ONLINE APPENDIX FOR
# ENEMY AT THE GATES: VARIATION IN ECONOMIC GROWTH FROM CIVIL CONFLICT

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Online Appendix

1. Illustrative Maps

FARC advocates a number of political and economic reforms and chooses targets strategically related to these objectives. Figure 1 shows the spatial distribution of violence in Colombia from 1989 to 2008, where Bogotá is designated by a black diamond and major cities by black triangles. To determine the centroid locations of conflict we use the PRIO conflict site database developed by Hallberg (2012).
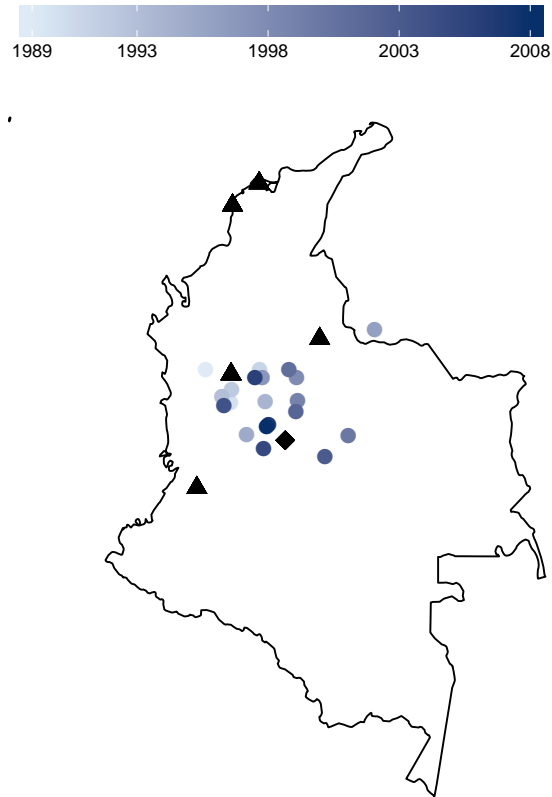
Figure 1. This map illustrates the geographic distribution of all conflict centroids in Colombia, according to the PRIO Conflict Site Dataset, and major cities from 1989 to 2008.

In figure 2, we show the geographic distribution of conflict in India from 1989 to 2007 again using the PRIO conflict site database. The story from this map is clearly quite stark from that of Colombia. Whereas in Colombia conflict had come right to the gates of major cities, in India conflict has been primarily confined to the periphery.
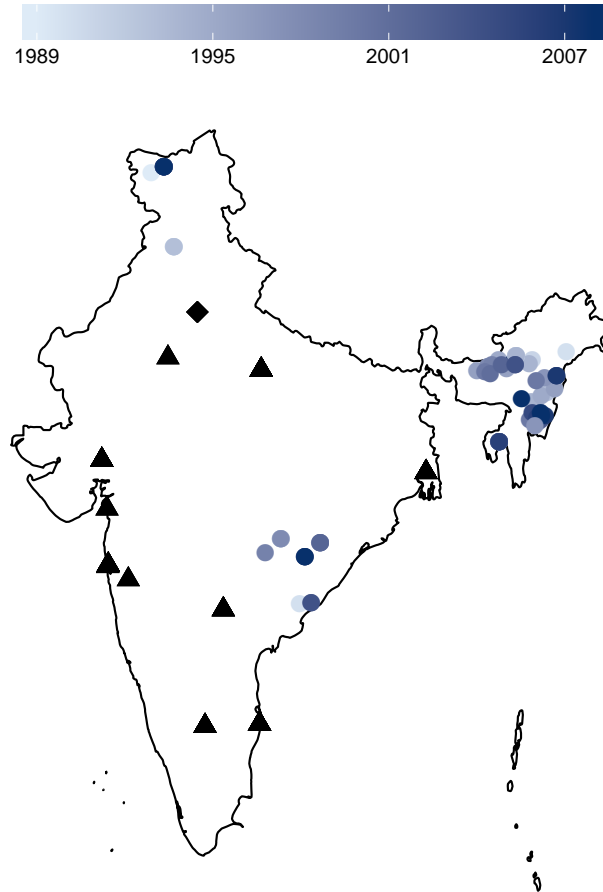
Figure 2. This map illustrates the geographic distribution of all conflict centroids in India, according to the PRIO Conflict Site Dataset, and major cities from 1989 to 2007.

2. Conflict Distance Models in Tabular Format

Results of our models measuring the effect of conflict distance in a tabular format.

Table 1. Tabular representation of coefficient plots shown in Figures 4a and 4b.

	Dependent variable:	
	$\%\Delta GDP_t$	
	(1)	(2)
Ln(Min. Cap. Dist.)$_{t-1}$	0.994**	
	(0.394)	
Ln(Min. City Dist.)$_{t-1}$		1.174***
		(0.410)
Intensity$_{t-1}$	−1.146	−1.190
	(0.971)	(0.970)
Duration$_{t-1}$	0.144***	0.143***
	(0.037)	(0.037)
Area$_{t-1}$	−4.704***	−4.853***
	(1.295)	(1.283)
Number of conflicts$_{t-1}$	1.431**	1.444**
	(0.617)	(0.620)
Upper Income	0.696	1.051
	(2.691)	(2.720)
Ln(Inflation)$_{t-1}$	−2.639***	−2.564***
	(0.469)	(0.471)
Democracy$_{t-1}$	−0.024	−0.003
	(0.090)	(0.091)
Resource Rents/GDP$_{t-1}$	0.072**	0.072**
	(0.036)	(0.036)
World GDP Growth$_t$	0.543**	0.554**
	(0.272)	(0.271)
Constant	2.453	1.360
	(3.349)	(3.438)
Countries	69	69
Observations	505	505
Note:	*p<0.1; **p<0.05; ***p<0.01	

3. ACLED Analysis

The Armed Conflict Location and Event Dataset provides an alternative source of information on the subnational spatial distribution of armed conflict (Raleigh et al., 2010). This dataset is, at the time of writing, limited to Africa and therefore was not selected for the primary analysis presented in the text. It does, however, offer us a valuable opportunity to validate our results. Here, we have replicated the primary model described in Section 4.2.

