Appendix for "Tolerating Threat? The Independent Effects of Civil Conflict on Domestic Political Tolerance."

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1. Introduction

I use this appendix to describe the variable specifications for the individual-level and state-level control variables as well as report additional results that I lacked the space to present in the main paper. This appendix is divided into two sections. In the first section, I describe the how variables were constructed along with a brief discussion of their general expected effects on political tolerance. In the second section, I present the supplemental analyses referenced in the article.

2. Individual-level Variables

Please note that all of the individual-level variables were constructed using items from the 1995-1997 World Values Survey. Aside from the common socio-economic controls (gender, age, and education) and the media awareness indicator, these variables are constructed from several survey items using the mean of the components for each individual to reduce missing data (see Peffley and Rohrschneider 2003; Hutchison and Gibler 2007; Hutchison 2011).

Democratic Activism. This variable measures an individual's level of political activity. Previous studies have consistently shown that individuals with higher level of democratic activity tend be more politically tolerant. This is due, in part, to the type of activities the survey queries, which require the respondent to exercise their own civil liberties in order to pursue. This variable ranges from 1 (lowest) to 3 (highest) using responses from three questions in the WVS, which ask the respondent to indicate whether they have (3), would consider (2), or would never (1): participate in a boycott, sign a petition, or attend a lawful demonstration.

Political Interest. This variable measures an individual's overall interest in political system. The two survey items used to construct this variable tap into the respondent's self-assessment of their own political interest. The first question asks for the respondent's interest in politics: very interested (3), somewhat interested (2), or not very interested (1). The second question asks how often the respondent engages in political discussions: frequently (3), occasionally (2), or never (1). The resultant indicator ranges from 1 (low interest) to 3 (high interest). The expectation is that individuals more interested in politics are more likely to respect and extend civil liberties to others.

Democratic Ideals. With this variable I measure an individual's commitment to democratic values and principles. Peffley and Rohrschneider (2003) note that their democratic ideals index is derived from a measure first employed by Sullivan et al. (1985) that looks at democratic values from multiple levels of abstraction. I generate this indicator from two questions asking the respondent to assess democracy as a political system in the abstract. Specifically, the first

question asks the respondent to rate whether having a democratic political system is very good (4), fairly good (3), fairly bad (2), or very bad (1). The second question requires the respondent to compare democracy to other alternate political systems. It asks whether the respondent strongly agrees (4), agrees (3), disagrees (2), or strongly disagrees (1) with the contention that democratic political systems are better than other forms of government. The variable ranges from 1 (low) to 4 (high). I expect that individual's that strongly support democratic ideals are more likely to tolerate their least-liked group.

Conformity. Authoritarian personality traits have often been linked with lower political and social tolerance levels (Adorno et al 1950; Sullivan et al 1982; Feldman and Stenner 1997; Feldman 2003; Hetherington and Weiler 2009). Feldman and Stenner (1997) assert that conformity is a primary indicator of these personality traits and outline how to create a conformity measure based on answers to following questions regarding desirable qualities in children. It asks the respondent to indicate whether or not certain qualities were important for children to learn at home from a large list of attributes. Respondents selecting either obedience and/or good manners are coded as 1, while imagination is coded as 0. The resultant variable ranges from 0 (low) to 1 (high). I expect that conformity is negatively associated with political tolerance. This expectation not only fits with previous empirical findings, but also corresponds with the social psychology literature suggesting that individuals with a strong propensity for conformity are less likely to tolerate 'renegadism' (Coser 1956).

Value Free Speech. This variable is closely tied to the democratic ideals index, derived, in part, from Sullivan et al's (1985) original measure of "legalistic norms" (Peffley and Rohrschneider 2003). Whereas, the democratic ideals index taps into an individual's generalized support for democratic values and principles, this variable measures an individual's concrete support for democratic values when confronted with value trade-off scenarios. It is constructed from responses to three questions, each of which requires an individual to choose between a most basic democratic right, free speech, and other values. The first question asks whether the government's priority should be to foster order in society (0) or protect individual rights (1). The other two questions ask individuals to rank four value statements as most important, one of which involves the protection of free speech. I assign a value of 1 to respondents who ranked free speech as the most important and a 0.5 to who ranked it as second most important. This variable ranges from 0 (low) to 1.25 (high). As with the democratic ideals variable, I expect those individuals that attach a higher priority to free speech to be more likely to tolerate their least-liked group.

