

Risk Analysis and State Fragility: Opportunities and Challenges

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November 25 2008

**With the generous support of CIDA and the Faculty of Public
Affairs - Carleton**



1. Goals and Objectives
2. Concepts and Operationalization
3. Research Design and Results
4. Policy Implications

GOALS

- To provide decision-support tools for desk officers **through reports and briefs;**
- To provide strategic and operational guidance for policy makers **through data analysis and country monitoring**
- To integrate problem-centred analysis into whole-of-government policy-making-**through training and outreach**
- To develop a network of research and policy capabilities across Canada **through a Scientific Committee and workshops;**
- To develop evidence-based analysis of fragility in specific countries through **data gathering and model development ;**
- To develop research expertise at Carleton through **hiring over 25 research assistants**
- To provide coherent and focused decision-support to policy-makers in development, defence and diplomacy **through partnerships.**

WHY?

Because, effective policy on fragile states requires a solid analytic base that:

- Identifies the relative risks that each state faces internally and poses externally;
- Combines real time dynamic analysis with structural information;
- Provides policy relevant diagnosis;
- Matches the analysis to the operational capacity of the end user; and
- Provides an evaluative framework for assessing policy impact.

Methodologies:

- Multi-source data
 - Expert and field surveys and research
 - Event monitoring/dynamic data analysis
 - Structural comparative risk assessment
- Intensive research oriented focus
- Comparative case-study structure

Key Differences

- Fragility and failure are analytically distinct
 - States become fragile and fail for different reasons
- Conflict is a symptom, not a cause, of fragility
 - Not all fragile states experience conflict

Methodology Project Inputs

Country Indicators for Foreign Policy

Structural data

- Baseline assessment
- Relative ranking

Event-based data

- Field officer and expert surveys
- Allied, IO, NGO, private sector, and media reports

