# JCR-14-0358.R1 ENTITLED "ENEMY AT THE GATES: VARIATION IN ECONOMIC GROWTH FROM CIVIL CONFLICT"

Dear Professor Huth,

Thank you for the opportunity to revise and resubmit our manuscript once again. We have incorporated each of the comments made by R2 into the revised manuscript. The revision memo is organized in response to the bulleted set of questions that were posted with the decision letter. Our comments and responses are shown in *BLUE* below each point.

We hope you agree that the manuscript has greatly improved through this helpful process and we are looking forward to your response.

Sincerely,

The Authors.

#### REVIEWER

- (1) Empirical Strategy & Sample:
  - (a) Empirical strategy. As I have already mentioned in my first report, the empirical strategy is still a major issue. Im not convinced by the use of random fixed effects. At least, I would to like see a table following the road map I gave in my previous comments. Last, I do not understand the last argument about the weak time-variation of the distance to conflict.
  - (b) Sample. I am not sure about the accuracy of the answer to my third point. I asked for the use of a full sample of countries. I dont see a problem to estimate the following equation:  $GDP_{it} = \beta_1 Conflict_{it} + \beta_2 Distance_{it} + \ldots + \zeta_{it}$ . where  $Distance_{it} = 0$  when  $Conflict_{it} = 0$  and  $Distance_{it} > 0$  when  $Conflict_{it} = 1$ . This specification allows to consider the full sample, to control for conflict and to estimate the main story about the distance to events. I expect the estimate of  $\beta_2$  to be positive.
    - The specification suggested above is one that we have now incorporated into our paper. We adopt the following specification suggested by the reviewer:  $GDP_{it} = \beta_1 Conflict_{it} + \beta_2 Distance_{it} + \ldots + \zeta_{it}$ . where  $Distance_{it} = 0$  when  $Conflict_{it} = 0$  and  $Distance_{it} > 0$  when  $Conflict_{it} = 1$ . Further as suggested by the reviewer we estimate the model with fixed effects instead of random effects. The results are shown below for both our minimum city distance and minimum capital distance variables, see tables 1 and 2, respectively. In line with the expectation the reviewer suggested the effect of  $\beta_2$  is positive across each specification. We have included an appendix item into the paper describing these results.

Date: November 6, 2015.

#### • City models

TABLE 1. This table shows the results of a series of regressions in which we utilize a full country year panel. The first column shows a simple model in which we estimate the effect of logged, minimum city distance and the presence of civil war on logged, economic growth. In the second column, we incorporate controls, next we add country fixed effects, and last we include both country and year fixed effects.

	Dependent variable:			
			$\Delta \ \mathrm{GDP}_t$	
	$Pooled\ I$	Pooled II	$Country\ FE$	Country + Year FE
	(1)	(2)	(3)	(4)
Civil $War_{t-1}$	-8.978***	-6.899***	-8.979***	-9.145***
	(1.462)	(1.369)	(1.690)	(1.697)
$Ln(Min. City Dist.)_{t-1}$	1.548***	1.267***	1.281***	1.312***
( , , , , , , ,	(0.278)	(0.260)	(0.322)	(0.324)
$\operatorname{Ln}(\operatorname{Inflation})_{t-1}$		-2.908***	-2.963***	$-3.156^{***}$
, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		(0.200)	(0.228)	(0.237)
$Democracy_{t-1}$		-0.065***	0.047	0.081*
, , ,		(0.020)	(0.045)	(0.048)
Resource Rents/GDP $_{t-1}$		0.054***	0.116***	0.120***
, , ,		(0.010)	(0.018)	(0.019)
World GDP Growth $_t$		0.756***	0.663***	
		(0.083)	(0.081)	
Countries	160	160	160	160
Observations	3,002	3,002	3,002	3,002

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

### • Capital city models

TABLE 2. This table shows the results of a series of regressions in which we utilize a full country year panel. The first column shows a simple model in which we estimate the effect of logged, minimum capital distance and the presence of civil war on logged, economic growth. In the second column, we incorporate controls, next we add country fixed effects, and last we include both country and year fixed effects.

