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Developing a Conflict Vulnerability Index

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1. INTRODUCTION

The objective of the International Conflict Assessment and Transformation (ICAT) Research Initiative's Conflict Vulnerability Index (CVI) is to conceptualize and measure vulnerability to intrastate conflict. Many studies have already been conducted to explain the fragility, disintegration, and collapse of states. The explanatory variables in these studies cover a variety of social, economic, political, ecological, and security dimensions. The implicit idea of these variables is to better understand the relationship between conflict vulnerability and actual conflict. However, the concept of conflict vulnerability is often unclear.

In this paper we propose a concept of conflict vulnerability between a state and its citizenry. The intuition is that conflict vulnerability can be expressed by the ratio of a state-threat to the state's response capacity. The state, in this situation, refers to both the government and the citizenry. The threat to a state can be perceived as a public bad and the state's response capacity as the available means to ameliorate the public bad.

We argue in line with the literature that conflict vulnerability can have its origin in various threat dimensions. These dimensions are of an economic, ecological, social, and political nature. Our objective is to propose simple vulnerability indices that can be constructed easily from readily available data and capture the threat dimensions comprehensively. We argue that in measuring conflict vulnerability, the security dimension often included in measures of state fragility is more appropriately considered part of the dependent variable, explained by actual vulnerabilities. For example, body counts and conflict intensity can be understood as actual state failures, while vulnerability should be able to explain those failures. Therefore, we do not include a security dimension in our vulnerability index. Rather, we use conflict as the dependent variable we are attempting to explain.

In Section two we discuss our understanding of conflict vulnerability. The empirical operationalization of four conflict vulnerability concepts is introduced in section three. Tables and global

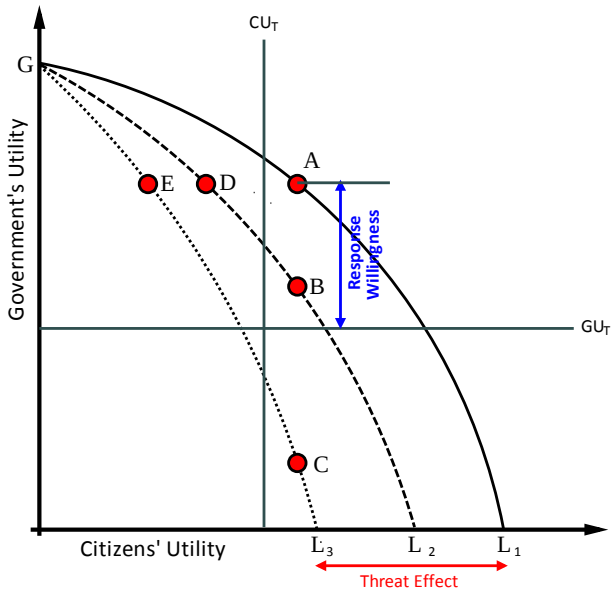
maps visualizing the geographic distribution of the various conflict vulnerabilities are presented in section four. Section five concludes with a summary of our main findings and outlook for further work of the ICAT Research Initiative.

2. THE CONCEPT OF CONFLICT VULNERABILITY BETWEEN THE STATE AND THE CITIZENRY

We understand conflict vulnerability as a situation in which a transition from a state of non-violent cooperation to a state of violent conflict is possible. The determinants behind increased conflict vulnerability can be illustrated in Figure 1, which represents a rational choice framework for explaining violent conflict.

Figure 1

Framework of Violence as an Alternative Choice to Cooperation



In the figure above, solid line 1 (L_1) is a utility possibilities frontier representing the utility the government and some vulnerable segment of society could gain from a given resource through non-violent cooperation. Line CU_T is the citizens' utility threshold. That is, it is the amount of utility the

citizenry expects it can obtain through fighting; therefore, it will not be willing to drop below this threshold in peaceful negotiations. GU_T is the government utility threshold. It is the amount of utility the government expects it could obtain through fighting, and the threshold it would not drop below during peaceful negotiations.

Assume that the utility of the government and the citizens begins at point A on line L_1. Neither side will fight, because they are currently gaining more utility than what they believe would be possible from fighting. Then, assume that a threat occurs, swiveling the utility possibilities frontier to L_2 and shifting the utility of the two parties to point D, where the utility of the government stays the same, but the utility of the citizenry decreases. The horizontal distance the line shifts could be considered the "threat effect." That is, the threat effect is the loss of utility the citizens would experience due to the threat.

At point D, the citizens believe they have more utility to gain from fighting, and would be willing to do so. However, the government is willing to negotiate, because there is still positive space between their current utility at point D, and their utility threshold. The vertical distance between the government's current utility and their utility threshold could, therefore, be considered their "response willingness," which is a function of their overall response capability and their perceived utility threshold. Because the resource in this case can peacefully be allocated in a way that keeps the citizens and the government above their respective utility thresholds, non-violent cooperation is again the predicted outcome.

Now, consider a threat that drops the utility possibilities frontier from L_1 to L_3, and shifts the allocation of resources from point A to point E. In this case, there is no zone of possible agreement. The government is only willing to respond to the threat down to its utility threshold. At that point, however, the citizenry would still believe they could be better off fighting. The effect of the threat, then, is greater than the government's willingness to respond to the threat, which leads to violent conflict.

Vulnerability can, therefore, be interpreted as

$$Vulnerability = \frac{Threat}{Response\ Capacity}$$

It is clear from this formula that if a threat level were to increase while response capacity remained steady, vulnerability would increase. In addition, an increase in response capacity while the threat remained constant would be associated with a decrease in vulnerability.

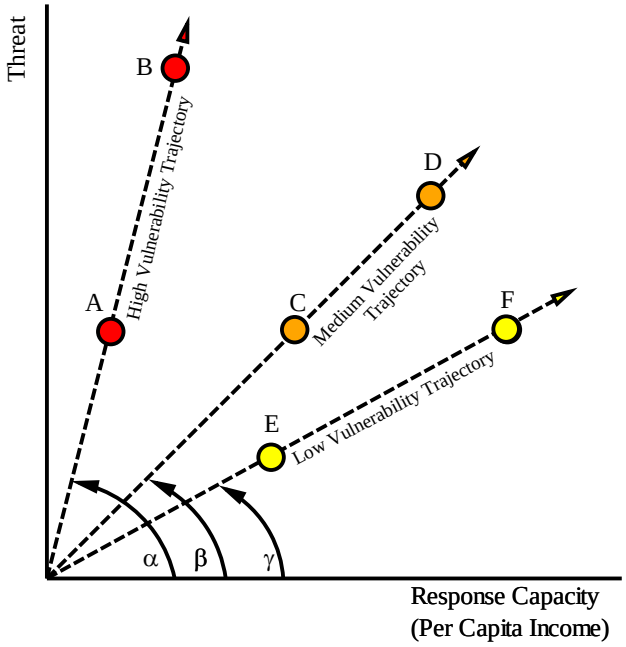
This vulnerability concept distinguishes itself from other general state fragility or country risk concepts in the sense that two countries with different threat exposures and response capacities (per capita income) can be subject to the same vulnerability. This is shown in Figure 2.

Figure 2 shows that the ratio of threat to response capacity is given by the angle of a trajectory line from the origin through the actual threat-response capacity observation. Figure 2 shows three examples of conflict vulnerability trajectories, representing a high, medium, and low vulnerability. The figure illustrates that each combination A and B, C and D, and E and F are on the same conflict vulnerability trajectory. In the case of the high conflict vulnerability trajectory, observation A has, compared to observation B, less threat exposure, but also less response capacity. Observation A has the same vulnerability as observation B, because observation B has off-set a greater threat by a greater response capacity, but the relative threat-response capacity ratios are the same for observations A and B. However, when comparing observations, A, C, and F, the conflict vulnerability is greatest for observation A, followed by observation C and F. Moving from A to C to F, increases the response capacity holding constant the threat.

This understanding of vulnerability is similar to that posited by General Systems Theory (GST). According to GST, a system is a set of interacting elements. Open systems differ from their environment by maintaining a higher degree of order (negentropy). The environment is characterized by maximum

Figure 2

Comparing Conflict Vulnerabilities



chaos (or entropy). From all the possible states in the environment, a system tolerates only a subset of these states. For example, living systems like human beings and animals function only under certain body temperatures and they die when they fail to maintain differences in temperature to changing environmental states. Social systems like a traffic system come to an end when drivers create their own rules, which is equivalent to importing states from the infinite set of possible states found in the system's environment. The more states a social system allows, the more it becomes anarchistic, and the greater the likelihood of system death.

A vulnerability threat can be thought of as a state from the environment which imposes itself on the system. In the case of our social, economic, and political vulnerability indicators, each threat marginalizes groups, which is equivalent to pushing them into the system's environment. Inequality, autocracy, and lack of economic diversity each lead to social, political, and economic marginalization. Resulting threats to a social system from socioeconomic and political marginalization can be forms of crime, disease, migration, mistrust, and violent conflict.

