

Appendix B-1: The Robustness of Results to Heterogeneity

Notes: The first two columns of numbers give the results that come from using the respective article's original model. The next columns then give the results of adding fixed-effects to the original. Following that, we list the effect of including fixed-effects on the magnitude and sign of the coefficient. In the column for change in magnitude, "+" ("--") indicates that the coefficient value increased (decreased) by a full standard error from the original model. Similarly, "-" ("-") indicates that the coefficient value increased (decreased) by more than half a standard error but less than a full standard error. A "0" indicates that the change was less than half a standard error, and "-/s" indicates that the sign on the coefficient changed. In the column for changes in statistical significance, the first value represents the statistical significance of the original result and the second the significance after including fixed-effects. Thus a "i-s", would indicate that the original variable was statistically insignificant but was significant after the inclusion of fixed-effects. The second group of numbers represents similar results, this time for the model without the LDV. For all of the studies we used PCSE's to determine statistical significance, including Cox et al. (1998) and Zahariadas (2001) which did not use PCSE's in their initial studies. It should be noted that our "original results" for Saideman et al. are slightly different than what the authors report in their paper. After dropping the variables with missing data we had a few less (usually a difference of 10 or less) observations than they use in their reported models. We felt justified in including their article in this study despite that discrepancy because the results are not different in any significant way from what they report. Finally, we include below each set of comparisons between the models with and without fixed-effects, two measures of the impact of the fixed effects. First, we include the percentage of how much of the variance in the dependent variable is explained by the fixed-effects and second we include the p-value from the F-test for the joint significance of the fixed-effects. These measures confirm the picture of the importance of accounting for panel heterogeneity.

Cox, Thies, & Rosenbluth (WP, 1998)

<i>DV= Total expenditures per elector</i>	Original Results		F.E. (w/ LDV)				No LDV, No F.E.		F.E. (w/o LDV)			
	<u>Coeff.</u>	<u>PCSE</u>	<u>Coeff.</u>	<u>PCSE</u>	<u>Δ in</u> <u>Coeff</u>	<u>Δ in</u> <u>S.S.</u>	<u>Coeff.</u>	<u>PCSE</u>	<u>Coeff.</u>	<u>PCSE</u>	<u>Δ in</u> <u>Coeff</u>	<u>Δ in</u> <u>S.S.</u>
I.V.'s (Table 1, Col 1)												
Margin of victory	-0.191	0.056	-0.186	0.030	0	s-s	-0.221	0.048	-0.219	0.032	0	s-s
			Variance Explained by F.E.: 40%						Variance Explained by F.E.: 43%			
			P-Value on F-test for F.E. 0						P-Value on F-test for F.E. 0			
 <i>DV= Voter Turnout</i>												
I.V.'s (Table 2, Col. 2)												
Margin	-0.093	0.019	-0.097	0.018	0	s-s	-0.104	0.014	-0.098	0.016	0	s-s
Total Campaign Expenditures	0.038	0.020	0.023	0.018	--	s-i	0.062	0.018	0.024	0.015	--	s-i
% of district that is urban	-0.059	0.017	0.031	0.029	-/s	s-i	-0.126	0.012	0.027	0.024	-/s	s-i
% of population under 15	0.419	0.216	-0.337	0.548	-/s	i-i	0.602	0.158	-0.342	0.503	-/s	s-i
% of population that is male	-0.489	0.546	-1.608	1.628	++	i-i	-0.772	0.406	-1.565	1.459	++	i-i
			Variance Explained by F.E.: 80%						Variance Explained by F.E.: 81%			
			P-Value on F-test for F.E. 0						P-Value on F-test for F.E. 0			

Hood, Kidd, & Morris (LSQ, 2001)

