Supplementary Materials

Table 2: Summary statistics

Variable	**Mean**	**Std. Dev.**	**Min.**	**Max.**	**N**
Onset (F/L)	0.01	0.11	0	1	2709
Onset (C/H)	0.01	0.1	0	1	2384
Land Ineq	0.81	0.12	0.4	0.98	1174
Land Ineq Sq	0.66	0.19	0.16	0.97	1174
Land Gini	0.63	0.16	0.18	0.98	2709
Land Gini Sq	0.42	0.2	0.03	0.96	2709
War Lag (F/L)	0.14	0.35	0	1	2709
GDP/Cap Lag(F/L)	4.58	4.19	0.27	41.02	2709
Log Pop (F/L)	9.37	1.41	6.27	14.01	2709

Table 3: Correlation Table

Variables	Onset (F/L)	Onset (C/H)	Land Ineq	Land Gini
Onset (F/L)	1.00			
Onset (C/H)	0.45	1.00		
Land Ineq	0.07	0.06	1.00	
Land Gini	-0.01	0.01	0.67	1.00

Discussion of Robustness Tests

I now go on to test alternative arguments on the relationship between rural inequality and conflict, and the robustness of my initial results. These models are consistent with my theoretical predictions and support my argument on the distinction between total landholding inequality and Ginis of landholding concentration. In Model 1, Table 4, I test for a quadratic relationship between total landholding inequality and conflict. There is no significant decline in the likelihood of conflict at very high levels of this variable, with predicted probabilities only dropping very slightly from 0.026 to 0.022 as land inequality increases from 0.91 to 0.96, its maximum. Consistent with my theoretical predictions, this result indicates that it is solely the concentration of landholdings which can lead to conflict being suppressed at very high levels. The high levels of landlessness which are entailed in very high total landholding inequality entail grievances which eliminate this negative effect on conflict onset. In Model 2, I test for a simple linear relationship between Gini coefficients of landholding concentration and conflict. Similarly to previous studies, I find no significant correlation between the two variables after controlling for relevant confounding factors. The predicted probability of conflict onset increases by less than one percentage point across the range of the variable. This result is in line with my theoretical predictions and the descriptive evidence presented in Figure 1. Civil war onset is most likely at moderate levels of landholding concentration, and similarly unlikely at both very low and very high levels of landholding concentration.

In Models 3 and 4 in Table 4, I test Boix's theory, which asserts that landholding inequality's effects on civil conflict are conditional on total asset specificity, and predicts that the likelihood of conflict onset is greatest when landholding inequality is high and urbanization is low (Boix 2008). This is a genuinely new test of his argument, because he uses a measure of the proportion of family farms rather than inequality measures based on the distribution of landholdings in his analysis. Instead of his measure of urbanization, I include its inverse, the proportion of the population which is employed in the agricultural sector using data from the FAO, and interact this variable with **Land Ineq** in Model 3 and with **Land Gini** in Model 4. The results of these models provide little support for Boix's theory, and show a lack of robust results when compared to my models above. Although the signs on both the landholding inequality variables and rural population are positive, the sign of the coefficient on their interaction is negative, whereas Boix's model predicts a significant positive coefficient on this term. However, all coefficients are estimated with very high uncertainty, with the size of the standard errors far exceeding the size of the coefficients on the interaction terms, so I cannot draw any definitive conclusions from these models for his approach.

Model 5 in Table 4 replicates Model 5 in Table 1, taking the F&L conflict indicator as its dependent variable, but it includes peace years and three time trends instead of a lagged dependent variable to control for time dependence. In this model, the signs and size of the coefficients on land inequality and the land Gini are very similar to their equivalents using a lagged dependent variable, and though the estimates are less precise examination of marginal effects gives substantive results very similar to models presented in Table 1. Total land inequality has positive effects on conflict onset which are significant at the $p < 0.05$ level when this measure exceeds 0.76. Land Ginis have significant positive effects on conflict onset at levels between 0.43 and 0.83.