There are also purely exogenous events occurring in the system's natural environment. This is the case for many natural hazards like floods, droughts, earthquakes, infestations, and extreme temperatures. Therefore, just as a system creates its own environment, it is also subject to challenges imposed by factors a system does not control but to which it still needs to adapt.

A system's ability to respond effectively to every single threat is known in GST as the law of requisite variety (Ashby, 1957). It says that for a system to maintain an equilibrium order difference to its environment, the variety of potential responses to external shocks must be as high as the variety of shocks. If a social system does not respond to (endogenous and exogenous) shocks from its environment, the system will inevitably come under sustainability pressure. Therefore, a state's capacity to respond to threats and the type of threats it has to contend with are important considerations in measuring conflict vulnerability.

3. MEASURING CONFLICT VULNERABILITY

In line with the literature, we argue that there are at least four forms of conflict vulnerabilities: economic, ecological, social, and political. Following the logic described in section two that vulnerability can be expressed as the ratio of a state-threat to society's response capacity, we identify the four threats as follows.

We define our conflict vulnerability indicator over a time frame of ten years, which is necessary for several reasons. First, time-invariant indicators such as income inequality and the economic profile are not surveyed every year, and using a wider time span is necessary to increase the number of observations. Second, spontaneous events like disasters or political change often increase vulnerability instantly and throw a long shadow into the future. In the case of a natural disaster, for example, while factors such as looting, chaos, and displacement, increase conflict vulnerability instantly, disasters also remain an ongoing source of conflict as they call for extraordinary disaster management capacities,

which are often not in place for many years. Similarly, political change like a democratization event does not instantly lead to a reduction of political vulnerability and needs to be consolidated first. Assessing conflict vulnerabilities in a longer time context is therefore necessary in order to incorporate the idea that conflict vulnerabilities have a history and legacy.

We argue that the biggest economic conflict threat is a little diversified competitive economic profile. Having a diversified and competitive economic profile in place reduces conflict in many ways. First, competition reduces market power and spreads access to economic opportunities. Second, building a competitive productive economy relies on irreversible investments, which increase the stakes of conflict. Third, a healthy economic environment contributes to social cohesion by decreasing crime, illness, and redistributive demands. We measure economic stability and diversity as the manufacturing and services export share as a percentage of GDP averaged over the 2002-2011 ten-year time period. We argue that if an economy is heavily involved in exporting manufactured goods and services, and passes the test of the international competitive market, then the society has made efficient use of its natural and human resources. Successful industrializing countries typically invest in human capital, health care, and technology, which diffuse grievances. This diffusion will not necessarily occur in rentier states, whose income is primarily based on the extraction of natural resources. In that case, investments that benefit the citizenry do not need to be made, because resource extraction does not require the levels of human capital and technological innovation needed in manufacturing and service-intensive economies.

Ecological threats can come in many forms. Water scarcity, wildfires, floods, and famines may all threaten citizens' utility and increase the likelihood of conflict. We measure ecological conflict vulnerability by the cumulative of natural disaster deaths per 1,000,000 citizens over the 2002-2011 ten-year time period. Natural disasters can trigger new conflicts or complicate existing conflicts. Especially slow-onset disasters such as droughts and famines may serve as catalysts for new conflict. They do so

by deteriorating people's livelihood base, which leads to an increase in demand for public funds, and possibly lowers the stakes of the use of force. Likewise, disasters that hit one rivaling group more than another may cause existing conflict to deepen. Especially fast-onset disasters such as earthquakes or floods may lead to sudden changes in the balance of power between rivaling parties that increases conflict complexity.

We approach social conflict vulnerability through the average income inequality (Gini coefficient) over the 2002-2011 ten-year time period. Often, income inequality is a manifestation of unresolved conflict, like inherited feudal and colonial legacies. At other times, income inequality may be the result of structural breaks. For example, after the collapse of socialist regimes many countries experienced transitions from high equality of (few) economic opportunities to high inequality of (abundant) economic opportunities. These legacies and structural breaks lead to demands for redistribution. If those demands are not met through peaceful cooperation, civil violence may result.

Exclusion from the political decision-making process increases the likelihood of revolutions and uprisings. Authoritarian regimes often reach the end of governability when socioeconomic development reaches levels of complexity in which people believe themselves no longer effectively represented. Social and economic modernization requires political organization mechanisms that respond to new complexities that traditional authoritarian regimes fail to provide. In addition, the political system assumes a particularly important role in coordinating the responses to all social, economic, and ecological threats. Democracies are more apt to navigate this complexity, due to their increased variety of potential responses. We measure a country's political system by the 2002-2011 ten-year average of the so-called Polity score.

In order to complete the various vulnerability indicators, we argue that the best indicator for a country's threat response capacity is per capita income, again measured as the average of the 2002-

2011 ten-year time period. The variable per capita income is highly correlated with indicators of public administrative and individual response capacities like access to social safety nets.

Most observations contain missing values. This is a particular problem for the variable income inequality (Gini), which is not surveyed every year. An additional problem is that the Gini coefficient listed in the World Bank Development Indicator Database for the ten-year period between 2002-2011 barely has any observations for Western European and North American countries. We, therefore, consulted a second dataset for income inequality, which is the UNU-WIDER World Income Inequality Database, Version 2.0c (May 2008). From this dataset, we collected available all observations between 2002 and 2011 that had an area coverage labeled "All," and also computed the average value for this period. From the World Bank, we obtained 116 observations, and from the UNU-WIDER database only 102 observations, but greater coverage of the Western European and North American area. Both datasets are highly correlated, with a Pearson correlation coefficient of r=0.87. We then blended both datasets by regressing each Gini coefficient of one dataset on the Gini coefficient of the other, and predicting the missing values in each dataset by the available information in the other. If this way, only one predicted observation was obtained, that observation was included in our dataset. When there were two predicted observations, their average was taken. The data constraints were much less severe for all other variables.

The basic structure of our various conflict vulnerability indices is calculated as the natural log ratio of an indexed threat over the indexed income, in which each index ranges from 0 to 100.

$$Vulnerability = ln\left(\frac{Threat\ Index}{Per\ Capita\ Income\ Index}\right)$$

We use the above conflict vulnerability indicators as independent variables in logit regressions in order to determine their relevance in explaining conflict. We chose as the dependent variable, the internal armed conflict from the Uppsala UCDP/PRIO Armed Conflict Dataset. This indicator measures

internal armed conflict between a state and opposition group without intervention from the outside, in which there were more than 25 battle deaths per year.

Table 1 summarizes the data, sources, and conflict vulnerability indicators.

Table 1

Data, Sources, and Formulas for Conflict Vulnerability Indicators.

Indicator	Variable	Data Source	Vulnerability Formula
Social Vulnerability, SocVul	Gini Index, Gini	World Bank Development Indicator Database and UNU-WIDER World Income Inequality Database	$SocVul_i = ln\left(\frac{Gini\ Index}{Per\ Capita\ Income\ Index} + 1\right)$
Economic Vulnerability, EconVul	Manufactures and Services Export Share (% GDP), MSES	World Bank Development Indicator Database	$EconVul_i = ln\left(\frac{100 - MSES\ Index *}{Per\ Capita\ Income\ Index} + 1\right)$
Ecological Vulnerability, EcolVul	Disaster deaths per 1,000,000 from following phenomena: Volcano, storm, mass movements wet and dry, infestations, floods, extreme temperatures, epidemics, earthquake, drought, complex disasters, and wildfire, DisDeath	Emergency Events Database (EM-DAT), The International Disaster Database, Centre for Research on the Epidemiology of Disasters (CRED).	$EcolVul_i = ln\left(\frac{DisDeath\ Index}{Per\ Capita\ Income\ Index} + 1\right)$
Political Vulnerability, PolVul	Polity 2 score (-10 to 10), Polity2. 0s given for anarchy were recoded as missing data, Polity	Marshall, M., Jaggers, K., and Gurr, T. (2011). Polity IV Project, Political Regime Characteristics and Transitions, 1800-2011.	$PolVul_i = ln\left(\frac{100 - Polity\ Index}{Per\ Capita\ Income\ Index} + 1\right)$
CivConflict	Conflict Type 3 – Internal Armed Conflict	UCDP/PRIO Armed Conflict Dataset	

*Where a positive score on the "threat" variable represented a public "good" (i.e., high manufacturing and services export shares and high democracy), we subtracted the "good" index from 100 so a higher score is associated with a higher threat.

4. TABLES AND MAPS

Appendix Table 1 summarizes the countries for which we were able to compute at least one conflict vulnerability indicator. The following Tables 2, 3, and 4 summarize the number of observations for each conflict vulnerability indicator per geo-political region, provide descriptive statistics of our variables, and present the bivariate estimation results using logit regressions.

