

# State Fragility Index and Matrix 2009

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	Fragility Index	Effectiveness Score	Legitimacy Score	Security Effectiveness	Security Legitimacy	Armed Conflict Indicator	Political Effectiveness	Political Legitimacy	Regime Type	Economic Effectiveness	Economic Legitimacy	Net Oil Production or Consumption	Social Effectiveness	Social Legitimacy	Regional Effects
Somalia	25	13	12	■	■	War	■	■	—	■	■		■	■	Mus
Dem. Rep. of Congo	23	12	11	■	■	War	■	■	dem	■	■		■	■	Afr
Sudan	23	11	12	■	■	War	■	■	aut	■	■	4	■	■	Mus
Afghanistan	22	12	10	■	■	War	■	■	—	■	■		■	■	Mus
Chad	22	12	10	■	■	War	■	■	aut	■	■	4	■	■	Mus
Myanmar (Burma)	21	11	10	■	■	War	■	■	AUT	■	■		■	■	
Ethiopia	21	11	10	■	■	War	■	■	dem	■	■		■	■	Afr
Iraq	20	10	10	■	■	War	■	■	—	■	■	22	■	■	Mus
Sierra Leone	19	11	8	■	■	*	■	■	DEM	■	■		■	■	Afr
Burundi	18	12	6	■	■	X	■	■	DEM	■	■		■	■	Afr
Central African Rep.	18	10	8	■	■	War	■	■	aut	■	■		■	■	Afr
Liberia	18	11	7	■	■	*	■	■	DEM	■	■		■	■	Afr
Niger	18	9	9	■	■	*	■	■	aut	■	■		■	■	Mus
Nigeria	18	9	9	■	■	War	■	■	dem	■	■	5	■	■	Afr
Rwanda	18	10	8	■	■	*	■	■	aut	■	■		■	■	Afr
Angola	17	8	9	■	■	X	■	■	aut	■	■	55	■	■	Afr
Burkina Faso	17	10	7	■	■		■	■	aut	■	■		■	■	Afr
Guinea	17	8	9	■	■	*	■	■	—	■	■		■	■	Mus
Zambia	17	9	8	■	■		■	■	DEM	■	■		■	■	Afr
Zimbabwe	17	9	8	■	■	*	■	■	dem	■	■		■	■	Afr
Cameroon	16	6	10	■	■		■	■	aut	■	■	1	■	■	Afr
Congo-Brazzaville	16	7	9	■	■	*	■	■	aut	■	■	25	■	■	Afr
Cote d'Ivoire	16	10	6	■	■	X	■	■	—	■	■		■	■	Afr
Guinea-Bissau	16	10	6	■	■	*	■	■	DEM	■	■		■	■	Afr
Mauritania	16	8	8	■	■	*	■	■	aut	■	■		■	■	Mus

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Pakistan	16	9	7	■	■	War	■	■	dem	■	■		■	■	Mus
Uganda	16	9	7	■	■	X	■	■	aut	■	■		■	■	Afr
Yemen	16	7	9	■	■	War	■	■	aut	■	■	2	■	■	Mus
Algeria	15	6	9	■	■	*	■	■	aut	■	■	19	■	■	Mus
Malawi	15	8	7	■	■		■	■	DEM	■	■		■	■	Afr
Nepal	15	10	5	■	■	X	■	■	DEM	■	■		■	■	
Timor Leste	15	9	6	■	■	*	■	■	DEM	■	■	31	■	■	
Azerbaijan	14	6	8	■	■	*	■	■	AUT	■	■	39	■	■	Mus
Benin	14	8	6	■	■		■	■	DEM	■	■		■	■	Afr
Comoros	14	8	6	■	■		■	■	DEM	■	■		■	■	Mus
Djibouti	14	6	8	■	■	*	■	■	dem	■	■	+	■	■	Mus
Eritrea	14	9	5	■	■	*	■	■	AUT	■	■		■	■	Afr
Gambia	14	9	5	■	■		■	■	aut	■	■		■	■	Mus
Ghana	14	8	6	■	■	*	■	■	DEM	■	■		■	■	Afr
Haiti	14	9	5	■	■	X	■	■	dem	■	■		■	■	
Iran	14	6	8	■	■	*	■	■	AUT	■	■	13	■	■	Mus
Kenya	14	7	7	■	■	X	■	■	DEM	■	■		■	■	Afr
Laos	14	6	8	■	■	*	■	■	AUT	■	■		■	■	
Madagascar	14	9	5	■	■		■	■	aut	■	■		■	■	Afr
Mali	14	8	6	■	■	*	■	■	DEM	■	■		■	■	Mus
Mozambique	14	7	7	■	■	*	■	■	dem	■	■		■	■	Afr
Togo	14	8	6	■	■		■	■	aut	■	■	+	■	■	Afr
Egypt	13	5	8	■	■	*	■	■	aut	■	■		■	■	Mus
India	13	8	5	■	■	War	■	■	DEM	■	■		■	■	
Senegal	13	7	6	■	■	*	■	■	DEM	■	■	+	■	■	Mus
Tajikistan	13	8	5	■	■	*	■	■	aut	■	■	+	■	■	Mus
Uzbekistan	13	5	8	■	■		■	■	AUT	■	■		■	■	Mus
Bangladesh	12	7	5	■	■	*	■	■	DEM	■	■		■	■	Mus

