Leaders, Tenure, and the Politics of Sovereign Credit: **Supplemental Appendix**

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A Variable Description and Sources

The following variables are found in the main manuscript's panel data analysis:

- **Bond Yields:** We collected bond data from the *Global Financial Database* and employ the average bond yield in each year to construct our measure, *Bond Yield* (Global Financial Data 2012). We construct a ratio variable, with the bond yield of a state divided by a benchmark sovereign bond yield that is deemed the lowest risk of default in the sovereign credit market. To be consistent with other studies, we use the Great Britain's consol as the lowest risk asset for observation years before 1914 and the United States' ten year bond yield as the lowest risk asset after 1914.

- **S&P Ratings:** These ratings reflect a country's general risk for default, graded by the firm's 17-point scale from AAA (lowest default risk) to C (highest default risk). To be consistent with other research, we transform the letter-grade scale into an ordinal indicator that spans from 0-16 with the highest value (16) representing an AAA rating and treat the indicator as a continuous variable. We use the yearly average of a country's ratings. S&P ratings were collected from a Bloomberg terminal in September 2013.

- **Institutional Investor (II) Ratings:** These ratings are survey assessments of creditworthiness by "senior economists and sovereign-risk analysts at leading global banks and money management and securities firms" (D'Ambrosio 2005). The ratings range from 0-100, with 100 representing the lowest default risk. We use the yearly average of a country's bi-yearly ratings. These data are drawn from DiGiuseppe and Shea (2016).

- **Leader Tenure:** We are interested in the effect of a leaders' tenure, with data drawn from the *Archigos* dataset (Goemans, Gleditsch and Chiozza 2009, Version4.1). Tenure is measured in days. It is positively (right) skewed and expected to have decreasing marginal benefits in the sovereign credit market. Subsequently, we take the natural log of this measure.

- **Democracy:** is derived from the 21-value *Polity* ordinal regime type indicator spanning

from -10 to 10, where 10 represents the most democratic states. Data drawn from Marshall and Jaggers (2010). To operationalize our measure of democracy, we code all states with *Polity* scores higher than or equal to six as democracies. Otherwise a state is coded as a non-democracy.

- **Growth:** is measured as the percent change in GDP from year $t-1$ to year t data drawn from World Bank (2016) from 1960 to 2012. Data are drawn from Haber and Menaldo (2011) for 1875 to 2006.

- **GDP per capita:** In thousands of dollars (2010 prices). Data drawn from World Bank (2016) from 1960 to 2012. Data are drawn from Haber and Menaldo (2011) for 1875 to 2006.

- **ln(GDP):** The natural log of Gross Domestic Product. Data drawn from World Bank (2016) from 1960 to 2012, measured in billions of dollars (2010 prices). Data are drawn from Haber and Menaldo (2011) for 1875 to 2006, measured in billions of dollars (2000 prices).

B Summary Statistics

Table B.1: Summary Statistics, 1980 - 2012

1980 - 2012					
Variable	**Mean**	**Std. Dev.**	**Min.**	**Max.**	**N**
S&P Rating	9.293	5.175	0	16	1825
Investor Rating	41.848	25.71	3.65	98.400	3896
Bond Yields	1.955	2.71	0.169	97.377	1779
Leader Tenure	7.353	1.114	2.485	9.792	5754
Democracy	0.468	0.499	0	1	5306
Growth (WB)	3.621	6.582	-64.047	149.973	5281
GDP per cap (WB)	11.022	16.501	0.115	115.003	5271
Log Real GDP (WB)	24.1	2.199	18.92	30.415	5274
1875- 2006					
Variable	**Mean**	**Std. Dev.**	**Min.**	**Max.**	**N**
Bond Yields	2.11	2.634	0.206	97.377	4330
Leader Tenure	7.23	1.193	0	10.106	13108
Log Real GDP (HM)	23.862	2.203	18.456	30.325	5838
Growth (HM)	0.039	0.084	-0.604	4.19	9486
GDP per cap (HM)	8.146	1.038	5.406	11.854	9690

WB = World Bank (2016); HM = Haber and Menaldo (2011).

C Leader Tenure and Credit Volatility

Longer tenured leaders can credibly allay concerns that contentious politics threaten debt promises. More time in power also allows leaders to better signal repayment effort to market actors. As a result, we observe tenure's association with better creditworthiness. An additional implication of this process is a reduction of the volatility or variance in credit risk assessments. As leader tenure extends, the markets should converge on their assessments given leaders' signaling efforts. To examine this conjecture, we simultaneously estimate *leader tenure*'s effect on creditworthiness and the volatility of creditworthiness.

Our estimation strategy draws on the institutions and development literature that has examined the relationship between democracies and the variance of economic growth (Mobarak 2005, Klomp and de Haan 2009). Following Klomp and de Haan (2009), we derive our measures of volatility from the five-year rolling standard deviation of the respective credit variables. We consider alternative calculations of variance as well, which produced similar results.[1] We then simultaneously estimate the volatility and credit outcome equations via three-stage least squares (3SLS) system of equations (Mobarak 2005).[2] To identify this system of equations, we use (Mobarak 2005) instruments for economic volatility: economic sectoral diversification, size of service sector, and population. Economic diversification allows an economy to smooth out the volatility of business cycles. We measure diversification with a Herfindahl concentration index of agriculture, manufacturing, and service shares of GDP (data drawn from World Bank (2016)). Higher levels of this measure indicate a lack of diversification. Service sectors are themselves quite heterogenous, so we include service as a share of GDP into the variance equations. Finally, we include population in the variance equations, as this indicates whether economic diversification is even possible.

Table C.2 shows the results of the 3SLS estimation. The outcome stage includes country fixed

[1]For example, we use the interquartile range, which limits the influence of outliers. In addition, we use Klomp and de Haan's (2009) relative standard deviation measure, which is the standard deviation multiplied by the five-year moving average. We also examine the variance between S&P, Moody's, and Fitch credit ratings. These results are consistent with our reported results and can be found in the replication materials.

[2]We also estimated a Heteroskedastic linear regression using the *hetregress* command in Stata, version 15. These models produce similar inferences and can be found in the replication materials.

effects, the lagged dependent variable, and the instrumented credit volatility predictor (not reported). The variance equations include the aforementioned instruments, along with the initial value of the credit variable at the start of the rolling five-year window (not reported), to account for initial credit effects (Klomp and de Haan 2009). In the outcome stages, we find a consistent relationship between *leader tenure* and the respective credit outcome variables. For the variance equations, we find that *leader tenure* reduces the volatility of all three credit variables. These results support our assertion that longer tenured leaders reduce uncertainty in credit markets.

Table C.2: 3SLS Leader Tenure and Credit Variance, 1980-2012

	S&P Rating		*II* Ratings		Bond Yields	
	(1)		(2)		(3)	
	Outcome	Variance	Outcome	Variance	Outcome	Variance
Leader Tenure	0.089*	-0.070*	0.262*	-0.131*	-0.061*	-0.048*
	(0.029)	(0.021)	(0.066)	(0.042)	(0.028)	(0.016)
Democracy	0.454*	0.037	1.347*	0.224*	-0.050	-0.062
	(0.145)	(0.058)	(0.222)	(0.110)	(0.102)	(0.044)
Growth	0.053*	-0.022*	0.184*	0.042*	-0.021*	-0.027*
	(0.006)	(0.005)	(0.013)	(0.009)	(0.007)	(0.004)
GDP per cap	-0.001	-0.015*	-0.020	-0.065*	-0.020*	-0.004*
	(0.007)	(0.002)	(0.019)	(0.004)	(0.005)	(0.001)
Log Real GDP	0.132	0.245*	2.036*	0.950*	0.420*	0.024
	(0.166)	(0.037)	(0.259)	(0.060)	(0.100)	(0.027)
Sectoral Concentration		0.033*		0.073*		0.154*
		(0.008)		(0.025)		(0.055)
Service Sector		-0.014*		-0.006		-0.013*
		(0.002)		(0.004)		(0.003)
Population		-0.230*		-0.792*		-0.038
		(0.036)		(0.058)		(0.027)
Constant	-2.714	-1.824*	-53.132*	-11.302*	-10.787*	0.245
	(4.677)	(0.594)	(7.149)	(0.963)	(2.837)	(0.364)
RMSE	0.654	0.567	2.209	1.851	0.722	0.479
R-Squared	0.984	0.181	0.992	0.176	0.745	0.289
χ^2	67346.1	252.9	297079.3	477.7	3296.3	487.7
N	1074		2247		1179	

$*p < 0.05$; Standard Errors in parentheses; Fixed Effects in outcome stage; All RHS variables are lagged one year. The dependent variable in the outcome stage is credit outcome (e.g., S&P rating, *II* rating, or bond yields.) The dependent variable in the variance stage is the standard deviation of the respective credit variable, derived from a five-year rolling window. The *Initial* credit variable in the variance stage is the value of that credit variable at the start of the five-year rolling window (not reported).

D Robustness Tests

The next sections examine the robustness of our main results. We consider alternative model specifications (e.g., error correction form), selection effects, additional control variables, the possible conditional effects of leaders' previous experience, the role of tenure in decisions to default, models without lagged dependent variables, the temporal ordering of tenure and creditworthiness, additional substantive interpretations of our results, and alternative domestic confounders. In summary, our inferences do not change as a result of these additional tests.