Table 2

Observations Per Geo-Political Region

Region	Countries	EconVul	EcolVul	PolVul	SocVul
East Asia and the Pacific (EAP)	29	26	29	18	14
Eastern Europe and Central Asia (EECA)	29	25	28	28	27
Western Europe (WE)	21	21	20	18	20
Latin American and the Caribbean (LAC)	34	33	33	22	20
Middle East and North Africa (MENA)	21	21	21	19	12
North America (NAM)	3	2	3	2	1
South Asia (SA)	7	7	7	6	7
Sub-Saharan Africa (SSA)	44	42	44	40	38

Table 3

Descriptive Statistics

Variable	Mean	Median	Minimum	Maximum	St. Dev.	N
EconVul	3.614	3.557	0.000	7.748	1.728	177
EcolVul	0.276	0.031	0.000	5.724	0.623	185
PolVul	2.568	2.412	0.000	6.961	1.984	153
SocVul	3.041	3.174	0.000	6.469	1.739	139
CivConflict*	39	No Conflict	-	-	5.647	214

Table 4

Bivariate Logit Regression Results

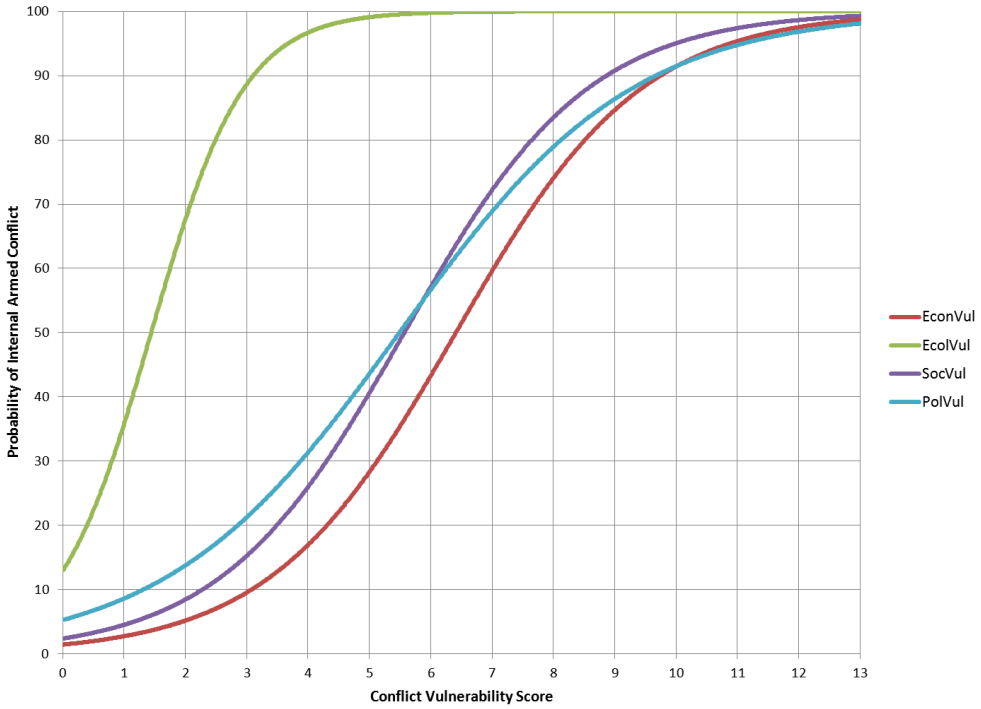
DV = CivConflict	Economic	Ecological	Political	Social
Constant	-4.220 (0.69)***	-1.900 (0.24)***	-2.882 (0.48)***	-3.710 (0.69)***
EconVul	0.659 (0.14)***			
EcolVul		1.321 (0.37)***		

PolVul			0.526 (0.12)***	
SocVul				0.667 (0.16)***
% Correct	83.6	82.2	81.7	80.6

Standard errors in parentheses. *** significant at p<.01

Table 4 shows that the conflict vulnerability indicators are individually highly significant. Graph 1 shows the likelihood function associated with each bivariate regression.

Graph 1



Probabilities of Internal Armed Conflict Based on Different Conflict Vulnerabilities

Graph 1 shows that the probability of "Internal Armed Conflict" responds differently to the various conflict vulnerability indicators. Especially, the likelihood function associated with the variable ecological conflict vulnerability is quite different from all the others. While economic, social, and political vulnerability appear to be grouped together, there are in fact also considerable variations in

their relationships with internal armed conflict, suggesting differences in likelihoods of up to 12 percentage points for given vulnerability scores.

Our conflict vulnerability indicators suffer from high multicollinearity as can be seen from Table 5, which provides the Pearson correlation matrix of our four different conflict vulnerability indicators.

Table 5

Correlation Matrix of Vulnerability Indicators

	EconVul	EcolVul	PolVul	SocVul
EconVul	1.000	0.502	0.901	0.972
EcolVul	0.502	1.000	0.459	0.558
PolVul	0.901	0.459	1.000	0.882
SocVul	0.972	0.558	0.882	1.000

Table 5 shows that improvements in the reduction of one conflict vulnerability dimension reduces conflict from other vulnerabilities as well. The interaction of the various vulnerabilities is highly important from a structural perspective and provides many opportunities for further research regarding possible causal relationships between the various conflict vulnerability indicators. Having four conflict vulnerability dimensions then leads to twelve different possible bilateral causal relationships, demanding for answers such as, for example: Does democratization lead to greater modernization of the manufacturing and service sector, or the other way around? Or, does greater democratization lead to more equality or is it equality that drives democratization? Similarly, is equality a precondition of economic modernization or a consequence of it? Or, is democracy good for the environment or it the environment that affects political characteristics?

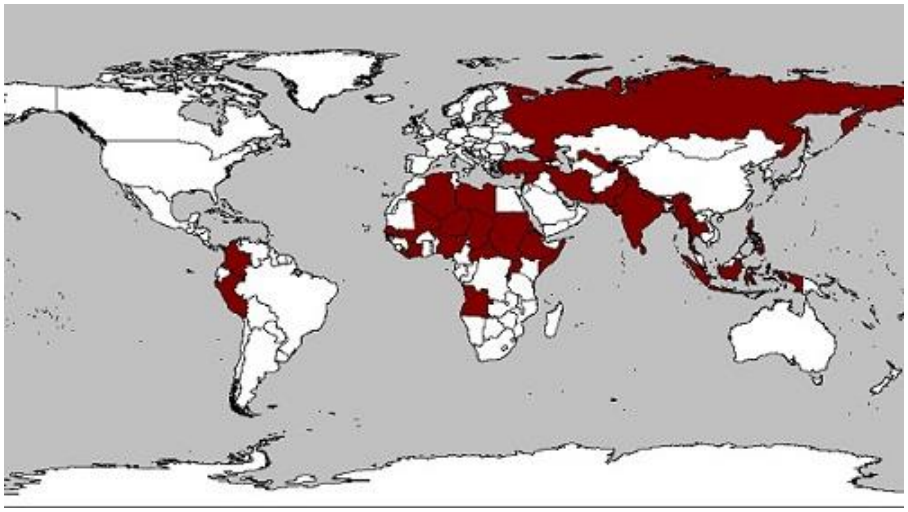
However, the purpose of our dataset is not to explain conflict by a combination of different conflict vulnerabilities or their structural interaction, but to identify country risk profiles along the

different conflict vulnerabilities. We want to know which countries are particularly vulnerable to any of the four dimensions. When the vulnerabilities are considered in combination, their high multicolliearity makes it difficult to discern the effect each has on the likelihood of internal armed conflict. Our individual focus makes our findings, therefore, more relevant for the identification of policy priorities and opportunities.

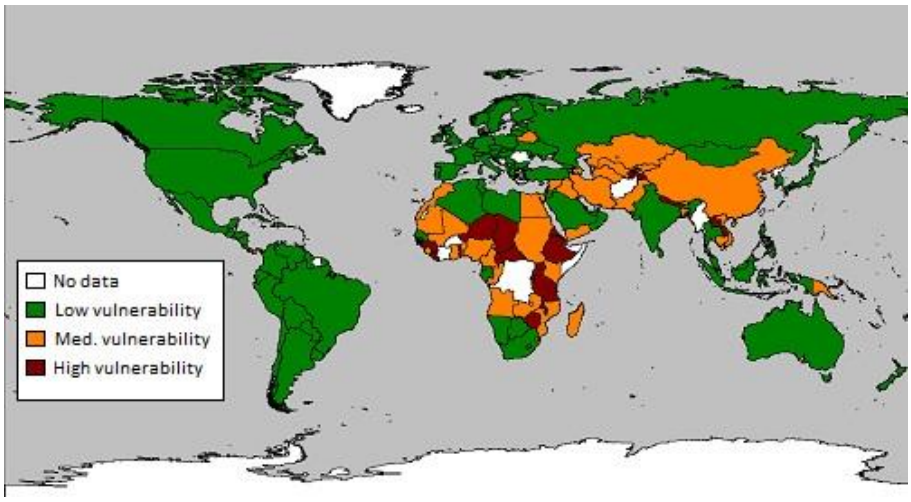
Conflict Vulnerability World Maps

The maps below provide a visual representation of the data involved in the conflict vulnerability index. An analysis of the maps suggests that the CVI is a useful tool in further understanding conflicts developing in North Africa, sub-Saharan Africa, Southeast Asia, and much of the Middle East.