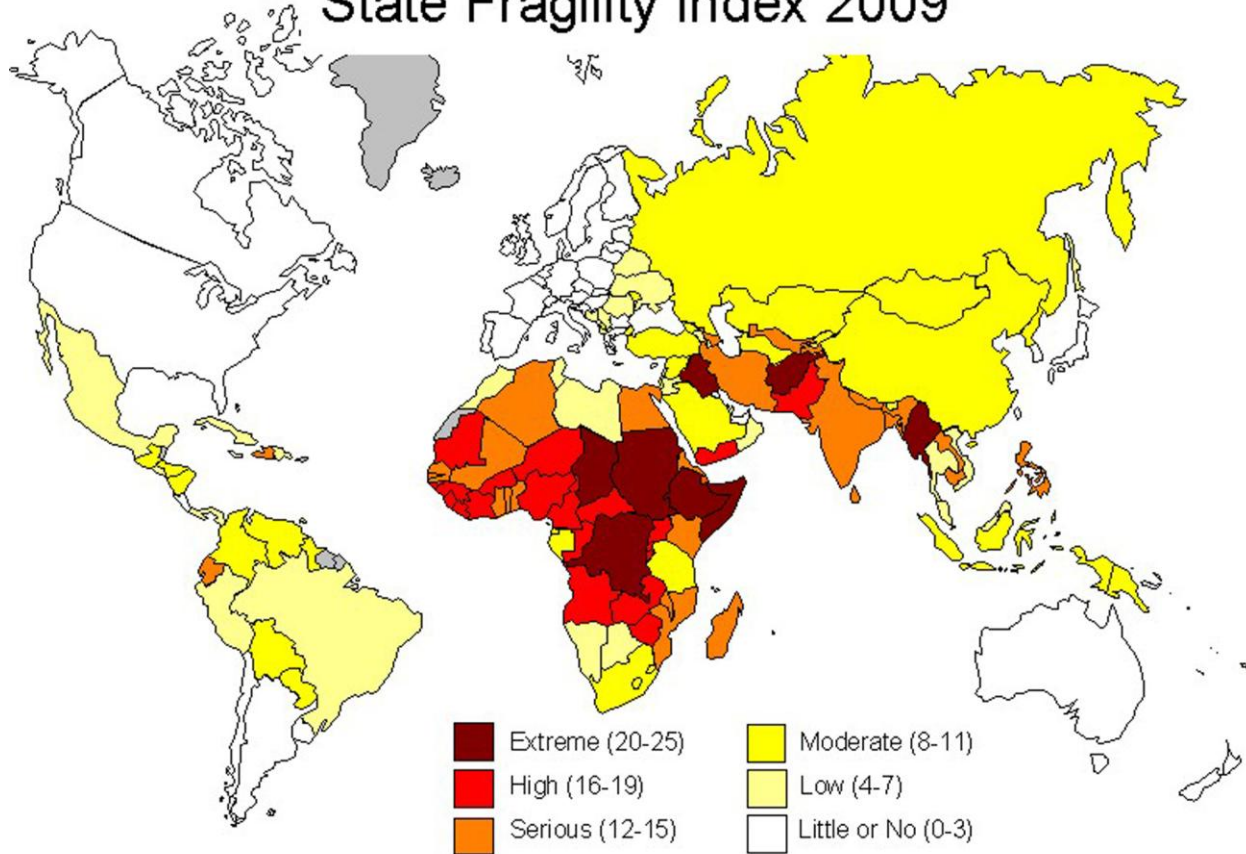
	Fragility Index	Effectiveness Score	Legitimacy Score	Security Effectiveness	Security Legitimacy	Armed Conflict Indicator	Political Effectiveness	Political Legitimacy	Regime Type	Economic Effectiveness	Economic Legitimacy	Net Oil Production or Consumption	Social Effectiveness	Social Legitimacy	Regional Effects
Cambodia	12	8	4	■	■	*	■	■	dem	■	■		■	■	
Ecuador	12	4	8	■	■	*	■	■	dem	■	■	8	■	■	
Philippines	12	8	4	■	■	War	■	■	DEM	■	■	+	■	■	
Sri Lanka	12	6	6	■	■	X	■	■	DEM	■	■	+	■	■	
Bolivia	11	4	7	■	■		■	■	DEM	■	■		■	■	
Colombia	11	3	8	■	■	War	■	■	DEM	■	■	3	■	■	
Equatorial Guinea	11	3	8	■	■		■	■	aut	■	■	204	■	■	Afr
Gabon	11	3	8	■	■		■	■	dem	■	■	56	■	■	Afr
Kyrgyzstan	11	7	4	■	■		■	■	—	■	■		■	■	Mus
Lesotho	11	8	3	■	■		■	■	DEM	■	■		■	■	Afr
Papua New Guinea	11	5	6	■	■	*	■	■	dem	■	■		■	■	
Tanzania	11	6	5	■	■		■	■	aut	■	■		■	■	Afr
Turkmenistan	11	4	7	■	■		■	■	AUT	■	■	6	■	■	Mus
Bhutan	10	5	5	■	■	*	■	■	dem	■	■		■	■	
Guatemala	10	5	5	■	■	*	■	■	DEM	■	■	+	■	■	
Guyana	10	3	7	■	■		■	■	DEM	■	■	+	■	■	
Kazakhstan	10	4	6	■	■		■	■	AUT	■	■	31	■	■	Mus
Korea, North	10	5	5	■	■		■	■	AUT	■	■		■	■	
Nicaragua	10	5	5	■	■	*	■	■	DEM	■	■	+	■	■	
Saudi Arabia	10	2	8	■	■	X	■	■	AUT	■	■	95	■	■	Mus
Venezuela	10	2	8	■	■		■	■	aut	■	■	24	■	■	
Georgia	9	6	3	■	■	X	■	■	DEM	■	■		■	■	
Israel	9	3	6	■	■	X	■	■	DEM	■	■	X	■	■	
Kosovo	9	5	4	■	■	*	■	■	DEM	■	■	na	■	■	Mus
Moldova	9	5	4	■	■	*	■	■	DEM	■	■	+	■	■	
Solomon Islands	9	6	3	■	■	*	■	■	DEM	■	■	+	■	■	
South Africa	9	4	5	■	■	*	■	■	DEM	■	■	+	■	■	Afr
Swaziland	9	5	4	■	■		■	■	AUT	■	■	+	■	■	Afr

