

Extent and Sources of State Fragility and Failure:

Core Factors in Fragility and Failure

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1. Key Findings
2. Concepts and Operationalization
3. Correlations, Causes, Aid impact and Small Developing States
4. Policy Implications

Structural data

- Baseline assessment
- Relative ranking

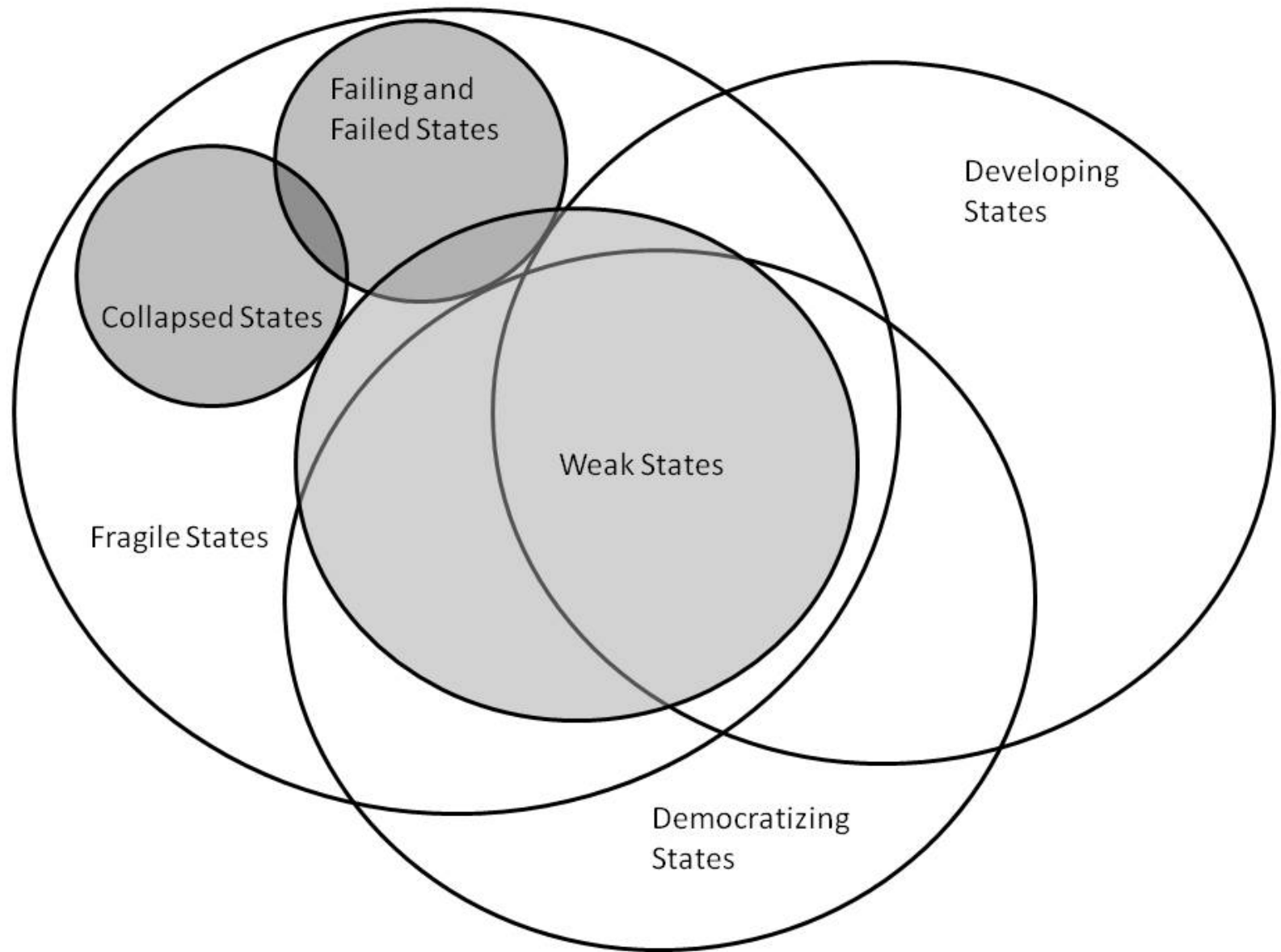
Event-based data

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

Evaluative Framework

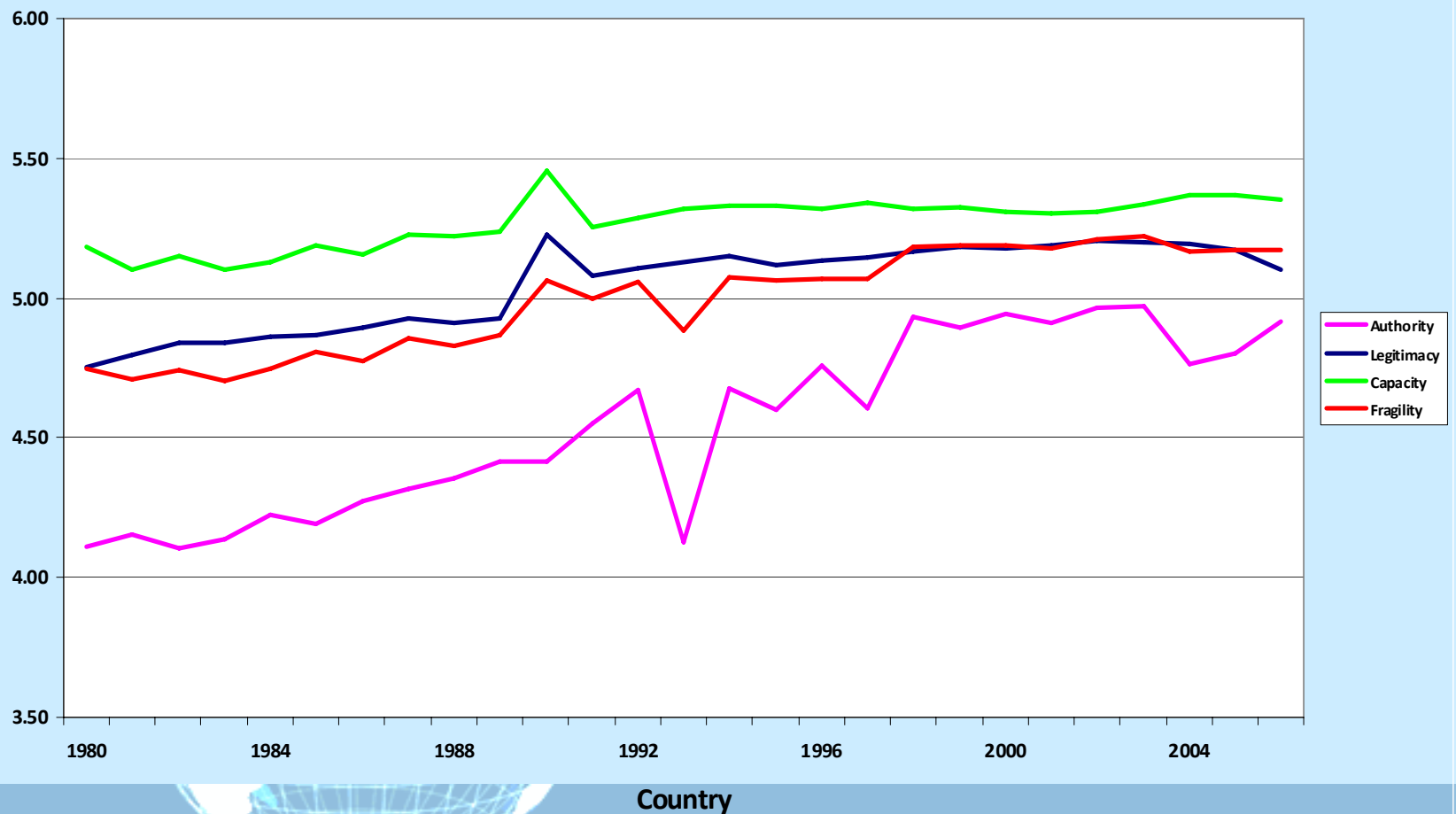
Qualitative Assessment

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



The State of the World: Fragility Increasing Over Time

State of the Developing World: 1980-2006



Key Findings

- Fragility can be measured by looking at **authority, legitimacy and capacity indicators**
- Failure most often associated with challenges to **authority and capacity** structures
- Foreign Aid focusing on **capacity** can be effective
- Fragile states are **over and underfunded**
- Small states **have unique problems** and must be closely monitored (eg Collier's Bottom Billion)

Key Findings

- Fragility and failure are distinct but related
 - States **become fragile and fail** for different reasons and entry points will be different