D.1 ADL Model in Error Correction Form

Table D.3: Leader Tenure and Creditworthiness, ECM

	S&P Rating 1980 - 2012	*II* Ratings 1980 - 2012	Bond Yields 1875 - 2006
	(1)	(2)	(3)
Long Run	0.691***	2.965***	-0.117*
Multiplier	0.195	0.637	(0.059)
(L) Leader Tenure	0.086***	0.286***	-0.065*
	(0.023)	(0.059)	(0.033)
Δ Leader Tenure	0.066***	0.128*	0.049
	(0.024)	(0.069)	(0.044)
Δ Democracy	0.024	0.004	0.121
	(0.150)	(0.295)	(0.242)
Δ Growth	-0.934***	-0.015	-4.817*
	(0.107)	(0.042)	(2.881)
Δ GDP per cap	-0.089***	0.240***	-10.371**
	(0.028)	(0.063)	(4.466)
Δ Log Real GDP	105.834***	9.277**	12.951*
	(10.918)	(4.133)	(7.308)
(L) Democracy	0.203**	0.950***	0.124
	(0.098)	(0.185)	(0.105)
(L) Growth	-0.910***	0.071*	-4.323
	(0.107)	(0.041)	(2.968)
(L) GDP per cap	0.001	-0.002	-0.941***
	(0.006)	(0.012)	(0.207)
(L) Log Real GDP	0.779***	0.717***	0.300**
	(0.174)	(0.255)	(0.140)
(L) S&P Rating	-0.124***		
	(0.014)		
(L) Investor Rating		-0.097***	
		(0.007)	
(L) Bond Yields			-0.558***
			(0.015)
Constant	-20.412***	-16.286***	1.979
	(4.498)	(6.287)	(2.921)
Country Dummies	*Yes*	*Yes*	*Yes*
Year Dummies	*Yes*	*Yes*	*Yes*
R-Squared	0.36	0.34	0.31
AIC	2555	14465	14218
N	1581	3259	3619
Countries	104	156	75

$*p < 0.1, **p < 0.05, ***p < 0.01$; Standard Errors in parentheses; Unit and Year Fixed Effects; The economic variables *Growth*, *Log Real GDP,* and *GDP per cap* are drawn from World Bank (2016) in models 1-2. In models 3, these variables are drawn from Haber and Menaldo (2011).

D.2 Selection Models

This section presents the Heckman selection results that were briefly discussed in the main manuscript. S&P ratings and bond yields are censored, as we do not observe states' creditworthiness if they are not rated or not in the bond yield market. (The *II* ratings do not suffer from this same problem.) This missingness is non-random. Instead, the likelihood of being in the S&P and bond yield data is a function of a state's creditworthiness, which may bias our results. To address this possible bias, we directly model the selection process using a Heckman selection model. In the selection stage, we model the probability of a state entering into the S&P and bond yield data. In the outcome stage, we estimate the effect of *leader tenure*, conditioned on the selection effects derived from the selection stage.

The dependent variable in the selection stage is a binary variable that indicates whether a state has bond yield data (for the bond yields models) in a given year or not and whether a state has S&P data (in the S&P models) in a given year or not. In order to condition the selection effects in the outcome stage, the selection stage must include an instrument or instruments that predict the selection stage dependent variable, but are unrelated to the outcome stage. This ensures that the error term of the selection model is uncorrelated with the errors in the outcome model (Greene 2002). We include two instruments: *Regional Credit Data* and *Year since credit data*. *Regional Credit Data* measures the percentage of states in a unit-state's region that have bond yield data or S&P data. We expect that a higher percentage of neighboring states that have credit data increases a state's propensity to enter the credit data because of the neighborhood effects found by Brooks, Cunha and Mosley (2015). However, whether a state's neighbors have credit data does not necessarily affect that state's creditworthiness. *Year since credit data* counts the number of years since a state last had bond or S&P data. We also include the squared and cubic values of this time variable, following Carter and Signorino's (2010) recommendation. We do not show the coefficient estimates on these additional time variables.

The remaining covariates are *Democracy*, *GDP*, *GDP growth percent* and *GDP per capita*. See Table D.4 for the results. We find a consistent relationship between *leader tenure* and credit-

worthiness in both models. In addition, we find that *leader tenure* is positively associated with the likelihood of entering the S&P and bond yield data.

Table D.4: Heckman Selection Models

	S&P Rating		Bond Yields	
	Outcome	Selection	Outcome	Selection
	(1)		(2)	
Leader Tenure	0.058*	0.099*	-0.175*	0.167*
	(0.023)	(0.031)	(0.083)	(0.028)
S&P Rating	0.871*			
	(0.015)			
Bond Yield			0.300*	
			(0.025)	
Democracy	0.257*	0.589*	-0.047	0.273*
	(0.105)	(0.070)	(0.312)	(0.061)
Growth	0.046*	0.019*	-0.034	0.015*
	(0.005)	(0.005)	(0.023)	(0.004)
GDP per cap	-0.011	-0.000	-0.007	0.000
	(0.007)	(0.002)	(0.015)	(0.002)
Log Real GDP	0.393*	0.226*	0.641	0.219*
	(0.196)	(0.019)	(0.484)	(0.016)
Regional Credit Data		0.957*		0.837*
		(0.112)		(0.112)
Years since S&P data		-0.830*		
		(0.033)		
Years since Bond data				-0.236*
				(0.007)
Constant	-9.716	-6.173*	-14.153	-5.712*
	(5.055)	(0.531)	(12.632)	(0.424)
N	1582	4885	1621	6590

$*p < 0.05$; All RHS variables are lagged one year in outcome stage.

D.3 Main Results with Additional Confounders

The following analysis re-examines the main results from Table 1 in the manuscript with additional confounders: *debt default*, *currency crisis*, *inflation crisis*, *debt levels*, *inter-state conflict*, *oil rents*, *financial depth*, and *bank risk*. *Debt default, currency crisis, inflation crisis*, (data for these three variables drawn from Reinhart and Rogoff (2008)) and *conflict* (MID data, Ghosn, Palmer and Bremer (2004)) are binary variables. *Debt levels* are measured as the natural log of state's debt level as a ratio to its GDP (data drawn from Abbas et al. (2011)).[3] *Oil rents* measures the oil revenue of a state as a percentage of GDP (data drawn from World Bank (2016)). We measure financial depth in two ways. First, we use the IMF's financial depth index (Svirydzenka 2016). Second, we use the World Bank measure of domestic credit from banks (World Bank 2016). Finally, we measure bank risk by using the World Bank's ratio of bank credit to reserves (World Bank 2016).

The inclusion of these variables in Table D.5 has no effect on our main inferences. Across these twenty-seven models, *leader tenure* remains statistically signficant and retains its substantive size compared to the Table 1 in the manuscript. We also include all of these controls into the same models in Table D.6 with no changes to our inferences.

[3] Given missingness in the variable, we linearly impute roughly 700 values for this variable.

Table D.5: Additional Controls for Models in Table 1

	S&P	*II*	Yields	S&P	*II*	Yields	S&P	*II*	Yields
Models	(1a)	(2a)	(3a)	(1b)	(2b)	(3b)	(1c)	(2c)	(3c)
Leader Tenure	0.056**	0.260***	-0.176**	0.057**	0.245***	-0.178**	0.057**	0.246***	-0.180**
	(0.023)	(0.054)	(0.083)	(0.023)	(0.054)	(0.083)	(0.023)	(0.054)	(0.083)
Default	-0.158	-1.819*	0.136						
	(0.123)	(0.196)	(0.437)						
Currency crisis				-0.074*	-0.666*	0.113			
				(0.031)	(0.094)	(0.114)			
Inflation							0.043	-0.051	-1.172
							(1.972)	(0.062)	(1.024)
R-Squared	0.78	0.92	0.14	0.78	0.92	0.14	0.78	0.92	0.14
AIC	2953	14527	7431	2949	14564	7430	2955	14616	7430
N	1582	3262	1621	1582	3262	1621	1582	3262	1621
Countries	104	156	78	104	156	78	104	156	78
Models	(1d)	(2d)	(3d)	(1e)	(2e)	(3e)	(1f)	(2f)	(3f)
Leader Tenure	0.050**	0.225***	-0.166**	0.058**	0.243***	-0.176**	0.066***	0.237***	-0.182**
	(0.023)	(0.055)	(0.083)	(0.023)	(0.054)	(0.083)	(0.023)	(0.058)	(0.085)
Debt-to-GDP	-0.007***	-0.010***	0.014***						
	(0.001)	(0.002)	(0.004)						
Conflict				0.024	-0.263**	-0.163			
				(0.049)	(0.108)	(0.178)			
Oil Rents							0.044***	0.019	-0.000
							(0.009)	(0.014)	(0.042)
R-Squared	0.78	0.92	0.15	0.78	0.92	0.14	0.78	0.93	0.14
AIC	2925	14025	7410	2955	14610	7431	2883	13011	7329
N	1582	3144	1619	1582	3262	1621	1543	2899	1593
Countries	104	153	78	104	156	78	97	128	76
Models	(1g)	(2g)	(3g)	(1h)	(2h)	(3h)	(1i)	(2i)	(3i)
Leader Tenure	0.057**	0.233***	-0.182**	0.056**	0.199***	-0.173**	0.063***	0.220***	-0.199**
	(0.023)	(0.056)	(0.084)	(0.023)	(0.056)	(0.085)	(0.024)	(0.057)	(0.092)
Financial Depth (IMF)	0.208	1.682***	0.565						
	(0.180)	(0.460)	(0.604)						
Domestic Credit (WB)				-0.007***	-0.005***	0.006*			
				(0.001)	(0.001)	(0.003)			
Bank Credit Ratio							-0.003***	-0.005***	0.001
							(0.001)	(0.002)	(0.003)
R-Squared	0.78	0.92	0.14	0.79	0.92	0.14	0.78	0.92	0.13
AIC	2954	14056	7377	2866	13854	7303	2843	13720	6830
N	1582	3148	1606	1554	3105	1586	1502	3069	1464
Countries	104	153	77	104	152	78	103	151	75

$*p < 0.1, **p < 0.05, ***p < 0.01$; Standard Errors in parentheses; Unit and Year Fixed Effects. The control variables *Democracy*, *Growth*, *Log Real GDP,* and *GDP per cap* are included in each model but not shown. All RHS variables are lagged one year.