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Syria	9	3	6	■	■		■	■	AUT	■	■	3	■	■	Mus
Turkey	9	3	6	■	■	War	■	■	DEM	■	■	+	■	■	Mus
China	8	4	4	■	■	*	■	■	AUT	■	■	+	■	■	
Honduras	8	4	4	■	■	*	■	■	DEM	■	■	+	■	■	
Indonesia	8	5	3	■	■	X	■	■	DEM	■	■		■	■	Mus
Mongolia	8	4	4	■	■		■	■	DEM	■	■	+	■	■	
Paraguay	8	4	4	■	■		■	■	DEM	■	■	+	■	■	
Russia	8	4	4	■	■	War	■	■	dem	■	■	18	■	■	
Armenia	7	4	3	■	■	*	■	■	dem	■	■	+	■	■	
Fiji	7	5	2	■	■		■	■	aut	■	■	+	■	■	
Lebanon	7	3	4	■	■	X	■	■	DEM	■	■	+	■	■	Mus
Libya	7	1	6	■	■		■	■	AUT	■	■	89	■	■	Mus
Namibia	7	3	4	■	■	*	■	■	DEM	■	■	+	■	■	Afr
Peru	7	3	4	■	■	*	■	■	DEM	■	■		■	■	
Thailand	7	4	3	■	■	War	■	■	dem	■	■	+	■	■	
Tunisia	7	3	4	■	■		■	■	aut	■	■		■	■	Mus
Ukraine	7	4	3	■	■		■	■	DEM	■	■	+	■	■	
Vietnam	7	4	3	■	■	*	■	■	AUT	■	■		■	■	
Cuba	6	2	4	■	■		■	■	AUT	■	■	+	■	■	
Dominican Republic	6	2	4	■	■		■	■	DEM	■	■	+	■	■	
Jordan	6	3	3	■	■		■	■	aut	■	■	+	■	■	Mus
Morocco	6	4	2	■	■	*	■	■	AUT	■	■	+	■	■	Mus
Serbia	6	4	2	■	■	*	■	■	DEM	■	■	+	■	■	
Belarus	5	4	1	■	■		■	■	AUT	■	■	+	■	■	
Bosnia	5	3	2	■	■	*	■	■	—	■	■	+	■	■	Mus
Brazil	5	1	4	■	■		■	■	DEM	■	■		■	■	
El Salvador	5	2	3	■	■	*	■	■	DEM	■	■	+	■	■	
Malaysia	5	1	4	■	■		■	■	DEM	■	■	2	■	■	Mus

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Oman	5	2	3	■	■		■	■	AUT	■	■	81	■	■	Mus
Panama	5	1	4	■	■	*	■	■	DEM	■	■	X	■	■	
Qatar	5	2	3	■	■		■	■	AUT	■	■	474	■	■	Mus
Romania	5	1	4	■	■	*	■	■	DEM	■	■	+	■	■	
Albania	4	3	1	■	■	*	■	■	DEM	■	■	+	■	■	Mus
Bahrain	4	0	4	■	■		■	■	AUT	■	■	5	■	■	Mus
Botswana	4	3	1	■	■		■	■	DEM	■	■	+	■	■	Afr
Macedonia	4	3	1	■	■		■	■	DEM	■	■	+	■	■	
Mexico	4	1	3	■	■	War	■	■	DEM	■	■	3	■	■	
Trinidad	4	0	4	■	■		■	■	DEM	■	■	32	■	■	
Bulgaria	3	1	2	■	■		■	■	DEM	■	■	+	■	■	
Croatia	3	1	2	■	■	*	■	■	DEM	■	■	+	■	■	
Cyprus	3	0	3	■	■		■	■	DEM	■	■	X	■	■	
Jamaica	3	2	1	■	■		■	■	DEM	■	■	X	■	■	
Kuwait	3	0	3	■	■	*	■	■	AUT	■	■	305	■	■	Mus
Montenegro	3	3	0	■	■		■	■	DEM	■	■	+	■	■	
United Arab Emirates	3	0	3	■	■		■	■	AUT	■	■	187	■	■	Mus
Australia	2	0	2	■	■		■	■	DEM	■	■	+	■	■	
Belgium	2	0	2	■	■		■	■	DEM	■	■	X	■	■	
Chile	2	0	2	■	■	*	■	■	DEM	■	■	+	■	■	
Norway	2	0	2	■	■		■	■	DEM	■	■	169	■	■	
Singapore	2	0	2	■	■		■	■	aut	■	■	X	■	■	
United States	2	1	1	■	■	War	■	■	DEM	■	■	X	■	■	
Argentina	1	0	1	■	■		■	■	DEM	■	■	2	■	■	
Czech Republic	1	0	1	■	■		■	■	DEM	■	■	+	■	■	
Estonia	1	1	0	■	■		■	■	DEM	■	■	+	■	■	
France	1	0	1	■	■		■	■	DEM	■	■	X	■	■	
Greece	1	0	1	■	■		■	■	DEM	■	■	X	■	■	