- Conflict is often a **symptom not a cause** of fragility
 - Not all fragile states experience conflict especially small developing states

Key Findings

Three streams in current literature

- **Development**

- World Bank, DFID, USAID etc

- **Conflict**

- Agenda for Peace, Carnegie Commission, Fund for Peace, International Crisis Behaviour,

- **Stability**

- Political Instability Task Force

All generate similar lists

Key Findings

Correlation Matrix (Developing Countries: 2006)

	Marshall-Goldstone	Fund for Peace	Brookings	LICUS	CIFP
Marshall-Goldstone	1.00				
Fund for Peace	0.62	1.00			
Brookings	-0.88	-0.71	1.00		
LICUS	-0.58	-0.56	0.76	1.00	
CIFP	0.80	0.69	-0.84	-0.59	1.00

Key Findings

- Dependent variables often defined in terms of failure
 - Usually as a violent end state or sometimes low capacity
- Need framework to anticipate earlier turning points, entry, sequencing and timing

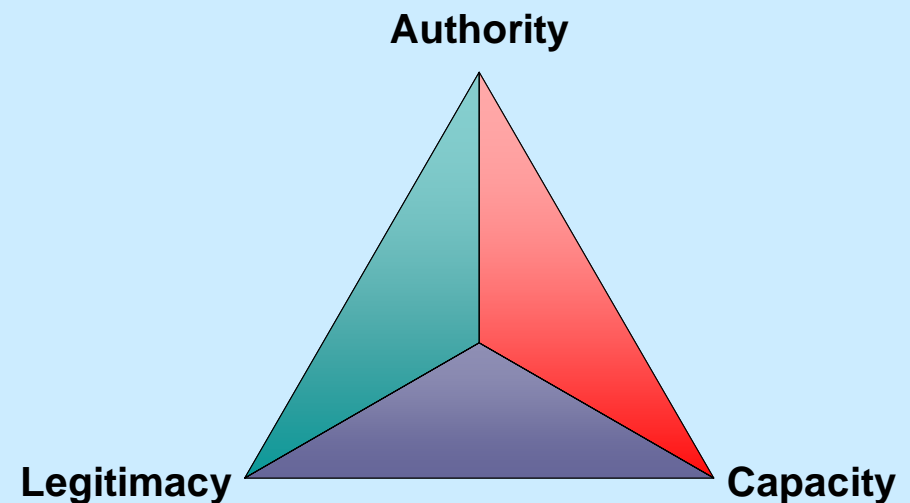
- Fundamental components of “stateness” to measure fragility
 - Authority
 - Legitimacy
 - Capacity
- Fragility connotes potential (dispositional property) involving all three components
- Fragility is a process not an end state