Media Awareness. With this variable, I measure an individual's consumption of mass media sources and, thereby, the exposure to potential framing and elite opinion leadership effects (see Zaller 1992). The general expectation is that media coverage of conflict events, particularly its framing, could affect the degree to which individuals react to threats. The specific expectations for this study are relatively agnostic because I do not have measures for the media content/government framing in each country. However, in the absence of strong government interference in media reporting, I would expect that a higher exposure to mass media will, *ceteris paribus*, raise the overall salience of reported threats and, thereby, triggering a stronger negative reaction to nonconformist groups. I generate this variable from the frequency of TV watching

indicator. It asks respondents to self-report their TV watching frequency on a scale from 0 (none) to 3 (3+ hours/day).

Socio-economic Indicators. I use the standard socio-economic variables to control for the effects of an individual's gender, age, and education levels. I also control for an individual's political ideology using a political self-placement question. It asks the respondent to place themselves along a 10-point ideology scale with 10 associated with the left and 1 associated with the right.

3. State-level Control Variables

Democratic Longevity. This variable measures the number of years that a state has experienced continuous democracy. This variable controls for the effect of democratic learning on overall political tolerance levels (see Peffley and Rohrschneider 2003; Hutchison and Gibler 2007). I use Marshall and Jaggers' (2002) Polity IV index as my measure of democratic longevity. Using Polity IV's democracy/autocracy score, I generate the number of years that a state has been a continuous democracy leading up to the year of the survey. Countries with a democracy/autocracy score of 6 or above are coded as democracies (Oneal and Russett 1997). Using this indicator, I sum the total number of continuous years that a state has experienced a democratic regime leading up to the year of the survey. Additionally, this indicator controls for regime type in the analyses as scores of 0 indicate non-democracies and scores above 0 indicate democracies.

Economic Development. Although scholars often point out the link between development and democracy (Przeworski 1991), the empirical record confirming the direction of the causal arrow remains inconclusive (Przeworski et al 2000). Thus, to ensure that both democratic longevity and political tolerance are not purely functions of economic development and modernity, I control for level of economic development. Furthermore, this variable also controls for the influence of development on the likelihood of civil conflict (Newman 1991). I use the United Nation's annual Human Development Index (HDI); an index based on three indicators of development for the year 1995: life expectancy, education, and GDP per capita. This index ranges from 0, indicating no development, to 1 indicating the highest level of development (United Nations Development Programme 1998). Within my sample, this continuous variable ranges from 0.391 to 0.943.

Ethnic Fractionalization. Coser (1956) states that external threat increases internal cohesion if two conditions are present at the time the threat presents itself. First, the threat must be salient to the group, which my independent variables try to measure. Second, a degree of group consensus exists *a priori* to the emergence of external threat. Previous psychological studies confirm that prior cohesion serves as an intervening variable conditioning group response (Stein 1976; Giles and Evans 1985). Similarly, a state's level of fractionalization may influence group responses to internal threats. I expect that internal fractionalization is negatively related to tolerance.. To control for this, I use an indicator of ethnic fractionalization to measure the degree of the ethnic division in a country. I use Fearon and Laitin's (2003) indicator of ethnic fractionalization, which measures the percentage share of the largest ethnic or religious group within the state population during the survey year.

4. Supplemental Models of Political Tolerance

In this section, I present additional analyses referenced in the paper and further robustness checks.

Discussion of Table 5a

As discussed in footnote 22 in the article, here I report the combined threat models. In these analyses, I control for external threats to the state and find both types of threat, external and internal, to have negative, independent effects on political tolerance.