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Lithuania	1	1	0	■	■		■	■	DEM	■	■	+	■	■	
Mauritius	1	1	0	■	■		■	■	DEM	■	■	+	■	■	
New Zealand	1	0	1	■	■		■	■	DEM	■	■	+	■	■	
Slovakia	1	0	1	■	■		■	■	DEM	■	■	+	■	■	
Spain	1	0	1	■	■		■	■	DEM	■	■	X	■	■	
Switzerland	1	0	1	■	■		■	■	DEM	■	■	X	■	■	
Uruguay	1	0	1	■	■		■	■	DEM	■	■	+	■	■	
Austria	0	0	0	■	■		■	■	DEM	■	■	X	■	■	
Canada	0	0	0	■	■		■	■	DEM	■	■	13	■	■	
Costa Rica	0	0	0	■	■		■	■	DEM	■	■	+	■	■	
Denmark	0	0	0	■	■		■	■	DEM	■	■	6	■	■	
Finland	0	0	0	■	■		■	■	DEM	■	■	X	■	■	
Germany	0	0	0	■	■		■	■	DEM	■	■	X	■	■	
Hungary	0	0	0	■	■		■	■	DEM	■	■	+	■	■	
Ireland	0	0	0	■	■		■	■	DEM	■	■	X	■	■	
Italy	0	0	0	■	■		■	■	DEM	■	■	+	■	■	
Japan	0	0	0	■	■		■	■	DEM	■	■	X	■	■	
Korea, South	0	0	0	■	■		■	■	DEM	■	■	X	■	■	
Latvia	0	0	0	■	■		■	■	DEM	■	■	+	■	■	
Netherlands	0	0	0	■	■		■	■	DEM	■	■	X	■	■	
Poland	0	0	0	■	■		■	■	DEM	■	■	+	■	■	
Portugal	0	0	0	■	■		■	■	DEM	■	■	+	■	■	
Slovenia	0	0	0	■	■		■	■	DEM	■	■	X	■	■	
Sweden	0	0	0	■	■		■	■	DEM	■	■	X	■	■	
Taiwan	0	0	0	■	■		■	■	DEM	■	■	X	■	■	
United Kingdom	0	0	0	■	■	*	■	■	DEM	■	■	+	■	■	

# State Fragility Index 2009



**Figure 1. Global Mapping of State Fragility**

## TECHNICAL NOTES TO THE STATE FRAGILITY INDEX AND MATRIX 2008:

The State Fragility Index and Matrix 2009 lists all independent countries in the world in which the total country population is greater than 500,000 in 2009 (163 countries). The Fragility Matrix scores each country on both Effectiveness and Legitimacy in four performance dimensions: Security, Political, Economic, and Social, at the end of the year 2009. Each of the Matrix indicators is rated on a four-point fragility scale: 0 "no fragility," 1 "low fragility," 2 "medium fragility," and 3 "high fragility" with the exception of the Economic Effectiveness indicator, which is rated on a five-point fragility scale (including 4 "extreme fragility"). The State Fragility Index, then, combines scores on the eight indicators and ranges from 0 "no fragility" to 25 "extreme fragility." A country's fragility is closely associated with its *state capacity* to manage conflict; make and implement public policy; and deliver essential services and its *systemic resilience* in maintaining system coherence, cohesion, and quality of life; responding effectively to challenges and crises, and continuing progressive development.