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



Pakistan's Entry Points for Programming: Governance, Economics, Security and Crime, Human Development, Demography and the Environment

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

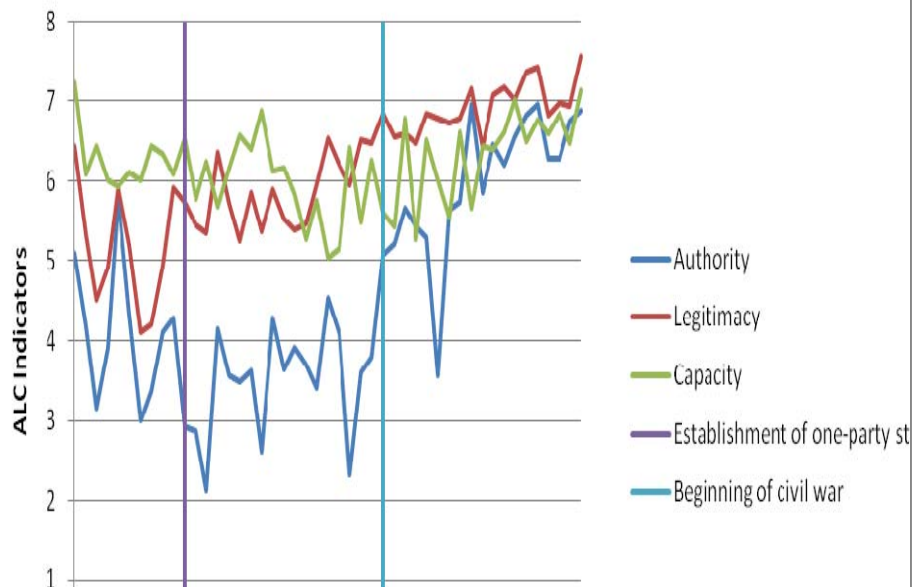
Country	Index Score	Index Rank	Country	Index Score	Index Rank	Country	Index Score	Index Rank	Country	Index Score	Index Rank
Afghanistan	6.86	1	Tanzania	5.73	48	Kazakhstan	4.95	95	Dominica	3.92	142
Sudan	6.86	2	Mali	5.70	49	El Salvador	4.95	96	Saint Kitts & Nevis	3.91	143
Burundi	6.77	3	Senegal	5.66	50	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

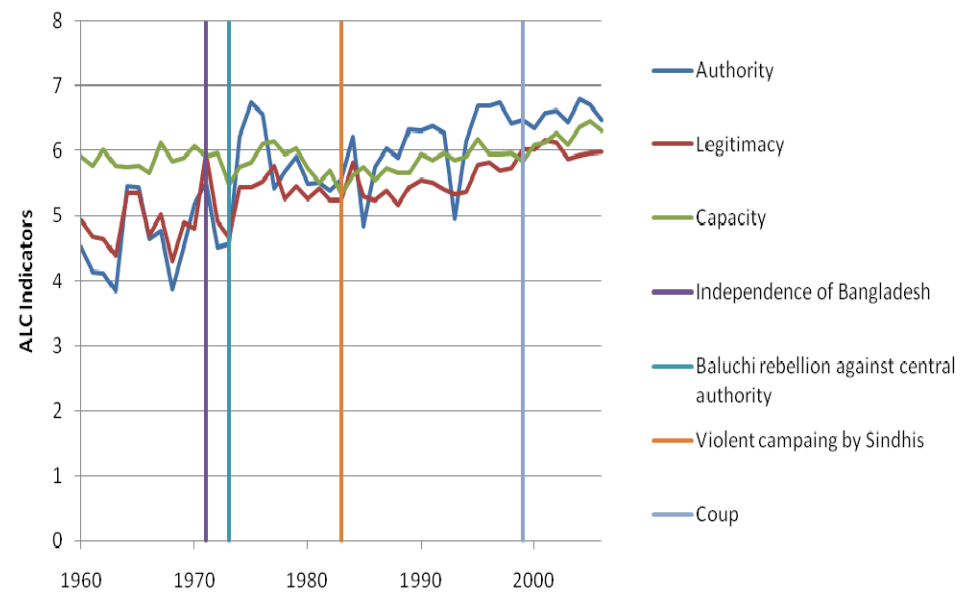
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Country	Authority Index Score	Authority Index Rank	Country	Legitimacy Index Score	Legitimacy Index Rank	Country	Capacity Index Score	Capacity Index Rank
Sudan	7.20	1	Saudi Arabia	7.41	1	Burundi	7.08	1
Afghanistan	7.01	2	Libya	7.17	2	Afghanistan	7.04	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