Evaluative Framework

Qualitative Assessment

- Survey data
- Expert opinion
- Structured analogy
- Iterative Delphi technique

Methodology Analysis and Output

Country Indicators for Foreign Policy

Data analysis

Structural governance score
Event trend-lines
Survey data
Base-line Assessment

Policy Evaluation

Identify available options
Demand-driven impact assessment

Analysis

Net Assessment

Quantitative and qualitative trend analysis

Drivers of change

Scenarios

Systemic and sectoral analysis

Stakeholders

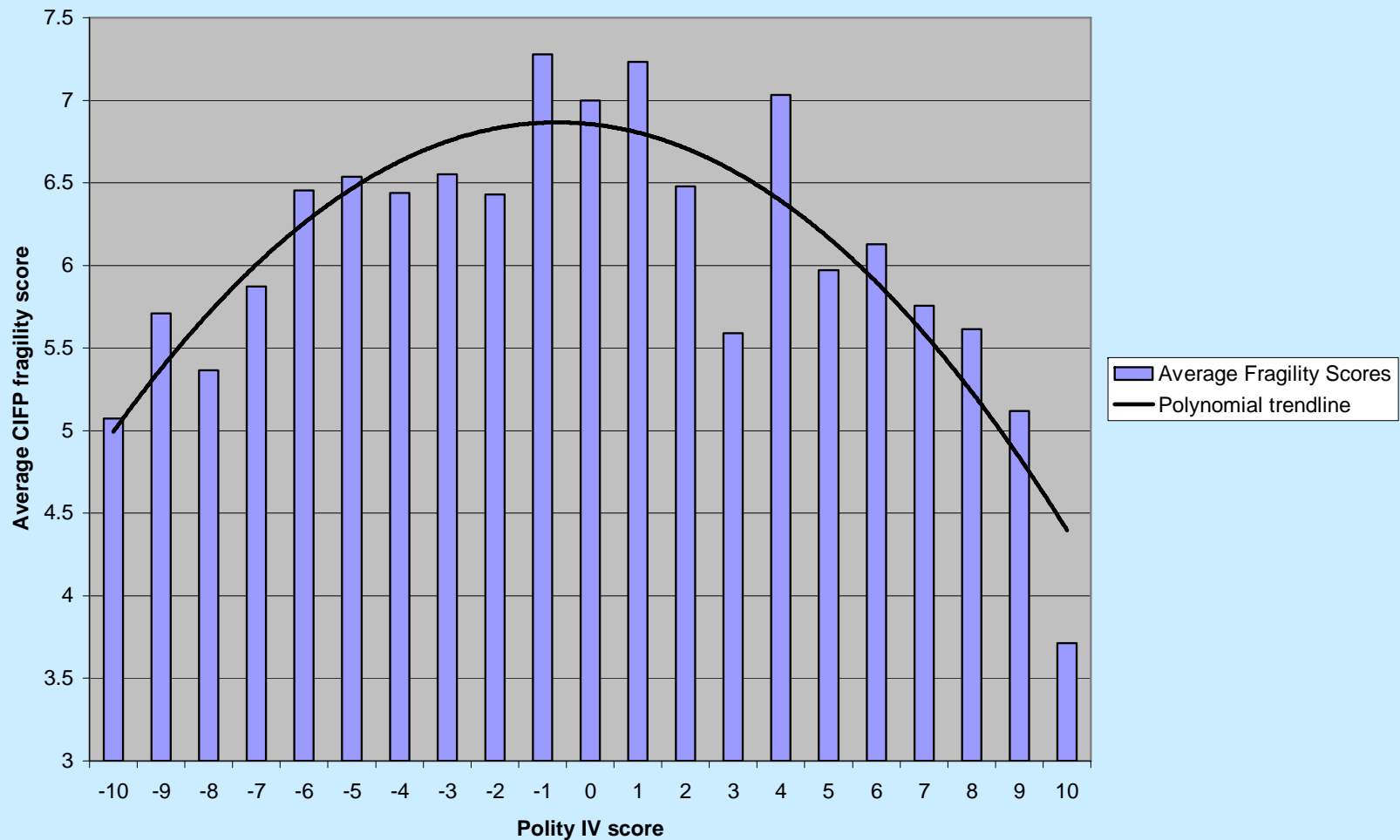
Implications for policy

Outputs

Initial Findings

Country Indicators for Foreign Policy

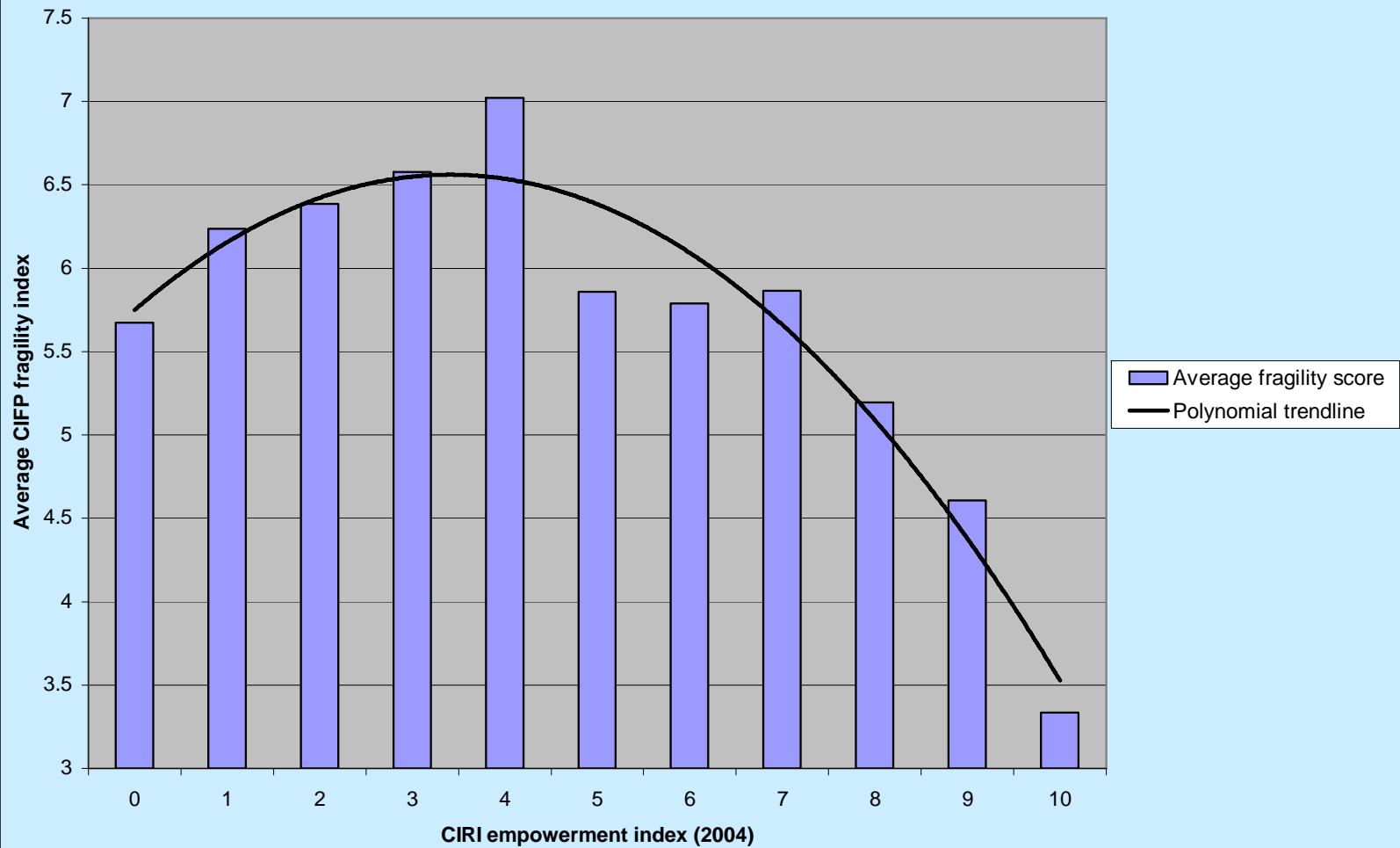
Relation of Democracy to Fragility



Initial Findings

Country Indicators for Foreign Policy

Relation of Human Rights to Fragility -- CIRI Empowerment Index

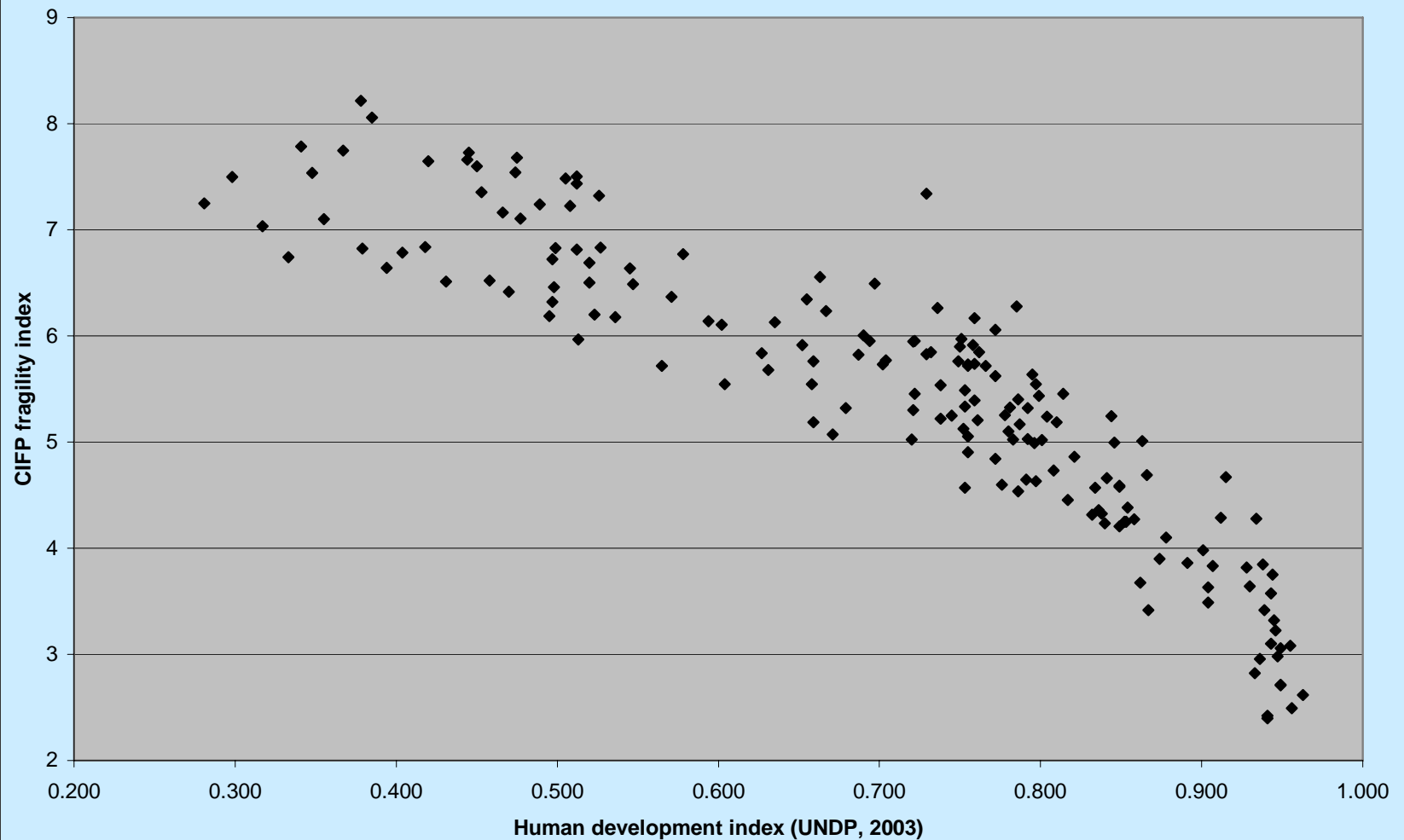


Correlates of Fragility

Human Development Index

Country Indicators for Foreign Policy

Relation of Development to Fragility



Correlates of Fragility

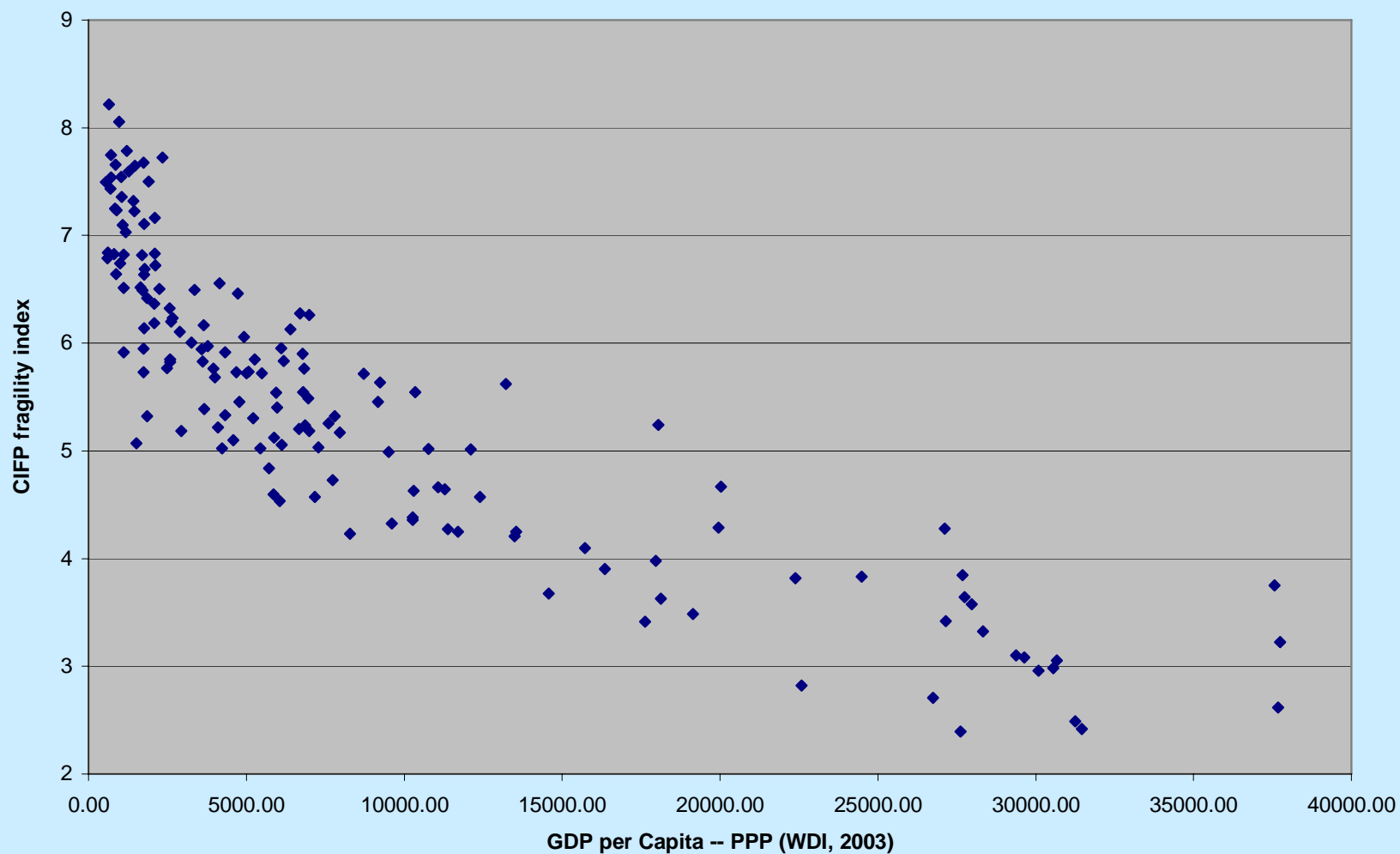
GDP

Country Indicators for Foreign Policy

Relation of GDP Per Capita to Fragility

NPSIA

Carleton
UNIVERSITY



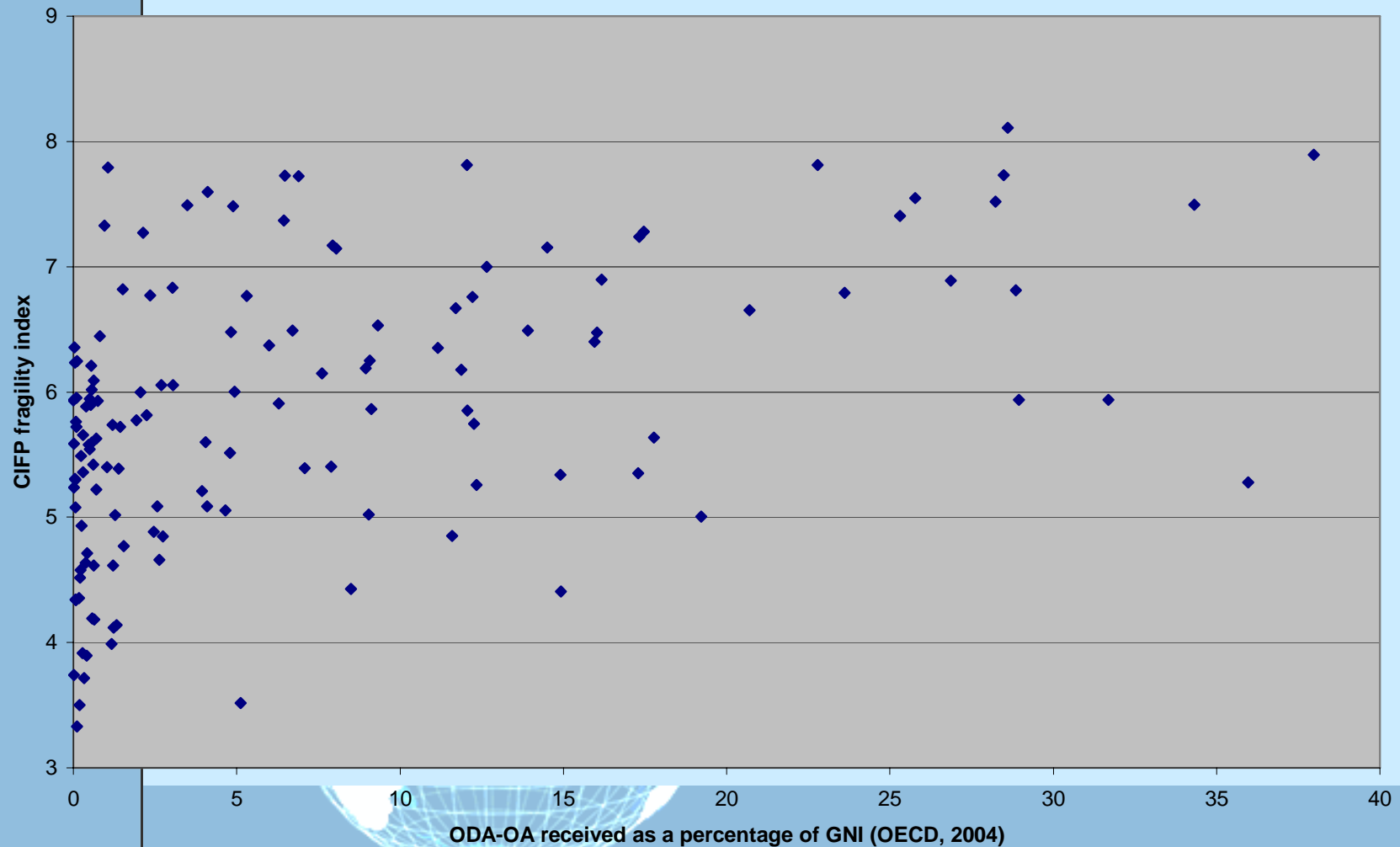
Correlates of Fragility Aid

Country Indicators for Foreign Policy

NPSIA

Carleton
UNIVERSITY