	Dependent variable:			
			$\Delta \operatorname{GDP}_t$	
	$Pooled\ I$	Pooled II	$Country\ FE$	Country + Year FE
	(1)	(2)	(3)	(4)
Civil $War_{t-1}$	-8.938***	-7.210***	-8.711***	-8.807***
	(1.476)	(1.383)	(1.707)	(1.713)
$\operatorname{Ln}(\operatorname{Min. Cap. Dist.})_{t-1}$	1.444***	1.245***	1.158***	1.175***
( 1 /6 1	(0.263)	(0.247)	(0.308)	(0.309)
$\operatorname{Ln}(\operatorname{Inflation})_{t-1}$		-2.925***	-2.973***	-3.164***
( // // 1		(0.200)	(0.228)	(0.237)
$Democracy_{t-1}$		-0.069***	0.038	0.069
, , ,		(0.020)	(0.045)	(0.048)
Resource Rents/GDP $_{t-1}$		0.053***	0.115***	0.119***
, , ,		(0.010)	(0.018)	(0.019)
World GDP Growth <sub><math>t</math></sub>		0.751***	0.662***	
·		(0.083)	(0.081)	
Countries	160	160	160	160
Observations	3,002	3,002	3,002	3,002

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

- (2) The authors have to consider the countrys size. The distance has to be weighted by the country size. It cannot be an argument to rule out the possibility to use country fixed effects.
  - We reran the analysis weighting both of our conflict distance variables by area and the results again hold. We do not include them in the paper but show the results below.
- (3) The sample includes the 1997 Asian crisis and the 2008 financial crisis. The authors control for the average GDP growth across all countries. The better way to control

TABLE 3. This table shows the results of a full panel country fixed effect regressions after weighting our distance variables by the land area of a country.

	$\frac{Dependent \ variable:}{\Delta \ \mathrm{GDP}_t}$	
	(1)	(2)
Civil $War_{t-1}$	$-7.364^{***}$ (1.885)	$-7.382^{***}$ (1.976)
$\operatorname{Ln}(\operatorname{Min.\ City\ Dist.})/\operatorname{Ln}(\operatorname{Land\ Area})_{t-1}$	12.042*** (4.559)	
Ln(Min. Cap. Dist.)/Ln(Land Area) $_{t-1}$		11.447** (4.542)
$\operatorname{Ln}(\operatorname{Inflation})_{t-1}$	$-2.990^{***}$ $(0.229)$	$-2.994^{***}$ (0.229)
$Democracy_{t-1}$	$0.048 \\ (0.045)$	0.041 $(0.045)$
Resource Rents/GDP $_{t-1}$	0.116*** (0.018)	0.116*** (0.018)
World GDP Growth $_t$	0.679*** (0.082)	0.678*** (0.082)
Countries Observations	160 2,978	160 2,978
Note:	*p<0.1; **p<	<0.05; ***p<0

for time-invariant common shocks is the inclusion of year fixed effects.

- We run an alternative model using year fixed effects instead of a lagged GDP growth measure. Results are shown below are findings still hold.
- (4) Data. Considering the raw dataset on conflict, US and Spain were in war (Figure 3). PRIO defines different nature of conflicts. I would like to see results with this distinctions.

We provide this distinction in We reran the models per this specification and have included the results in the appendix. In both low intensity and high intensity cases we find that the distance variables remain significant and in the hypothesized direction.

TABLE 4. This table shows the results of incorporating both country and year fixed effects.

	$\frac{Dependent\ variable:}{\Delta\ \mathrm{GDP}_t}$			
	(1)	(2)		
$\overline{\text{Civil War}_{t-1}}$	$-9.145^{***}$ (1.698)	$-8.807^{***}$ (1.713)		
Ln(Min. City Dist.) $_{t-1}$	1.312*** (0.324)			
Ln(Min. Cap. Dist.) $_{t-1}$		1.175*** (0.309)		
$\operatorname{Ln}(\operatorname{Inflation})_{t-1}$	-3.156*** $(0.237)$	$-3.164^{***}$ $(0.237)$		
$Democracy_{t-1}$	0.081* (0.048)	$0.069 \\ (0.048)$		
Resource Rents/GDP $_{t-1}$	0.120*** (0.019)	0.119*** (0.019)		
World GDP Growth $_t$	-272,285,162,667.000  (31,953,969,784,563.000)			
Countries Observations	160 3,002	160 3,002		
Note:	*p<0.1; **p<0.05; ***p<0.01			

<sup>(5)</sup> The sub-section 3.3 on the descriptive cases is a good candidate for the (online) appendix.

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(6) The authors include binary indicators for whether the country is classified as upper income by the World Bank. It is highly endogeneous to the main variable of interest.

Removing this variable has no effect on our analysis. We do not include this extra check in the paper but results are available upon request.

(7) The authors have to motivate why they decide to introduce the main variables with lags. Link to the introduction of lags, it would be interesting in the same framework to see whether it is possible

## We don't understand this point.

(8) Table 2. The authors mention random fixed effects with country, year or country + year. I do not understand what they mean.

We have replaced this table per your suggestion.

(9) Tables have to be self-contained.

We don't understand this point.

(10) The references have to actualized.

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