Table D.6: Additional Controls for Models in Table 1 (All)

	S&P	*II*	Yields
	(1)	(2)	(3)
Leader Tenure	0.064***	0.211***	-0.206**
	(0.024)	(0.059)	(0.096)
Democracy	0.319***	0.996***	-0.244
	(0.106)	(0.190)	(0.354)
Default	-0.021	-1.378***	0.025
	(0.123)	(0.203)	(0.500)
Currency crisis	-0.060*	-0.491***	0.125
	(0.031)	(0.094)	(0.122)
Inflation	-3.850*	0.095	-1.392
	(2.071)	(0.068)	(1.110)
Debt-to-GDP	-0.007***	-0.006***	0.013***
	(0.001)	(0.002)	(0.005)
Conflict	0.046	-0.229**	-0.183
	(0.051)	(0.116)	(0.204)
Oil Rents	0.039***	0.016	0.017
	(0.009)	(0.015)	(0.045)
Financial Depth (IMF)	0.622***	2.779***	0.388
	(0.191)	(0.500)	(0.702)
Domestic credit (WB)	-0.006***	-0.019***	0.005
	(0.001)	(0.003)	(0.004)
Bank credit ratio	-0.002***	-0.002	0.001
	(0.001)	(0.002)	(0.003)
Growth	0.031***	0.169***	-0.034
	(0.006)	(0.011)	(0.027)
GDP per cap	0.004	-0.002	-0.016
	(0.008)	(0.014)	(0.018)
Log Real GDP	0.354*	0.544	1.295**
	(0.207)	(0.363)	(0.592)
S&P Rating	0.830***		
	(0.018)		
Investor Rating		0.872***	
		(0.008)	
Bond Yields			0.267***
			(0.028)
Constant	-7.954	-9.106	-31.058**
	(5.359)	(9.152)	(15.694)
R-Squared	0.80	0.94	0.14
AIC	2676	11625	6611
N	1445	2638	1405
Countries	96	122	72

$*p < 0.1, **p < 0.05, ***p < 0.01$; Standard Errors in parentheses; Unit and Year Fixed Effects. All RHS variables are lagged one year.

D.4 Previous Experience of Leaders

In our next robustness check, we examine whether the experience of a leader *before* he or she takes power conditions the effects of *leader tenure* on creditworthiness. In the manuscript, we briefly discuss our expectations: we do not expect a conditional effect. Leading and managing a state's fiscal and economic health is so unlike other positions in politics or business that we expect any new leader, regardless of previous experience, to benefit from more time in office. However, this is largely an empirical question that can be addressed using the leadership dataset, LEAD (Ellis, Horowitz and Stam 2015).

We examine three facets of leaders' prior experience: whether they have prior economic experience or not; whether they have received an advanced education degree (e.g., a graduate degree); and whether they have ample political experience. The first two concepts are measured as binary variables in the LEAD dataset. The political experience variable counts the number of years a leader had in politics prior to becoming leader. We take the natural log of this variable given that it is right skewed.

Before we examine these results, we note that using the LEAD data limit the temporal scope of the analysis to 2001.[4] This leads to a reduction in sample size, including about a sixty percent loss in the S&P analysis. Therefore, our conclusions here are tentative. Models 1-3 in Table D.7 examine leaders' previous experience in economics across the three measures of creditworthiness. We find that having an economics career reduces the *II* rating and increases bond yields when *leader tenure* is zero. The coefficient on the interaction terms in these models shows that tenure helps creditworthiness more for leaders with economics experience. There is no conditional effect for the S&P analysis.

[4]The bond yields analysis covers 1875 - 2001

Table D.7: Leader Tenure and Sovereign Bond Yields

	S&P	*II*	Yields	S&P	*II*	Yields	S&P	*II*	Yields
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Leader Tenure	0.050	0.260*	-0.069*	0.004	0.329*	-0.046	0.090	0.212	-0.245*
	(0.039)	(0.074)	(0.039)	(0.052)	(0.097)	(0.052)	(0.098)	(0.154)	(0.102)
Economics Career	-0.087	-2.651*	2.552*						
	(0.595)	(1.443)	(0.869)						
Tenure*Economics	-0.012	0.411*	-0.394*						
	(0.090)	(0.218)	(0.129)						
High Education				-0.711	0.395	0.727			
				(0.435)	(0.896)	(0.468)			
Tenure*Education				0.083	-0.040	-0.105			
				(0.063)	(0.128)	(0.069)			
Politically Experienced							0.116	-0.349	-0.393
							(0.248)	(0.407)	(0.256)
Tenure*Political Exp.							-0.015	0.042	0.056
							(0.035)	(0.058)	(0.037)
Constant	8.472	14.932*	4.039	5.739	15.225*	4.233	5.306	16.006*	4.699
	(13.772)	(8.042)	(3.416)	(13.637)	(8.072)	(3.445)	(13.724)	(8.098)	(3.448)
Controls	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Lagged DVs	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Country Dummies	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Year Dummies	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
R-Squared	0.72	0.89	0.19	0.72	0.89	0.19	0.72	0.89	0.19
AIC	1218	9409	12407	1215	9378	12354	1222	9377	12415
N	671	2104	3096	671	2097	3077	671	2097	3096
Countries	75	133	66	75	133	66	75	133	66

$*p < 0.1$; Standard Errors in parentheses; Unit and Year Fixed Effects; All RHS variables are lagged one year. The control variables *Democracy*, *Growth*, *Log Real GDP,* and *GDP per cap* are included in each model but not shown.

Models 4 - 6 examine the effects of education and finds no effect across the creditworthiness dependent variables. Similarly, models 7 - 9 examines the effects of political experience and finds no relationships.

Given the reduced sample sizes, we want to limit our ad-hoc explanation of these results. Mostly, the results are null. Nevertheless, the economics experience results are suggestive and warrant further exploration. Our main inferences made in the manuscript, however, still hold.

D.5 Tenure and Default

Table D.8 examines whether *leader tenure* is associated with sovereign default policy. In the manuscript, we argue that increased time in office allows leaders to manage the market and constituents' expectations. This does not mean that the leader will pursue better policies. To examine this dynamic, we use Reinhart and Rogoff's (2008) default data, which is a binary measure that indicates whether a state is in default or not. We also use a default onset variable which indicates whether a default spell has started in year t, and zero otherwise. For years where default endures, we code these years as missing to avoid estimation bias (McGrath 2015). Models 1 and 2 use the World Bank's (2016) data on the economic controls, which limits the data to start in 1960. Models 3 and 4 uses Haber and Menaldo (2011) economic data. *Debt to GDP* is drawn from Abbas et al. (2011). *Global yield rate* is the bond yield on the lowest risk asset in the sovereign market. Following previous research, we use a combination of the British consol (1875 - 1913) and U.S. ten year bond yield (1914 - 2007) as the lowest risk asset (Shea 2014). We collected annual bond data from the *Global Financial Database* (Global Financial Data 2012). We expect that higher global interest rates will make debt repayment less likely given the higher costs of credit and also make war less likely given the higher costs of borrowing.

Table D.8 shows no evidence that *leader tenure* decreases the likelihood of default or default onset. Only one of the coefficients across the models are statistically significant, but *all* are in the opposite expected direction. These results support our assertion that the association between leader tenure and creditworthiness is not merely a function of more experienced leaders picking better policies. Instead, longer tenured leaders will be better able to mitigate the market's concerns and uncertainty when the state implements difficult fiscal policies. To demonstrate this, we interact leader tenure with default onset (data drawn from Reinhart and Rogoff (2008)). While we expect that default onset will decrease creditworthiness, longer tenured leaders will mitigate the negative consequences better than novice leaders. Table D.9 shows the results of the conditional effect of tenure, which are consistent with our expectations.

Table D.8: Probit Models: Leader Tenure, Default, and Default Onset

	Default	Default Onset	Default	Default Onset
	1960 - 2008	1960 - 2008	1875 - 2006	1875 - 2006
	(1)	(2)	(3)	(4)
Leader Tenure	0.172*	0.104	0.020	0.046
	(0.098)	(0.081)	(0.063)	(0.058)
Democracy	0.011	0.015	-0.341*	-0.162
	(0.178)	(0.179)	(0.156)	(0.126)
Global Yield Rate	0.224*	0.105*	0.071*	0.056*
	(0.058)	(0.042)	(0.041)	(0.032)
ln(Debt to GDP)	0.540*	0.101	0.134	0.118
	(0.148)	(0.188)	(0.093)	(0.075)
Growth	-0.038*	-0.061*	-3.230*	-3.275*
	(0.016)	(0.022)	(0.750)	(1.188)
GDP per cap	-0.060*	-0.069*	-0.366*	-0.346*
	(0.020)	(0.017)	(0.087)	(0.121)
Log Real GDP	0.125	0.213*	0.059	0.148*
	(0.076)	(0.069)	(0.054)	(0.039)
Years since default	-0.247*		-0.228*	
	(0.038)		(0.025)	
Years since default onset		0.005		-0.003
		(0.018)		(0.014)
Constant	-7.502*	-8.570*	0.754	-3.763*
	(2.436)	(2.376)	(1.437)	(1.042)
Log Likelihood	-258.95	-105.81	-584.49	-240.78
AIC	540	234	1191	504
N	3002	1635	4193	3256

$*p < 0.1$. Clustered standard Errors in parentheses; The economic variables *Growth*, *Log Real GDP,* and *GDP per cap* are drawn from World Bank (2016) in models 1-2. In models 3 - 4, these variables are drawn from Haber and Menaldo (2011). Squared and cubic time splines of years since default/default onset are not shown. All RHS variables are lagged one year.

Table D.9: Conditional Relationship between Leader Tenure and Default Onset

	S&P	*II*	Yields
	(1)	(2)	(3)
Leader Tenure	0.050	0.178*	-0.038
	(0.028)	(0.078)	(0.026)
Default Onset	-3.705*	-8.583*	4.791*
	(1.013)	(1.932)	(0.764)
Tenure*Default Onset	0.566*	0.788*	-0.625*
	(0.154)	(0.271)	(0.107)
Democracy	0.442*	1.318*	0.030
	(0.118)	(0.234)	(0.105)
Years since default	-0.025*	-0.023*	0.001
	(0.004)	(0.007)	(0.003)
Growth	0.058*	0.275*	-0.010
	(0.007)	(0.016)	(0.007)
GDP per cap	0.011	0.036	-0.016*
	(0.007)	(0.019)	(0.006)
Log Real GDP	0.602*	2.382*	0.281*
	(0.139)	(0.252)	(0.107)
S&P Rating	0.906*		
	(0.017)		
Investor Rating		0.890*	
		(0.008)	
Bond Yields			0.606*
			(0.023)
Constant	-14.782*	-57.846*	-6.193*
	(3.538)	(6.189)	(2.647)
Log Likelihood	-1019.66	-4077.18	-1092.90
AIC	2059	8174	2206
N	1084	1783	1133

$*p < 0.05$. Unit fixed effects. All RHS variables are lagged one year.