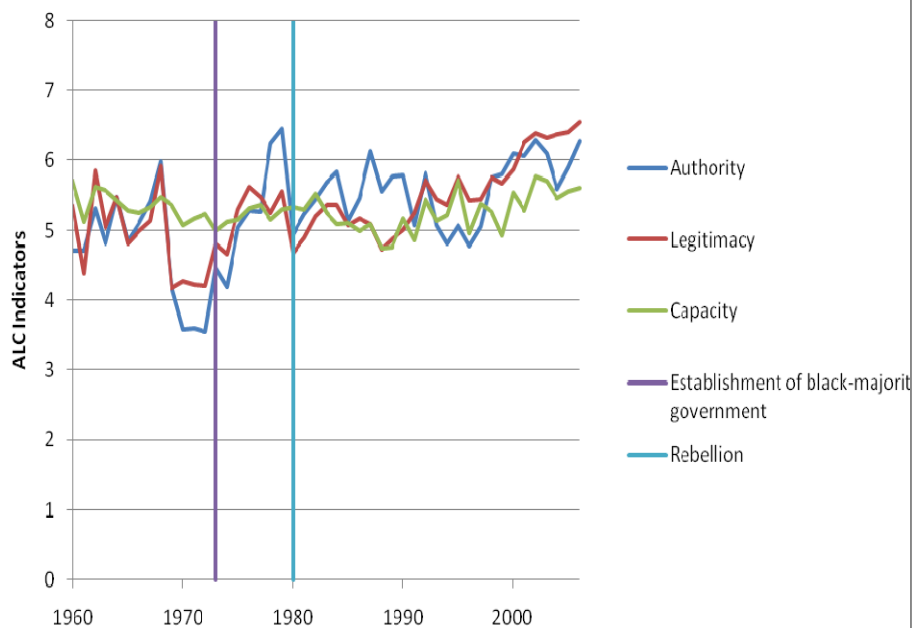
ALC Indicators for Somalia (1960-2006)



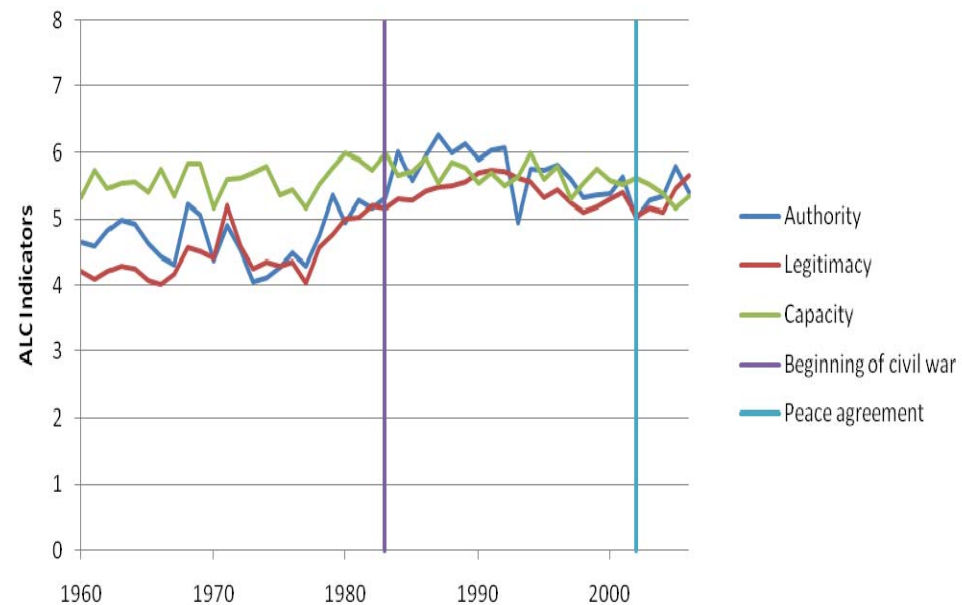
ALC Indicators for Pakistan (1960-2006)



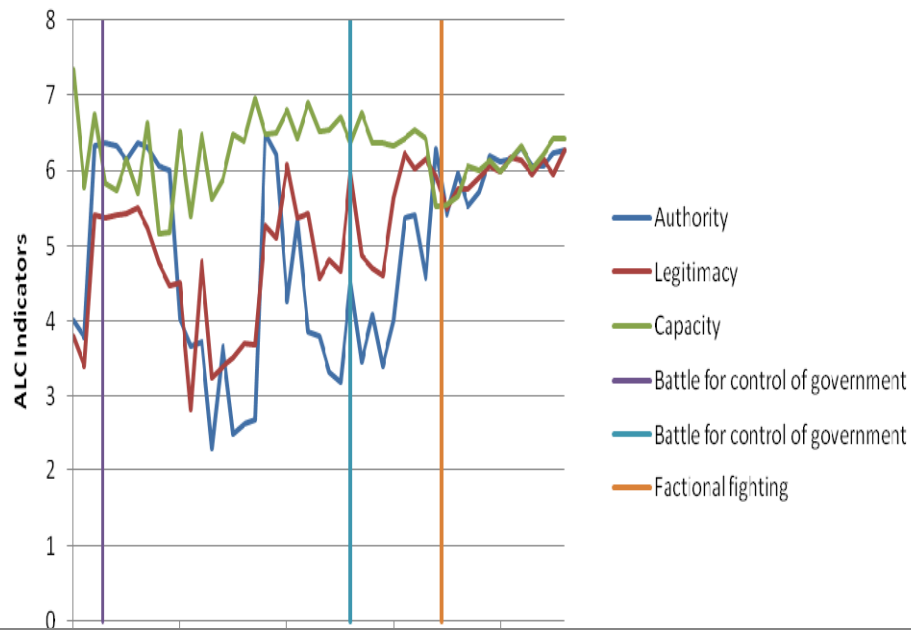
ALC Indicators for Zimbabwe (1960-2006)