In Table 5 I examine the effects of my independent variables of interest on alternative specifications of the dependent variable. Firstly, in Models 1 and 2 I use the F&L conflict onset data, but I exclude from the analysis all country-years during which a civil war is ongoing and there is no new conflict onset. I do this to eliminate the potential bias which results from equating years in which there is no new conflict, but an ongoing civil war in a country, with years in which there is no conflict at all. This requires dropping a total of 807 observations from the dataset. Model 1 in Table 5 shows that the positive effect of total landholding inequality on conflict onset is unchanged by excluding these observations, with the sign and significance of the coefficient on the variable very similar to the results presented in Table 1, and significant effects seen at levels of inequality above 0.75. The results of Model 2 also show a similar quadratic relationship between Ginis of landholding concentration and conflict onset, with the probability of conflict peaking at a Gini of 0.68.

In Models 3 and 4 in Table 5, I use a variable on conflict incidence from the Onset of Intrastate Armed Conflict dataset by Gleditsch et al. to model the effects of land inequality on the incidence of conflict (Gleditsch et al. 2002). I do this to, firstly, bolster confidence in my results by using a third source of data on civil war and, secondly, to look at conflict incidence rather than the onset of new conflicts. In Model 3, there is a significant positive correlation between total landholding inequality and the incidence of conflict, with conflict significantly more likely at levels of inequality above 0.66. This suggests a similar effect of rural grievances on both conflict onset and the likelihood of

subsequent conflict incidence. Model 4 finds a quadratic relationship between Ginis of landholding concentration and conflict incidence, although the coefficient estimates are not as precise as those of models in Table 1, and in particular the decline in the likelihood of incidence at very high levels of landholding concentration is not as pronounced. This result provides interesting evidence on my argument emphasizing the ability of landed elites to repress conflict. The lack of a significant decline in conflict incidence at very high levels of landholding concentration suggests that once a conflict has started, a landed elite finds it more difficult to stop it than it does suppressing nascent unrest.

Because the high number of missing observations in my dataset on total landholding inequality—which contains a total of only 1174 observations compared to 2709 Gini coefficients—could induce bias in my results, I present a model replicating Model 1 in Table 1 estimated via multiple imputation as Model 5 in Table 5.[13] This model is a test for whether the sample of country-years included in my landholding inequality dataset is driving my results linking this variable to conflict onset. The results are, given the high levels of missingness in the original data, a weak confirmation of the hypothesis that total landholding inequality is positively associated with conflict. The coefficient on the variable in Model 5 is positive, but not statistically significant—its p-value is 0.13. Increases in total landholding inequality across its range are associated with a two percentage point increases in the probability of conflict onset, changes very similar in magnitude to those seen in the model presented in Table 1. However, these increases are not statistically significant at the $p < 0.10$ level.

[13] The imputation process was carried out using Amelia II by Honaker, King, and Blackwell (2010). I use five imputed datasets, and the imputation model includes all observations in the F&L dataset. I include all independent variables in the imputation models as well as lags for land inequality and land Ginis. The analysis of the imputed datasets and subsequent calculations of predicted probabilities are done using the `estsimp` and `simqi` commands in the `Clarify` package by Tomz, Wittenberg, and King (2005).

Table 4: Tests of Alternative Specifications

	(1) Ineq (F/L)		(2) Gini (F/L)		(3) Boix (LI)		(4) Boix (LG)		(5) Full Model	
Land Ineq	161.26	(113.68)			11.93	(8.98)			11.45	(7.60)
Land Ineq Sq	-87.97	(66.75)								
Land Gini			0.96	(1.18)			2.65	(3.35)	34.34*	(19.52)
Land Gini Sq									-27.88*	(15.20)
Rural Pop					5.16	(14.32)	1.40	(3.93)		
Land Ineq*Rural Pop					-7.80	(15.36)				
Land Gini*Rural Pop							-2.72	(4.95)		
War Lag (F/L)	-1.70***	(0.55)	-0.96**	(0.38)	-1.61***	(0.56)	-0.99***	(0.37)		
Peace Years									-0.13	(0.24)
Spline 1									-0.00	(0.00)
Spline 2									-0.00	(0.00)
Spline 3									0.00	(0.00)
GDP/Cap Lag(F/L)	-0.38***	(0.13)	-0.34***	(0.09)	-0.44**	(0.20)	-0.38***	(0.13)	-0.26	(0.17)
Log Pop (F/L)	0.37*	(0.20)	0.41***	(0.13)	0.30	(0.23)	0.36***	(0.13)	0.08	(0.20)
Constant	-81.09*	(47.94)	-8.98***	(1.73)	-16.95	(10.54)	-9.13***	(3.38)	-25.33***	(7.32)
Observations	1174		2709		1041		2159		1174	

