Pillars of Prosperity

The Political Economics of Development Clusters

A TEN YEAR UPDATE

Chapter 4: Political Violence

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June 9, 2021

Outline

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Introduction

- Here we reassemble the tables from Chapter 4 of Pillars, comparing the main correlations with our new *Pillars 2.dta*.
- For definitions and details on all variables used, see the accompanying codebook to *Pillars 2.dta*.
- Some charts in this chapter are replicates from those in Chapter 1, and hence are omitted from these slides.

Old Tables

- This section replicates the old tables from Chapter 4 in Pillars for comparative purposes with the new tables in the next section.
- These can be replicated using the original *Pillars.dta* dataset.
- Tables 4.1, 4.2 and 4.3 from Pillars are combined into one table for brevity.

Table 4.1-4.3 (old)

	Some civil war			No civil war				
	Bosnia			*Australia*	*Cyprus*	Jamaica	*New Zealand*	*Switzerland*
	Cameroon			*Bahamas*	*Czech Republic*	*Kuwait*	*Norway*	Tanzania
	Guinea-Bissau			*Bahrain*	*Denmark*	Lesotho	*Oman*	Togo
	Liberia			*Barbados*	Djibouti	*Luxembourg*	Panama	Trinidad & Tobago
	Nepal			Belize	Equatorial Guinea	Madagascar	New Guinea	Tunisia
	Rwanda			Benin	Fiji	Malawi	*Qatar*	*United Kingdom*
	Sierra Leone			Bhutan	Gabon	Malaysia	*Saudi Arabia*	Uzbekistan
Less than 5% repression	Yemen			Botswana	Gambia	Maldives	Senegal	
				Brunei	Guinea	Mali	*Singapore*	
				Burkina Faso	Guyana	*Malta*	Slovak Republic	
				Canada	Honduras	Mauritania	*Slovenia*	
				Cape Verde	*Iceland*	Mauritius	Solomon Islands	
				Central African Republic	*Ireland*	Mongolia	Suriname	
				Costa Rica	*Israel*	Namibia	Swaziland	
				Croatia	Ivory Coast	*Netherlands*	*Sweden*	
	Afghanistan	India		Albania	Ghana	Taiwan		
	Algeria	Indonesia	South Korea	*Austria*	*Greece*	Thailand		
	Angola	Iran	Sri Lanka	Bangladesh	Haiti	Uruguay		
	Argentina	Iraq	Sudan	*Belgium*	Hungary	Venezuela		
	Burundi	Laos	Syria	Bolivia	*Italy*	Zambia		
			Turkey					
	Cambodia	Lebanon		Brazil	Japan			
	Chad	*Libya*	Uganda	Bulgaria	Jordan			
More than 5% repression	China	Morocco	*United States*	Chile	Kenya			
	Colombia	Mozambique	Vietnam	Comoros	Mexico			
	Congo	Nicaragua	Zimbabwe	Dominican Republic	Niger			
	Cuba	Nigeria		Ecuador	Paraguay			
	El Salvador	Pakistan		Egypt	Poland			
	Ethiopia	Russia		Estonia	*Portugal*			
	France	Somalia		*Finland*	Romania			
	Guatemala	South Africa		*Germany*	*Spain*			

Note: countries that are italicised have per capita income above the 75th percentile in 1990 by Penn World Tables. Countries in red have predominantly cohesive political institutions.

Table 4.4 (old)