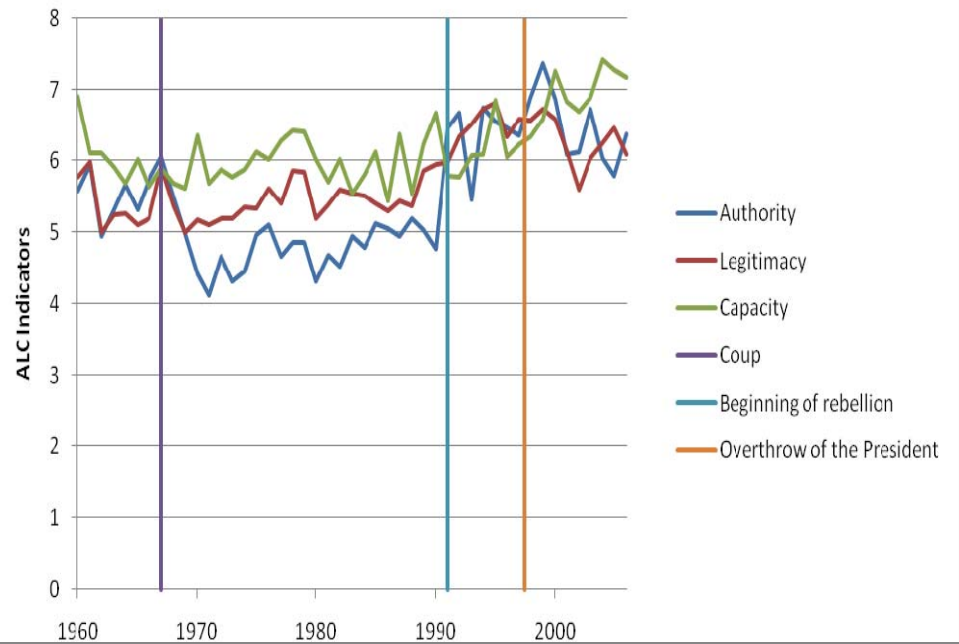
ALC Indicators for Sri Lanka (1960-2006)



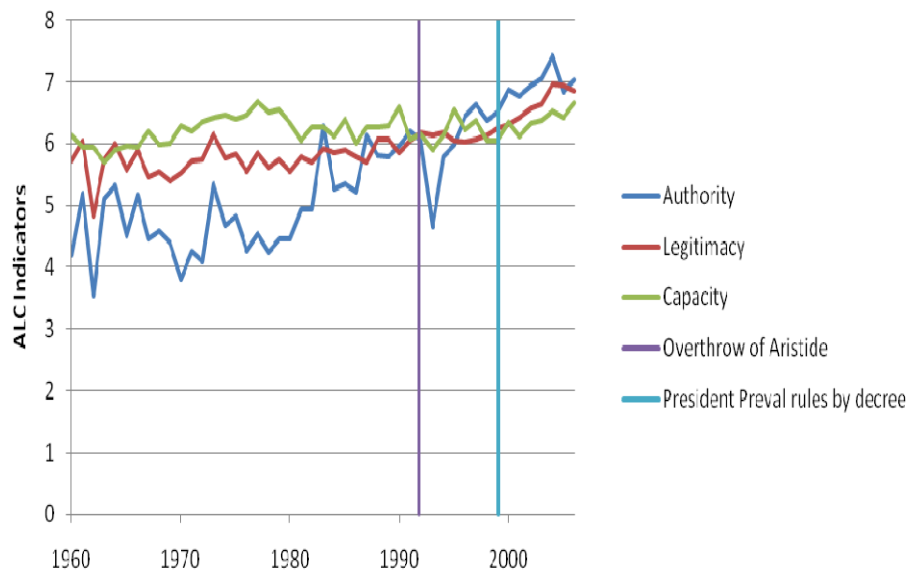
ALC Indicators for Yemen (1960-2006)



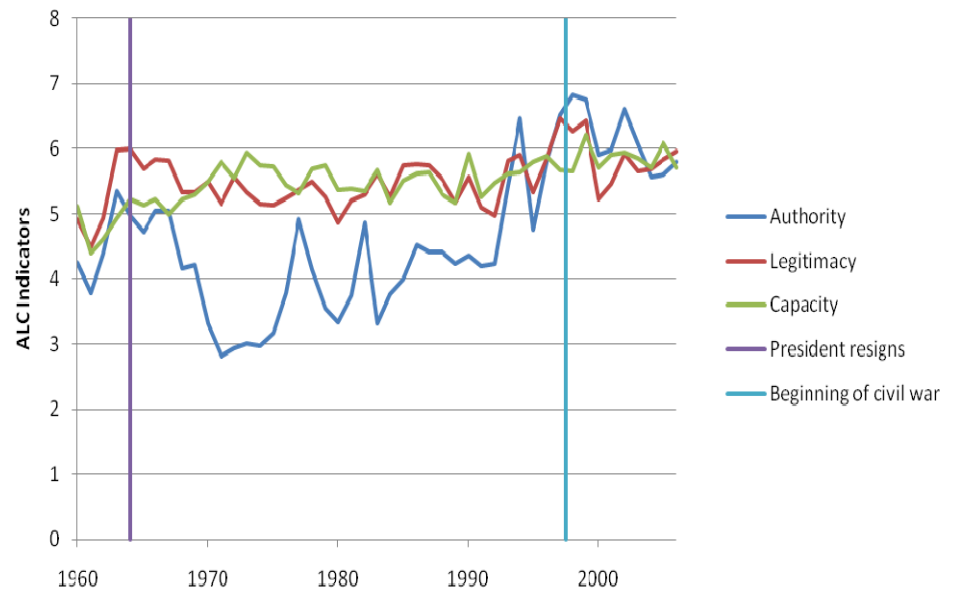
ALC Indicators for Sierra Leone (1960-2006)