D.6 Omit Lagged Dependent Variable

The lagged dependent variables account for much of the variance in the models, which suppresses our coefficients. We estimate models without lagged dependent variables and observe larger effect sizes for *leader tenure*. Following Angrist and Pischke (2009, 243-247), we can think of the results in the manuscript with lagged dependent variables as the lower bound of the effect and the results in Table D.10 without lagged dependent variables as the upper bound.

Table D.10: Leader Tenure and Creditworthiness with No LDV

	S&P Rating 1980 - 2012	*II* Ratings 1980 - 2012	Bond Yields 1980 - 2012	Bond Yields 1875 - 1979	Bond Yields 1875 - 2006
	(1)	(2)	(3)	(4)	(5)
Leader Tenure	0.187*	0.621*	-0.216*	-0.135*	-0.098*
	(0.041)	(0.142)	(0.084)	(0.023)	(0.034)
Democracy	0.132	2.478*	0.004	0.275*	0.211
	(0.182)	(0.459)	(0.317)	(0.084)	(0.112)
Growth	0.048*	0.129*	-0.048*	0.285	-0.085
	(0.009)	(0.020)	(0.022)	(0.409)	(0.400)
GDP per cap	0.092*	0.239*	-0.017	-0.156	-1.549*
	(0.012)	(0.031)	(0.016)	(0.218)	(0.219)
Log Real GDP	3.963*	9.486*	0.644	-0.579*	0.433*
	(0.308)	(0.620)	(0.485)	(0.143)	(0.152)
Constant	-97.826*	-197.117*	-12.753	18.905*	5.114
	(7.963)	(15.455)	(12.661)	(2.790)	(3.147)
R-Squared	0.28	0.45	0.05	0.20	0.09
AIC	5198	21944	7799	7819	15587
N	1686	3395	1675	2518	3757
Countries	106	156	79	42	75

$*p < 0.05$; Standard Errors in parentheses; Unit and Year Fixed Effects; All RHS variables are lagged one year. The economic variables *Growth*, *Log Real GDP,* and *GDP per cap* are drawn from World Bank (2016) in models 1–3. In models 4 and 5, these variables are drawn from Haber and Menaldo (2011).

D.7 Multiple Imputation

We employ multiple imputation to address missing data issues with our main control variables, using Stata's (version 14) `mi impute` multivariate normal regression method. Values of the control variables democracy, GDP, growth, and GDP per capita are imputed using leader tenure's values. We also tried alternative imputation variations, where the covariates are imputed on year, time splines, regional credit data. These more complicated attempts do not change our results (see replication files for these attempts).

The imputation created 10 sets of simulated values to replace the missing values, then applies analysis from the original models in Table 1 in the manuscript, adjusting the obtained parameter estimates for missing-data uncertainty. We improve the sample size in the S&P models by 6.4 percent, in the *II* models by 13.3 percent, and in the bond yields models by 4.2 percent. We re-analyze models 1 - 3 from Table 1 in the manuscript using the imputed data in Table D.11. We also re-analyze the selection models in Table D.12 and the models with *oil rents* as a control in Table D.13. These model produce similar results as the original models.

Table D.11: Leader Tenure and Creditworthiness with Imputed Data

	S&P Rating	*II* Ratings	Bond Yields
	(1)	(2)	(3)
Leader Tenure	0.064*	0.212*	-0.170*
	(0.023)	(0.054)	(0.080)
Democracy	0.157	0.778*	0.026
	(0.099)	(0.198)	(0.278)
Growth	0.043*	0.090*	-0.029
	(0.005)	(0.008)	(0.021)
GDP per cap	-0.005	-0.007	-0.007
	(0.006)	(0.010)	(0.014)
Log Real GDP	0.088	0.035	0.235
	(0.089)	(0.090)	(0.270)
S&P Rating	0.880*		
	(0.014)		
Investor Rating		0.907*	
		(0.006)	
Bond Yields			0.302*
			(0.024)
Constant	-1.975	1.273	-3.558
	(2.219)	(2.201)	(7.025)
N	1684	3697	1690
Countries	112	168	81

$*p < 0.05$; Standard Errors in parentheses; Unit and Year Fixed Effects in outcome stage; All RHS variables are lagged one year.

Table D.12: Selection Models with Imputed Data

	S&P Rating		Bond Yields	
	Selection	Outcome	Selection	Outcome
	(1)		(2)	
Leader Tenure	0.070*	0.064*	0.111*	-0.130*
	(0.025)	(0.023)	(0.023)	(0.059)
S&P Rating		0.880*		
		(0.014)		
Bond Yield				0.322*
				(0.021)
democracy2	0.652*	0.151	0.309*	-0.125
	(0.060)	(0.100)	(0.056)	(0.193)
Growth	0.014*	0.043*	0.008*	-0.013
	(0.004)	(0.005)	(0.004)	(0.016)
GDP per cap	0.003	-0.005	0.003	-0.012
	(0.002)	(0.006)	(0.002)	(0.009)
Log Real GDP	0.207*	0.086	0.179*	-0.104
	(0.015)	(0.089)	(0.013)	(0.194)
Regional Credit Data	0.608*		0.313*	
	(0.062)		(0.111)	
Years since S&P data	-0.640*			
	(0.024)			
Years since Bond data			-0.190*	
			(0.005)	
Constant	-5.643*	-1.897	-4.346*	5.218
	(0.432)	(2.239)	(0.362)	(5.145)
N	5556	1684	7259	2167
Countries		112		82

$*p < 0.05$; Standard Errors in parentheses; Unit and Year Fixed Effects in outcome stage; All RHS variables are lagged one year. Dependent variables in selection stages are whether states have credit rating/bond yield data in a given year. Time splines in selection stage and Mill's inverse ratio not reported.

Table D.13: Leader Tenure and Creditworthiness with Imputed Data

	S&P Rating	*II* Ratings	Bond Yields
	(1)	(2)	(3)
Leader Tenure	0.067*	0.208*	-0.170*
	(0.023)	(0.053)	(0.080)
Oil Rents	0.024*	0.006	-0.001
	(0.007)	(0.009)	(0.030)
Democracy	0.155	0.826*	0.026
	(0.103)	(0.190)	(0.275)
Growth	0.043*	0.088*	-0.029
	(0.005)	(0.008)	(0.021)
GDP per cap	-0.005	-0.009	-0.006
	(0.005)	(0.009)	(0.014)
Log Real GDP	0.092	0.094	0.237
	(0.089)	(0.110)	(0.266)
S&P Rating	0.880*		
	(0.014)		
Investor Rating		0.907*	
		(0.006)	
Bond Yields			0.302*
			(0.024)
Constant	-2.180	-0.218	-3.608
	(2.280)	(2.722)	(6.920)
N	1684	3697	1690
Countries	112	168	81

$*p < 0.05$; Standard Errors in parentheses; Unit and Year Fixed Effects in outcome stage; All RHS variables are lagged one year.

D.8 Temporal Analysis

Because of the importance of credit to political survival, leaders are motivated to reduce uncertainty in the credit market. If credit did not help leaders stay in power longer, it is less likely that leaders would put effort towards improving credit. In sum, we envision a feedback process, where credit helps leaders (Morrison 2009, 2014, DiGiuseppe and Shea 2015, 2016), so leaders work to secure credit.

While our natural experiment hopefully lends credence to our assertion that leaders affect creditworthiness, we run additional analysis here to demonstrate leaders' effect on credit. First, Table D.14 shows the effect of the leads (in years) of tenure on credit. There is no effect of the leads on bond yields, and the effects of the leads dissipates by lead three. As an alternative means to assess temporal ordering, we turn to Granger analysis in Table D.15. We examine lags of up to five years. We find that *leader tenure* Granger causes S&P ratings with up to three years, and Granger causes *II* and bond yields up to five years. Conversely, S&P ratings Granger cause leader tenure from lags two through four, with null results for the other two credit variables. We do not overstate these results, as Granger causality is not akin to average treatment effects. Nor do they negate DiGiuseppe and Shea's findings given that tenure as a dependent variable should be modeled using survival analysis (as these authors did). The Granger results simply imply that leader tenure is temporally predictive of credit, and this, coupled with the natural experiment, suggests that tenure does affect credit.

Table D.14: Leads of Leader Tenure and Creditworthiness

	S&P	*II*	Yields	S&P	*II*	Yields	S&P	*II*	Yields
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Leader Tenure$_{t+1}$	0.121*	0.199*	-0.108						
	(0.022)	(0.054)	(0.083)						
Leader Tenure$_{t+2}$				0.068*	0.111*	0.015			
				(0.022)	(0.053)	(0.087)			
Leader Tenure$_{t+3}$							0.006	0.039	0.087
							(0.022)	(0.053)	(0.090)
Democracy	0.245*	0.815*	0.006	0.235*	0.765*	0.021	0.215*	0.739*	0.058
	(0.102)	(0.174)	(0.309)	(0.103)	(0.173)	(0.322)	(0.102)	(0.173)	(0.333)
Growth	0.045*	0.107*	-0.035	0.046*	0.109*	-0.040	0.055*	0.110*	-0.034
	(0.005)	(0.008)	(0.023)	(0.005)	(0.008)	(0.023)	(0.006)	(0.008)	(0.024)
GDP per cap	-0.010	-0.027*	-0.010	-0.010	-0.026*	-0.011	-0.008	-0.026*	-0.005
	(0.007)	(0.012)	(0.015)	(0.007)	(0.012)	(0.016)	(0.007)	(0.012)	(0.017)
Log Real GDP	0.378*	0.262	0.620	0.397*	0.279	0.569	0.448*	0.285	0.478
	(0.192)	(0.252)	(0.478)	(0.193)	(0.252)	(0.512)	(0.202)	(0.252)	(0.543)
S&P Rating	0.872*			0.874*			0.832*		
	(0.015)			(0.015)			(0.015)		
Investor Rating		0.905*			0.905*			0.905*	
		(0.007)			(0.007)			(0.007)	
Bond Yields			0.302*			0.300*			0.285*
			(0.025)			(0.025)			(0.026)
Constant	-9.802*	-4.077	-14.067	-9.945*	-3.861	-12.249	-10.415*	-3.470	-11.453
	(4.946)	(6.217)	(12.511)	(4.981)	(6.231)	(13.398)	(5.199)	(6.239)	(14.208)
R-Squared	0.78	0.92	0.14	0.78	0.92	0.13	0.78	0.92	0.12
AIC	2928	14622	7433	2950	14632	7174	2602	14635	6898
N	1582	3262	1621	1582	3262	1552	1482	3262	1486
Countries	104	156	78	104	156	76	102	156	76

$*p < 0.05$; Standard Errors in parentheses; Unit and Year Fixed Effects; All RHS variables are lagged one year, except *Leader Tenure*.