Standard errors in parentheses

All models with robust standard errors clustered by country

All models include full Fearon and Laitin (2003) controls

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5: Robustness Tests for Ongoing Conflicts, Conflict Incidence and Multiple Imputation

	(1)		(2)		(3)		(4)		(5)	
	Ineq excl Ongoing		Gini excl Ongoing		Incidence (PRIO)		Incidence (PRIO)		Ineq via MI	
Rural Ineq	10.17**	(4.12)			14.29***	(3.11)			2.48	(1.57)
Land Gini			25.83**	(12.54)			10.60	(6.61)		
Land Gini Sq			-18.83*	(10.11)			-7.52	(5.06)		
War Lag (F/L)	1.75**	(0.72)	2.32***	(0.50)					-1.01***	(0.27)
GDP/Cap Lag(F/L)	-0.42***	(0.12)	-0.37***	(0.09)	-0.15*	(0.08)	-0.11**	(0.05)	-0.30***	(0.08)
Log Pop (F/L)	0.41*	(0.22)	0.53***	(0.16)	0.28*	(0.15)	0.25**	(0.10)	0.28***	(0.07)
Peace Years					-1.77***	(0.26)	-1.80***	(0.17)		
Spline 1					-0.05***	(0.01)	-0.05***	(0.01)		
Spline 2					0.01***	(0.00)	0.01***	(0.00)		
Spline 3					-0.00**	(0.00)	-0.00**	(0.00)		
Constant	-17.07***	(5.16)	-17.61***	(3.62)	-15.02***	(2.96)	-4.64*	(2.47)	-9.17***	(1.47)
Observations	1028		2352		1161		2686		5098	

Standard errors in parentheses

All models with robust standard errors clustered by country

All models include full Fearon and Laitin (2003) controls

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 6: List of Countries in Land Gini Models

Country	Obs.	Country	Obs.	Country	Obs.
ARGENTINA	29	HAITI	1	NIGERIA	1
AUSTRALIA	41	HONDURAS	30	NORWAY	51
AUSTRIA	45	HUNGARY	31	PAKISTAN	40
BANGLADESH	23	INDIA	43	PANAMA	50
BELGIUM	50	INDONESIA	31	PARAGUAY	31
BHUTAN	1	IRAN	1	PERU	34
BOLIVIA	12	IRAQ	31	PHILIPPINES	44
BOTSWANA	23	IRELAND	50	POLAND	40
BRAZIL	47	ISRAEL	32	PORTUGAL	50
BURKINA FASO	1	ITALY	40	RWANDA	1
BURMA	4	IVORY COAST	2	SAUDI ARABIA	1
CAMEROON	13	JAMAICA	16	SENEGAL	38
CANADA	41	JAPAN	43	SIERRA LEONE	15
CHILE	33	JORDAN	33	SOUTH AFRICA	1
CHINA	1	KENYA	15	SPAIN	30
COLOMBIA	46	KOREA S	30	SRI LANKA	39
COSTA RICA	35	KUWAIT	1	SUDAN	1
CYPRUS	18	LAOS	1	SWAZILAND	1
CZECHOSLOVAKIA	42	LEBANON	30	SWEDEN	49
DEM. REP. CONGO	21	LESOTHO	23	SWITZERLAND	22
DENMARK	51	LIBERIA	1	SYRIA	1
DOMINICAN REP.	46	LIBYA	1	TAIWAN	16
ECUADOR	45	MADAGASCAR	19	TANZANIA	10
EGYPT	40	MALAWI	25	THAILAND	31
EL SALVADOR	36	MALAYSIA	18	TOGO	22
ETHIOPIA	23	MAURITANIA	2	TUNISIA	35
FIJI	20	MEXICO	21	TURKEY	48
FINLAND	50	MOROCCO	15	UGANDA	27
FRANCE	37	MOZAMBIQUE	1	UK	50
GAMBIA	1	NAMIBIA	1	URUGUAY	49
GERMANY FED. REP.	36	NEPAL	28	USA	50
GHANA	15	NETHERLANDS	50	VENEZUELA	37
GREECE	50	NEW ZEALAND	31	VIETNAM	28
GUATEMALA	30	NICARAGUA	40	ZAMBIA	11
GUYANA	11	NIGER	1	Total	2709