ALC Indicators for Haiti (1960-2006)



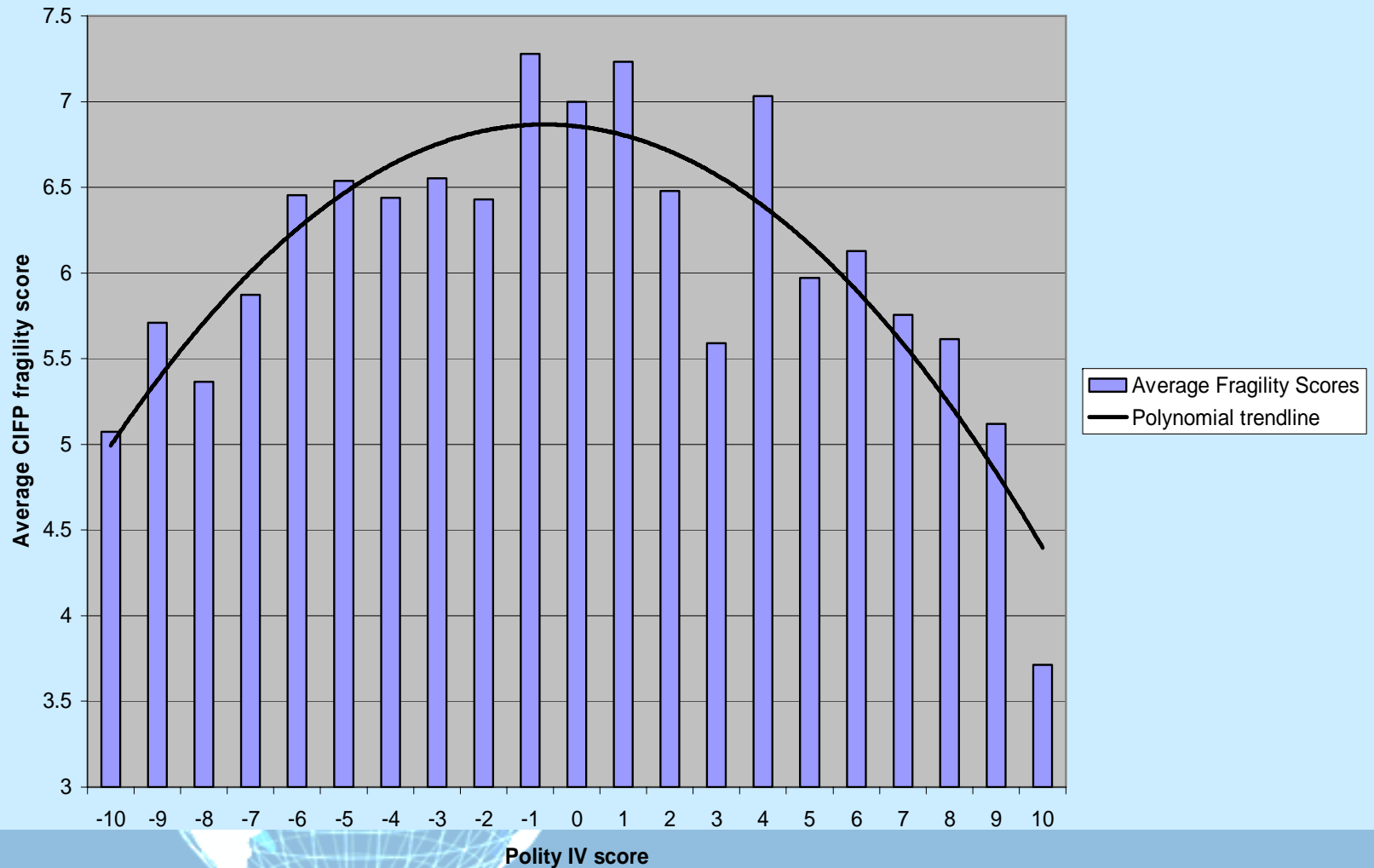
ALC Indicators for Republic of Congo (1960-2006)