Table D.15: Granger Tests of Leader Tenure and Creditworthiness

Leader Tenure Granger Causes Credit

	S&P Rating		*II* Ratings		Bond Yields	
Lags	F-Test	p-value	F-Test	p-value	F-Test	p-value
1	13.200	0.000	10.020	0.002	6.450	0.011
2	5.310	0.005	8.490	0.000	3.160	0.042
3	4.030	0.007	4.980	0.002	3.110	0.025
4	2.160	0.072	4.280	0.002	4.290	0.002
5	1.690	0.134	3.890	0.002	3.100	0.009

H_0: Leader Tenure does not Granger cause Creditworthiness

Credit Granger Causes Leader Tenure

	S&P Rating		*II* Ratings		Bond Yields	
Lags	F-Test	p-value	F-Test	p-value	F-Test	p-value
1	2.350	0.126	1.040	0.308	0.330	0.563
2	6.220	0.002	0.180	0.834	0.510	0.082
3	4.680	0.003	0.570	0.633	2.050	0.105
4	2.470	0.043	1.180	0.319	2.060	0.084
5	1.390	0.225	0.860	0.509	2.020	0.072

H_0: Creditworthiness does not Granger cause Leader Tenure

D.9 Additional Substantive Inference

This section briefly presents additional substantive interpretations of Table 1 in the manuscript. First, we divide each continuous covariate by two standard deviations to allow the coefficients to be comparable to each other and to the binary measure of democracy, as recommended by Gelman (2008). These standardized results are found in Table D.16 and suggest that the substantive effect of *leader tenure* is not as large as democracy or the other economic covariates in the S&P and *II* models. *Leader tenure* in the bond yields models is substantively larger than the other covariates, except GDP (which is not statistically significant).

Table D.16: Leader Tenure and Creditworthiness with Standardized Coefficients

	S&P Rating	*II* Ratings	Bond Yields
	(1)	(2)	(3)
Leader Tenure	0.128*	0.547*	-0.395*
	(0.052)	(0.121)	(0.186)
Democracy	0.255*	0.923*	-0.061
	(0.104)	(0.177)	(0.311)
Growth	0.599*	1.418*	-0.437
	(0.071)	(0.104)	(0.296)
GDP per cap	-0.369	-0.856*	-0.258
	(0.232)	(0.404)	(0.508)
GDP	1.707*	0.967	3.046
	(0.851)	(1.107)	(2.110)
S&P Rating	0.871*		
	(0.015)		
Investor Rating		0.904*	
		(0.007)	
Bond Yield			0.301*
			(0.025)
Constant	-9.597	-3.370	-15.490
	(4.986)	(6.206)	(12.520)
R-Squared	0.78	0.92	0.14
AIC	2953	14615	7430
N	1582	3262	1621
Countries	104	156	78

$*p < 0.05$; Standard Errors in parentheses; Unit and Year Fixed Effects; All RHS variables are lagged one year. All continuous variables are divided by two standard deviations.

Comparing standardized coefficients, however, is difficult given that *leader tenure* and GDP are logarithmic variables. This means that their marginal effect will vary across different values of

the variable. Table D.17 focuses on the marginal effect of each covariate when these variables add one standard deviation to their mean level. To compare these effects we re-run Table 1 from the manuscript, but substitute in *polity 2* for the binary democracy measure for comparability purposes (see Table E.22 below for this table). Then we report the marginal effects from moving from a variable's mean to one standard deviation past its mean. Given the panel nature of our data, we report results for standard deviation within and between units. The results in Table D.17 show that *leader tenure*'s substantive effect is larger than the other covariates, except GDP which again is not statistically significant. While suggestive, we make no further claims on the relative importance of the covariates given comparability issues (King 1986).

Table D.17: Marginal Effects, Mean Plus Standard Deviation

	S&P Rating	*II* Ratings	Bond Yields
Leader Tenure			
within	0.917*	3.858*	-2.802*
	[0.229, 1.605]	[2.181, 5.536]	[-5.211, -0.397]
between	0.954*	3.915*	-2.803*
	[0.238, 1.670]	[2.213, 5.616]	[-5.210, -0.396]
Polity2			
within	0.163	0.411*	-0.270
	[-0.023, 0.350]	[0.228, 0.592]	[-3.066, 21.679]
between	0.251	0.628*	-0.378
	[-0.035, 0.539]	[0.349, 0.906]	[-3.066, 21.679]
Growth			
within	0.318*	0.980*	-0.225
	[0.251, 0.539]	[0.838, 1.121]	[-0.519, 0.070]
between	0.330*	0.716*	-0.215
	[0.261, 0.399]	[0.612, 0.818]	[-0.497, 0.067]
GDP per cap			
within	-0.154	-0.387*	-0.241
	[-0.420, 0.111]	[-0.768, -0.006]	[-1.067, 0.585]
between	-0.231	-0.683*	-0.350
	[-0.630, 0.166]	[-1.355, -0.010]	[-1.551, 0.850]
GDP			
within	9.146	18.230	42.217
	[-3.014, 21.307]	[-7.975, 44.437]	[-8.877, 93.310]
between	9.306	18.622	43.045
	[-3.066, 21.679]	[-8.147, 45.391]	[-9.051, 95.142]

$*p < 0.05$; 95 percent confidence intervals in brackets. Marginal effects drawn from models 1-3 in Table 1 in manuscript, though *Polity2* is substituted for the original binary measure of democracy for comparison purposes. Effects are derived using the variables mean value and adding the within or between panel standard deviation (other covariates held at their means).

D.10 Government Quality

This section examines an alternative explanation of the main results, specifically whether domestic institutions such as central banks or the quality of bureaucratic management negate the importance of leader tenure. We did not empirically address these factors in the main models for two reasons. First, some of these factors may be post-treatment factors, so including them may introduce bias to the models (Acharya, Blackwell and Sen 2016). For example, a longer tenured leader may have a better sense of which treasury ministry to appoint given the expected reaction from credit markets. Second, other domestic factors tend to be slow moving, such as the presence of a central bank, and thus would be controlled for with unit fixed effects.

Despite these reservations, we consider additional domestic controls in our models. First, we control for bureaucratic quality to address the possibility that a leader is surrounded by competent (incompetent) government workers that would increase (decrease) the credit markets' confidence in a state's creditworthiness. *Bureaucratic quality* is a continuous measure, ranging from zero to four, with higher values indicating higher quality bureaucracies. Bureaucratic quality data are drawn from International Country Risk Guide (Teorell et al. 2013) and compiled by Graham (2015). Including this control in the models in Table D.18 does not change our inferences. Next, instead of focusing on bureaucratic quality in general, we include a measure that focuses on the quality of a state's economic institutions. These data are drawn from (Kunčič 2014). The results do not change. Finally, we examine whether central bank independence confounds our results, using Garriga's (2016) data. Again, our results are consistent. Table D.21 includes all these added controls together in the same model, with no major changes to report.

Table D.18: Leader Tenure, Quality of Government, and Creditworthiness

	S&P	*II*	Yields	S&P	*II*	Yields	S&P	*II*	Yields
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Leader Tenure	0.060**	0.239***	-0.211**	0.043*	0.319***	-0.265**	0.057**	0.190***	-0.182**
	(0.024)	(0.058)	(0.099)	(0.024)	(0.062)	(0.121)	(0.023)	(0.057)	(0.084)
Bureau. Quality	0.084	0.182	1.623						
	(0.361)	(0.595)	(1.214)						
Econ. Instit. Quality				0.131	3.228***	-2.442			
				(0.368)	(0.670)	(1.605)			
Central Bank Indep.							-0.024	0.482	-1.157**
							(0.165)	(0.414)	(0.572)
R-Squared	0.77	0.93	0.14	0.77	0.92	0.12	0.78	0.92	0.14
AIC	2696	11370	6724	2300	10258	5601	2936	13142	7380
N	1489	2633	1429	1346	2390	1147	1571	2955	1608
Countries	98	129	75	101	155	75	104	152	78

$*p < 0.1, **p < 0.05, ***p < 0.01$; Standard Errors in parentheses; Unit and Year Fixed Effects. All RHS variables are lagged one year. The control variables *Democracy*, *Growth*, *Log Real GDP*, and *GDP per cap* are included in each model but not shown.

Table D.19: All Government Quality Controls

	S&P Rating	*II* Ratings	Bond Yields
Leader Tenure	0.046*	0.299***	-0.293**
	(0.024)	(0.066)	(0.129)
Bureau. Quality	0.181	1.175	2.708
	(0.368)	(0.775)	(1.733)
Econ. Instit. Quality	0.220	2.122***	-2.670
	(0.389)	(0.760)	(1.711)
Central Bank Indep.	0.004	0.025	-2.296**
	(0.179)	(0.500)	(0.946)
Democracy	0.266**	1.138***	-0.006
	(0.108)	(0.234)	(0.504)
Growth	0.056***	0.183***	-0.044
	(0.006)	(0.014)	(0.033)
GDP per cap	-0.009	-0.030	0.056*
	(0.009)	(0.019)	(0.033)
Log Real GDP	0.412*	0.017	0.848
	(0.210)	(0.482)	(1.069)
S&P Rating	0.837***		
	(0.019)		
Investor Rating		0.881***	
		(0.010)	
Bond Yields			0.255***
			(0.031)
Constant	-10.138*	0.147	-18.515
	(5.398)	(11.968)	(27.624)
R-Squared	0.77	0.92	0.13
AIC	2242	8500	5347
N	1298	1997	1084
Countries	95	126	72

$*p < 0.1, **p < 0.05, ***p < 0.01$; Standard Errors in parentheses; Unit and Year Fixed Effects. All RHS variables are lagged one year.