	Ordered variable	Ordered variable	Ordered variable	Political violence	Political violence	Civil war	Civil war	Ordered variable
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Natural disaster	0.263***	0.317***	0.299***	0.278**	0.327***	0.370**	0.431***	0.263**
	(0.107)	(0.110)	(0.111)	(0.109)	(0.112)	(0.152)	(0.155)	(0.111)
Security Council member	-1.048***	-1.194***	-1.382***	-1.110***	-1.269***	-1.360**	-1.383**	-1.048**
	(0.399)	(0.417)	(0.456)	(0.412)	(0.430)	(0.545)	(0.547)	(0.413)
Security Council member in Cold War	1.275***	1.461***	1.657***	1.267*	1.465**	1.074*	1.105*	1.275**
	(0.439)	(0.458)	(0.495)	(0.453)	(0.472)	(0.633)	(0.635)	(0.504)
Natural disaster x strong institutions		-0.701**	-0.333		-.618*		-1.233**	
		(0.374)	(0.318)		(0.376)		(0.595)	
Security Council member x strong institutions		1.975*	2.940***		2.186*			
		(1.173)	(1.123)		(1.178)			
Security Council member in Cold War x strong institutions		-2.577*	-3.379**		-2.746**			
		(1.375)	(1.247)		(1.381)			
Strong institutions measure		High exec. constraints 1950-2005	Parliamentary Democracy 1950-2005		High exec. constraints 1950-2005		High exec. constraints 1950-2005	
Estimation method	FE ordered logit	FE ordered logit	FE ordered logit	FE logit	FE logit	FE logit	FE logit	FE ordered logit
Significance of interactions (p-value)		0.62	0.49		0.66		0.17	
Observations	4251	4251	4251	4251	4251	2061	2061	2061
Number of countries	97	97	97	97	97	49	49	97

Table 4.5 (old)

	Political violence	Political violence	Civil war	Civil war	Log GDP per capita	Log aid disbursement	Political violence	Civil war
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Natural disaster	0.024*	0.029*	0.029**	0.043***	-.005	0.158***		
	(0.013)	(0.017)	(0.013)	(0.016)	(0.003)	(0.047)		
Security Council member	-.066**	-.092***	-.051**	-.053**	0.009	-0.269***		
	(0.027)	(0.029)	(0.023)	(0.023)	(0.008)	(0.092)		
Security Council member	0.090**	0.129***	0.034	0.036	-0.004	0.434***		
in Cold War	(0.040)	(0.045)	(0.029)	(0.029)	(0.010)	(0.113)		
Natural disaster x		-0.024		-.079***				
strong institutions		(0.037)		(0.024)				
Security Council member x		0.148***						
strong institutions		(0.054)						
Security Council member		-.205***						
in Cold War x		(0.068)						
strong institutions								
Two-year lagged log					0.905***			
GDP per capita					(0.013)			
Log GDP per capita							0.062	0.046
							(0.039)	(0.040)
Log aid disbursement							0.191***	0.161***
							(0.046)	(0.050)
Observations	5880	5880	5880	5880	6300	5067	3914	3914
Number of countries	158	158	158	158	178	150		

New Tables

- We now replicate the previous three tables, extending the time coverage by ten years from 1950-2005 to 1950-2015.
- These tables can be created using the new *Pillars 2.dta* dataset.

Table 4.1-4.3 (new)

	Some civil war			No civil war				
	Algeria	Sierra Leone		Antigua	Croatia	*Ireland*	Mauritania	*Saudi Arabia*
	Angola	Tajikistan		Armenia	*Cyprus*	*Italy*	Mauritius	Senegal
	Azerbaijan	Ukraine		*Australia*	*Czech Republic*	Ivory Coast	Moldova	Seychelles
	Bosnia			*Austria*	*Denmark*	Jamaica	Mongolia	*Singapore*
	Cameroon			*Barbados*	Djibouti	Kazakhstan	Montenegro	*Slovenia*
	Chad			Belarus	Equatorial Guinea	*Kuwait*	Namibia	*Sweden*
	Georgia			*Belgium*	Estonia	Kyrgyzstan	*Netherlands*	*Switzerland*
Less than 5% repression	*Israel*			Benin	*Finland*	Latvia	*New Zealand*	*Taiwan*
	Laos			Botswana	Gabon	Lesotho	Niger	Tanzania
	Liberia			Burkina Faso	Gambia	Lithuania	North Korea	Togo
	Libya			*Canada*	*Germany*	*Luxembourg*	*Norway*	Trinidad & Tobago
	Mozambique			Cape Verde	Guinea	Madagascar	Oman	Tunisia
	Nicaragua			Central African Republic	Guinea-Bissau	Malawi	Panama	Turkmenistan
	Rwanda			Comoros	*Hong Kong*	Mali	*Qatar*	*United Arab Emirates*
	Serbia			Costa Rica	*Iceland*	*Malta*	Sao Tome and Principe	*United Kingdom*
								Uzbekistan
	Afghanistan	Morocco	Vietnam	Albania	Honduras	Venezuela		
	Burundi	Myanmar	Yemen	Argentina	Hungary	Zambia		
	Cambodia	Nepal	Zaire (DRC)	*Bahrain*	*Japan*			
	China	Nigeria	Zimbabwe	Bangladesh	Jordan			
	Colombia	Pakistan		Bolivia	Kenya			
	Congo	Peru		Brazil	Malaysia			
	Cuba	Philippines		Bulgaria	Mexico			
More than 5% repression	El Salvador	Russia		Chile	Paraguay			
	Ethiopia	South Africa		Dominican Republic	Poland			
	France	Sri Lanka		Ecuador	*Portugal*			
	India	Sudan		Egypt	Romania			
	Indonesia	Syria		Ghana	*South Korea*			
	Iran	Turkey		*Greece*	*Spain*			
	Iraq	Uganda		Guatemala	Thailand			
	Lebanon	*United States*		Haiti	Uruguay			