DV=Unadjusted LCCR scores

	Original Results		F.E. (w/ LDV)		Δ in	Δ in	No LDV, No F.E.		F.E. (w/o LDV)		Δ in	Δ in
	Coeff.	PCSE	Coeff.	PCSE	Coeff	S.S.	Coeff.	PCSE	Coeff.	PCSE	Coeff	S.S.
I.V.'s (Table 1, Col. 1)												
GOP Strength	0.487	0.210	1.329	0.365	++	s-s	0.775	0.224	1.635	0.346	++	s-s
Black Electoral Strength	1.799	0.604	1.382	0.659	-	s-s	2.631	0.603	1.778	0.655	--	s-s
			Variance Explained by F.E.: 62%				Variance Explained by F.E.: 75%					
			P-Value on F-test for F.E. 0				P-Value on F-test for F.E. 0					

Moene and Wallerstein (APSR, 2001)

DV= Government Spending for insurance against loss of income as a share of GDP

	Original Results		F.E. (w/ LDV)		Δ in	Δ in	No LDV, No F.E.		F.E. (w/o LDV)		Δ in	Δ in
	Coeff.	PCSE	Coeff.	PCSE	Coeff	S.S.	Coeff.	PCSE	Coeff.	PCSE	Coeff	S.S.
I.V.'s (Table 1, Col. 2)												
Inequality (90/10)	-1.933	0.346	1.670	2.095	--/s	s-i	-4.442	0.066	1.553	2.243	-/s	s-i
			Variance Explained by F.E.: 94%				Variance Explained by F.E.: 95%					
			P-Value on F-test for F.E. 0.01				P-Value on F-test for F.E. 0					

DV= Government Spending for insurance against loss of income as a share of GDP

	Original Results		F.E. (w/ LDV)		Δ in	Δ in	No LDV, No F.E.		F.E. (w/o LDV)		Δ in	Δ in
	Coeff.	PCSE	Coeff.	PCSE	Coeff	S.S.	Coeff.	PCSE	Coeff.	PCSE	Coeff	S.S.
I.V.'s (Table 1, Col. 5)												
Inequality (50/10)	-1.306	0.573	1.016	2.360	-/s	s-i	-4.696	0.386	0.309	2.629	-/s	s-i
Inequality (90/50)	-1.531	0.954	1.741	0.574	-/s	i-s	-2.761	0.601	3.788	2.309	-/s	s-s
			Variance Explained by F.E.: 95%				Variance Explained by F.E.: 97%					
			P-Value on F-test for F.E. 0.01				P-Value on F-test for F.E. 0					

Pickering (JPR, 2002)

DV=Foreign Military Intervention

	Original Results		F.E. (w/ LDV)		Δ in	Δ in	No LDV, No F.E.		F.E. (w/o LDV)		Δ in	Δ in
	Coeff.	PCSE	Coeff.	PCSE	Coeff	S.S.	Coeff.	PCSE	Coeff.	PCSE	Coeff	S.S.
I.V.'s (Table 2, Col. 2)												
War experience	0.069	0.028	0.053	0.088	-	s-i	0.080	0.027	0.048	0.088	--	s-i
War experience squared	0.048	0.015	-0.033	0.033	-/s	s-i	0.057	0.015	-0.035	0.033	-/s	s-i
			Variance Explained by F.E.: 14%				Variance Explained by F.E.: 15%					
			P-Value on F-test for F.E. 0				P-Value on F-test for F.E. 0					

Poe & Tate (APSR, 1994)

DV= Governmental repression (Amnesty International)

I.V.'s (Table 1, Col. 1)

Democracy (Freedom House)

Original Results	F.E. (w/ LDV)		Δ in	Δ in	No LDV, No F.E.	F.E. (w/o LDV)		Δ in	Δ in		
Coeff.	PCSE	Coeff.	PCSE	Coeff	S.S.	Coeff.	PCSE	Coeff	S.S.		
-0.045	0.017	-0.112	0.041	++	s-s	-0.160	0.015	-0.125	0.031	--	s-s
Variance Explained by F.E.: 76%					Variance Explained by F.E.: 83%						
P-Value on F-test for F.E. 0					P-Value on F-test for F.E. 0						