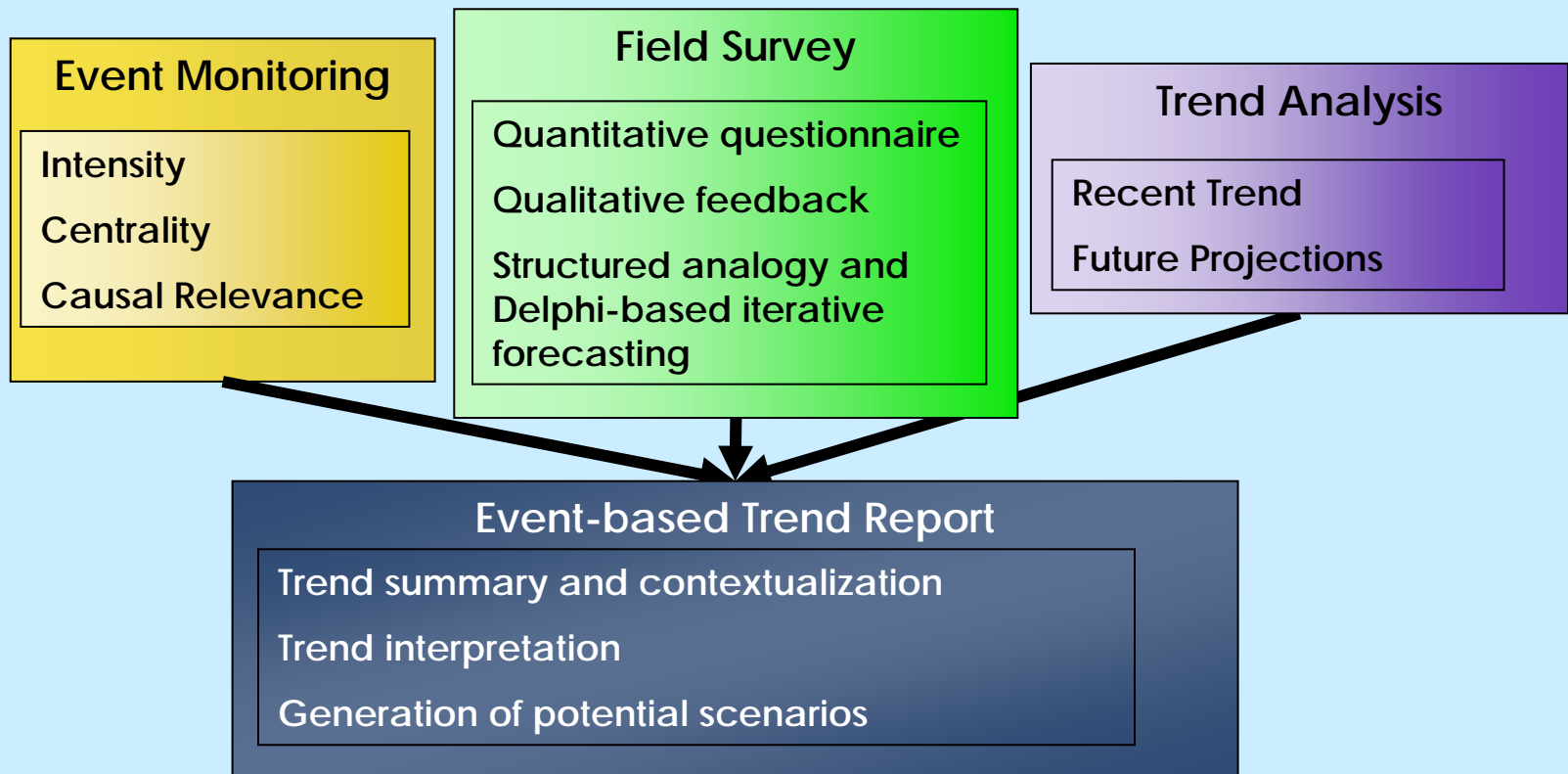
Relation of Aid to Fragility



Dynamic Data Analysis

Qualitative and Quantitative Inputs

In addition to a structural assessment for all countries, CIFP performs an event-based trend analysis for potentially fragile states. Data sources are varied, including both qualitative input from officers in the field and quantitative event monitoring.



Haiti Events

Export
to
excel

Events data

Sources

Open Report

Trendline
tools

New Event

Copy Event

"Type" details

Delete Event

Filter by Sign

Show all

Date 01-Sep-06

ID:
1

Finished

Yes

Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
1	2	3	4	5	6	7

Sign

-1

Causality

2

Escalation

1

Centrality:

1

Stakeholders

1. Government
2. International community
3. Neighboring States
4. Diaspora
5. UN Stabilizing Force
6. Population
7. Other major political parties
8. Roman Catholic Church
9. Business elites
10. Gangs
11. Police

Composite Indicator

CA+CE+ES

-4

[Update
composite
indicator](#)

Type

1. Consent
2. Discuss
3. Extend Gesture
4. Grant
5. Assist
6. Comment
7. Economic
8. Human Death/Illness
9. Natural Disaster/Animal Incident
10. Government Activity
11. Warn
12. Other
13. Complain
14. Challenge
15. Deny
16. Inflict Harm

Event Two police officers were shot and injured at the seaport in an attack carried out by unidentified armed individuals.