### Fragility Indices

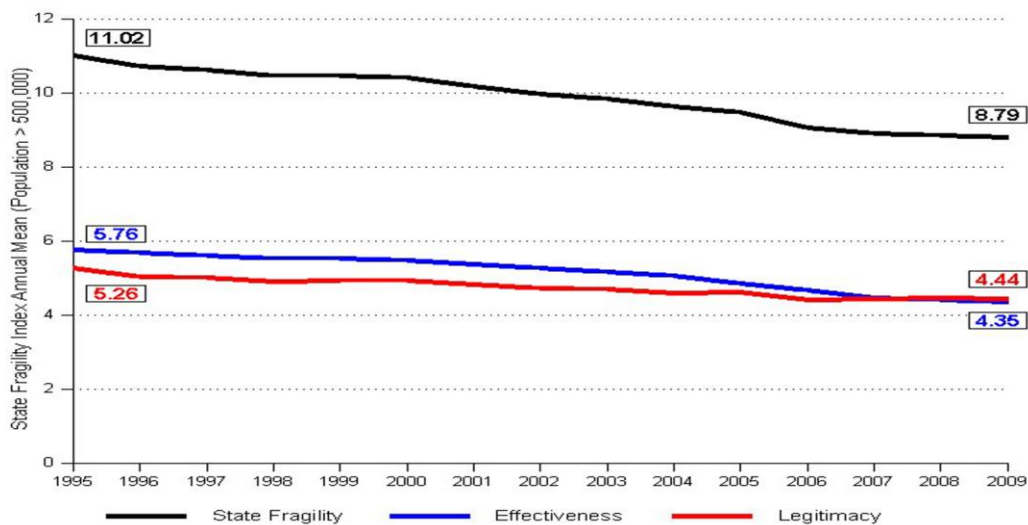
*State Fragility Index* = Effectiveness Score + Legitimacy Score (25 points possible)

*Effectiveness Score* = Security Effectiveness + Political Effectiveness + Economic Effectiveness + Social Effectiveness (13 points possible)

*Legitimacy Score* = Security Legitimacy + Political Legitimacy + Economic Legitimacy + Social Legitimacy (12 points possible)

The first column, following the country name, lists that country's State Fragility Index for the most current year (using year 2009 data whenever available). The composite index is followed by its two component scores: Effectiveness and Legitimacy.

**General Notes:** The State Fragility Index and Matrix was originally designed and introduced in the “Global Report on Conflict, Governance, and State Fragility 2007.” In order to standardize procedures for scoring each of the eight component indicators so as to make the indicators and indices comparable across time, we have set threshold values for the categorical fragility scores based on cut-points derived from values in a baseline year (2004). This methodology effects continuous measures used for Economic Effectiveness (GDP per capita in constant 2000 US dollars); Economic Legitimacy (manufacturing exports as a percent of merchandise exports); Social Effectiveness (human development indicator; HDI); and Social Legitimacy (infant mortality rate); baseline specifications are provided in the relevant indicator explanations that follow. The Economic Effectiveness indicator has been rescaled in 2009 and a fifth value has been added to denote “extreme fragility” in countries that have a GDP per capita of \$400 or less (constant 2000 US\$). In addition, a fourth indicator was added in 2008 to the calculation of the Political Legitimacy Score (scores for all previous years have been recalculated; state fragility scores have been calculated for all countries annually beginning with 1995). As several of the Matrix indicators use “most recent year available” data, the Matrix scores for previous years are adjusted when current year data becomes available; see details below. Trends graphs (figures 2-4 below) include only the 160 countries that have existed since 1995 (Kosovo, Montenegro, and Timor Leste are not included in the trends/comparisons).