DV= Repression (Amnesty)

I.V.'s (Table 1, Col. 2)

Democracy (Vanhanen Measure)

Original Results	F.E. (w/ LDV)		Δ in	Δ in	No LDV, No F.E.	F.E. (w/o LDV)		Δ in	Δ in		
Coeff.	PCSE	Coeff.	PCSE	Coeff	S.S.	Coeff.	PCSE	Coeff	S.S.		
-0.009	0.003	-0.007	0.005	0	s-i	-0.030	0.002	-0.012	0.004	--	s-s
Variance Explained by F.E.: 72%					Variance Explained by F.E.: 82%						
P-Value on F-test for F.E. 0					P-Value on F-test for F.E. 0						

DV= Repression (State Department)

I.V.'s (Table 1, Col. 3)

Democracy (Freedom House)

Original Results	F.E. (w/ LDV)		Δ in	Δ in	No LDV, No F.E.	F.E. (w/o LDV)		Δ in	Δ in		
Coeff.	PCSE	Coeff.	PCSE	Coeff	S.S.	Coeff.	PCSE	Coeff	S.S.		
-0.062	0.019	-0.089	0.036	++	s-s	-0.167	0.012	-0.101	0.031	--	s-s
Variance Explained by F.E.: 97%					Variance Explained by F.E.: 98%						
P-Value on F-test for F.E. 0					P-Value on F-test for F.E. 0						

DV= Repression (State Department)

I.V.'s (Table 1, Col. 4)

Democracy (Vanhanen Measure)

Original Results	F.E. (w/ LDV)		Δ in	Δ in	No LDV, No F.E.	F.E. (w/o LDV)		Δ in	Δ in		
Coeff.	PCSE	Coeff.	PCSE	Coeff	S.S.	Coeff.	PCSE	Coeff	S.S.		
-0.010	0.003	-0.003	0.006	--	s-i	-0.026	0.002	-0.004	0.005	--	s-i
Variance Explained by F.E.: 97%					Variance Explained by F.E.: 97%						
P-Value on F-test for F.E. 0					P-Value on F-test for F.E. 0						

Reich (PRQ, 1999)

DV= Seniorage

I.V.'s (Table 1, Col. 3)

First democratic government

Original Results	F.E. (w/ LDV)		Δ in	Δ in	No LDV, No F.E.	F.E. (w/o LDV)		Δ in	Δ in		
Coeff.	PCSE	Coeff.	PCSE	Coeff	S.S.	Coeff.	PCSE	Coeff	S.S.		
1.064201	0.461121	1.118613	0.559966	0	s-s	1.713	0.553	1.65714	0.59982	0	s-s
Variance Explained by F.E.: 24%					Variance Explained by F.E.: 37%						
P-Value on F-test for F.E. 0.2					P-Value on F-test for F.E. 0						

DV= Seniorage

I.V.'s (Table 1, Col. 4)

<10 years continuous democracy

Original Results	F.E. (w/ LDV)		Δ in	Δ in	No LDV, No F.E.	F.E. (w/o LDV)		Δ in	Δ in		
Coeff.	PCSE	Coeff.	PCSE	Coeff	S.S.	Coeff.	PCSE	Coeff	S.S.		
1.36026	0.55144	1.406213	1.01801	0	s-i	2.149	0.703	1.32685	1.07613	--	s-i
Variance Explained by F.E.: 21%					Variance Explained by F.E.: 34%						
P-Value on F-test for F.E. 0.28					P-Value on F-test for F.E. 0.01						

Saideman, Lanoue, Campenni, & Stanton (CPS, 2002)