D.11 Clustering Standard Errors

We do not cluster our standard errors in the main analysis (Table 1), given low intra-cluster correlation coefficients across our response variables: S&P has $\rho = 0.012$; *II* has $\rho = 0.025$; bond yields has $\rho = 0.000$ (Arceneaux and Nickerson 2009). In addition, the presence of unit and year fixed effects, coupled with clustered standard errors can lead to bias in standard errors (Angrist and Pischke 2009). Nevertheless, we test the consistency of results with different standard errors. First, we estimate our models with panel corrected standard errors (Beck and Katz 2011).[5] Next, we bootstrap standard errors with 50 with-replacement draws from within the clusters (countries), as recommended by Cameron and Miller (2015). These alternative models produce similar results as our original models, suggesting that our models are not wildly misspecified (King and Roberts 2015).

[5] In order to estimate variance covariance matrix using casewise inclusion, we had to delete units that had insufficient observations overtime, which accounts for the difference in sample sizes with Table 1 in the manuscript.

Table D.20: Panel Corrected Standard Errors

	S&P Rating	*II* Ratings	Bond Yields
Leader Tenure	0.029*	0.183*	-0.133*
	(0.014)	(0.046)	(0.026)
Democracy	0.142*	0.882*	0.474*
	(0.045)	(0.182)	(0.082)
Growth	0.057*	0.112*	-0.039*
	(0.006)	(0.010)	(0.013)
GDP per cap	0.005*	0.012*	-0.019*
	(0.002)	(0.006)	(0.002)
Log Real GDP	0.010	0.080	-0.157*
	(0.010)	(0.055)	(0.012)
S&P Rating	0.975*		
	(0.007)		
Investor Rating		0.979*	
		(0.007)	
Bond Yields			0.359*
			(0.012)
Constant	-0.536*	-6.038*	5.860*
	(0.268)	(1.198)	(0.480)
R-Squared	0.98	0.99	0.21
N	1436	2917	1132
Countries	77	112	37

$*p < 0.05$, Standard Errors in parentheses; Unit and Year Fixed Effects. All RHS variables are lagged one year.

Table D.21: Bootstrapped Standard Errors, Cluster on Country

	S&P Rating	*II* Ratings	Bond Yields
Leader Tenure	0.057*	0.246*	-0.177*
	(0.026)	(0.063)	(0.088)
Democracy	0.255	0.923*	-0.061
	(0.131)	(0.208)	(0.123)
Growth	0.046*	0.108*	-0.033
	(0.009)	(0.016)	(0.019)
GDP per cap	-0.011*	-0.026	-0.008
	(0.005)	(0.015)	(0.016)
Log Real GDP	0.388	0.220	0.693*
	(0.209)	(0.352)	(0.218)
S&P Rating	0.871*		
	(0.038)		
Investor Rating		0.904*	
		(0.009)	
Bond Yields			0.301
			(0.322)
Constant	-9.597	-3.370	-15.490*
	(5.263)	(8.924)	(5.765)
R-Squared	0.78	0.92	0.14
AIC	2953	14615	7430
N	1582	3262	1621
Countries	104	156	78

$*p < 0.05$, Standard Errors in parentheses; Unit and Year Fixed Effects. All RHS variables are lagged one year.

E Democracy, Tenure, and Creditworthiness

Given the robust relationship between democracy and sovereign credit, this section further examines the role of democracy in this analysis. We consider alternative measures of democracy, examine a possible conditional relationship, and examine within democracy variation as a function of elections, opposition, partisanship, and other potentially confounding characteristics of democracies.

E.1 Alternative Measures of Democracy

The analysis in the manuscript relies on a binary measure of democracy. Using the *Polity* score as a reference, we code all states with *Polity* scores higher than or equal to six as democracies, as is standard in the literature. To ensure that our operationalization does not affect our results, we include the ordinal measure of *Polity* into the models in Table E.22. In addition, we examine other non-binary measures of democracies. Drawing on the V-Dem database (Coppedge et al. 2016, version 6), we examine the effect of the continuous measures of polyarchy (which focuses on electoral principles) and liberalism (which focuses on limits on leaders). We also consider judicial institutions as an alternative control to *Democracy*, given research that connects rule of law and creditworthiness (Biglaiser and Staats 2012). We use Linzer and Staton's (2015) measure of judicial independence as a proxy for rule of law, following (Staats, Biglaiser and DeRouen 2017). Inclusion of these alternative variables do not change our results.

Table E.22: Alternative Measures of Democracy

	S&P	*II*	Yields	S&P	*II*	Yields	S&P	*II*	Yields	S&P	*II*	Yields
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Leader Tenure	0.056*	0.250*	-0.192*	0.060*	0.273*	-0.181*	0.062*	0.289*	-0.183*	0.059*	0.223*	-0.189*
	(0.023)	(0.055)	(0.084)	(0.024)	(0.056)	(0.085)	(0.024)	(0.056)	(0.085)	(0.023)	(0.054)	(0.082)
Polity2	0.019	0.068*	-0.031									
	(0.012)	(0.015)	(0.032)									
Electoral democracy index				0.269	2.415*	0.112						
				(0.341)	(0.468)	(0.987)						
Liberal democracy index							0.427	3.095*	0.005			
							(0.325)	(0.514)	(1.003)			
Rule of Law										1.177*	2.176*	-0.570
										(0.372)	(0.610)	(1.105)
Growth	0.046*	0.107*	-0.034	0.047*	0.104*	-0.033	0.048*	0.104*	-0.033	0.056*	0.100*	-0.033
	(0.005)	(0.008)	(0.022)	(0.006)	(0.008)	(0.023)	(0.006)	(0.008)	(0.023)	(0.006)	(0.008)	(0.022)
GDP per cap	-0.011	-0.025*	-0.009	-0.013	-0.044*	-0.011	-0.014	-0.046*	-0.011	-0.014*	-0.036*	-0.008
	(0.007)	(0.012)	(0.015)	(0.007)	(0.016)	(0.020)	(0.007)	(0.016)	(0.020)	(0.007)	(0.012)	(0.015)
Log Real GDP	0.395*	0.344	0.778	0.387	0.116	0.661	0.379	0.106	0.674	0.465*	0.219	0.748
	(0.194)	(0.252)	(0.480)	(0.200)	(0.263)	(0.507)	(0.200)	(0.263)	(0.508)	(0.193)	(0.253)	(0.479)
S&P Rating	0.871*			0.876*			0.876*			0.861*		
	(0.015)			(0.016)			(0.015)			(0.015)		
Investor Rating		0.905*			0.904*			0.902*			0.901*	
		(0.007)			(0.007)			(0.007)			(0.007)	
Bond Yields			0.300*			0.301*			0.301*			0.301*
			(0.025)			(0.025)			(0.025)			(0.024)
Constant	-9.700	-6.326	-17.433	-9.597	-1.704	-14.639	-9.463	-1.467	-14.884	-12.069*	-3.397	-16.449
	(4.992)	(6.239)	(12.538)	(5.130)	(6.479)	(13.204)	(5.130)	(6.469)	(13.238)	(4.927)	(6.206)	(12.351)
R-Squared	0.78	0.92	0.14	0.78	0.92	0.14	0.78	0.92	0.14	0.78	0.92	0.14
AIC	2957	14623	7429	2957	14632	7302	2956	14622	7302	3050	15349	7581
N	1582	3262	1621	1562	3219	1585	1562	3219	1585	1652	3407	1663
Countries	104	156	78	103	153	76	103	153	76	111	164	80

$*p < 0.05$; Standard Errors in parentheses; Unit and Year Fixed Effects; All RHS variables are lagged one year. Rule of law is proxied by Linzer and Staton's (2015) measure of judicial independence.

E.2 Conditional Effect of Democracy and Tenure

Table E.23 examines the possible conditional relationship between *democracy* and *leader tenure*. We interact these variables and examine the interaction across our three credit dependent variables. Model 1 in Table E.23 shows that tenure increases S&P ratings more for democracies and that tenure does not appear to matter for non-democracies. Given the selection dynamics in the S&P ratings data regarding regime type (Beaulieu, Cox and Saiegh 2012), we are cautious to infer too much from these results. The *II* ratings show a similar conditional effect in model 2, but also shows that *leader tenure* matters for non-democracies as well. There is no evidence of a conditional effect in model 3, where bond yields are the dependent variable. Models 4-6 replicate the first three models and substitute the ordinal *Polity* measure for the original binary measure of democracy. While the S&P rating models produce similar results, the interaction effect is no longer present in the *II* model. In sum, it is possible that tenure matters more in democracies, though this conditional effect is not robust across different measures of creditworthiness or democracy. These mixed results lead us to maintain our main inferences. However, the conditional effect is suggestive and warrants attention in future research.[6]

[6]We also examined interactions with the alternative measures of democracy shown in Table E.22. These results, which can be replicated using our replication files, are also non-conclusive.

Table E.23: Leader Tenure, Democracy, and Creditworthiness

	S&P Rating	*II* Ratings	Bond Yields	S&P Rating	*II* Ratings	Bond Yields
	(1)	(2)	(3)	(4)	(5)	(6)
Leader Tenure	-0.029	0.143*	-0.066	-0.024	0.252*	-0.180
	(0.049)	(0.072)	(0.150)	(0.042)	(0.057)	(0.126)
Democracy	-0.542	-0.697	1.047			
	(0.414)	(0.762)	(1.285)			
Tenure*Democracy	0.110*	0.233*	-0.156			
	(0.055)	(0.106)	(0.176)			
Polity2				-0.069*	0.075	-0.017
				(0.040)	(0.057)	(0.115)
Tenure*Polity2				0.011*	-0.001	-0.002
				(0.005)	(0.007)	(0.015)
Growth	0.046*	0.108*	-0.034	0.047*	0.107*	-0.034
	(0.005)	(0.008)	(0.023)	(0.005)	(0.008)	(0.023)
GDP per cap	-0.011	-0.027*	-0.008	-0.011	-0.024*	-0.009
	(0.007)	(0.012)	(0.015)	(0.007)	(0.012)	(0.015)
Log Real GDP	0.359*	0.261	0.712	0.380*	0.341	0.778
	(0.194)	(0.252)	(0.480)	(0.194)	(0.253)	(0.480)
S&P Rating	0.873*			0.875*		
	(0.015)			(0.016)		
Investor Rating		0.903*			0.905*	
		(0.007)			(0.007)	
Bond Yields			0.301*			0.300*
			(0.025)			(0.025)
Constant	-8.211	-3.625	-16.808	-8.693*	-6.285	-17.520
	(5.030)	(6.203)	(12.609)	(5.003)	(6.250)	(12.561)
R-Squared	0.78	0.92	0.14	0.78	0.92	0.14
AIC	2951	14611	7431	2953	14625	7431
N	1582	3262	1621	1582	3262	1621
Countries	104	156	78	104	156	78

$*p < 0.1$ Standard Errors in parentheses; Unit and Year Fixed Effects; The economic variables *Growth*, *Log Real GDP,* and *GDP per cap* are drawn from World Bank (2016) in models 1-2. In models 3, these variables are drawn from Haber and Menaldo (2011).