Cluster [Edit Cluster](#)

1. Governance
2. Economics
3. Security and Crime
4. Human Development
5. Demography
6. Environment

Comments

Source1 Radio Metropole

[Add Source](#)[Edit List](#)[Refresh List](#)

Location: Port-au-Prince

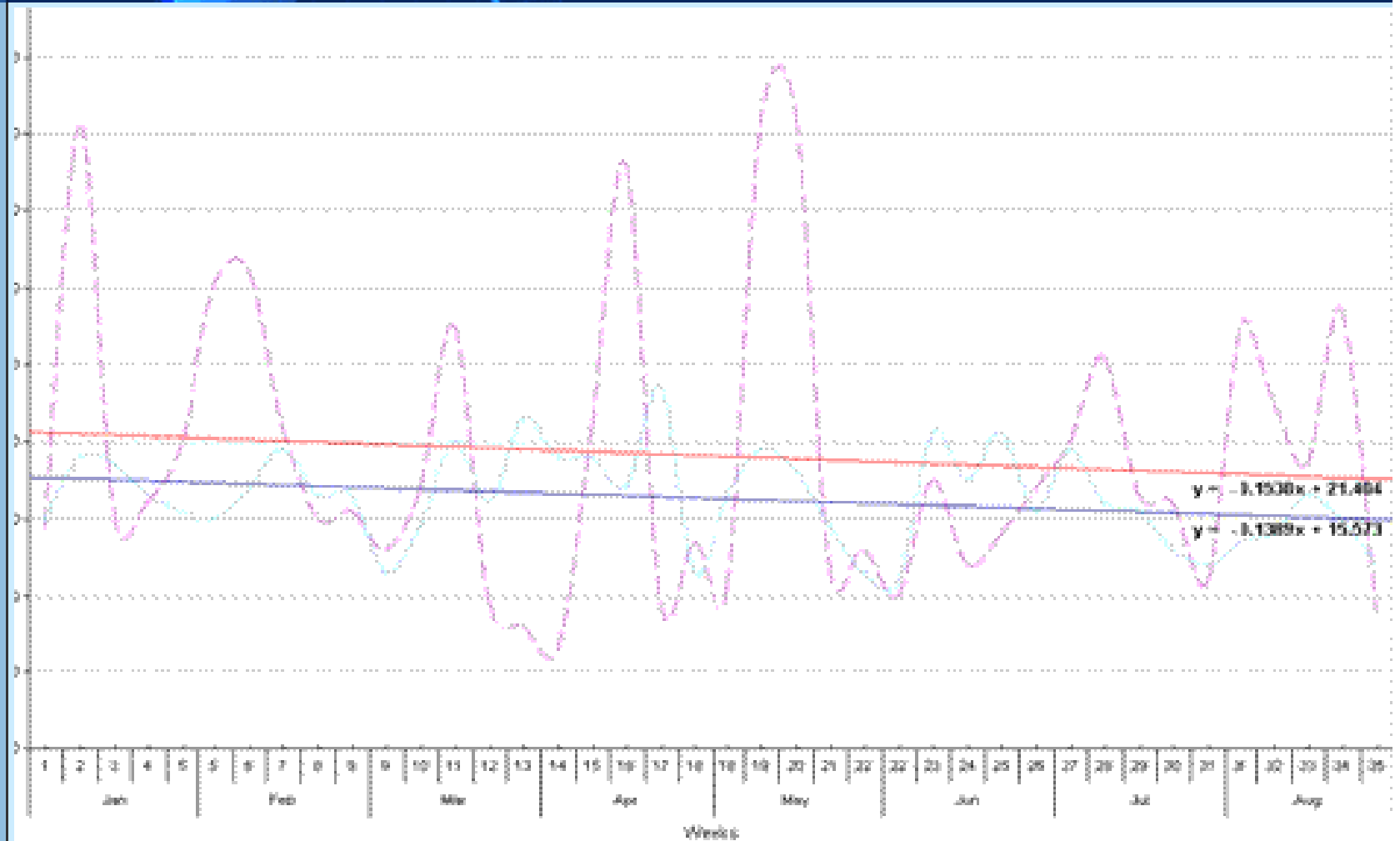
[Add Location](#)[Edit List](#)[Refresh List](#)

Keywords

gangs

Keywords List

1.



Existing approaches to fragility

- Three streams in current literature
 - Development
 - World Bank, DFID, CIDA etc
 - Conflict
 - Agenda for Peace, Carnegie Commission, Fund for Peace, International Crisis Behaviour etc
 - Stability
 - Political Instability Task Force, Goldstone et al, Polity IV etc

Existing approaches to fragility

- Dependent variables defined in terms of failure
 - Usually as a violent end state or low capacity
- Limited ability to anticipate earlier turning points

- Fundamental components of “stateness”
 - Authority
 - Legitimacy
 - Capacity
- Fragility connotes potential (dispositional property) involving all three components

Fragile states lack:

the *functional authority* to provide basic security within their borders;

the *institutional capacity* to provide basic social needs for their populations;

and/or the *political legitimacy* to effectively represent their citizens at home and abroad.

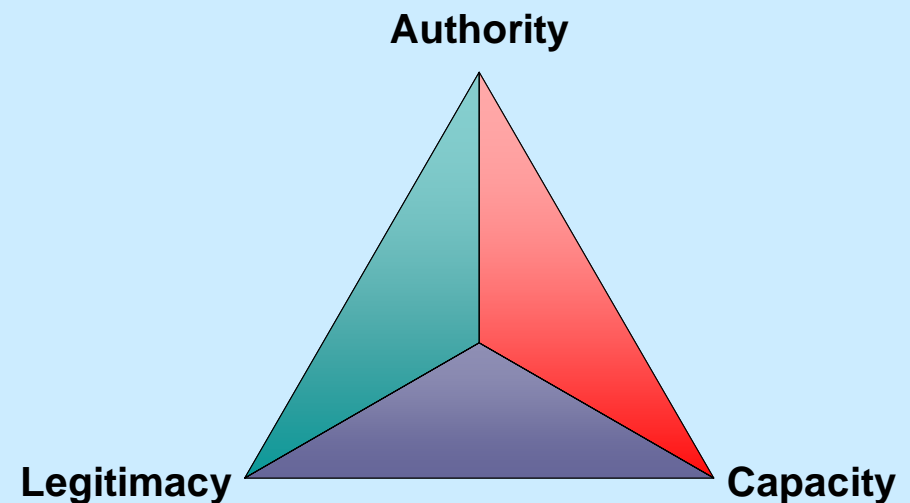


Table 1 Pakistan Fragility Rankings	Cluster avg.	Fragility index score	Fragility index rank	Raw Data — Five year avg	Trend Score
<i>STRUCTURAL DATA (SOURCE AND SCALE OF RAW DATA IN PARENTHESES) 2007</i>					
1. Governance	6.74				
Freedom of the Press (FH, index, 0-100)		6.0	73	59.2	s.q.
Gov't Effectiveness (WB Governance Matters, index, Deviation from mean)		6.1	70	-0.5	*
Level of Corruption (TI, index, 0-10)		7.9	27	2.3	neg
Level of Democracy (Polity IV, index, (-10 - 10))		7.6	29	-5.4	pos
Level of participation in international political organizations (CIFP)		5.8	68	7.0	*
Percentage of Female Parliamentarians, index, (WB WDI)		2.6	154	21.8	*
Permanence of Regime Type (Polity IV, years since regime change)		7.8	25	3.0	s.q.
Refugees hosted (UNHCR, total)		9.0	1	1319167.8	pos
Restrictions on Civil Liberties (FH, index, 1-7)		6.5	35	5.0	s.q.
Restrictions on Political Rights (FH, index, 1-7)		6.9	23	6.0	s.q.
Rule of Law (WB GM, Deviation from mean)		6.8	53	-0.8	*
Voice and Accountability in Decision-making (WB GM, Dev. from mean)		7.8	29	-1.2	*
2. Economics	5.47				
Economic growth — Percentage of GDP (WB WDI)		4.0	125	4.8	pos
Economic Size — Relative (WB WDI, GDP per capita, constant 2000 US\$)		6.9	47	553.3	s.q.
Economic Size — Total (WB WD, GDP, constant 2000 US\$)		3.0	136	8.23E+10	pos
External Debt — percentage of GNI (WB WDI)		3.4	92	35.3	*
FDI — percentage of GDP (WB WDI)		2.8	141	0.8	s.q.
Foreign Aid — percent of Central Government Expenditures (WB WDI)		6.5	25	11.6	s.q.
Foreign Aid — Total per capita (WB WDI)		3.0	126	10.0	s.q.
Inequality — GINI Coefficient (WB WDI)		2.3	101	30.6	*
Inflation (WB WDI)		5.8	58	5.2	neg