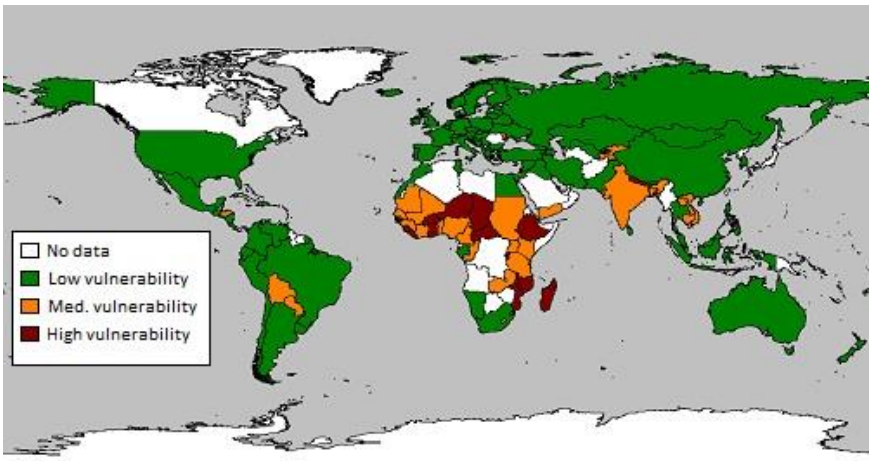
Countries Experiencing Conflict, 2002 – 2011



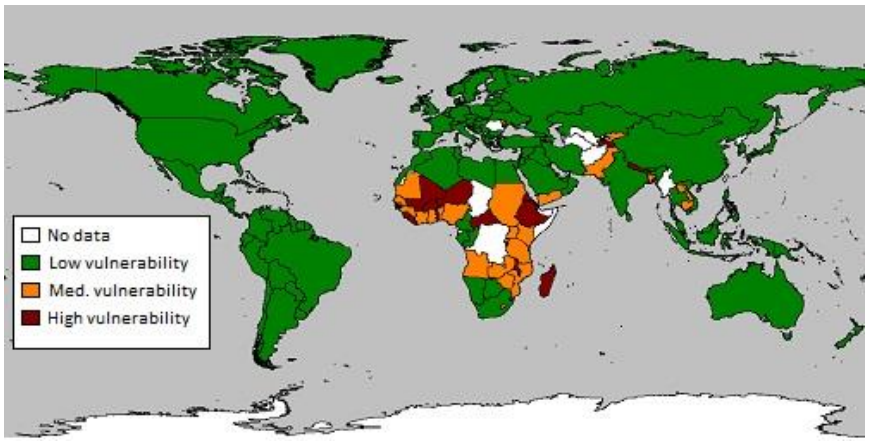
Political Vulnerability



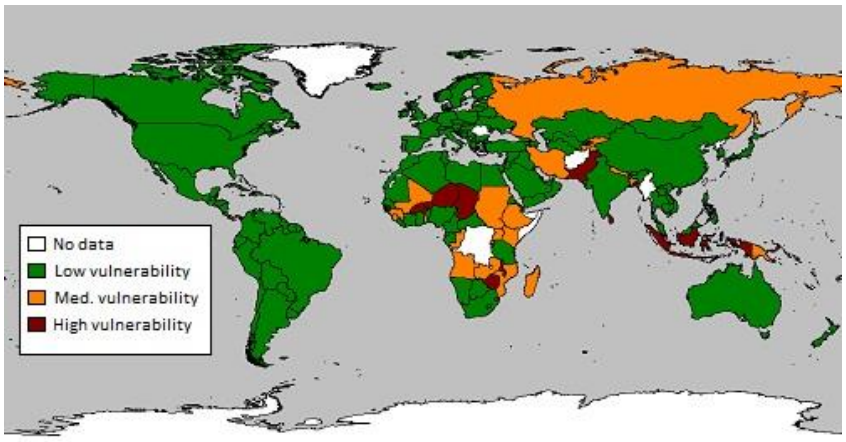
Social Vulnerability



Economic Vulnerability



Ecological Vulnerability



5. SUMMARY AND CONCLUSIONS

There are two major goals of the conflict vulnerability index. The first is to reframe the theoretical discussion of the cause of intrastate conflict, and the second is to determine the factors that most place a given state at risk to intrastate conflict. The current theory surrounding instrastate conflict suggests that risk comes from a summed combination of factors. For example, state fragility is considered a summation of various measures of legitimacy and effectiveness. The conflict vulnerability index, on the other hand, suggests that the most salient factor is not an aggregate of different capabilities, but rather the ratio of threats faced by the state to capabilities to offset those threats. A state with high capabilities may still be vulnerable if it also faces many threats. Similarly, a state with low capability may not be vulnerability if it also faces few threats.

The second goal is to determine the factors that most place a given state at risk to intrastate conflict. In order to determine those risk factors, a combination of social, political, economic, and ecological threats are considered. Measuring these threats using income inequality, democracy, the trade share of manufacturing and services exports, and disaster deaths yields a useful tool in understanding recent conflicts, and provides a starting point to begin the discussion on this idea of state

vulnerability. It also opens the door for additional analyses of intrastate conflicts regarding policies that may affect either a state's threat or capability levels. In addition, it will be worth exploring the optimal allocation of resources when given the opportunity to apply resources toward threat reduction or capability enhancements.

APPENDIX

Table 1

Countries included in each of the vulnerability indices. Where countries are not included, it is due to data being unavailable.

Country	Code	EconVul	EcolVul	PolVul	SocVul
Albania	ALB	⍰	⍰	⍰	⍰
Algeria	DZA	⍰	⍰	⍰	⍰
Angola	AGO	⍰	⍰	⍰	⍰
Antigua and Barbuda	ATG	⍰	⍰	⍰	⍰
Argentina	ARG	⍰	⍰	⍰	⍰
Armenia	ARM	⍰	⍰	⍰	⍰
Aruba	ABW	⍰	⍰	⍰	⍰
Australia	AUS	⍰	⍰	⍰	⍰
Austria	AUT	⍰	⍰	⍰	⍰
Azerbaijan	AZE	⍰	⍰	⍰	⍰
Bahamas, The	BHS	⍰	⍰	⍰	⍰
Bahrain	BHR	⍰	⍰	⍰	⍰
Bangladesh	BGD	⍰	⍰	⍰	⍰
Barbados	BRB	⍰	⍰	⍰	⍰
Belarus	BLR	⍰	⍰	⍰	⍰
Belgium	BEL	⍰	⍰	⍰	⍰
Belize	BLZ	⍰	⍰	⍰	⍰
Benin	BEN	⍰	⍰	⍰	⍰
Bermuda	BMU	⍰	⍰	⍰	⍰
Bhutan	BTN	⍰	⍰	⍰	⍰
Bolivia	BOL	⍰	⍰	⍰	⍰
Bosnia and Herzegovina	BIH	⍰	⍰	⍰	⍰
Botswana	BWA	⍰	⍰	⍰	⍰
Brazil	BRA	⍰	⍰	⍰	⍰
Brunei Darussalam	BRN	⍰	⍰	⍰	⍰
Bulgaria	BGR	⍰	⍰	⍰	⍰
Burkina Faso	BFA	⍰	⍰	⍰	⍰
Burundi	BDI	⍰	⍰	⍰	⍰
Cambodia	KHM	⍰	⍰	⍰	⍰
Cameroon	CMR	⍰	⍰	⍰	⍰
Canada	CAN	⍰	⍰	⍰	⍰
Cape Verde	CPV	⍰	⍰	⍰	⍰
Central African Republic	CAF	⍰	⍰	⍰	⍰
Chad	TCD	⍰	⍰	⍰	⍰
Chile	CHL	⍰	⍰	⍰	⍰