In order to match our existing data structure, it was necessary to aggregate the ACLED data to the country-year level. We did this by first subsetting ACLED to the years 1989-2008 and then selecting only conflict sites with at least 25 fatalities in each given year. The 25 fatalities threshold is intended to mirror the PRIO coding criteria and to prevent very low-fatality events from biasing our estimates of conflict location toward high-population areas. Covariates created with PRIO but unavailable in ACLED are omitted. The analysis procedure then continues as described in Section 4.2: the minimum distance measure is calculated as the natural logarithm of the average distance in kilometers from any conflict site to the nearest major city (or capital). The results are presented in Table 2 below.

When utilizing this alternative dataset we again find significant support for the argument that conflicts more proximate to urban centers have a greater adverse effect on economic growth than those farther away. Additionally, if we switched to a fixed effects framework, such as the one described in the previous appendix section, we still find significant support for the hypotheses laid out in our paper.

Table 2. The table below shows the results of two regressions using random effects clustered on countries. The first column shows the results using conflict proximity from any major city and the second conflict proximity from the capital. Conflict data here is based on ACLED.

	Dependent variable:	
	$\%\Delta GDP_t$	
	(1)	(2)
Ln(Min. City Dist.)$_{t-1}$	0.585**	
	(0.254)	
Ln(Min. Cap. Dist.)$_{t-1}$		0.660**
		(0.259)
Number of conflicts$_{t-1}$	9.091***	9.291***
	(1.834)	(1.832)
Ln(Inflation)$_{t-1}$	1.167	0.921
	(0.851)	(0.815)
Democracy$_{t-1}$	0.147	0.116
	(0.217)	(0.217)
Resource Rents/GDP$_{t-1}$	−0.0001	0.004
	(0.048)	(0.048)
World GDP Growth$_t$	1.034**	0.877**
	(0.442)	(0.439)
Intercept	−19.308***	−18.398***
	(5.477)	(5.252)
Countries	22	22
Observations	101	101
Note:	*p<0.1; **p<0.05; ***p<0.01	

4. Estimating Models Separately for High and Low Intensity Conflicts

Here instead of treating conflict intensity as a control, we re-do our primary random effect regression models estimating the effect of distance on growth, but restricting to the civil conflicts coded as wars and then a separate model for civil conflicts coded as low intensity events. In both low intensity and high intensity cases we find that the conflict distance variables remain significant and in the expected direction, and the β estimate of our distance variables is noticeably higher when using high intensity versus low intensity civil conflict cases. The results are presented in Table 3 below.

Table 3. The table below shows the results of four different regressions using random effects clustered on countries. The first column shows the results for a regression using only conflicts described as low intensity according to PRIO on Δ GDP$_t$ using the Ln(Min. City Dist.)$_{t-1}$ variable along with the full set of controls, with the exception of the intensity variable. The second column runs a similar regression but using only conflicts described as high intensity. The latter two columns repeat this analysis for the Ln(Min. Cap. Dist.)$_{t-1}$ variable.

	Dependent variable:			
	%ΔGDP_t			
	(Low Intensity)	(High Intensity)	(Low Intensity)	(High Intensity)
Ln(Min. City Dist.)$_{t-1}$	1.163***	2.281**		
	(0.409)	(1.130)		
Ln(Min. Cap. Dist.)$_{t-1}$			1.009***	2.884***
			(0.385)	(1.104)
Duration$_{t-1}$	0.151***	0.227**	0.153***	0.204**
	(0.035)	(0.091)	(0.035)	(0.090)
Area$_{t-1}$	−3.794***	−8.995***	−3.603***	−7.606***
	(1.345)	(2.636)	(1.366)	(2.703)
Number of conflicts$_{t-1}$	1.367**	1.262	1.332**	1.406
	(0.573)	(3.599)	(0.573)	(3.556)
Upper Income	2.176	−1.637	1.741	−0.390
	(2.342)	(9.430)	(2.300)	(9.316)
Ln(Inflation)$_{t-1}$	−2.020***	−2.984***	−2.087***	−3.030***
	(0.499)	(0.727)	(0.497)	(0.713)
Democracy$_{t-1}$	−0.051	0.117	−0.073	0.118
	(0.089)	(0.214)	(0.089)	(0.211)
Resource Rents/GDP$_{t-1}$	0.106***	−0.034	0.107***	−0.052
	(0.036)	(0.067)	(0.036)	(0.067)
World GDP Growth$_t$	0.560*	0.461	0.546*	0.422
	(0.299)	(0.482)	(0.300)	(0.476)
Intercept	−1.315	−3.701	−0.387	−7.567
	(3.504)	(9.592)	(3.395)	(9.453)
Countries	66	30	66	30
Observations	403	131	403	131
Note:	*p<0.1; **p<0.05; ***p<0.01			

References

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