Informal Economy — Black Market (Heritage Fund, Index, 1-5)	5.2	44	4.0	s.q.
Informal Economy — Ratio of PPP to GDP (WB WDI)	6.3	55	3.6	pos
Infrastructure — Reliability of Electricity Supply (WB, % output lost)	8.2	12	25.7	s.q.
Infrastructure — Telephone mainlines per 1000 inhabitants (WB)	7.0	49	25.4	s.q.
Infrastructure — Internet Usage per 1000 inhabitants (WB)	7.3	40	7.3	s.q.
Investment Climate — Contract Regulation (Heritage Foundation, Index, 1-5)	2.7	85	3.2	pos
Level of participation in international economic organizations (CIFP)	8.0	24	2.0	*
Paying Taxes (WB Doing Business, global rank)	7.4	32	141.5	*
Regulatory Quality (WB GM, deviation from mean)	7.2	42	-0.8	*
Remittances Received — percentage of GDP (WB)	6.3	52	0.0	neg
Reserve Holdings — Total (WB)	3.4	121	9.33E+09	s.q.
Trade Balance — percentage of GDP (WB)	3.1	112	2.3	s.q.
Trade Openness — percentage of GDP (WB)	8.8	5	32.2	s.q.
Unemployment — Total (WB)	3.9	60	6.9	neg
Percentage of Women in the Labour Force (WB)	8.5	13	26.2	pos
3. Security & Crime	7.44			
Conflict intensity (Uppasala PRIO, number of conflict-related deaths)	1.0	35	0.0	*
Dependence on External Military Support (FFP, Index, 1-10)	8.1	12	8.9	*
Human Rights — Empowerment (CIRI, Index, 0-10)	8.0	29	2.0	s.q.
Human Rights — Physical Integrity (CIRI, Index, 0-8)	8.5	14	1.6	s.q.
Military Expenditure — percentage of GDP (WDI)	7.5	21	3.8	s.q.
Political Stability (WB GM, deviation from mean)	8.3	15	-1.6	*
Refugees Produced (WB, total)	6.9	34	19191.6	neg
Risk of ethnic Rebellion (CIFP, based on MaR dataset)	8.7	5	13.0	*
Terrorism -- Number of fatalities (US NCTC, number of fatalities)	8.7	6	306.5	*
Terrorism -- Number of Incidents (US NCTC, number of incidents)	8.7	7	294.5	*

4. Human Development	6.15				
Access to Improved Water (WB, percent of the population)	4.7	94	91.0	*	
Access to Sanitation (WB, percent of the population)	5.9	65	59.0	*	
Education — Primary Completion — female (WB, percent)	..	..	..	..
Education — Primary Completion — total (WB, percent)	..	..	..	..
Education — Primary Enrolment — total (WB, percent)	..	..	..	..
Education — Primary Enrolment — Ratio Female to Male (WB)	8.8	5	69.8	pos	
Food Security — Aid as percentage of total consumption (FAO STAT)	5.0	64	0.8	*	
Gender Empowerment Measure (UNDP, index, 0-1)	8.0	10	0.4	*	
Gender-related Development Index (UNDP, index, 0-1)	7.4	30	0.5	pos	
Health Infrastructure — Expenditures as a percentage of GDP (WB)	8.6	11	2.8	neg	
HIV/AIDS — New AIDS Cases Reported (UN, total)	3.8	65	16.4	*	
HIV/AIDS — Percent of Adult Females Infected (WB)	1.3	107	15.0	*	
HIV/AIDS — Percent of Adult population infected (WB)	1.3	143	0.1	*	
Human Development Index (UNDP, index 0-1)	7.3	40	0.5	pos	
Infant Mortality (WB, per 1000 live births)	7.7	29	82.6	*	
Literacy (WB, percent of population age 15 and above)	8.2	13	49.9	*	
Literacy — female (WB, percent of female population age 15 and above)	8.2	11	36.0	*	
5. Demography	6.62				
Life Expectancy — Female (WB)	6.5	58	65.2	*	
Life Expectancy — Total (WB)	6.3	66	64.2	*	
Migration — Estimated Net Rate (UN)	7.4	38	-2.4	*	
Population Density (WB, population per square km)	7.6	35	192.7	neg	
Population Diversity — Ethnic (CIFP)	..	..	..	..
Population Diversity — Religious (CIFP)	4.9	81	0.4	*	

Population Growth (WB, annual percent)	7.5	34	2.4	s.q.
Slum Population — proportion of population (WDI, UN)	5.8	41	0.3	*
Urban Growth Rate — Annual percent (WB)	7.1	46	3.5	s.q.
Youth Bulge — Percent aged 0-14 of total population (WB)	6.4	59	39.5	pos
6. Environment	5.64			
Arable/fertile land availability (WB, hectares per person)	5.5	86	0.1	s.q.
Consumption — Commercial energy consumption per capita (UN, kg of oil equivalent)	3.4	127	284.3	s.q.
Consumption — Use of solid fuels (UN, percent of population using)	6.7	48	72.0	*
Disaster Risk Index, (UNDP, average number of deaths per million)	6.3	58	2.6	*
Ecological Footprint — Global hectares per capita (WWF, Global Footprint Network)	1.3	144	0.6	*
Water — Annual withdrawal (FAO STAT, percent of total renewable)	8.2	16	76.1	*
Water — Available renewable per capita (FAO STAT, m ³ /inhabitants/year)	7.5	34	1433.5	*
Forest — Annual percent change in area (FAO)	8.5	10	-2.1	*
Pollution — CO ₂ emissions per capita (WB, metric tons per capita)	3.4	126	0.8	s.q.
Pollution — CO ₂ emissions per dollar PPP (WB, kg per 2000 US\$ PPP)	5.6	71	0.4	s.q.
TOTAL	6.18			

Fragile States Index 2007

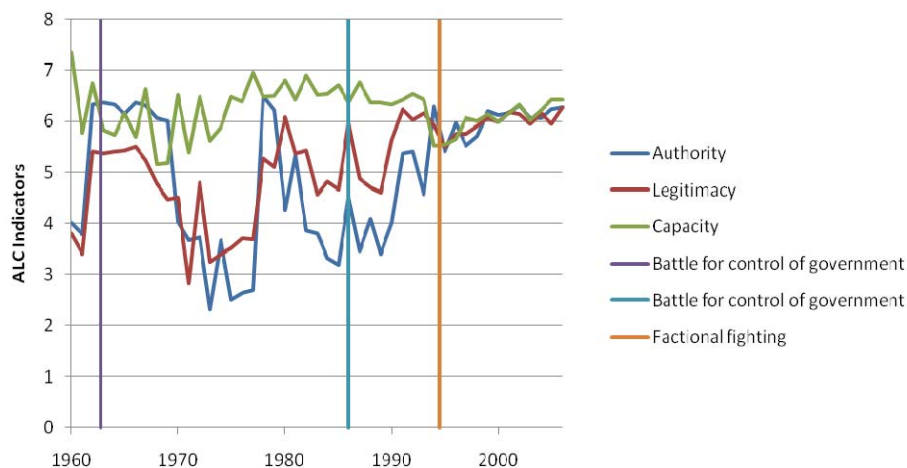
June 2007

Country	Index Score	Index Rank	Country	Index Score	Index Rank	Country	Index Score	Index Rank	Country	Index Score	Index Rank
Afghanistan	6.86	1	Tanzania	5.73	48	Kazakhstan	4.95	95	Dominica	3.92	142
Sudan	6.86	2	Mali	5.70	49	El Salvador	4.95	96	Saint Kitts & Nevis	3.91	143
Burundi	6.77	3	Senegal	5.66	50	Libya	4.93	97	Greece	3.88	144
Somalia	6.77	4	Zambia	5.65	51	Peru	4.92	98	Mauritius	3.87	145
DRC	6.61	5	Guatemala	5.64	52	Ukraine	4.92	99	Costa Rica	3.87	146
Iraq	6.54	6	Papua New Guinea	5.60	53	Maldives	4.90	100	Poland	3.86	147
Haiti	6.53	7	Sao Tome and Principe	5.59	54	Paraguay	4.86	101	Latvia	3.83	148
Yemen, Rep.	6.51	8	Uzbekistan	5.55	55	Jordan	4.86	102	Bahamas	3.83	149
Liberia	6.49	9	Mozambique	5.51	56	Tonga	4.84	103	Slovakia	3.75	150
Ethiopia	6.48	10	Georgia	5.51	57	Jamaica	4.82	104	Korea, South	3.75	151
Eritrea	6.41	11	Madagascar	5.50	58	Macedonia	4.81	105	Estonia	3.72	152
Angola	6.40	12	Solomon Islands	5.50	59	Cape Verde	4.80	106	Chile	3.71	153
Cote d'Ivoire	6.40	13	Ghana	5.50	60	South Africa	4.79	107	Cyprus	3.69	154
Chad	6.37	14	Timor-Leste	5.49	61	Micronesia	4.77	108	Hungary	3.69	155
Nigeria	6.37	15	Indonesia	5.48	62	Cuba	4.75	109	Uruguay	3.68	156
Palestinian Terr.	6.35	16	Azerbaijan	5.46	63	Namibia	4.74	110	Italy	3.67	157
Sierra Leone	6.34	17	Honduras	5.45	64	Albania	4.73	111	Spain	3.61	158
Guinea	6.26	18	Kyrgyzstan	5.43	65	Qatar	4.66	112	Singapore	3.60	159
Nepal	6.23	19	Lebanon	5.43	66	Mexico	4.66	113	Czech Republic	3.55	160
Pakistan	6.22	20	Bhutan	5.42	67	Belize	4.65	114	France	3.53	161
Guinea-Bissau	6.22	21	Nicaragua	5.40	68	Brazil	4.64	115	United States	3.51	162
Central African Republic	6.22	22	Algeria	5.36	69	Samoa	4.62	116	Malta	3.50	163
Uganda	6.20	23	Lesotho	5.35	70	Fiji	4.62	117	Lithuania	3.49	164
Mauritania	6.18	24	Syria	5.34	71	Tunisia	4.62	118	Portugal	3.49	165
Equatorial Guinea	6.17	25	Sri Lanka	5.34	72	Thailand	4.59	119	United Kingdom	3.46	166
Togo	6.17	26	Egypt	5.32	73	Kiribati	4.55	120	Barbados	3.32	167
Kenya	6.12	27	Serbia and Montenegro	5.27	74	Saint Vincent and the Grenadines	4.54	121	Netherlands	3.32	168
Congo, Rep.	6.11	28	Colombia	5.26	75	UAE	4.50	122	Belgium	3.29	169
Djibouti	6.08	29	Saudi Arabia	5.25	76	Oman	4.49	123	Japan	3.27	170