E.3 Potential Confounders within Democratic Sample

This section analyzes the role of tenure within the sample of democracies (states with *Polity* scores equal to or higher than six). These tests include additional confounders that may affect tenure and creditworthiness. All data for these additional measures are drawn from the DPI database (Beck et al. 2001). First, we control for whether an election is forthcoming in time t or $t + 1$. Models 1a and 2a in Table E.24 show that elections decrease credit ratings, though the effect is null for bond yields. *Leader tenure* remains consistent with the main results.

Next, we include measures that capture the leader coalition's vote share in the previous election and that of the opposition. These variables do not appear associated with creditworthiness. Similarly, we examine whether the leader's party controls all houses of government (*Unified Government*). This measure may not matter in some types of democracies, which leads us to also control for *Parliamentary* and *Proportional Representation* systems.

We also consider the partisanship of leaders, examining whether leaning to the left on economic issues affects tenure and/or creditworthiness. Next, we consider the stability of the governing coalition, as measured by *Government Fractionalization*. Finally, we include *Veto Points*, which measures the number of checks of leader faces in implementing policy.

Including all of the additional controls within the democracy sample shows that (1) *leader tenure* remains consistent across each specification and (2) no control variable had a consistent, statistically significant effect across all three measures of creditworthiness. Table E.25 includes these additional controls in the same model and the results continue to be consistent, despite the inefficiencies of including too many controls.

Table E.24: Additional Controls for Democracies

	S&P	*II*	Yields	S&P	*II*	Yields	S&P	*II*	Yields
Models	(1a)	(2a)	(3a)	(1b)	(2b)	(3b)	(1c)	(2c)	(3c)
Leader Tenure	0.070*	0.283*	-0.248*	0.069*	0.276*	-0.248*	0.069*	0.278*	-0.244*
	(0.026)	(0.080)	(0.113)	(0.026)	(0.081)	(0.113)	(0.026)	(0.080)	(0.113)
Election	-0.070	-0.236*	-0.010						
	(0.036)	(0.110)	(0.160)						
Leader vote share				0.001	0.001	-0.003			
				(0.001)	(0.004)	(0.006)			
Opposition vote share							-0.000	0.006	0.005
							(0.001)	(0.004)	(0.006)
R-Squared	0.79	0.94	0.13	0.79	0.94	0.13	0.79	0.94	0.13
N	1238	1717	1250	1238	1717	1250	1238	1717	1250
Countries	77	100	65	77	100	65	77	100	65
Models	(1d)	(2d)	(3d)	(1e)	(2e)	(3e)	(1f)	(2f)	(3f)
Leader Tenure	0.069*	0.266*	-0.257*	0.069*	0.272*	-0.241*	0.069*	0.261*	-0.248*
	(0.026)	(0.082)	(0.116)	(0.026)	(0.081)	(0.112)	(0.026)	(0.081)	(0.114)
Unified Government	-0.024	0.215	0.360						
	(0.059)	(0.170)	(0.281)						
Parliamentary				0.036	0.454	-2.812*			
				(0.217)	(0.481)	(0.607)			
PR system							-0.094	-0.637	-0.153
							(0.182)	(0.514)	(0.831)
R-Squared	0.79	0.94	0.13	0.79	0.94	0.15	0.79	0.94	0.13
N	1207	1655	1227	1238	1717	1250	1237	1693	1246
Countries	74	99	64	77	100	65	77	99	65
Models	(1g)	(2g)	(3g)	(1h)	(2h)	(3h)	(1i)	(2i)	(3i)
Leader Tenure	0.069*	0.266*	-0.251*	0.062*	0.275*	-0.236*	0.066*	0.280*	-0.248*
	(0.026)	(0.081)	(0.115)	(0.027)	(0.082)	(0.117)	(0.026)	(0.081)	(0.114)
Left Leader	-0.039	-0.038	-0.030						
	(0.048)	(0.147)	(0.210)						
Gov't Fractionalization				-0.388	1.333*	-0.510			
				(0.266)	(0.650)	(1.284)			
Veto Points							-0.031*	-0.070	0.037
							(0.014)	(0.045)	(0.062)
R-Squared	0.79	0.94	0.13	0.79	0.94	0.13	0.79	0.94	0.13
N	1218	1685	1216	1214	1669	1228	1234	1700	1249
Countries	76	99	64	77	100	65	77	100	65

$*p < 0.05$ Standard Errors in parentheses; Unit and Year Fixed Effects. Sample consists of only democracies. The control variables *Growth*, *Log Real GDP,* and *GDP per cap* are included in each model but not shown. All RHS variables are lagged one year.

Table E.25: All Controls for Democracies

	S&P	*II*	Yields
	(1)	(2)	(3)
Leader Tenure	0.062**	0.250***	-0.219*
	(0.027)	(0.084)	(0.120)
Election	-0.071*	-0.188	-0.027
	(0.038)	(0.115)	(0.170)
Leader vote share	0.001	0.002	-0.005
	(0.002)	(0.004)	(0.008)
Opposition vote share	-0.001	0.006	0.008
	(0.002)	(0.005)	(0.008)
Unified Government	-0.103	0.215	0.344
	(0.070)	(0.193)	(0.323)
Parliamentary	0.034	0.590	-3.150***
	(0.223)	(0.533)	(0.671)
PR system	-0.087	-1.316**	0.035
	(0.193)	(0.564)	(0.906)
Left Leader	-0.035	0.021	0.038
	(0.049)	(0.152)	(0.219)
Gov't Fractionalization	-0.400	2.197***	-0.398
	(0.330)	(0.841)	(1.593)
Veto Points	-0.025	-0.124**	0.045
	(0.017)	(0.052)	(0.072)
Growth	0.067***	0.277***	-0.041
	(0.007)	(0.020)	(0.033)
GDP per cap	-0.001	-0.066***	-0.010
	(0.008)	(0.018)	(0.022)
Log Real GDP	0.530*	0.991	1.183
	(0.274)	(0.732)	(0.938)
S&P Rating	0.861***		
	(0.018)		
Investor Rating		0.892***	
		(0.011)	
Bond Yields			0.257***
			(0.030)
Constant	-12.962*	-21.547	-26.090
	(7.103)	(18.620)	(24.696)
R-Squared	0.79	0.94	0.15
N	1167	1574	1177
Countries	73	97	63

$*p < 0.1, **p < 0.05, ***p < 0.01$; Standard Errors in parentheses; Unit and Year Fixed Effects. All RHS variables are lagged one year.

F Assassination Data Collection

Following the data collection procedures outlined in Jones and Olken (2009), we add ten cases to the original assassination data, covering the years 2004 - 2013. For each case we recorded the date of the attempt, the leader's name, title and country of origin, the location of the attempt, the weapon used, the fate of the leader, whether it was a solo or group attack, and the news source for the case documentation.

We searched for cases in the *Proquest* and *Lexus Nexus* newspaper databases. We included three sets of keywords into the search. First, we included event keywords: Assassination or assassin or assassinated or wound or wounded or injure or injured or kill or killed or attack or attacked or attempt or bid or try or tried or bomb or bombed or murder or murdered or shot or shoot or stab or stabbed or assault or assaulted or escape or escaped or die or dies or died or perish or perishes or perished or slain.

Next, we included leader keywords: emir or king or president or prime minister or premier or amir or leader or ruler.

Finally, we included the country name into the search. As an additional search method, we input the leader's name into the search. The following two paragraphs are examples of a country search and a leader search:

> Country Search: Austria and (emir or king or president or prime minister or premier or amir or leader or ruler) and (Assassination or assassin or assassinated or wound or wounded or injure or injured or kill or killed or attack or attacked or attempt or bid or try or tried or bomb or bombed or murder or murdered or shot or shoot or stab or stabbed or assault or assaulted or escape or escaped or die or dies or died or perish or perishes or perished or slain)

> Leader Search: Renner Austria and (emir or king or president or prime minister or premier or amir or leader or ruler) and (Assassination or assassin or assassinated or

wound or wounded or injure or injured or kill or killed or attack or attacked or attempt or bid or try or tried or bomb or bombed or murder or murdered or shot or shoot or stab or stabbed or assault or assaulted or escape or escaped or die or dies or died or perish or perishes or perished or slain)

For the leader search, we ran a search for each leader in each country. When there was a regime change, we also ran searches for the interim leaders. For the case of Bosnia and Herzegovina, a country that has a unique ethnically based power sharing executive, we ran searches for the Bosniak, Serbian, and Croatian leaders. In addition, we excluded cases where the attempt was part of a coup, where suspects were trying to seize power for themselves. In addition, we excluded "uncovered plots" to limit the cases to where the attempt actually took place. We also excluded cases where it was clear an attack's intent was not to kill the leader, such as when Mauritanian guards mistakenly fired upon Mauritanian President Mohamed Abdel Aziz in 2009. Finally, we exclude cases where the leader was in no danger during the attempt. For example, when a fence jumper made it into the White House, U.S. President Obama was not in the residence and was in no danger.[7] Thus, this case, and other cases where the leader was never in danger are excluded.

[7]"Armed Intruder at White House Got to East Room" *The New York Times*, September 29, 2014. Michael Shear and Michael Schmidt. Accessed October 1, 2014.

F.1 Balance Statistics

Table F.26 examines the balance statistics of several variables in two ways. First, we examine the differences of the variables across assassination successes and failures. Next, we examine the differences of the variables across assassination attempts in general compared to states that never had an assassination attempt in the sample. We find that the variables do not statistically vary across success and failures, supporting our claim of exogeneity. We do find, however, that poorer, non-democratic states are more likely to have an assassination. This leads us to explicitly model this selection process (see next section).