China	CHN	⍰	⍰	⍰	⍰
Colombia	COL	⍰	⍰	⍰	⍰
Comoros	COM	⍰	⍰	⍰	⍰
Congo, Rep.	COG	⍰	⍰	⍰	⍰
Costa Rica	CRI	⍰	⍰	⍰	⍰
Cote d'Ivoire	CIV	⍰	⍰	⍰	⍰
Croatia	HRV	⍰	⍰	⍰	⍰
Cuba	CUB	⍰	⍰	⍰	⍰
Cyprus	CYP	⍰	⍰	⍰	⍰
Czech Republic	CZE	⍰	⍰	⍰	⍰
Denmark	DNK	⍰	⍰	⍰	⍰
Djibouti	DJI	⍰	⍰	⍰	⍰
Dominica	DMA	⍰	⍰	⍰	⍰
Dominican Republic	DOM	⍰	⍰	⍰	⍰
Ecuador	ECU	⍰	⍰	⍰	⍰
Egypt, Arab Rep.	EGY	⍰	⍰	⍰	⍰
El Salvador	SLV	⍰	⍰	⍰	⍰
Equatorial Guinea	GNQ	⍰	⍰	⍰	⍰
Eritrea	ERI	⍰	⍰	⍰	⍰
Estonia	EST	⍰	⍰	⍰	⍰
Ethiopia	ETH	⍰	⍰	⍰	⍰
Fiji	FJI	⍰	⍰	⍰	⍰
Finland	FIN	⍰	⍰	⍰	⍰
France	FRA	⍰	⍰	⍰	⍰
Gabon	GAB	⍰	⍰	⍰	⍰
Gambia, The	GMB	⍰	⍰	⍰	⍰
Georgia	GEO	⍰	⍰	⍰	⍰
Germany	DEU	⍰	⍰	⍰	⍰
Ghana	GHA	⍰	⍰	⍰	⍰
Greece	GRC	⍰	⍰	⍰	⍰
Greenland	GRL	⍰	⍰	⍰	⍰
Grenada	GRD	⍰	⍰	⍰	⍰
Guatemala	GTM	⍰	⍰	⍰	⍰
Guinea	GIN	⍰	⍰	⍰	⍰
Guinea-Bissau	GNB	⍰	⍰	⍰	⍰
Guyana	GUY	⍰	⍰	⍰	⍰
Haiti	HTI	⍰	⍰	⍰	⍰
Honduras	HND	⍰	⍰	⍰	⍰
Hong Kong SAR, China	HKG	⍰	⍰	⍰	⍰
Hungary	HUN	⍰	⍰	⍰	⍰
Iceland	ISL	⍰	⍰	⍰	⍰
India	IND	⍰	⍰	⍰	⍰
Indonesia	IDN	⍰	⍰	⍰	⍰

Iran, Islamic Rep.	IRN	⍰	⍰	⍰	⍰
Iraq	IRQ	⍰	⍰	⍰	⍰
Ireland	IRL	⍰	⍰	⍰	⍰
Israel	ISR	⍰	⍰	⍰	⍰
Italy	ITA	⍰	⍰	⍰	⍰
Japan	JPN	⍰	⍰	⍰	⍰
Jordan	JOR	⍰	⍰	⍰	⍰
Kazakhstan	KAZ	⍰	⍰	⍰	⍰
Kenya	KEN	⍰	⍰	⍰	⍰
Kiribati	KIR	⍰	⍰	⍰	⍰
Korea, Rep.	KOR	⍰	⍰	⍰	⍰
Kosovo	KSV	⍰	⍰	⍰	⍰
Kuwait	KWT	⍰	⍰	⍰	⍰
Kyrgyz Republic	KGZ	⍰	⍰	⍰	⍰
Lao PDR	LAO	⍰	⍰	⍰	⍰
Latvia	LVA	⍰	⍰	⍰	⍰
Lebanon	LBN	⍰	⍰	⍰	⍰
Lesotho	LSO	⍰	⍰	⍰	⍰
Liberia	LBR	⍰	⍰	⍰	⍰
Libya	LBY	⍰	⍰	⍰	⍰
Lithuania	LTU	⍰	⍰	⍰	⍰
Luxembourg	LUX	⍰	⍰	⍰	⍰
Macao SAR, China	MAC	⍰	⍰	⍰	⍰
Macedonia, FYR	MKD	⍰	⍰	⍰	⍰
Madagascar	MDG	⍰	⍰	⍰	⍰
Malawi	MWI	⍰	⍰	⍰	⍰
Malaysia	MYS	⍰	⍰	⍰	⍰
Maldives	MDV	⍰	⍰	⍰	⍰
Mali	MLI	⍰	⍰	⍰	⍰
Malta	MLT	⍰	⍰	⍰	⍰
Marshall Islands	MHL	⍰	⍰	⍰	⍰
Mauritania	MRT	⍰	⍰	⍰	⍰
Mauritius	MUS	⍰	⍰	⍰	⍰
Mexico	MEX	⍰	⍰	⍰	⍰
Micronesia, Fed. Sts.	FSM	⍰	⍰	⍰	⍰
Moldova	MDA	⍰	⍰	⍰	⍰
Mongolia	MNG	⍰	⍰	⍰	⍰
Montenegro	MNE	⍰	⍰	⍰	⍰
Morocco	MAR	⍰	⍰	⍰	⍰
Mozambique	MOZ	⍰	⍰	⍰	⍰
Namibia	NAM	⍰	⍰	⍰	⍰
Nepal	NPL	⍰	⍰	⍰	⍰
Netherlands	NLD	⍰	⍰	⍰	⍰

New Zealand	NZL	⍰	⍰	⍰	⍰
Nicaragua	NIC	⍰	⍰	⍰	⍰
Niger	NER	⍰	⍰	⍰	⍰
Nigeria	NGA	⍰	⍰	⍰	⍰
Norway	NOR	⍰	⍰	⍰	⍰
Oman	OMN	⍰	⍰	⍰	⍰
Pakistan	PAK	⍰	⍰	⍰	⍰
Palau	PLW	⍰	⍰	⍰	⍰
Panama	PAN	⍰	⍰	⍰	⍰
Papua New Guinea	PNG	⍰	⍰	⍰	⍰
Paraguay	PRY	⍰	⍰	⍰	⍰
Peru	PER	⍰	⍰	⍰	⍰
Philippines	PHL	⍰	⍰	⍰	⍰
Poland	POL	⍰	⍰	⍰	⍰
Portugal	PRT	⍰	⍰	⍰	⍰
Puerto Rico	PRI	⍰	⍰	⍰	⍰
Qatar	QAT	⍰	⍰	⍰	⍰
Romania	ROM	⍰	⍰	⍰	⍰
Russian Federation	RUS	⍰	⍰	⍰	⍰
Rwanda	RWA	⍰	⍰	⍰	⍰
Samoa	WSM	⍰	⍰	⍰	⍰
Saudi Arabia	SAU	⍰	⍰	⍰	⍰
Senegal	SEN	⍰	⍰	⍰	⍰
Serbia	SRB	⍰	⍰	⍰	⍰
Seychelles	SYC	⍰	⍰	⍰	⍰
Sierra Leone	SLE	⍰	⍰	⍰	⍰
Singapore	SGP	⍰	⍰	⍰	⍰
Slovak Republic	SVK	⍰	⍰	⍰	⍰
Slovenia	SVN	⍰	⍰	⍰	⍰
Solomon Islands	SLB	⍰	⍰	⍰	⍰
South Africa	ZAF	⍰	⍰	⍰	⍰
Spain	ESP	⍰	⍰	⍰	⍰
Sri Lanka	LKA	⍰	⍰	⍰	⍰
St. Kitts and Nevis	KNA	⍰	⍰	⍰	⍰
St. Lucia	LCA	⍰	⍰	⍰	⍰
St. Vincent and the Grenadines	VCT	⍰	⍰	⍰	⍰
Sudan	SDN	⍰	⍰	⍰	⍰
Suriname	SUR	⍰	⍰	⍰	⍰
Swaziland	SWZ	⍰	⍰	⍰	⍰
Sweden	SWE	⍰	⍰	⍰	⍰
Switzerland	CHE	⍰	⍰	⍰	⍰
Syrian Arab Republic	SYR	⍰	⍰	⍰	⍰

Tajikistan	TJK	⍰	⍰	⍰	⍰
Tanzania	TZA	⍰	⍰	⍰	⍰
Thailand	THA	⍰	⍰	⍰	⍰
Timor-Leste	TMP	⍰	⍰	⍰	⍰
Togo	TGO	⍰	⍰	⍰	⍰
Tonga	TON	⍰	⍰	⍰	⍰
Trinidad and Tobago	TTO	⍰	⍰	⍰	⍰
Tunisia	TUN	⍰	⍰	⍰	⍰
Turkey	TUR	⍰	⍰	⍰	⍰
Turkmenistan	TKM	⍰	⍰	⍰	⍰
Tuvalu	TUV	⍰	⍰	⍰	⍰
Uganda	UGA	⍰	⍰	⍰	⍰
Ukraine	UKR	⍰	⍰	⍰	⍰
United Arab Emirates	ARE	⍰	⍰	⍰	⍰
United Kingdom	GBR	⍰	⍰	⍰	⍰
United States	USA	⍰	⍰	⍰	⍰
Uruguay	URY	⍰	⍰	⍰	⍰
Uzbekistan	UZB	⍰	⍰	⍰	⍰
Vanuatu	VUT	⍰	⍰	⍰	⍰
Venezuela, RB	VEN	⍰	⍰	⍰	⍰
Vietnam	VNM	⍰	⍰	⍰	⍰
West Bank and Gaza	WBG	⍰	⍰	⍰	⍰
Yemen, Rep.	YEM	⍰	⍰	⍰	⍰
Zambia	ZMB	⍰	⍰	⍰	⍰
Zimbabwe	ZWE	⍰	⍰	⍰	⍰

