	US treasury rate	0.553***	0.560**
		(0.077)	(0.279)
	Democ. X UST		-0.012
			(0.371)
	Current account balance (% of GDP)	0.067***	0.067***
		(0.025)	(0.025)
	GDP growth (annual %)	0.129***	0.129***
		(0.039)	(0.039)
	GDP per capita	3.186***	3.186***
		(0.210)	(0.210)
	Inflation (annual %)	-0.004***	-0.004***
		(0.002)	(0.002)
	Trade (% of GDP)	-0.000	-0.000
		(0.005)	(0.005)
	Default crisis	-4.800***	-4.802***
		(1.439)	(1.437)
Has Rating	Democracy (VDem)	1.625***	2.165**
		(0.456)	(0.889)
	US treasury rate	-0.180***	-0.129
		(0.041)	(0.087)
	Democ. X UST		-0.098
			(0.152)
	Current account balance (% of GDP)	-0.002	-0.001
		(0.011)	(0.011)
	GDP growth (annual %)	-0.002	-0.001
		(0.014)	(0.013)
	GDP per capita	0.842***	0.843***
		(0.135)	(0.135)
	Inflation (annual %)	-0.000	-0.000
		(0.001)	(0.000)
	Trade (% of GDP)	-0.006***	-0.006***
		(0.002)	(0.002)
	Default crisis	-0.126	-0.137
		(0.279)	(0.281)
	Exports to US	0.000	0.000
		(0.000)	(0.000)
	2000s	0.749***	0.747***
		(0.095)	(0.094)
	2010s	0.660***	0.670***
		(0.194)	(0.192)
	Observations	31,531	31,531
	Countries	120	120

Robust standard errors clustered by country in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This table reports results of 2-stage Heckman selection estimation, taking whether a country has received a rating by any of the 3 major rating agencies as the first stage "selection" model, and the average rating across the 3 agencies in the second stage "outcome" model. Covariates are based on Beaulieu, Cox and Saiegh (2012).

Table 14: Heckman Selection - Issuance

EQUATION	VARIABLES	(1) Issue	(2) Issue
Bond Issuance	Democracy (VDem)	-0.121	-0.704***
		(0.108)	(0.188)
	US treasury rate	0.004	-0.096***
		(0.010)	(0.025)
	Democ. X UST		0.144***
			(0.034)
	Current account balance (% of GDP)	0.002	0.002
		(0.003)	(0.003)
	GDP growth (annual %)	-0.001	-0.001
		(0.003)	(0.003)
	GDP per capita	-0.040	-0.037
		(0.028)	(0.029)
	Inflation (annual %)	-0.000	-0.000
		(0.000)	(0.000)
	Trade (% of GDP)	-0.001	-0.001
		(0.000)	(0.000)
	Default crisis	-0.302***	-0.282***
		(0.092)	(0.090)
Has Rating	Democracy (VDem)	1.501***	1.448***
		(0.444)	(0.452)
	US treasury rate	-0.230***	-0.224***
		(0.036)	(0.037)
	Current account balance (% of GDP)	-0.013	-0.013
		(0.011)	(0.011)
	GDP growth (annual %)	-0.006	-0.006
		(0.013)	(0.013)
	GDP per capita	0.654***	0.664***
		(0.124)	(0.125)
	Inflation (annual %)	-0.000	-0.000
		(0.000)	(0.000)
	Trade (% of GDP)	-0.006**	-0.006**
		(0.002)	(0.002)
	Default crisis	0.065	0.066
		(0.258)	(0.258)
	Exports to US	0.001**	0.001**
		(0.000)	(0.000)
	2000s	0.644***	0.665***
		(0.109)	(0.110)
	2010s	0.698***	0.683***
		(0.219)	(0.222)
	Observations	31,531	31,531
	Countries	120	120

Robust standard errors clustered by country in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This table reports results of 2-stage Heckman selection estimation, taking whether a country has received a rating by any of the 3 major rating agencies as the first stage "selection" model, and a dummy for bond issuance in the second stage "outcome" model. Covariates are based on Beaulieu, Cox and Saiegh (2012).

Table 15: Standardized Measure of Democracy (1990-2016)