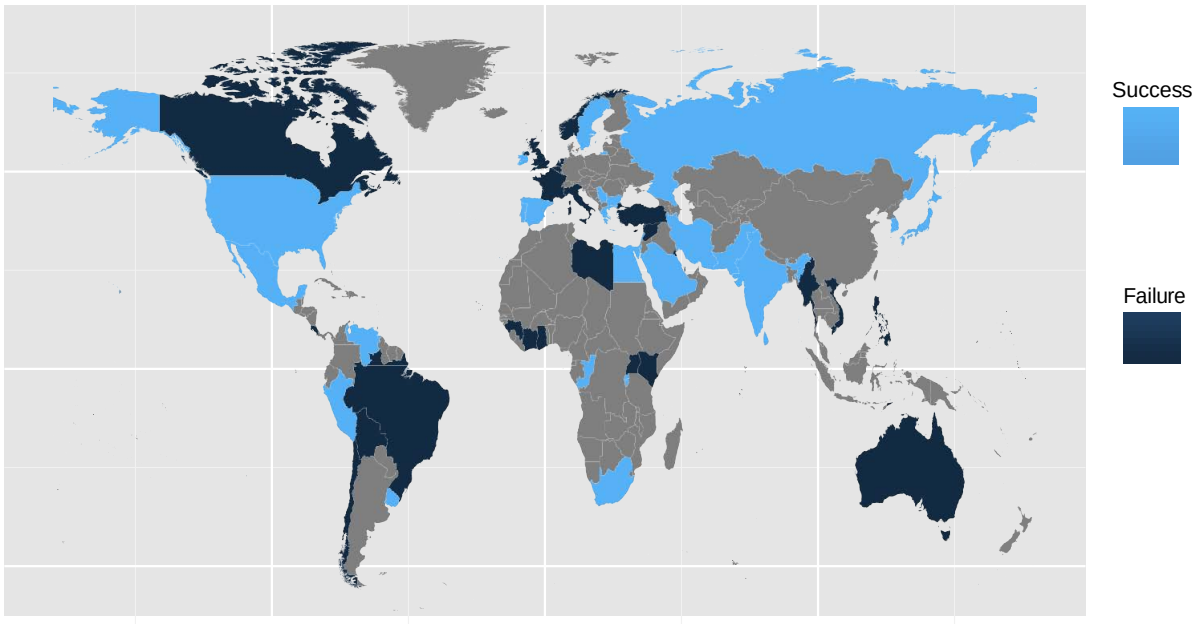
Table F.26: Balance Summary Statistics p-values

Variable	Kimogorov - Smirnov	Wilcoxon Rank Sum	Difference in Means
Assassination Successes and Failure Differences			
Leader Tenure (L)	0.464	0.226	0.147
Polity	0.188	0.061	0.079
GDP	0.705	0.350	0.288
Growth	0.978	0.660	0.127
GDP per cap	0.525	0.506	0.288
Debt-to-GDP	0.169	0.242	0.589
Bond yield ratio (L)	0.809	0.587	0.379
Nominal bond yield (L)	0.816	0.753	0.178
Assassination Attempts and Non-Attempts Differences			
Leader Tenure (L)	0.000	0.000	0.000
Polity	0.000	0.000	0.000
GDP	0.000	0.000	0.000
Growth	0.147	0.238	0.305
GDP per cap	0.000	0.000	0.000
Debt-to-GDP	0.905	0.819	0.923
Bond yield ratio (L)	0.023	0.029	0.025
Nominal bond yield (L)	0.038	0.613	0.954

F.2 Assassination Attempt Sample Selection

We observe that assassination attempts – both successes and failures – are geographically dispersed. Figure F.1 shows that successes, failures, and no attempts (gray) are cross-sectionally varied. Nevertheless, the assassination analysis presents the possibility of a selection problem. While we argue that assassination success is orthogonal to the political and economic phenomena in which we are interested, the same cannot be said for assassination attempts. States that have political or economic instability are probably more likely to experience an assassination attempt and these political and economic factors are probably correlated with our variables of interest.

Figure F.1: Assassination Attempts, 1875 - 2013



Light blue indicates at least one assassination success in this state. Dark blue indicates all attempts were failures. Gray indicate no attempts in this country, according to coding rules.

Figure F.2 shows the number of attempts and successes over our sample's duration, demonstrating that both attempts and successes are temporally dispersed.

States with assassination attempts may be economically, financially, or politically different than states that do not. To initially assess this possibility, we explore the descriptive difference in bond yield ratios and nominal bond yield levels in the year before an assassination success, in the year before an assassination failure, and in countries with no assassination attempts in their history in

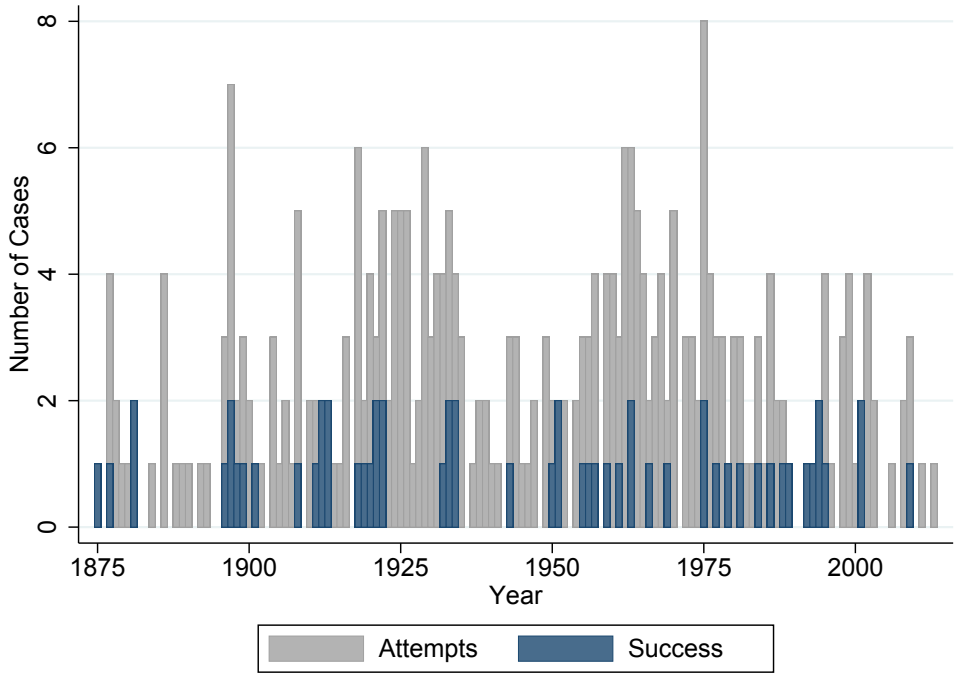


Figure F.2: Assassination Attempts and Successes, 1875 - 2013

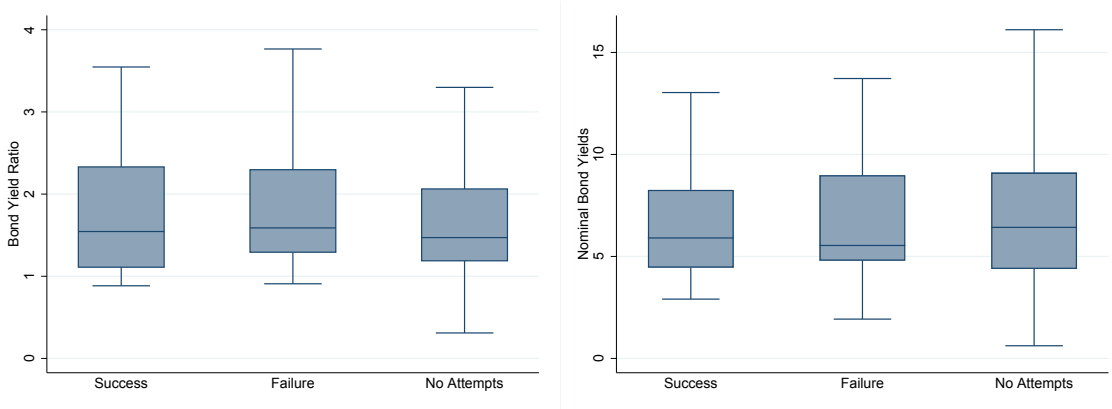


Figure F.3: Bond Yields and Assassination Attempts, 1875 - 2013

Figure F.3. Across these samples, the mean and dispersion of bond yield levels are similar for assassination successes, failures, and non-attempts.

To ensure the processes that predict selection into the assassination attempt sample do not threaten our overall inferences, we use an alternative selection model. In the selection model, we predict whether states have assassination attempts in a given year using a host of covariates. First, we use *democracy* given that democracies may be less likely to experience assassination because the public has alternative, low-cost means to remove unwanted leaders. We include economic covariates - *GDP*, *GDP growth percent* and *GDP per capita* (data drawn from Haber and Menaldo (2011)), given we expect that economic wealth and stability may decrease the demand for assassinations.

Finally, we include a variable that measures, in years, how long it has been since a previous attempt.[8] We treat this temporal variable as our instrument in the selection stage. We expect that time since last assassination should predict whether states enter the assassination sample, but should not necessarily affect changes in bond yields. Following Carter and Signorino (2010), we then take the squared and cubic values of this variable to account for temporal dependence (these nuisance estimators are not shown in the results).

The results of this selection model are presented below in Table F.27, while the outcome stage results are presented in the main manuscript. As demonstrated, our results are the same, suggesting that processes that predict selection into the assassination sample do not threaten our inferences.

[8]If states never experience an attempt, this measure counts from when they enter the sample.

Table F.27: Selection into Assassination Attempt, 1875-2013

	Model 1
	β /(SE)
Tenure	-0.162*
	(0.026)
Democracy	-0.399*
	(0.078)
ln(GDP)	0.110*
	(0.020)
Growth	-0.570
	(0.388)
ln(GDP per cap)	-0.123*
	(0.039)
Time since last attempt	-0.038*
	(0.006)
Time since last attempt^2	0.001*
	(0.000)
Time since last attempt^3	-0.000*
	(0.000)
Constant	-3.143*
	(0.432)
Log-Like	-960.94
AIC	1940
N	9232

$*p < 0.05$

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