Table 6

Country Ranking by Political Vulnerability Score

Country	Vulnerability Score	Likelihood of Conflict	Conflict 2002-2011
Eritrea	6.96	0.68	1
Burundi	6.36	0.61	1
Ethiopia	6.27	0.60	1
Tajikistan	6.09	0.58	1
Guinea-Bissau	6.03	0.57	0
Togo	5.89	0.55	0
Central African Republic	5.87	0.55	1
Niger	5.78	0.54	1
Malawi	5.72	0.53	0
Chad	5.72	0.53	1
Rwanda	5.67	0.52	1
Nepal	5.62	0.52	1
Uganda	5.43	0.49	1
Zimbabwe	5.40	0.49	0
Lao PDR	5.35	0.48	0
Liberia	5.17	0.46	1
Tanzania	5.12	0.45	0
Guinea	5.07	0.45	0
Kyrgyz Republic	5.06	0.44	0
Vietnam	5.02	0.44	0
Angola	4.91	0.42	1
Gambia, The	4.87	0.42	0
Mauritania	4.86	0.42	0
Sudan	4.85	0.42	1
Uzbekistan	4.84	0.42	1
Sierra Leone	4.82	0.41	0
Cameroon	4.75	0.40	0
Yemen, Rep.	4.74	0.40	0
Haiti	4.72	0.40	1
Turkmenistan	4.62	0.39	0
Cambodia	4.57	0.38	0
Mozambique	4.56	0.38	0
Pakistan	4.55	0.38	1
Iraq	4.54	0.38	0
Madagascar	4.52	0.38	0
Mali	4.44	0.37	1
Bangladesh	4.40	0.36	0
Nigeria	4.29	0.35	1

Country	Vulnerability Score	Likelihood of Conflict	Conflict 2002-2011
Zambia	4.23	0.34	0
Bhutan	4.15	0.33	0
Timor-Leste	4.12	0.33	0
Congo, Rep.	4.11	0.33	0
Syrian Arab Republic	4.10	0.33	1
Benin	4.06	0.32	0
Swaziland	3.98	0.31	0
Djibouti	3.93	0.31	0
Azerbaijan	3.92	0.31	0
Ghana	3.91	0.30	0
Comoros	3.91	0.30	0
Papua New Guinea	3.87	0.30	0
Morocco	3.84	0.30	0
China	3.82	0.29	0
Egypt, Arab Rep.	3.67	0.28	0
Belarus	3.64	0.27	0
Kazakhstan	3.59	0.27	0
Iran, Islamic Rep.	3.56	0.27	1
Kenya	3.44	0.25	0
Lesotho	3.28	0.24	0
Jordan	3.28	0.24	0
Senegal	3.24	0.24	1
Tunisia	3.18	0.23	0
Cuba	3.08	0.22	0
Moldova	3.08	0.22	0
Armenia	3.06	0.22	0
Algeria	3.05	0.22	1
Sri Lanka	3.05	0.22	1
Fiji	3.04	0.22	0
Guyana	2.96	0.21	0
Ukraine	2.93	0.21	0
Georgia	2.92	0.21	1
Gabon	2.70	0.19	0
Ecuador	2.63	0.18	0
Serbia	2.60	0.18	0
Indonesia	2.58	0.18	1
Honduras	2.47	0.17	0
Libya	2.46	0.17	1
Thailand	2.41	0.17	1
Saudi Arabia	2.36	0.16	0
Equatorial Guinea	2.34	0.16	0

Country	Vulnerability Score	Likelihood of Conflict	Conflict 2002-2011
Solomon Islands	2.34	0.16	0
Bolivia	2.32	0.16	0
Russian Federation	2.27	0.16	1
India	2.21	0.15	1
Oman	2.17	0.15	0
Philippines	2.17	0.15	1
Namibia	2.14	0.15	0
Paraguay	2.11	0.14	0
Nicaragua	2.05	0.14	0
Malaysia	1.92	0.13	0
Bahrain	1.91	0.13	0
Kosovo	1.90	0.13	0
Venezuela, RB	1.88	0.13	0
El Salvador	1.82	0.13	0
Guatemala	1.82	0.13	0
Albania	1.76	0.12	0
Colombia	1.74	0.12	1
Kuwait	1.45	0.11	0
United Arab Emirates	1.34	0.10	0
Qatar	1.33	0.10	0
Turkey	1.32	0.10	1
Dominican Republic	1.30	0.10	0
Lebanon	1.23	0.10	0
Romania	1.21	0.10	0
Montenegro	1.21	0.10	0
Macedonia, FYR	1.20	0.10	0
Botswana	1.19	0.09	0
Brazil	1.15	0.09	0
Bulgaria	1.10	0.09	0
Singapore	1.05	0.09	0
Latvia	1.02	0.09	0
Peru	1.01	0.09	1
Mexico	0.92	0.08	0
South Africa	0.83	0.08	0
Argentina	0.70	0.07	0
Croatia	0.69	0.07	0
Panama	0.64	0.07	0
Estonia	0.56	0.07	0
Czech Republic	0.53	0.07	0
Korea, Rep.	0.48	0.07	0
Chile	0.28	0.06	0

Country	Vulnerability Score	Likelihood of Conflict	Conflict 2002-2011
Slovak Republic	0.24	0.06	0
France	0.18	0.06	0
Belgium	0.15	0.06	0
Australia	0.00	0.05	0
Austria	0.00	0.05	0
Canada	0.00	0.05	0
Costa Rica	0.00	0.05	0
Cyprus	0.00	0.05	0
Denmark	0.00	0.05	0
Finland	0.00	0.05	0
Germany	0.00	0.05	0
Greece	0.00	0.05	0
Hungary	0.00	0.05	0
Ireland	0.00	0.05	0
Israel	0.00	0.05	1
Italy	0.00	0.05	0
Japan	0.00	0.05	0
Lithuania	0.00	0.05	0
Mauritius	0.00	0.05	0
Mongolia	0.00	0.05	0
Netherlands	0.00	0.05	0
New Zealand	0.00	0.05	0
Norway	0.00	0.05	0
Poland	0.00	0.05	0
Portugal	0.00	0.05	0
Slovenia	0.00	0.05	0
Spain	0.00	0.05	0
Sweden	0.00	0.05	0
Switzerland	0.00	0.05	0
Trinidad and Tobago	0.00	0.05	0
United Kingdom	0.00	0.05	0
United States	0.00	0.05	0
Uruguay	0.00	0.05	0

Table 7

Country Ranking by Social Vulnerability Score

Country	Vulnerability Score	Conflict Likelihood	Conflict Occurrence
Burundi	6.47	0.65	1
Malawi	6.23	0.61	0
Guinea-Bissau	6.16	0.60	0
Niger	6.16	0.60	1
Central African Republic	6.10	0.59	1
Comoros	5.83	0.54	0
Madagascar	5.81	0.54	0
Rwanda	5.71	0.52	1
Liberia	5.57	0.50	1
Nepal	5.57	0.50	1
Sierra Leone	5.48	0.49	0
Ethiopia	5.44	0.48	1
Chad	5.36	0.47	1
Burkina Faso	5.33	0.46	0
Mozambique	5.31	0.46	0
Ghana	5.27	0.45	0
Uganda	5.23	0.44	1
Mali	5.23	0.44	1
Lesotho	5.20	0.44	0
Zambia	5.16	0.43	0
Kenya	5.14	0.43	0
Togo	5.10	0.42	0
Tajikistan	5.04	0.41	1
Kyrgyz Republic	4.89	0.39	0
Nigeria	4.77	0.37	1
Guinea	4.73	0.36	0
Tanzania	4.72	0.36	0
Benin	4.70	0.36	0
Gambia, The	4.63	0.35	0
Cambodia	4.61	0.35	0
Cote d'Ivoire	4.51	0.33	1
Timor-Leste	4.46	0.32	0
Mauritania	4.44	0.32	0
Senegal	4.42	0.32	1
Moldova	4.35	0.31	0

Country	Vulnerability Score	Conflict Likelihood	Conflict Occurrence
Bolivia	4.25	0.29	0
Lao PDR	4.20	0.29	0
Cameroon	4.19	0.29	0
Yemen, Rep.	4.16	0.28	0
Sudan	4.04	0.27	1
Vietnam	4.02	0.26	0
Bangladesh	4.02	0.26	0
Honduras	4.01	0.26	0
India	4.01	0.26	1
Congo, Rep.	3.94	0.25	0
Djibouti	3.91	0.25	0
Paraguay	3.90	0.25	0
Nicaragua	3.83	0.24	0
Uzbekistan	3.80	0.24	1
Ecuador	3.76	0.23	0
Bhutan	3.75	0.23	0
Philippines	3.67	0.22	1
Mongolia	3.66	0.22	0
Swaziland	3.65	0.22	0
Iraq	3.65	0.22	0
Cape Verde	3.65	0.22	0
Guatemala	3.61	0.21	0
Namibia	3.61	0.21	0
Georgia	3.61	0.21	1
West Bank and Gaza	3.58	0.21	0
Sri Lanka	3.57	0.21	1
Pakistan	3.51	0.20	1
Armenia	3.42	0.19	0
South Africa	3.29	0.18	0
Indonesia	3.28	0.18	1
Morocco	3.26	0.18	0
China	3.25	0.18	0
Azerbaijan	3.25	0.18	0
Colombia	3.21	0.17	1
Syrian Arab Republic	3.17	0.17	1
Ukraine	3.16	0.17	0
El Salvador	3.16	0.17	0
Fiji	3.13	0.16	0