Table 5a: Effect of Civil Conflict and External Threat on Political Tolerance

	Model 1-3		**Model 4-3**		**Model 6-3**	
HLM Models	n=20,227 individuals		n=20,227 individuals		n=20,227 individuals	
	Coef.	**S.E.**	**Coef.**	**S.E.**	**Coef.**	**S.E.**
Intercept	-4.22***	(0.29)	-4.23***	(0.30)	-4.22***	(0.30)
Individual-Level:						
Democratic Activism	0.37***	(0.05)	0.36***	(0.05)	0.36***	(0.05)
Political Interest	0.12**	(0.05)	0.12**	(0.05)	0.12**	(0.05)
Democratic Ideals	0.11	(0.07)	0.11	(0.07)	0.11	(0.07)
Free Speech Priority	0.44***	(0.09)	0.43***	(0.09)	0.43***	(0.09)
Conformity	-0.41***	(0.11)	-0.41***	(0.11)	-0.41***	(0.11)
Media Awareness	-0.02	(0.03)	-0.02	(0.03)	-0.02	(0.03)
Ideology (high=left)	-0.006	(0.01)	-0.004	(0.01)	-0.005	(0.01)
Gender (1=female)	-0.20***	(0.06)	-0.20***	(0.06)	-0.20***	(0.07)
Age	-0.01***	(0.00)	-0.01***	(0.00)	-0.01***	(0.00)
Education	0.09***	(0.01)	0.09***	(0.01)	0.09***	(0.01)
Macro-Level:						
Democratic Longevity	-0.004	(0.003)	-0.002	(0.003)	-0.003	(0.003)
Ethnic Fractionalization	1.63**	(0.62)	1.42**	(0.67)	1.59**	(0.74)
Economic Development (HDI)	-1.94*	(1.03)	-2.27	(1.38)	-0.58	(1.04)
Civil War (Correlates of War)	-1.33***	(0.46)				
Total Number of Armed Conflicts (5yrs)			-0.65**	(0.31)		
Terrorist Attacks (2yrs)					-0.21	(0.18)
Targeted Territorial Disputes	-0.82***	(0.22)	-0.84***	(0.24)	-0.87***	(0.25)
Initiated Territorial Disputes	-0.27	(0.56)	-0.49	(0.60)	-0.85	(0.66)
Targeted Non-Territorial Disputes	-0.13	(0.34)	-0.07	(0.37)	-0.13	(0.39)
Initiated Non-Territorial Disputes	0.31	(0.20)	0.25	(0.22)	0.24	(0.23)
Random Effect:						
Variance Component	1.67***		1.85***		1.80***	
Df	23		23		23	
Chi^2	82.7		86.1		83.6	

Note: Entries are restricted maximum likelihood coefficients and standard errors estimated with HLM 6.02
The standard errors are listed in parentheses.
* p<0.10, ** p<0.05, *** p<0.01
Source: 1995-1997 World Values Survey

Discussion of Table 6a

One anonymous reviewer suggested that rugged terrain may not be entirely exogenous to previous tolerance because it is possible that previous tolerance may have affected recent changes to a country's borders. Thus, the percentage of rugged terrain measure would be affected by prior tolerance. I conduct two robustness checks to account for this possibility.

First, I determined which countries in my sample experienced a border change within 20 years of the survey using the Correlates of War Territorial Change dataset (Tir et al. 1998). Using this data, I constructed a dummy variable indicating whether a country experience a recent border change and included it in the three basic models (Models 1, 4, and 6 in the original article). In Table 6a, I report these results and find no substantive differences in the effects of the civil conflict variables on individual tolerance. Furthermore, the border change variable is statistically significant only in Model 6-4, which examines the effects of terrorism. Here I do find that a recent border change has a negative influence on individual tolerance but the substantive effect of terrorism remains unchanged.

For the second robustness check, I exclude those countries whose borders changed within 20 years of the survey. I then estimate models 1, 4, &6 across this revised sample. I once again find no substantive differences in the effects of the civil conflict variables on individual tolerance between this sample and the full sample. Given the inclusion of two additional instruments and the diagnostics reported in the original article as well as the results of these two robustness checks, I am highly confident that the instruments are exogenous and appropriate for this study.