Let us now look at some key findings in more detail

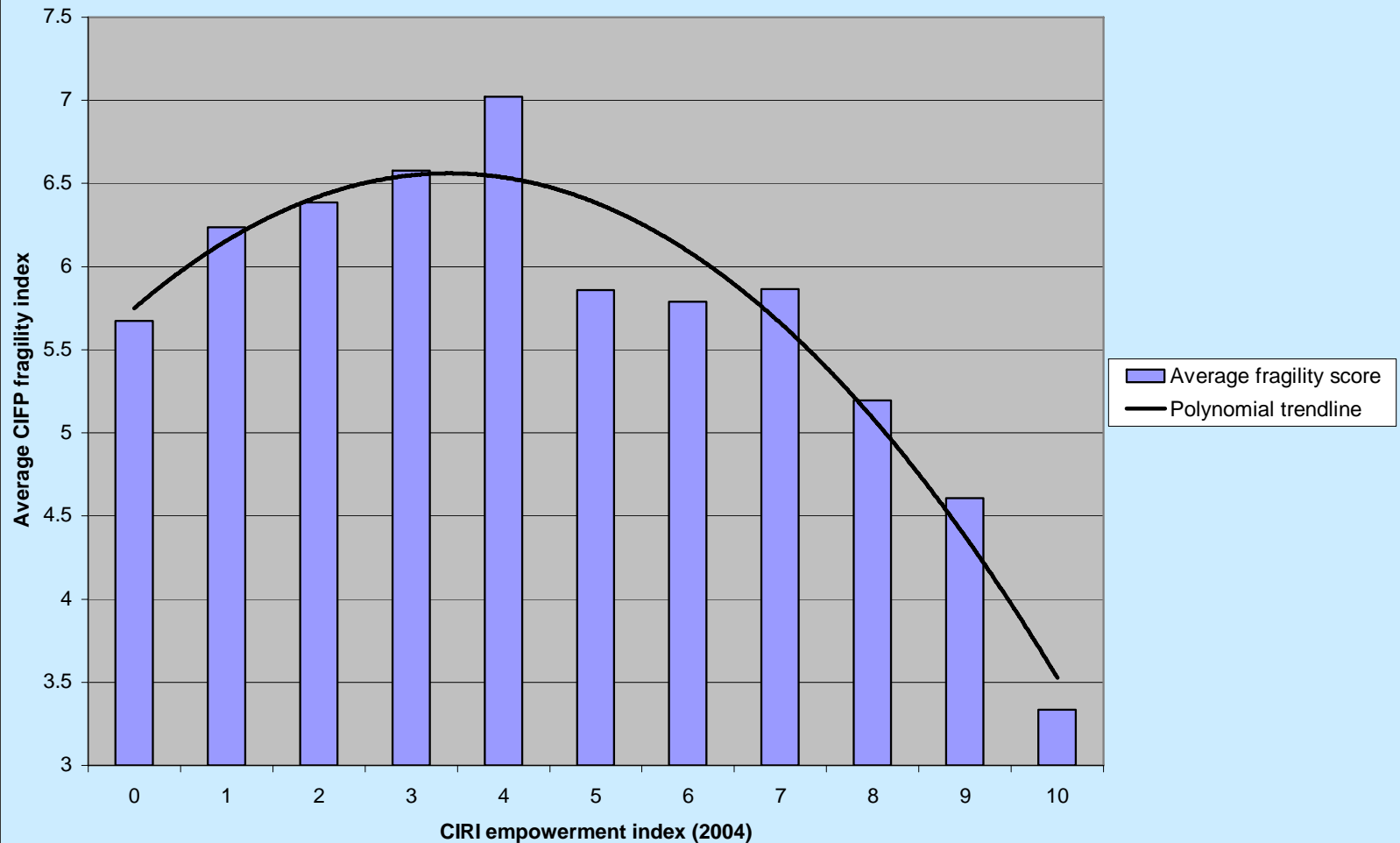
- Causes and Correlates of Fragility
- Aid allocation and Fragility; Where to focus?
- Fragility of Small Developing States