Country	Vulnerability Score	Conflict Likelihood	Conflict Occurrence
Peru	3.12	0.16	1
Serbia	3.08	0.16	0
Iran, Islamic Rep.	2.87	0.14	1
Brazil	2.86	0.14	0
Dominican Republic	2.86	0.14	0
Thailand	2.83	0.14	1
Tunisia	2.77	0.13	0
Macedonia, FYR	2.75	0.13	0
Russian Federation	2.75	0.13	1
Bosnia and Herzegovina	2.70	0.13	0
Jordan	2.68	0.13	0
Panama	2.63	0.12	0
Egypt, Arab Rep.	2.59	0.12	0
Kazakhstan	2.53	0.12	0
Seychelles	2.53	0.12	0
Costa Rica	2.49	0.11	0
Albania	2.42	0.11	0
Gabon	2.41	0.11	0
Maldives	2.41	0.11	0
Chile	2.40	0.11	0
Romania	2.37	0.11	0
Venezuela, RB	2.35	0.10	0
Montenegro	2.35	0.10	0
Mexico	2.29	0.10	0
Turkey	2.24	0.10	1
Malaysia	2.22	0.10	0
Bulgaria	2.14	0.09	0
Uruguay	2.05	0.09	0
Argentina	1.99	0.08	0
Belarus	1.92	0.08	0
Latvia	1.83	0.08	0
Lithuania	1.81	0.08	0
Estonia	1.69	0.07	0
Poland	1.66	0.07	0
Puerto Rico	1.43	0.06	0
Croatia	1.25	0.05	0
Portugal	1.20	0.05	0
Hungary	1.14	0.05	0

Country	Vulnerability Score	Conflict Likelihood	Conflict Occurrence
Bahamas, The	0.93	0.04	0
Greece	0.87	0.04	0
Qatar	0.81	0.04	0
New Zealand	0.80	0.04	0
Slovak Republic	0.78	0.04	0
United States	0.76	0.04	0
Korea, Rep.	0.70	0.04	0
Italy	0.68	0.04	0
Spain	0.67	0.04	0
Slovenia	0.66	0.04	0
Cyprus	0.57	0.03	0
Malta	0.55	0.03	0
United Kingdom	0.51	0.03	0
Ireland	0.41	0.03	0
Australia	0.39	0.03	0
Finland	0.36	0.03	0
Germany	0.33	0.03	0
Czech Republic	0.31	0.03	0
Switzerland	0.31	0.03	0
France	0.26	0.03	0
Belgium	0.25	0.03	0
Denmark	0.24	0.03	0
Norway	0.23	0.03	0
Netherlands	0.19	0.03	0
Austria	0.14	0.03	0
Luxembourg	0.11	0.03	0
Iceland	0.05	0.02	0
Sweden	0.00	0.02	0

Table 8

Country Ranking by Economic Vulnerability Score

Country	Vulnerability Score	Likelihood of Conflict	Conflict 2002-2011
Albania	3.94	0.16	0
Algeria	3.80	0.15	1
Angola	5.41	0.34	1
Antigua and Barbuda	1.93	0.05	0
Argentina	2.35	0.06	0
Armenia	4.32	0.20	0
Aruba	1.47	0.04	0
Australia	1.51	0.04	0
Austria	1.28	0.03	0
Azerbaijan	4.03	0.17	0
Bahamas, The	1.49	0.04	0
Bahrain	1.91	0.05	0
Bangladesh	5.40	0.34	0
Barbados	2.10	0.06	0
Belarus	3.56	0.13	0
Belgium	1.08	0.03	0
Belize	3.12	0.10	0
Benin	5.76	0.40	0
Bhutan	4.38	0.21	0
Bolivia	4.44	0.21	0
Bosnia and Herzegovina	3.76	0.15	0
Botswana	2.96	0.09	0
Brazil	3.08	0.10	0
Brunei Darussalam	1.74	0.04	0
Bulgaria	3.49	0.13	0
Burkina Faso	6.30	0.48	0
Burundi	7.75	0.71	1
Cambodia	5.10	0.30	0
Cameroon	5.06	0.29	0
Canada	1.41	0.04	0
Cape Verde	3.87	0.16	0
Central African Republic	6.52	0.52	1
Chile	2.70	0.08	0
China	3.80	0.15	0
Colombia	3.44	0.12	1

Country	Vulnerability Score	Likelihood of Conflict	Conflict 2002-2011
Comoros	5.86	0.41	0
Congo, Rep.	4.41	0.21	0
Costa Rica	2.81	0.09	0
Cote d'Ivoire	5.16	0.31	1
Croatia	2.56	0.07	0
Cuba	3.23	0.11	0
Cyprus	2.00	0.05	0
Czech republic	2.19	0.06	0
Denmark	1.18	0.03	0
Djibouti	4.63	0.24	0
Dominica	2.67	0.08	0
Dominican Republic	3.17	0.11	0
Ecuador	4.07	0.18	0
Egypt	3.91	0.16	0
El Salvador	3.56	0.13	0
Eritrea	7.12	0.62	1
Estonia	2.39	0.07	0
Ethiopia	7.02	0.60	1
Fiji	3.53	0.13	0
Finland	1.30	0.03	0
France	1.49	0.04	0
Gabon	3.13	0.10	0
Gambia, The	5.08	0.29	0
Georgia	4.41	0.21	1
Germany	1.36	0.03	0
Ghana	5.93	0.42	0
Greece	1.94	0.05	0
Greenland	1.69	0.04	0
Grenada	2.66	0.08	0
Guatemala	3.89	0.16	0
Guinea	5.70	0.39	0
Guinea-Bissau	7.27	0.64	0
Guyana	4.39	0.21	0
Haiti	5.70	0.39	1
Honduras	4.20	0.19	0
Hong Kong	0.06	0.02	0
Hungary	2.42	0.07	0

Country	Vulnerability Score	Likelihood of Conflict	Conflict 2002-2011
Iceland	1.19	0.03	0
India	5.02	0.29	1
Indonesia	4.53	0.22	1
Iran	3.88	0.16	1
Iraq	4.96	0.28	0
Ireland	0.98	0.03	0
Israel	1.49	0.04	1
Italy	1.61	0.04	0
Japan	1.13	0.03	0
Jordan	3.48	0.13	0
Kazakhstan	3.75	0.15	0
Kenya	5.47	0.35	0
Kiribati	4.90	0.27	0
Korea, Rep.	1.75	0.04	0
Kuwait	1.53	0.04	0
Kyrgyz Republic	5.73	0.39	0
Lao PDR	5.47	0.35	0
Latvia	2.75	0.08	0
Lebanon	2.50	0.07	0
Lesotho	5.40	0.34	0
Liberia	6.27	0.48	1
Libya	2.61	0.08	1
Lithuania	2.71	0.08	0
Luxembourg	0.25	0.02	0
Macao	1.02	0.03	0
Macedonia, FYR	3.69	0.14	0
Madagascar	6.35	0.49	0
Malawi	7.22	0.63	0
Malaysia	2.48	0.07	0
Maldives	2.93	0.09	0
Mali	6.28	0.48	1
Malta	1.77	0.05	0
Mauritania	5.25	0.32	0
Mauritius	2.76	0.08	0
Mexico	2.65	0.08	0
Moldova	5.20	0.31	0
Mongolia	4.94	0.28	0

Country	Vulnerability Score	Likelihood of Conflict	Conflict 2002-2011
Morocco	3.91	0.16	0
Mozambique	5.89	0.42	0
Namibia	3.55	0.13	0
Nepal	6.34	0.49	1
Netherlands	1.27	0.03	0
New Zealand	1.89	0.05	0
Nicaragua	4.43	0.21	0
Niger	7.04	0.60	1
Nigeria	5.46	0.35	1
Norway	1.11	0.03	0
Oman	2.23	0.06	0
Pakistan	5.09	0.30	1
Panama	2.77	0.08	0
Papua New Guinea	5.02	0.29	0
Paraguay	4.17	0.19	0
Peru	3.54	0.13	1
Philippines	4.15	0.18	1
Poland	2.65	0.08	0
Portugal	2.03	0.05	0
Qatar	1.31	0.03	0
Romania	3.51	0.13	0
Russian Federation	3.55	0.13	1
Rwanda	6.05	0.44	1
Samoa	3.81	0.15	0
Saudi Arabia	2.33	0.06	0
Senegal	5.22	0.31	1
Serbia	4.44	0.21	0
Seychelles	2.19	0.06	0
Sierra Leone	6.37	0.49	0
Singapore	0.00	0.01	0
Slovak Republic	2.21	0.06	0
Slovenia	1.76	0.04	0
Solomon Islands	4.50	0.22	0
South Africa	3.20	0.11	0
Spain	1.81	0.05	0
Sri Lanka	4.36	0.21	1
St. Kitts an nevis	2.14	0.06	0