Table 6a: Effect of Civil Conflict on Political Tolerance (Border Changes)

	Full Sample						No Border Changes Sample					
	Model 1-4		**Model 4-4**		**Model 6-4**		**Model 1-5**		**Model 4-5**		**Model 6-5**	
IV-2SLS Models	n=20,243 individuals; Endogenous Variable: **Civil War (COW)**		n=20,243 individuals; Endogenous Variable: **Internal Armed Conflicts**		n=20,243 individuals; Endogenous Variable: **Fatal Terrorist Attacks**		n=9,630 individuals; 15 countries; Endogenous Variable: **Civil War (COW)**		n=9,630 individuals; 15 countries; Endogenous Variable: **Internal Armed Conflicts**		n=9,630 individuals; 15 countries; Endogenous Variable: **Fatal Terrorist Attacks**	
	Coef.	**S.E.**	**Coef.**	**S.E.**	**Coef.**	**S.E.**	**Coef.**	**S.E.**	**Coef.**	**S.E.**	**Coef.**	**S.E.**
Constant	0.07	(0.10)	0.13	(0.15)	0.07	(0.10)	0.20**	(0.09)	0.21**	(0.09)	0.09	(0.09)
Individual-Level:												
Democratic Activism	0.04***	(0.01)	0.04***	(0.01)	0.04***	(0.01)	0.05***	(0.01)	0.05***	(0.01)	0.05***	(0.01)
Political Interest	0.01*	(0.01)	0.01*	(0.01)	0.02**	(0.01)	0.03***	(0.01)	0.03***	(0.01)	0.03***	(0.01)
Democratic Ideals	0.01	(0.01)	0.01	(0.01)	0.01	(0.01)	0.02*	(0.01)	0.02*	(0.01)	0.02	(0.01)
Free Speech Priority	0.05***	(0.01)	0.0***	(0.01)	0.05***	(0.01)	0.05***	(0.02)	0.05***	(0.02)	0.04**	(0.02)
Conformity	-0.06***	(0.02)	-0.06***	(0.02)	-0.05**	(0.02)	-0.10***	(0.03)	-0.10***	(0.03)	-0.09***	(0.03)
Media Awareness	-0.01	(0.005)	-0.01	(0.01)	-0.01**	(0.004)	-0.01	(0.01)	-0.01	(0.01)	-0.01	(0.01)
Ideology (high=left)	-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)	-0.003	(0.002)	-0.002	(0.002)	-0.003	(0.002)
Gender (1=female)	-0.02***	(0.01)	-0.03***	(0.01)	-0.02***	(0.01)	-0.03***	(0.01)	-0.03***	(0.01)	-0.03***	(0.01)
Age	-0.001***	(0.00)	-0.001***	(0.00)	-0.001***	(0.00)	-0.001***	(0.00)	-0.001***	(0.00)	-0.001***	(0.00)
Education	0.01***	(0.00)	0.01***	(0.00)	0.01***	(0.00)	0.01***	(0.00)	0.01***	(0.00)	0.01***	(0.00)
Macro-Level:												
Democratic Longevity	0.001*	(0.00)	0.001*	(0.00)	0.00	(0.00)	0.001*	(0.00)	0.00	(0.00)	0.00	(0.00)
Ethnic Fractionalization	0.03	(0.05)	0.01	(0.06)	0.03	(0.05)	-0.12*	(0.07)	-0.13*	(0.07)	-0.07	(0.08)
Economic Development (HDI)	-0.08	(0.10)	-0.14	(0.15)	-0.04	(0.10)	-0.21***	(0.06)	-0.19***	(0.05)	-0.07	(0.07)
Border Change	-0.02	(0.02)	-0.03	(0.02)	-0.05**	(0.02)						
Civil War (Correlates of War)	-0.08**	(0.04)					-0.09***	(0.03)				
Civil War (Fearon & Laitin, 2003)												
Civil War (UCP/PRIO Armed Conflict)												
Total Number of Armed Conflicts (5yrs)			-0.05**	(0.02)					-0.06***	(0.02)		
Total Fatalities from Armed Conflicts (5yrs)												
Terrorist Attacks (2yrs)					-0.02*	(0.01)					-0.02**	(0.01)
First-stage Diagnostics for Instrumented Variables:												
Kleibergen-Paap Wald F-statistic of excluded elements	8.43***		7.23***		10.50***		12.60***		10.73***		20.37***	
Partial R^2 for excluded instruments	0.31		0.19		0.24		0.69		0.58		0.56	
Hansen's J statistic (p-value)	0.28		0.27		0.42		n/a		n/a		n/a	

Note: First-stage diagnostics were estimated using ivreg2 models in Stata 10.1

Excluded Instruments: **Rugged Terrain, Military Personnel, Change in Military Expenditures**

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

Source: 1995-1997 World Values Survey

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