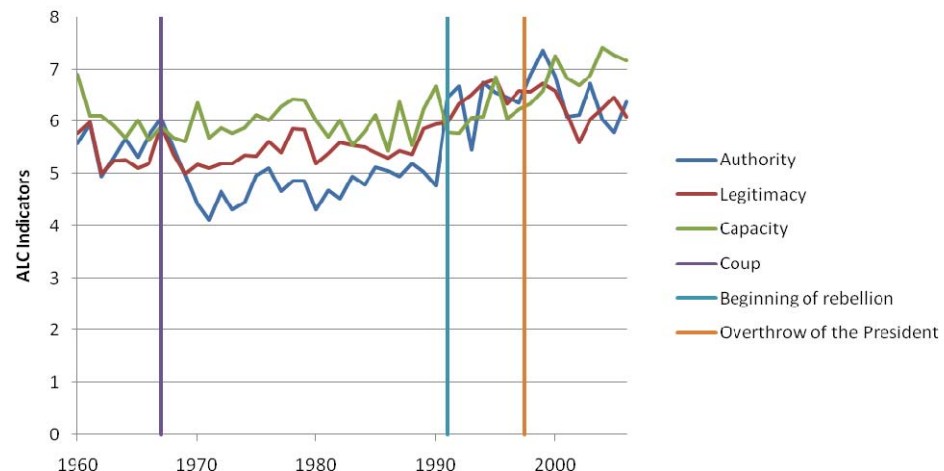
ALC Top 40 Rankings

Country	Authority Index Score	Authority Index Rank	Country	Legitimacy Index Score	Legitimacy Index Rank	Country	Capacity Index Score	Capacity Index Rank
Sudan	7.20	1	Saudi Arabia	7.41	1	Burundi	7.08	1
Afghanistan	7.01	2	Libya	7.17	2	Afghanistan	7.04	2
Iraq	6.96	3	Korea, North	7.14	3	Ethiopia	7.04	3
DRC	6.91	4	Yemen, Rep.	7.06	4	Niger	6.96	4
Palestinian Terr.	6.79	5	Somalia	7.00	5	Sierra Leone	6.95	5
Burundi	6.77	6	Iraq	6.96	6	Djibouti	6.95	6
Cote d'Ivoire	6.76	7	UAE	6.92	7	Mauritania	6.87	7
Angola	6.75	8	Turkmenistan	6.89	8	Sudan	6.85	8
Nigeria	6.70	9	Equatorial Guinea	6.79	9	Eritrea	6.83	9
Somalia	6.62	10	Iran	6.76	10	Burkina Faso	6.83	10
Liberia	6.59	11	Syria	6.70	11	Mali	6.83	11
Haiti	6.58	12	Belarus	6.67	12	Haiti	6.80	12
Myanmar (Burma)	6.43	13	Uzbekistan	6.66	13	Mozambique	6.80	13
Nepal	6.42	14	Qatar	6.66	14	Somalia	6.75	14
Pakistan	6.32	15	Palestinian Terr.	6.60	15	Benin	6.74	15
Guinea-Bissau	6.31	16	Lebanon	6.57	16	Chad	6.73	16
Indonesia	6.27	17	Bahrain	6.51	17	Sao Tome and Principe	6.70	17
Iran	6.25	18	Egypt	6.48	18	Zambia	6.69	18
Ethiopia	6.22	19	Eritrea	6.47	19	Yemen, Rep.	6.68	19
Central African Republic	6.17	20	Zimbabwe	6.46	20	Guinea	6.68	20

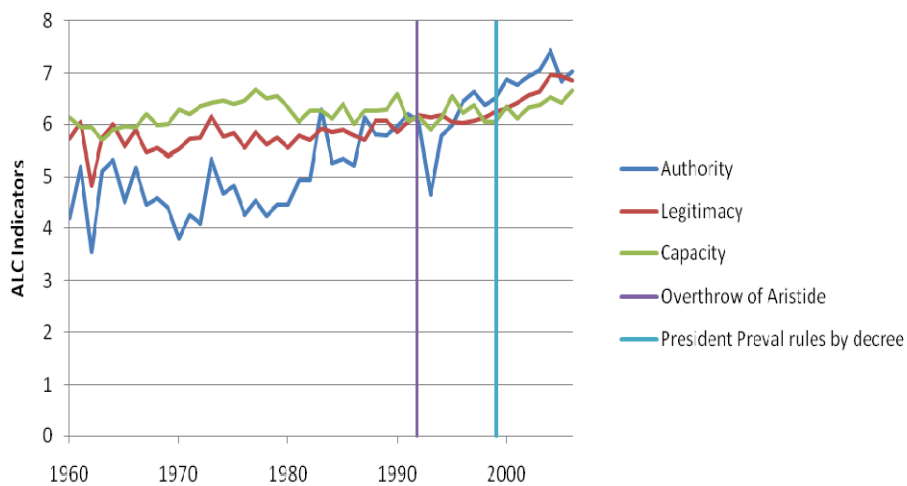
ALC Indicators for Yemen (1960-2006)



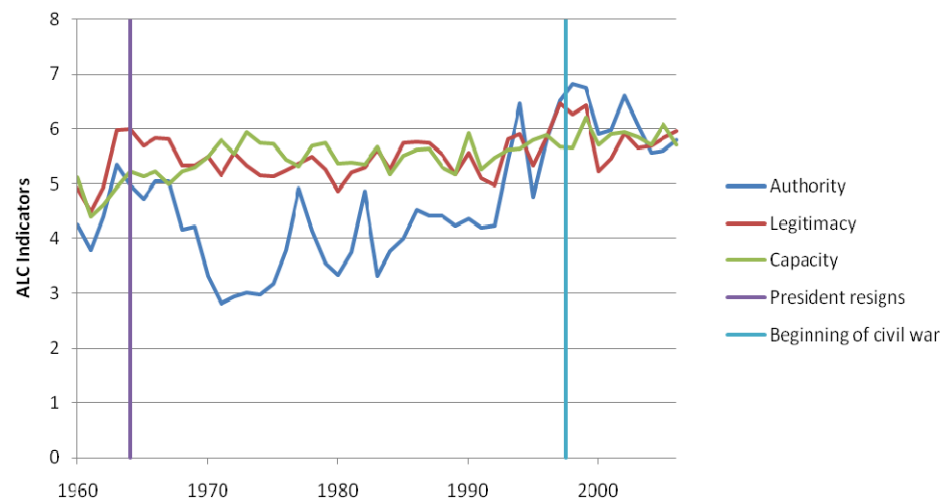
ALC Indicators for Sierra Leone (1960-2006)



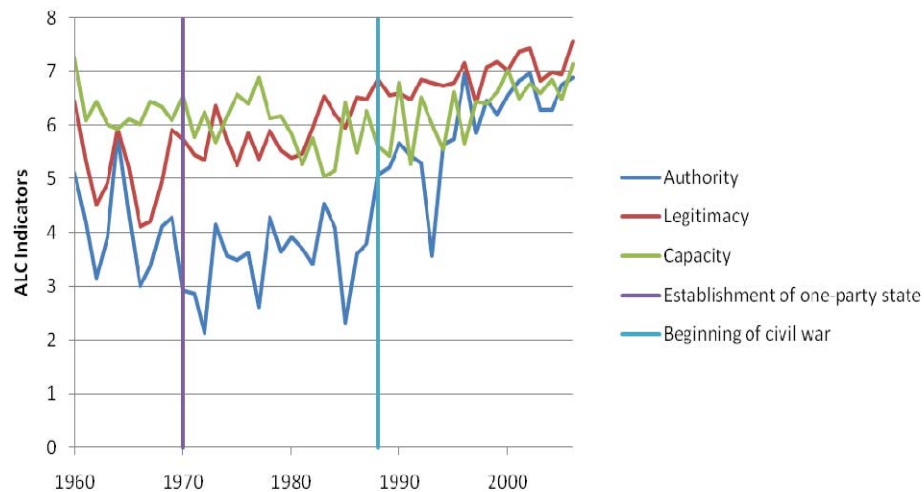
ALC Indicators for Haiti (1960-2006)