Country	Vulnerability Score	Likelihood of Conflict	Conflict 2002-2011
St. Lucia	2.70	0.08	0
St. Vincent and the Grenadines	2.87	0.09	0
Sudan	5.17	0.31	1
Suriname	3.63	0.14	0
Swaziland	3.76	0.15	0
Sweden	1.17	0.03	0
Swizerland	1.02	0.03	0
Syrian Arab Republic	4.17	0.19	1
Tajikistan	6.51	0.52	1
Tanzania	5.64	0.38	0
Thailand	3.30	0.11	1
Timor-Leste	5.86	0.41	0
Togo	6.17	0.46	0
Tonga	3.78	0.15	0
Trinidad and Tobago	2.23	0.06	0
Tunisia	3.31	0.12	0
Turkey	2.86	0.09	1
Tuvalu	4.14	0.18	0
Uganda	5.90	0.42	1
Ukraine	4.37	0.21	0
United Arab Emirates	1.41	0.04	0
United Kingdom	1.33	0.03	0
United States	1.19	0.03	0
Uruguay	2.49	0.07	0
Vanuatu	3.99	0.17	0
Venezuela	2.89	0.09	0
Vietnam	4.95	0.28	0
West Bank and Gaza	4.54	0.23	0
Yemen, Rep.	5.22	0.31	0
Zambia	5.72	0.39	0
Zimbabwe	5.75	0.39	0

Table 9

Country Ranking by Ecological Vulnerability Score

Country	Vulnerability Score	Conflict Likelihood	Conflict 2002-2011
Haiti	5.72	1.00	1
Guinea-Bissau	3.36	0.93	0
Burkina Faso	2.30	0.76	0
Sri Lanka	2.07	0.70	1
Zimbabwe	1.85	0.63	0
Niger	1.78	0.61	1
Malawi	1.73	0.59	0
Burundi	1.60	0.55	1
Pakistan	1.54	0.53	1
Indonesia	1.48	0.51	1
Chad	1.28	0.45	1
Madagascar	1.25	0.44	0
Angola	1.18	0.42	1
Nepal	1.16	0.41	1
Samoa	1.08	0.38	0
Sierra Leone	1.05	0.37	0
Ethiopia	0.84	0.31	1
Togo	0.76	0.29	0
Tajikistan	0.75	0.29	1
Iran, Islamic Rep.	0.61	0.25	1
Micronesia, Fed. Sts.	0.60	0.25	0
Rwanda	0.54	0.23	1
Mozambique	0.53	0.23	0
Comoros	0.53	0.23	0
Sudan	0.52	0.23	1
Bangladesh	0.50	0.22	0
Papua New Guinea	0.49	0.22	0
Guinea	0.49	0.22	0
Russian Federation	0.47	0.22	1
Zambia	0.47	0.22	0
Solomon Islands	0.46	0.22	0
Uganda	0.46	0.22	1
Mali	0.42	0.21	1
Congo, Rep.	0.42	0.21	0
Kyrgyz Republic	0.40	0.20	0
Kenya	0.37	0.20	0
Maldives	0.36	0.19	0
Central African Republic	0.35	0.19	1

Country	Vulnerability Score	Conflict Likelihood	Conflict 2002-2011
Philippines	0.35	0.19	1
Cameroon	0.33	0.19	0
Timor-Leste	0.33	0.19	0
Djibouti	0.32	0.19	0
Cambodia	0.32	0.19	0
Guatemala	0.31	0.18	0
Nigeria	0.29	0.18	1
Benin	0.29	0.18	0
Senegal	0.27	0.18	1
Liberia	0.26	0.17	1
Mauritania	0.24	0.17	0
Vietnam	0.23	0.17	0
Grenada	0.22	0.17	0
Ghana	0.22	0.17	0
Mongolia	0.22	0.17	0
Thailand	0.22	0.17	1
Nicaragua	0.22	0.17	0
Botswana	0.22	0.17	0
India	0.21	0.16	1
El Salvador	0.19	0.16	0
Bolivia	0.19	0.16	0
Namibia	0.19	0.16	0
Honduras	0.16	0.16	0
Guyana	0.16	0.16	0
China	0.16	0.16	0
Tonga	0.15	0.16	0
Algeria	0.15	0.15	1
Yemen, Rep.	0.14	0.15	0
Lao PDR	0.13	0.15	0
Fiji	0.13	0.15	0
Dominican Republic	0.13	0.15	0
Peru	0.12	0.15	1
Lesotho	0.12	0.15	0
Bhutan	0.12	0.15	0
Cote d'Ivoire	0.11	0.15	1
Tanzania	0.11	0.15	0
Croatia	0.11	0.15	0
Spain	0.08	0.14	0
Portugal	0.08	0.14	0
Gambia, The	0.08	0.14	0
Ukraine	0.08	0.14	0

Country	Vulnerability Score	Conflict Likelihood	Conflict 2002-2011
Morocco	0.07	0.14	0
Italy	0.07	0.14	0
Colombia	0.06	0.14	1
France	0.05	0.14	0
St. Lucia	0.05	0.14	0
Paraguay	0.04	0.14	0
Slovenia	0.04	0.14	0
Cape Verde	0.04	0.14	0
Moldova	0.04	0.14	0
Romania	0.04	0.14	0
Hungary	0.04	0.14	0
Belize	0.04	0.14	0
Ecuador	0.03	0.14	0
Belgium	0.03	0.13	0
St. Vincent and the Grenadines	0.03	0.13	0
Vanuatu	0.03	0.13	0
Luxembourg	0.03	0.13	0
Czech Republic	0.03	0.13	0
Chile	0.02	0.13	0
Costa Rica	0.02	0.13	0
Oman	0.02	0.13	0
Dominica	0.02	0.13	0
Bulgaria	0.02	0.13	0
Panama	0.02	0.13	0
Macedonia, FYR	0.02	0.13	0
Poland	0.02	0.13	0
Latvia	0.02	0.13	0
Germany	0.02	0.13	0
Netherlands	0.02	0.13	0
Seychelles	0.02	0.13	0
Suriname	0.02	0.13	0
Japan	0.02	0.13	0
Syrian Arab Republic	0.02	0.13	1
Switzerland	0.01	0.13	0
Iraq	0.01	0.13	0
Turkey	0.01	0.13	1
Equatorial Guinea	0.01	0.13	0
Slovak Republic	0.01	0.13	0
Georgia	0.01	0.13	1
Brazil	0.01	0.13	0
Albania	0.01	0.13	0

Country	Vulnerability Score	Conflict Likelihood	Conflict 2002-2011
Kazakhstan	0.01	0.13	0
New Zealand	0.01	0.13	0
South Africa	0.01	0.13	0
Bahamas, The	0.01	0.13	0
Malaysia	0.01	0.13	0
Swaziland	0.01	0.13	0
Austria	0.01	0.13	0
Tunisia	0.01	0.13	0
Egypt, Arab Rep.	0.01	0.13	0
Venezuela, RB	0.01	0.13	0
Bosnia and Herzegovina	0.01	0.13	0
Hong Kong SAR, China	0.01	0.13	0
Mexico	0.00	0.13	0
Saudi Arabia	0.00	0.13	0
Serbia	0.00	0.13	0
Australia	0.00	0.13	0
Uruguay	0.00	0.13	0
Bermuda	0.00	0.13	0
Cuba	0.00	0.13	0
Mauritius	0.00	0.13	0
Korea, Rep.	0.00	0.13	0
Uzbekistan	0.00	0.13	1
Greece	0.00	0.13	0
Lithuania	0.00	0.13	0
Argentina	0.00	0.13	0
Jordan	0.00	0.13	0
United States	0.00	0.13	0
Barbados	0.00	0.13	0
Estonia	0.00	0.13	0
Cyprus	0.00	0.13	0
Armenia	0.00	0.13	0
Israel	0.00	0.13	1
Singapore	0.00	0.13	0
Belarus	0.00	0.13	0
Trinidad and Tobago	0.00	0.13	0
United Kingdom	0.00	0.13	0
Azerbaijan	0.00	0.13	0
Gabon	0.00	0.13	0
Puerto Rico	0.00	0.13	0
Canada	0.00	0.13	0
Lebanon	0.00	0.13	0

Country	Vulnerability Score	Conflict Likelihood	Conflict 2002-2011
Denmark	0.00	0.13	0
Sweden	0.00	0.13	0
Norway	0.00	0.13	0
Ireland	0.00	0.13	0
Antigua and Barbuda	0.00	0.13	0
Bahrain	0.00	0.13	0
Brunei Darussalam	0.00	0.13	0
Eritrea	0.00	0.13	1
Finland	0.00	0.13	0
Iceland	0.00	0.13	0
Kiribati	0.00	0.13	0
Kuwait	0.00	0.13	0
Libya	0.00	0.13	1
Macao SAR, China	0.00	0.13	0
Malta	0.00	0.13	0
Marshall Islands	0.00	0.13	0
Montenegro	0.00	0.13	0
Palau	0.00	0.13	0
Qatar	0.00	0.13	0
St. Kitts and Nevis	0.00	0.13	0
Turkmenistan	0.00	0.13	0
Tuvalu	0.00	0.13	0
United Arab Emirates	0.00	0.13	0
West Bank and Gaza	0.00	0.13	0