Note: countries that are italicised have per capita income above the 75th percentile in 2000 by Maddison. Maddison is used versus Penn World Tables due to its slightly wider sample coverage for 2000. Countries in red have predominantly cohesive political institutions. See *Pillars 2.dta* codebook for further details on civil war and repression variables.

Table 4.1-4.3 (new)

- As per the previous table, bar some outliers, high income countries and states with predominantly cohesive institutions continue to experience lower levels of political violence.
- Our newly constructed civil war incidence variable means some countries have changed columns and/or rows relative to the old table.
  - Notwithstanding this, almost all countries are situated in the exact cell as the old table.
  - As per the *Pillars 2.dta* codebook, the correlation coefficient between our new civil war incidence variable and the old one in *Pillars.dta* is ≈ 1.

Table 4.4 (new)

	Ordered variable	Ordered variable	Ordered variable	Political violence	Political violence	Civil war	Civil war	Ordered variable
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Natural disaster	0.049	0.071	0.055	0.051	0.075	0.098	0.103	0.049
	(0.096)	(0.099)	(0.097)	(0.097)	(0.101)	(0.136)	(0.14)	(0.107)
Security Council member	-.511**	-.498**	-.611**	-.574**	-.554**	-.394	-.392	-.511*
	(0.235)	(0.252)	(0.249)	(0.243)	(0.259)	(0.31)	(0.311)	(0.268)
Security Council member in Cold War	0.561*	0.632*	0.736**	0.734**	0.833**	0.071	0.069	0.561
	(0.303)	(0.323)	(0.319)	(0.311)	(0.33)	(0.447)	(0.447)	(0.409)
Natural disaster x strong institutions		-.232	-.091		-.242		-.071	
		(0.29)	(0.473)		(0.294)		(0.453)	
Security Council member x strong institutions		-.079	1.262		-.147			
		(0.687)	(0.823)		(0.724)			
Security Council member in Cold War x strong institutions		-.664	-2.056**		-.950			
		(0.905)	(1.039)		(0.953)			
Strong institutions measure		High exec. constraints 1950-2015	Parliamentary Democracy 1950-2015		High exec. constraints 1950-2015		High exec. constraints 1950-2015	
Estimation method	FE ordered Logit	FE ordered Logit	FE ordered logit	FE logit	FE logit	FE logit	FE logit	FE ordered logit
Significance of interactions (p-value)		0.55	0.61		0.40		0.94	
Observations	5811	5811	5811	5811	5811	2425	2425	5811
Number of countries	116	116	116	116	116	49	49	116

Table 4.5 (new)

	Political violence	Political violence	Civil war	Civil war	Log GDP per capita	Log aid disbursement	Political violence	Civil war
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Natural disaster	-.001	-.002	0.008	0.013	0.002	0.152***		
	(0.012)	(0.016)	(0.01)	(0.014)	(0.003)	(0.043)		
Security Council member	-.047*	-.061*	-.029	-.029	-.004	-.099		
	(0.025)	(0.033)	(0.02)	(0.019)	(0.006)	(0.082)		
Security Council member	0.071*	0.109**	0.007	0.006	0.002	0.27**		
in Cold War	(0.04)	(0.051)	(0.027)	(0.027)	(0.008)	(0.131)		
Natural disaster x		0.006		-.026				
strong institutions		(0.038)		(0.029)				
Security Council member x		0.046						
strong institutions		(0.048)						
Security Council member		-.134*						
in Cold War x		(0.073)						
strong institutions								
Two-year lagged log					0.933***			
GDP per capita					(0.011)			
Log GDP per capita							0.032	0.023
							(0.033)	(0.034)
Log id disbursement							0.123***	0.107***
							(0.031)	(0.034)
Observations	7796	7796	7918	7918	7799	6308	4824	4824
Number of countries	189	189	201	201	170	150		