DV= Protest

I.V.'s (Table 1, Col. 1)	Original Results		F.E. (w/ LDV)		Δ in	Δ in	No LDV, No F.E.		F.E. (w/o LDV)		Δ in	Δ in
	<u>Coeff.</u>	<u>PCSE</u>	<u>Coeff.</u>	<u>PCSE</u>	<u>Coeff</u>	<u>S.S.</u>	<u>Coeff.</u>	<u>PCSE</u>	<u>Coeff.</u>	<u>PCSE</u>	<u>Coeff</u>	<u>S.S.</u>
Regime type	0.024	0.007	0.046	0.010	++	s-s	0.059	0.009	0.063	0.012	0	s-s
Enduring regime	0.028	0.052	-0.206	0.087	-/s	i-s	0.037	0.096	-0.232	0.101	-/s	i-s
Young democracy	0.029	0.062	-0.120	0.085	-/s	i-i	-0.003	0.106	-0.119	0.104	-/s	i-i
First election	0.040	0.114	0.009	0.108	0	i-i	-0.082	0.093	-0.051	0.103	0	i-i
Proportional democracy	-0.163	0.053	-0.117	0.158	-	s-i	-0.445	0.096	-0.358	0.181	-	s-s
Federal system	0.142	0.054	0.042	0.230	--	s-i	0.313	0.106	0.012	0.285	--	s-i
			Variance Explained by F.E.: 39%						Variance Explained by F.E.: 53%			
			P-Value on F-test for F.E. 0						P-Value on F-test for F.E. 0			

DV= Protest (Democracies)

I.V.'s (Table 2, Col. 1)	Original Results		F.E. (w/ LDV)		Δ in	Δ in	No LDV, No F.E.		F.E. (w/o LDV)		Δ in	Δ in
	<u>Coeff.</u>	<u>PCSE</u>	<u>Coeff.</u>	<u>PCSE</u>	<u>Coeff</u>	<u>S.S.</u>	<u>Coeff.</u>	<u>PCSE</u>	<u>Coeff.</u>	<u>PCSE</u>	<u>Coeff</u>	<u>S.S.</u>
Enduring regime	0.031	0.076	0.217	0.130	++	i-i	0.025	0.133	0.221	0.143	++	i-i
First election	-0.252	0.192	-0.390	0.181	+	i-s	-0.389	0.144	-0.402	0.170	0	s-s
Electoral system	-0.092	0.030	-0.600	0.242	++	s-s	-0.192	0.047	-0.579	0.250	++	s-s
Parliamentary	0.053	0.033	0.428	0.346	++	i-i	0.115	0.051	0.558	0.381	++	s-i
Federal system	0.096	0.089	(dropped)				0.314	0.142	(dropped)			
			Variance Explained by F.E.: 58%						Variance Explained by F.E.: 63%			
			P-Value on F-test for F.E. 0						P-Value on F-test for F.E. 0			

Zahariadas (ISQ, 2001)

DV=Total Aid

I.V.'s (Table 2, Col. 1)	Original Results		F.E. (w/ LDV)		Δ in	Δ in	No LDV, No F.E.		F.E. (w/o LDV)		Δ in	Δ in
	<u>Coeff.</u>	<u>PCSE</u>	<u>Coeff.</u>	<u>PCSE</u>	<u>Coeff</u>	<u>S.S.</u>	<u>Coeff.</u>	<u>PCSE</u>	<u>Coeff.</u>	<u>PCSE</u>	<u>Coeff</u>	<u>S.S.</u>
Research and Development	-1.481	0.523	-0.964	0.685	-	s-i	-0.209	0.296	-0.760	0.580	++	i-i
Research and Development Squared	0.297	0.129	0.169	0.173	-	s-i	-0.093	0.085	0.127	0.155	-/s	i-i
Job gain	-0.002	0.010	0.005	0.011	-/s	i-i	-0.004	0.012	0.004	0.011	-/s	i-i
			Variance Explained by F.E.: 85%						Variance Explained by F.E.: 95%			
			P-Value on F-test for F.E. 0.07						P-Value on F-test for F.E. 0			