**Figure 2. Global Trends in State Fragility, 1995-2009**

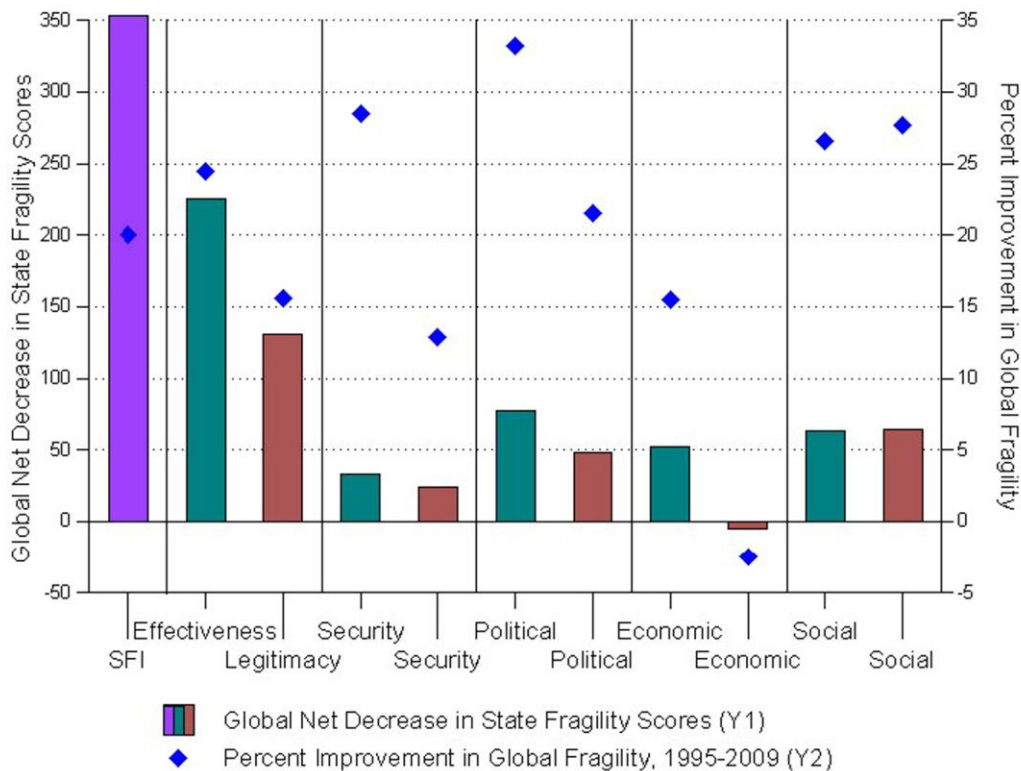
### Security Indicators

**Security Effectiveness (“seceff”) Score:** Total Residual War, a measure of general security and vulnerability to political violence, 1985-2009 (25 years). Source: Monty G. Marshall, Major Episodes of Political Violence, 1946-2009, (www.systemicpeace.org), variable name “acttotal.” The formula to calculate this score is based on two assumptions: (1) the residual effects of low level and/or short wars diminish relatively quickly; and (2) the residual effects of serious or protracted wars diminish gradually over a 25-year period. Three indicators are used to calculate each country’s “residual war” score (*reswartot*): *warsum1-4* (sum of annual scores for all wars in which the country is directly involved for each continuous period of armed conflict); *yrnowar1-3* (interim years of “no war” between periods of armed conflict); and *yrpeace* (years of peace, or no war, since the end of most recent war period). For states with one war episode:  $reswartot = warsum - [yrpeace + (0.04yrpeace \times warsum)]$ . For countries with multiple periods of war, a *reswar* value is calculated for each, in chronological order. Thus, for a state with two episodes of war, to calculate the first episode:  $reswar1 = warsum1 - [yrnowar1 + (0.04yrnowar1 \times warsum1)]$ ; and for the second episode:  $reswartot = (reswar1 + warsum2) - [yrpeace + (.04yrpeace \times (reswar1 + warsum1))]$ ; and so on. Any negative residual war (*reswar*) scores are converted to zero before calculating additional residual war scores. The final *reswartot* value is then converted to a four-point fragility scale, where: 0 = 0; 1 = 0.1-15; 2 = 15.1-100; and 3 = greater than 100.

**Security Legitimacy (“secleg”) Score:** State Repression, a measure of state repression, 1995-2008. Source: Mark Gibney, Linda Cornett, and Reed Wood, Political Terror Scale (PTS; www.politicalterror scale.org). The PTS provides separate annual indicators drawn from U.S. State Department and Amnesty International reports; each indicator is coded on a five-point scale, from 1: “no repression” to 5: “systemic, collective repression.” To calculate the 2008 state repression score, we calculate the following: (1) nine-year average, 1995-2003; (2) four-year average, 2004-2007; and (3) most recent value, 2008; the three, mean indicators are then compared according to a fragility

categorization: 0 = 1.0-2.0; 1 = 2.1-3.0; 2 = 3.1-4.0; and 3 = greater than 4.0. If the most recent year value agrees with the previous four-year average, then these two means are used to identify the repression category. When the most recent year score is not in agreement with the previous period, then the earlier nine-year mean is used to help determine a more general pattern in state repression. Historical treatments, that is, calculations of Security Legitimacy Scores for previous years, are further aided by reference to patterns in "future" PTS values. The exact year of change in the general practice of state repression and, so, the Security Legitimacy Score can be more confidently identified in the historical treatment. Because the calculated value on this indicator is based on year 2008 data, the indicator value is assigned to the 2008 Matrix "secleg" score and that score is carried forward to the 2009 Matrix.

**Referent Indicator:** The *Armed Conflict Indicator* provides a general indicator of the country's most recent experience with major armed conflict, including wars of independence, communal wars, ethnic wars, revolutionary wars, and inter-state wars. Referent indicators are not used in the calculation of state fragility scores. Source: Major Episodes of Political Violence, 1946-2009, Center for Systemic Peace. A dark shaded "War" entry indicates a country is actively involved in a major armed conflict(s) in mid-2010; a medium shaded "X" indicates that the country has emerged from major armed conflict(s) in the past five years (since mid-2005); and a light shaded "\*" indicates that the country has been directly involved in one or more major armed conflicts sometime during the previous twenty year period (1985-2004) but has not experienced a major armed conflict since, that is, for at least the past five years.