New Tables – Comments (I)

- Although the updated tables which include data up until 2015 provide more mixed evidence on the determinants of conflict, elements of the theory developed in Besley and Persson (2011) and provided in Pillars still hold.
  - This mixed evidence is largely driven by the inclusion of ten more years of data; running the same regressions with the new data over the original time period of 1950-2005 finds fairly similar results to the original tables (not shown here).
- Recall a key, nontrivial prediction of the theory is how executive constraints should hamper political violence even in the face of exogenous shocks that could induce conflict.
  - Empirically, interacting the exogenous determinants of conflict with executive constraints should yield equally sized coefficients but with *opposing* signs.

New Tables – Comments (II)

- Albeit some statistical insignificance with the individual coefficients on the interaction terms, the overall significance of the interactions, as indicated by the p-value from the test of significance row, is unable to reject the null hypothesis that the interacted coefficients, when summated with the non-interacted coefficients, are equal to zero.
- Hence, even with new data and the inclusion of ten more years worth of observations, we still find this aspect of the theory to be congruent with the empirical evidence.

Robustness Checks

- Once again, we use the V-Dem dataset to perform some elementary robustness checks on the previous two tables.
- We use V-Dem to measure our executive constraints parameter for the interactions.
  - As per the *Pillars 2.dta* codebook, we measure executive constraints based on the average of V-Dem's judicial constraints (*v2x_jucon*) and legislative constraints (*v2xlg_legcon*) indicators.
- In the following tables which replicate the new versions of tables 4.4 and 4.5, we only report those columns that are relevant to the executive constraints interactions.
  - This applies except for columns 1 and 3 of table 4.5, as they are included purely for comparative purposes with the interactions.

Table 4.4 (V-Dem)

	Ordered variable	Political violence	Civil war
	(2)	(5)	(7)
Natural disaster	0.075	0.075	0.093
	(0.098)	(0.100)	(0.137)
Security Council member	-.531**	-.598**	-.393
	(0.24)	(0.248)	(0.31)
Security Council member in Cold War	0.603*	0.791**	0.069
	(0.311)	(0.319)	(0.447)
Natural disaster x strong institutions	-.394	-.347	0.218
	(0.343)	(0.345)	(0.786)
Security Council member x strong institutions	0.334	0.443	
	(1.081)	(1.084)	
Security Council member in Cod War x strong institutions	-.664	-.919	
	(1.326)	(1.332)	
Strong institutions measure	High exec. constraints 1950-2015	High exec. constraints 1950-2015	High exec. constraints 1950-2015
Estimation method	FE ordered logit	FE logit	FE logit
Significance of interactions (p-value)	0.80	0.86	0.69
Observations	5811	5811	2425
Number of countries	116	116	49

Table 4.5 (V-Dem)

	Political violence	Political violence	Civil war	Civil war
	(1)	(2)	(3)	(4)
Natural disaster	-.001	-.003	0.008	0.014
	(0.012)	(0.016)	(0.01)	(0.014)
Security Council member	-.047*	-.066**	-.029	-.029
	(0.025)	(0.031)	(0.02)	(0.019)
Security Council member in Cold War	0.071*	0.102**	0.007	0.007
	(0.04)	(0.05)	(0.027)	(0.027)
Natural disaster x strong institutions		0.013		-.033
		(0.035)		(0.026)
Security Council member x strong institutions		0.078**		
		(0.039)		
Security Council member in Cold War x strong institutions		-.129**		
		(0.062)		
Observations	7796	7796	7918	7918
Number of countries	189	189	201	201

Robustness Checks – Comments

- Albeit again some mixed evidence concerning V-Dem's alternative measure of executive constraints, we still find the interactions aspect of the theory to hold.
- As per table 4.4, the p-values from the test of significance of the interactions is unable to reject the null hypothesis that summating the non-interacted and interacted coefficients is different from zero.