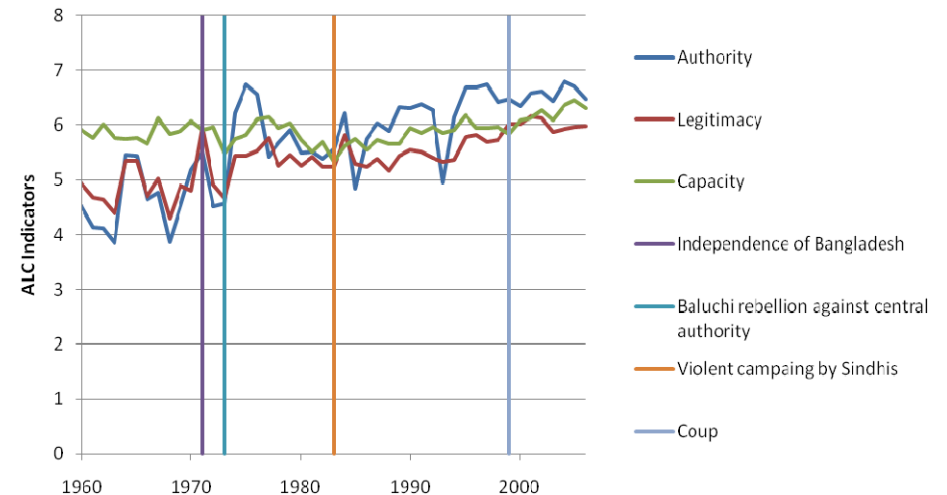
ALC Indicators for Republic of Congo (1960-2006)



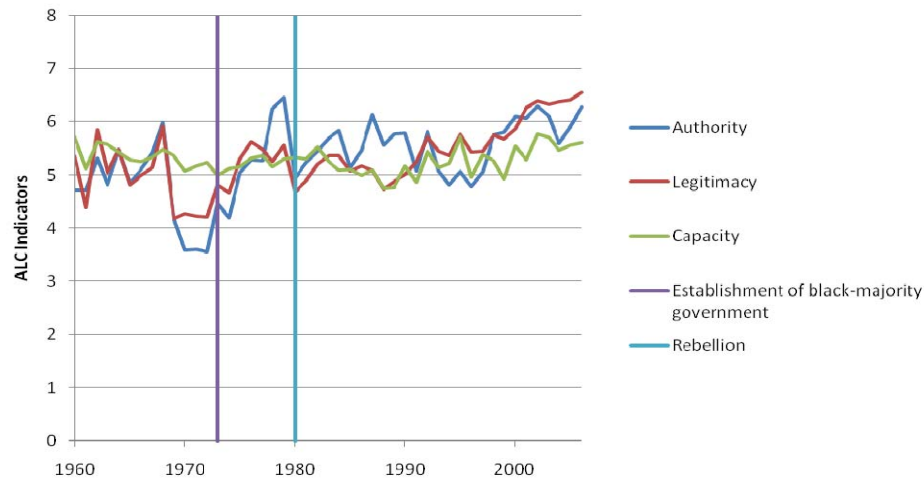
ALC Indicators for Somalia (1960-2006)



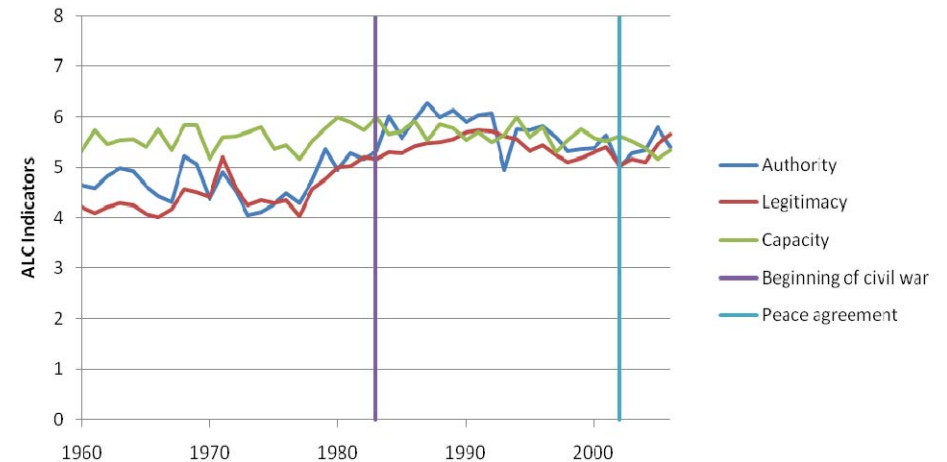
ALC Indicators for Pakistan (1960-2006)



ALC Indicators for Zimbabwe (1960-2006)



ALC Indicators for Sri Lanka (1960-2006)





Research Design and Results

Country Indicators for Foreign Policy



Let us now look at some of the ‘empirical’ work that we have conducted

-causes of fragility

-fragility of SIDS

-aid allocation and fragility; aid effectiveness in fragile states

Project 1: Causes of Fragility

Country Indicators for Foreign Policy



An Empirical Model:

- three streams and leading indicators**
- validation of the CFP fragility index**
- root causes**

$$fragility_i = f(c, pcgdp_i, growth_i, demo_i, trade_i, inmo_i, dummies)$$

Project 1: Causes of Fragility

Table 1: Summary Statistics

Country Indicators for Foreign Policy



Summary Statistics

Variable Name	Description	Number of Obs'ns	Mean	Median	STDEV
ETRISK*	risk of rebellion	98	4.84	3.77	3.86
FRG	fragility index	156	5.89	5.8	1.06
GDPPC	gdp per capita	134	5031	3867	4552
GINI	gini coefficient	100	42.33	40.58	9.94
GRW	economic growth	148	3.46	3.56	3.11
HDI	human development index	148	0.65	0.72	0.16
HREM	human rights – empowerment	154	5.32	6	3.07
INMO	infant mortality rate	155	51.47	36.8	39.2
LDEM	level of democracy	129	1.77	4	6.4
LIT	literacy rate	107	77.73	84	20.34
POPDIVET*	ethnic diversity	128	0.39	0.42	0.26
POPDIVREL	Religious diversity	134	0.39	0.38	0.23
TRAD	trade openness	141	83.18	75.38	37.71

Project 2: Causes of Fragility

- DV: Fragility index, 4 and above

Explanatory variables	Benchmark model	
Constant	9.81**	(13.30)
Logged GDP per capita (PPP)	-0.47**	(-6.06)
Growth	-0.05**	(-3.47)
Level of democracy	-0.04**	(-4.67)
Trade openness	-0.01**	(-3.45)
Infant Mortality	0.01**	(3.33)
Africa	0.29**	(2.29)
Latin America	0.17	(1.33)
MENA	-0.01	(-0.04)
N	116	
Adj R ²	0.83	

Project 2: Causes of Fragility

- DV: Fragility index, 4 and above

Explanatory variables	Benchmark model	
Constant	9.44**	(12.35)
Logged GDP per capita (PPP)	-0.40**	(-4.77)
Growth	-0.05**	(-3.24)
Level of democracy	-0.03**	(-4.21)
Level of democracy squared	-0.01**	(-2.06)
Trade openness	-0.01**	(-3.69)
Infant Mortality	0.01**	(3.28)
Africa	0.29**	(2.29)
Latin America	0.18**	(1.33)
MENA	-0.05	(-0.32)
N	116	
Adj R ²	0.83	

Project 2: Causes of Fragility

- DV: Fragility index, 4 and above

Explanatory variables	Benchmark model	
Constant	9.69**	(15.03)
Logged GDP per capita (PPP)	-0.42**	(-5.98)
Growth	-0.05**	(-4.27)
Human rights empowerment	-0.05	(-0.96)
Human rights empowerment squared	-0.01**	(-1.19)
Trade openness	-0.01**	(-3.87)
Infant Mortality	0.01**	(4.38)
Africa	0.36**	(3.01)
Latin America	0.28**	(2.28)
MENA	-0.08	(-0.64)
N	129	
Adj R ²	0.86	

Project 2: Causes of Fragility

- DV: Fragility index, 4 and above

Explanatory variables	Benchmark model	
Constant	9.39**	(13.27)
Human Development Index	-4.36**	(-5.26)
Growth	-0.05**	(-2.67)
Level of democracy	-0.03**	(-3.10)
Level of democracy squared	-0.01**	(-3.20)
Trade openness	-0.01**	(-2.95)
Infant Mortality	0.01	(0.35)
Africa	-0.03	(-0.30)
Latin America	0.10	(0.73)
MENA	-0.22	(-1.37)
N	118	
Adj R ²	0.83	