**Figure 3. Global Net Changes in State Fragility, 1995-2009**

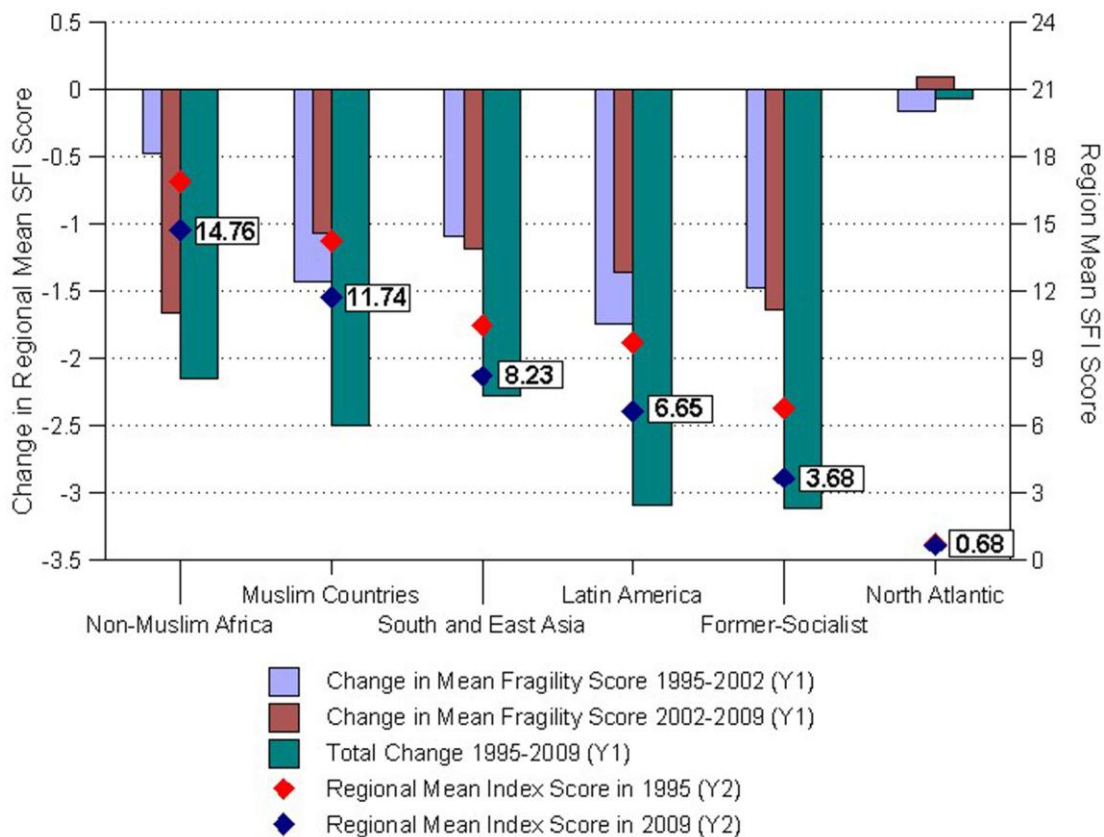
**Political Indicators**

*Political Effectiveness ("poleff") Score:* Regime/Governance Stability, 1995-2009. Sources: Monty G. Marshall, Keith Jagers, and Ted Robert Gurr, Polity IV Project: Political Regime Characteristics and Transitions, 1800-2009; Henry S. Bienen and Nicolas van de Walle, Leadership Duration (updated by Monty G. Marshall); and Monty G. Marshall and Donna Ramsey Marshall, Coups d'Etat, 1946-2009, datasets (www.systemicpeace.org). Three indicators are used to calculate the Regime/Governance Stability score: Regime Durability (Polity IV, 2009); Current Leader's Year's in Office (Leadership Duration, 2009); and Total Number of Coup Events 1995-2009, including successful, attempted, plotted, alleged coups and forced resignations or assassinations of chief executives, but not including coup events associated with Polity adverse regime changes (these major regime

changes cause the "durability" score to be reset to "0" and, so, would be double-counted, see above). These indicators are scored such that: Durability < 10 years = 1; Leader Years in Office > 12 years = 1; and Total Coup Events: 1-2 = 1 and >2 = 2. These indicators are then added to produce the Regime/Governance Stability score (scores of 4 are recoded as 3). Note: Countries coded in the Polity IV dataset as an "interregnum" (i.e., total or near total collapse of central authority, -77) for the current year are scored 3 on the Political Effectiveness indicator.

**Political Legitimacy ("polleg") Score:** Regime/Governance Inclusion, 2009. Sources: Polity IV, 2009; Ted Robert Gurr, Monty G. Marshall, and Victor Asal, Minorities at Risk Discrimination 2009 (updated by Monty G. Marshall); and Ted Robert Gurr and Barbara Harff, Elite Leadership Characteristics 2009 (updated by Monty G. Marshall) data. In the 2007 report, four indicators were used to determine the Regime/Governance Inclusion score: Factionalism (Polity IV, *parcomp* value 3 = 1); Ethnic Group Political Discrimination against 5% or more of the population (Discrimination: *POLDIS* values 2, 3, 4 = 1); Political Salience of Elite Ethnicity (Elite Leadership Characteristics: *ELETH* values 1 or 2 = 1); and Polity Fragmentation (Polity IV, *fragment* value greater than 0 = 1). To these indicators, we have added Exclusionary Ideology of Ruling Elite (Elite Leadership Characteristics: *ELITI* value 1 = 1). The Political Legitimacy Score is calculated by adding these five indicators; scores of 4 or 5 (rare) are recoded as 3.

**Referent Indicator:** The *Regime Type* column provides a general indicator of the country's regime type in mid-2010 based on the "polity" score recorded in the Polity IV data series. A dark-shaded, upper case "AUT" indicates the country is governed by an institutionalized autocratic regime. A medium-shaded, lower case "aut" indicates that the country is governed by an uninstitutionalized, or "weak," autocratic regime. A lower case "dem" indicates an uninstitutionalized, or "weak," democratic regime and an upper case "DEM" indicates an institutionalized democracy. Countries denoted with a dash "-" indicates that the country is has only limited central governance, either because of a regime failure (Somalia), foreign occupation (Afghanistan, Bosnia, and Iraq), or a transitional government (Ivory Coast).