VARIABLES	(1) Issue (No OECD)	(2) Issue (No OECD)	(3) Amount (No OECD)	(4) Amount (No OECD)
Standardized democracy	-0.384	-0.324	-5.176**	-5.081*
	(0.241)	(0.295)	(2.515)	(2.717)
US treasury rate	0.027	0.038	0.472*	0.473*
	(0.025)	(0.028)	(0.243)	(0.251)
Std. democ. X UST	0.131***	0.133***	1.389***	1.096**
	(0.036)	(0.043)	(0.413)	(0.426)
GDP per capita	0.433*	0.624**	0.279	2.045*
	(0.256)	(0.269)	(1.070)	(1.206)
GDP growth (annual %)	0.002	0.000	0.128	0.149
	(0.009)	(0.009)	(0.097)	(0.098)
Current account balance (% of GDP)	0.010	0.024**	0.113	0.171
	(0.007)	(0.010)	(0.081)	(0.119)
Chinn-Ito index	0.051	-0.062	1.062	0.467
	(0.085)	(0.089)	(0.667)	(0.658)
Public debt (% GDP)	-0.005	-0.003	-0.027	-0.019
	(0.004)	(0.003)	(0.026)	(0.027)
Regional peer issuance	0.937*	0.288	-4.172	-8.070
	(0.533)	(0.544)	(6.504)	(6.297)
MSCI peer issuance	-0.303	-0.350	-2.402	-2.575
	(0.499)	(0.372)	(3.363)	(3.024)
CBI Garriga (weighted)		-0.259		-5.566
		(0.484)		(4.216)
Regime duration		0.023***		0.034
		(0.005)		(0.069)
Pegged XR		-0.018		-2.782*
		(0.117)		(1.646)
Oil rents (% of GDP)		-0.045**		-0.239*
		(0.018)		(0.140)
IMF prog. in place		0.166		2.797**
		(0.121)		(1.375)
Inflation crisis		-0.087		3.577*
		(0.212)		(2.144)
Default crisis		-0.577**		-10.367***
		(0.284)		(2.563)
Observations	21,028	16,890	22,196	17,673
Log likelihood	-9807	-8010	-49385	-40973
Pseudo-R2	0.308	0.304	0.0605	0.0636
Countries	91	78	97	83

Robust standard errors clustered by country in parentheses

*** p<0.01, ** p<0.05, * p<0.1

This table reports results of probit regressions using sovereign bond issuance as the dependent variable (Columns 1 and 2) and tobit regressions using amount issued as the dependent variable (Columns 3 and 4), after standardizing the measure of democracy. Country and year fixed effects, as well as MSCI ratings and region dummies, are suppressed for presentation.

Predictive power

To address the issue of predictive power of our models, we provide below a figure mapping the receiver operator curve (ROC) for our model that includes an interaction to capture the conditional nature of the democratic advantage, as opposed to one that does not.[74] As demonstrated below in Figure 6, the dark gray ROC for the model including the interaction term (model A) exhibits superior performance in terms of area under the curve as compared to the light gray ROC estimated without the interaction (model B). A test of equality of areas under the two ROCs rejects the null hypothesis of equal areas at $p < 0.000$.
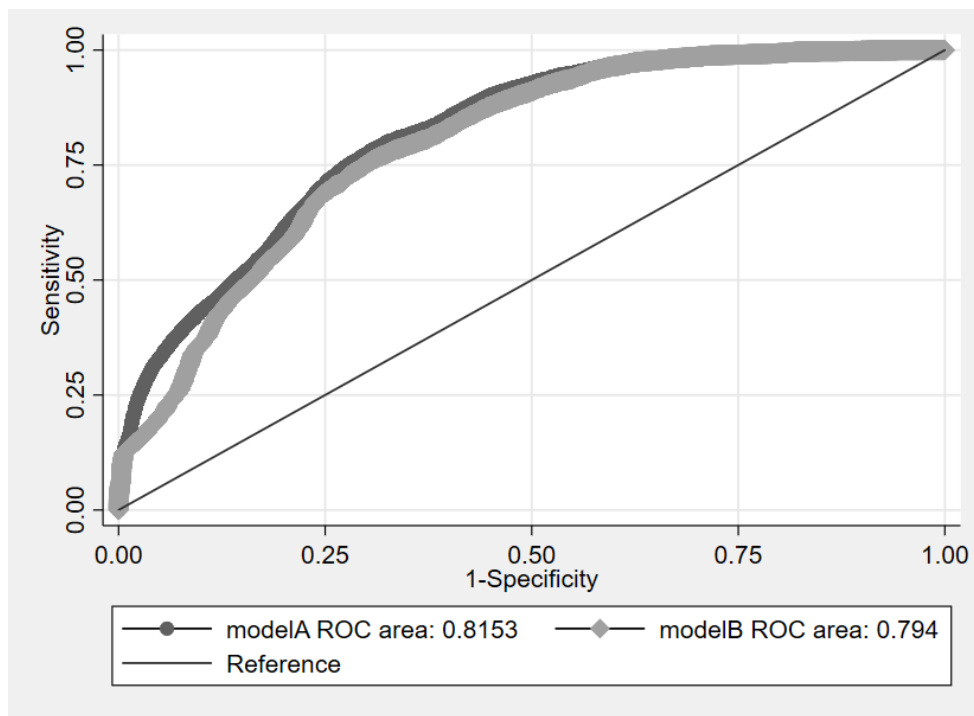

Figure 6: Receiver operator curves (ROC) for model including an interaction between *Democracy* and *US Treasury rates* (model A), and a model without the interaction (model B).

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[74]Figure calculated using the *roccomp* command in Stata 15.