Project 2: Fragility of SIDS

Country Indicators for Foreign Policy

- **Carment, Prest, Samy (2006): we find that Small Island Developing States (37) are medium risk**
- **Mitigating factors within SIDS not found within the broad data set that serve to lessen the overall incidence of conflict**
- **As a group, they experience less conflict; in fact, they experience low-level conflict in ways that are not related to conventional war-based definitions and measurements of large scale violence**
- **Other patterns: demographic and environmental stress are usually above average, while economic performance is usually below average**
- **Governance in SIDS: Carment, Gagne, Prest, Samy (2008)**

Project 2: Fragility of SIDS

Country Indicators for Foreign Policy

Small Island Developing States	Risk Index (weighted average)	Small Island Developing States	Risk Index (weighted average)
Barbados	3.53	Palau	4.54
Malta	3.56	Tonga	4.54
Bahamas	3.77	Seychelles	4.60
Guyana	3.90	Belize	4.76
Antigua and Barbuda	3.91	Cape Verde	4.77
Jamaica	4.01	Dominican Republic	4.83
Cyprus	4.07	Singapore	4.86
Mauritius	4.13	Bahrain	4.93
Samoa	4.15	Cuba	4.93
Micronesia (Federated States of)	4.17	Maldives	4.93
Vanuatu	4.19	Papua New Guinea	5.04
St. Lucia	4.20	Kiribati	5.09
Trinidad and Tobago	4.21	Sao Tome and Principe	5.18
Grenada	4.35	Solomon Islands	5.25
Suriname	4.36	Comoros	5.63
Fiji	4.39	Timor-Leste	5.82
St. Vincent and the Grenadines	4.40	Haiti	6.03
St. Kitts and Nevis	4.49	Guinea-Bissau	6.31
Dominica	4.50		

Project 2: Governance in SDS

Country Indicators for Foreign Policy



Governance in SDS vs. Other Countries - CIFP Data (2002-2006)

Governance Indicators	All Countries	Developing Countries	SDS
Average score	5.00	5.39	4.61
Democratic Participation	5.56	5.96	5.98
Government and Accountability	5.11	5.45	5.49
Human Rights	4.97	5.50	4.34
Political Stability	4.88	5.34	4.04
Rule of Law	3.97	4.24	2.74
	5.59	5.98	5.18

Project 2: Governance in SIDS

Country Indicators for Foreign Policy



Determinants of Governance (2002-2006)

Explanatory Variables	1	2	3	4
	Developing Countries		Small Developing States	
Constant	9.75** -15.7	10.21** -18.67	8.87** -6.22	9.26** -6.89
log(gdpppc9701)	-0.56** (-6.94)	-0.54** -7.27	-0.44** (-2.68)	-0.43** (-2.42)
trade9701	-0.01* (-1.62)	-0.01** (-3.00)	-0.01 (-1.25)	-0.01** (-1.99)
elf6080	0.12 -0.39	-	0.29 -0.52	-
elf85	-	-0.55** (-1.87)	-	-0.11 (-0.16)
British	-0.55** (-2.96)	-0.33* (-1.76)	-0.68** (-1.91)	-0.48 (-1.16)
N	106	120	32	25
Adj. R-squared	0.49	0.41	0.45	0.42
F-Stat	24.89	20.03	7.28	5.34

Note: t-statistics are shown in brackets. * significant at 10%; ** significant at 5%.



Project 2: SIDS-Conclusions

Country Indicators for Foreign Policy



- **Main conclusions: SIDS face specific challenges unlike larger and more diverse states; their vulnerabilities tend to manifest themselves in different ways from large-scale violent conflict**

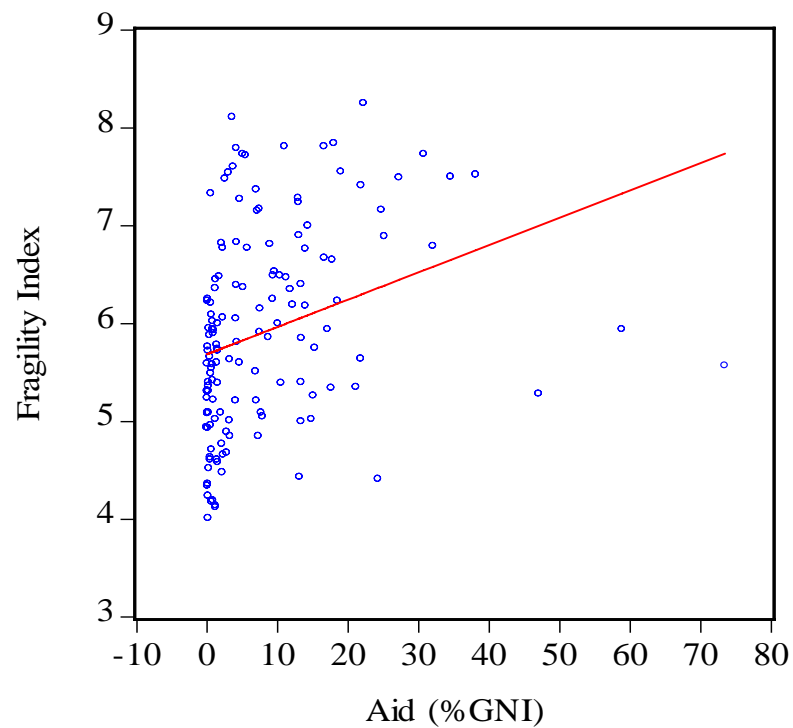
Project 3: Aid Policy and Fragility

Country Indicators for Foreign Policy

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Figure 1: Aid and Fragility (All Countries)



Project 3: Aid Policy and Fragility

Country Indicators for Foreign Policy



	1969-1978	1979-1988	1989-93	1994-1998	1999-2003
<u>All Aid Recipients</u>					
Aid Per Capita (US \$)					
-average	22.4	51.5	56.7	106.4	80.8
-standard deviation	30.4	64.9	70.7	518.9	202.5
Aid (%GNI)					
-average	5.9	8.9	10.6	10.7	8.8
-standard deviation	6.8	10.5	14.7	16.7	11.9
<u>Top 40 Fragile States</u>					
Aid Per Capita (US \$)					
-average	11.4	29.0	37.1	42.5	35.5
-standard deviation	10.3	21.6	23.8	38.6	46.1
Aid (%GNI)					
-average	6.5	11.3	15.7	16.0	13.8
-standard deviation	5.0	11.3	13.1	12.1	10.5
<u>Top 20 Fragile States</u>					
Aid Per Capita (US \$)					
-average	9.9	29.5	37.7	49.5	41.0
-standard deviation	7.1	19.7	22.8	48.8	62.6
Aid (%GNI)					
-average	6.1	12.1	16.0	17.6	15.9
-standard deviation	5.1	14.5	14.0	14.2	11.8

Project 3: Aid Policy and Fragility

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Determinants of Aid Allocation (Dependent Variable: Aid/GNI)

Explanatory Variables	All	5>	6>
<i>Constant</i>	-2.64 (-0.51)	1.42 (-0.16)	-29.19** (-2.64)
<i>Authority</i>	-2.60** (-3.10)	-3.28** (-2.95)	-0.63 (-0.73)
<i>Legitimacy</i>	-1.54 (-1.53)	-1.56 (-1.19)	-1.55 (-1.03)
<i>Capacity</i>	5.70** (-6.29)	5.74** (-6.14)	7.43** (-6.04)
N	145	117	60
Adj. R-squared	0.33	0.31	0.36

Project 3: Aid Policy and Fragility

Country Indicators for Foreign Policy



Aid Effectiveness

Explanatory Variables	All	5>	6>
<i>Constant</i>	5.9	3.8	-0.88
	-1.11	-0.63	(-0.10)
<i>Aid</i>	0.54**	0.57**	1.01**
	-2.14	-2.17	-2.99
<i>Aid*Aid</i>	0.01	-0.01	-0.01
	-0.31	(-0.01)	(-0.63)
<i>Aid*Fragility</i>	-0.08*	-0.07*	-0.12**
	(-1.93)	(-1.79)	(-2.49)
<i>Initial Income</i>	-0.43	-0.32	-0.47
	(-1.11)	(-0.70)	(-0.56)
<i>Population</i>	0.05	0.12	0.44*
	-0.24	-0.57	-1.69
<i>Literacy Rate</i>	-0.01	-0.01	-0.02
	(-0.06)	(-0.15)	(-0.96)
<i>Africa</i>	-0.71	-0.79	-0.35
	(-1.02)	(-1.10)	(-0.45)
N	99	84	44
Adj. R-squared	0.13	0.13	0.19

Policy Implications

By identifying the aspects of fragility that are associated with Authority, Legitimacy and Capacity, policies can be better targeted to structural weaknesses than we expect to result in conflict and conflict-related state failure analysis

CIFP Tools can be used to Monitor and to Evaluate impact and to assess risk

In the case of aid allocation, authority and capacity are significant factors

Future work: more in-depth analysis of causes of fragility and their evolution over time (panel data); examination of aid allocation and effectiveness for fragile states using panel data.