**Figure 4. Regional Net Changes in State Fragility, 1995-2009**

## Economic Indicators

*Economic Effectiveness ("ecoeff") Score:* Gross Domestic Product per Capita (constant 2000 US\$), 2002-2008. Source: World Bank, World Development Indicators, 2009 ([www.worldbank.org/data](http://www.worldbank.org/data)). The annual values for the past seven years are reviewed to verify that the value in the most recent year is consistent with values in previous years and that a threshold/category change in a country's GDP per capita indicator score is part of a consistent trend and not simply a short-term aberration from that trend. The value for the most recent year (2008) is coded into a five-point fragility scale, based on cut-points derived from the threshold values for the fit of the State Fragility Index and GDP per capita in a baseline year (2004). The standardized categories are as follows: 4 = less than or equal to \$400.00; 3 = \$400.01 to \$1000; 2 = \$1000.01 to \$2500.00; 1 = \$2500.01 to \$5000; and 0 = greater than \$5000. When a country's 2007 value exceeds the borderline value separating categories, the fifteen-year income growth indicator is used to assign the final score: selecting the higher fragility category if long-term growth is negative or the lower fragility category if long-term growth is positive. Because the calculated value on this indicator is based on year 2008 data, the indicator value is assigned to the 2008 Matrix "ecoeff" score and that score is carried forward to the 2009 Matrix.

*Economic Legitimacy ("ecoleg") Score:* Share of Export Trade in Manufactured Goods, 1995-2007. Source: UN Development Programme, Structure of Trade, 2009, and World Bank, World Development Indicators (WDI), 2009, (manufacturing as a percentage of merchandise exports). Merchandise exports include two classes of products: manufactured goods and primary commodities; low percentage of manufactured goods indicates a high reliance on primary commodities for foreign exchange. The annual values of this variable are examined to ensure that the most recent annual value is a representative value within the established range for that country. The manufacturing percentage of merchandise exports is then converted to a four-point fragility score, where: 3 = less than or equal to 10; 2 = greater than 10 and less than or equal to 25; 1 = greater than 25 and less than or equal to 40; and 0 = greater than 40. Because the calculated value on this indicator is based on year 2007 data, the indicator value is assigned to the 2007 Matrix "ecoleg" score and that score is carried forward to both the 2008 and 2009 Matrix. The world's main illicit drug producing/supplying countries: Afghanistan, Burma (Myanmar), and Columbia are given the highest value (3) on this indicator.

**Referent Indicator:** The *Net Oil Production or Consumption* indicator provides information on a country's 2009 petroleum energy profile expressed in net "barrels per capita" as reported by the US Energy Information Administration ([www.eia.doe.gov](http://www.eia.doe.gov)). The indicator value is calculated by subtracting the country's reported total daily consumption figure from its total daily production figure (in thousands of barrels), multiplying the result by 365 (to get an annual figure), and dividing by the country's total population (in thousands). A dark-shaded numerical value (e.g., Qatar's **474**) indicates a net petroleum producer expressed in barrels per capita. A plus sign "+" indicates a moderate net petroleum consuming country (1-10 barrels per capita) and an "X" indicates a major net consuming country (greater than 10 barrels per capita). Blank cells indicate country's with low petroleum profiles (less than one barrel per capita producer or consumer).

## Social Indicators

*Social Effectiveness ("soceff") Score:* Human Capital Development, 2007. Source: UNDP *Human Development Report 2009*, Human Development Index (HDI), 2007 ([www.undp.org](http://www.undp.org)). Reported HDI values are converted according to a four-point fragility scale based on the cut-points of the lower three HDI quintiles in the baseline year, 2004. The Social Effectiveness Score is assigned as follows: 3 = less than or equal to .500; 2 = greater than .500 and less than or equal to .700; 1 = greater than .700 and less than or equal to .800; and 0 = greater than .800. Because the calculated value on this indicator is based on year 2007 data, the indicator value is assigned to the 2007 Matrix "soceff" score and that score is carried forward to both the 2008 and 2009 Matrices.

*Social Legitimacy ("socleg") Score:* Human Capital Care, 2009. Source: US Census Bureau, International Data Base, 2010, (IDB; [www.census.gov/ipc/www/idb](http://www.census.gov/ipc/www/idb)), Infant Mortality Rate, 2009. This indicator is based on the infant mortality rate (number of deaths of infants under one year of age from a cohort of 1,000 live births), with values converted to a four-point fragility scale based on the upper cut-points of the lower three quintiles of the infant mortality rates in the baseline year, 2004. The Social Legitimacy Score is assigned as follows: 3 = greater than 75.00; 2 = less than or equal to 75.00 and greater than 45.00; 1 = less than or equal to 45.00 and greater than 20.00; and 0 = less than or equal to 20.00. These scores are then adjusted according to ranking comparisons between the country's income level (GDP per capita) and human capital development (HDI). If the country's HDI ranking among the 162 countries listed is more than twenty-five places above its GDP per capita ranking (meaning it provides better human capital care than expected by its level of income) the Social Legitimacy Score (fragility) is lowered by one point. If HDI ranking is more than twenty-five places below GDP per capita ranking, the fragility score is increased by one point.

**Referent Indicator:** The *Regional Effects* indicator provides information to identify two important "neighborhood" clusters of countries: "**Mus**" indicates a country that is characterized by a Muslim majority (countries mainly located in northern Africa, the Middle East, and Central and Southeast Asia) and "**Afr**" indicates a country located in non-Muslim (sub-Saharan) Africa.