Correlates of Fragility: Democracy Problems of Transitioning



Correlates of Fragility: Human Rights

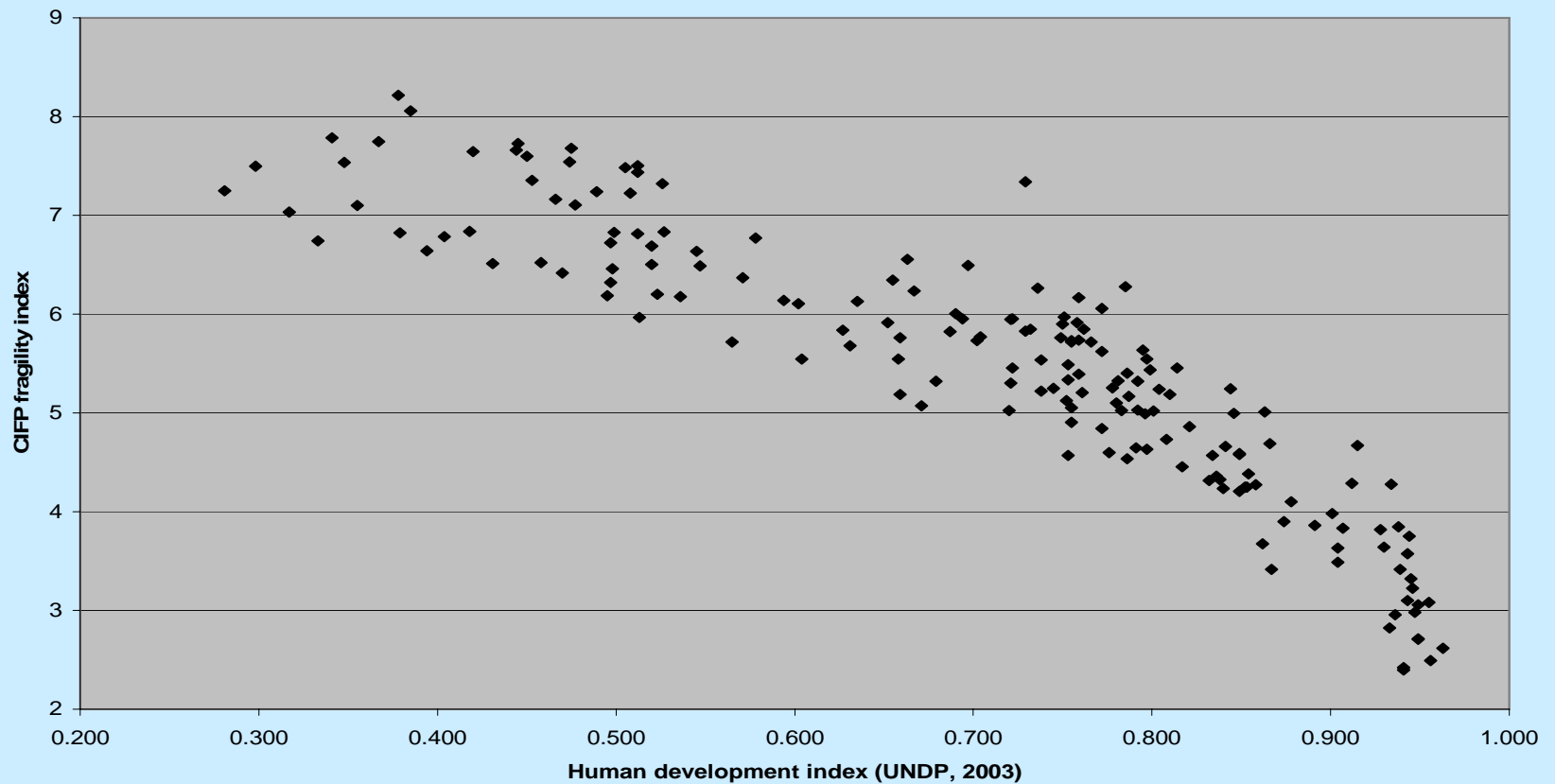
Fragile States Not the Least Free



Correlates of Fragility: Human Development Index

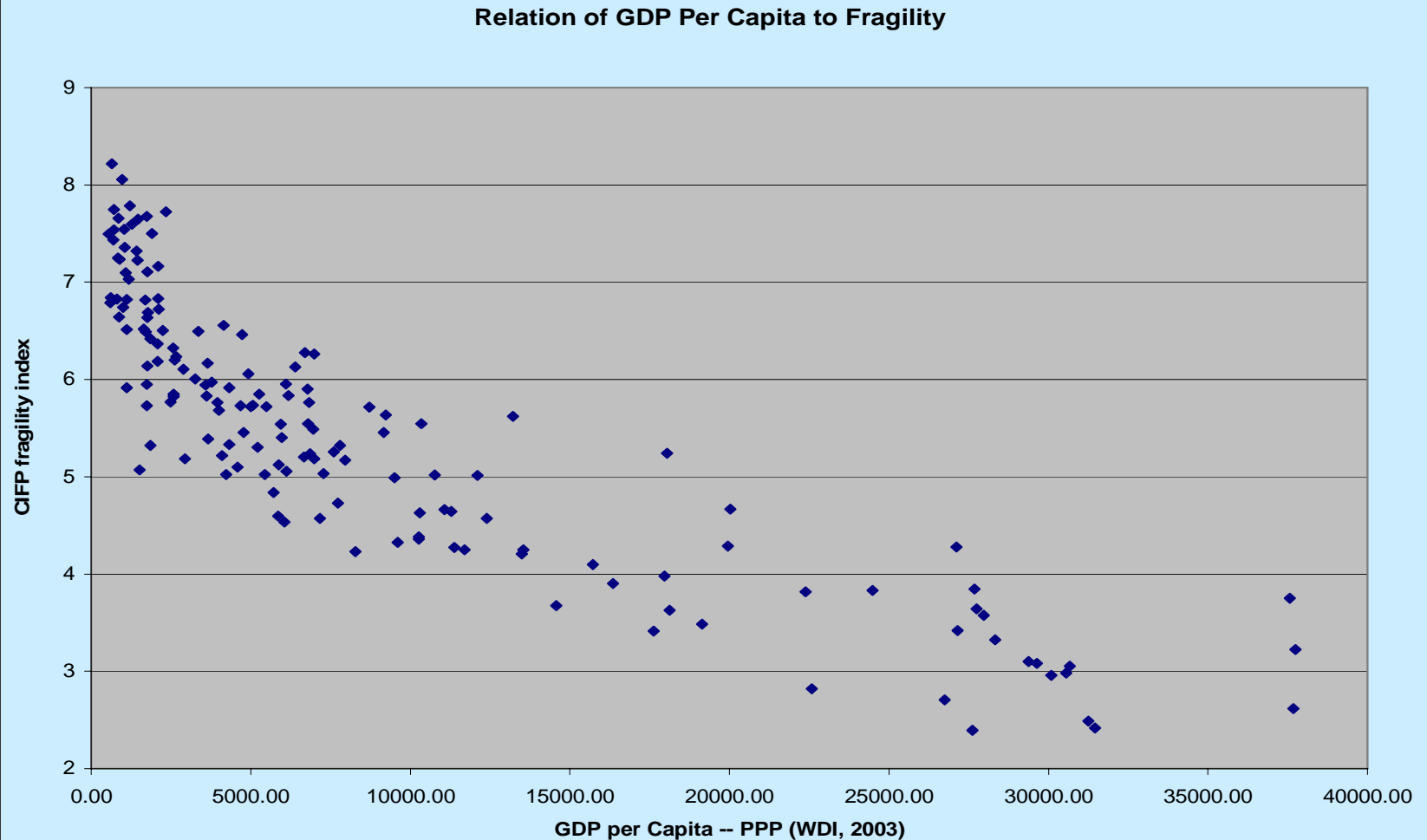
Capacity is the Answer

Relation of Development to Fragility

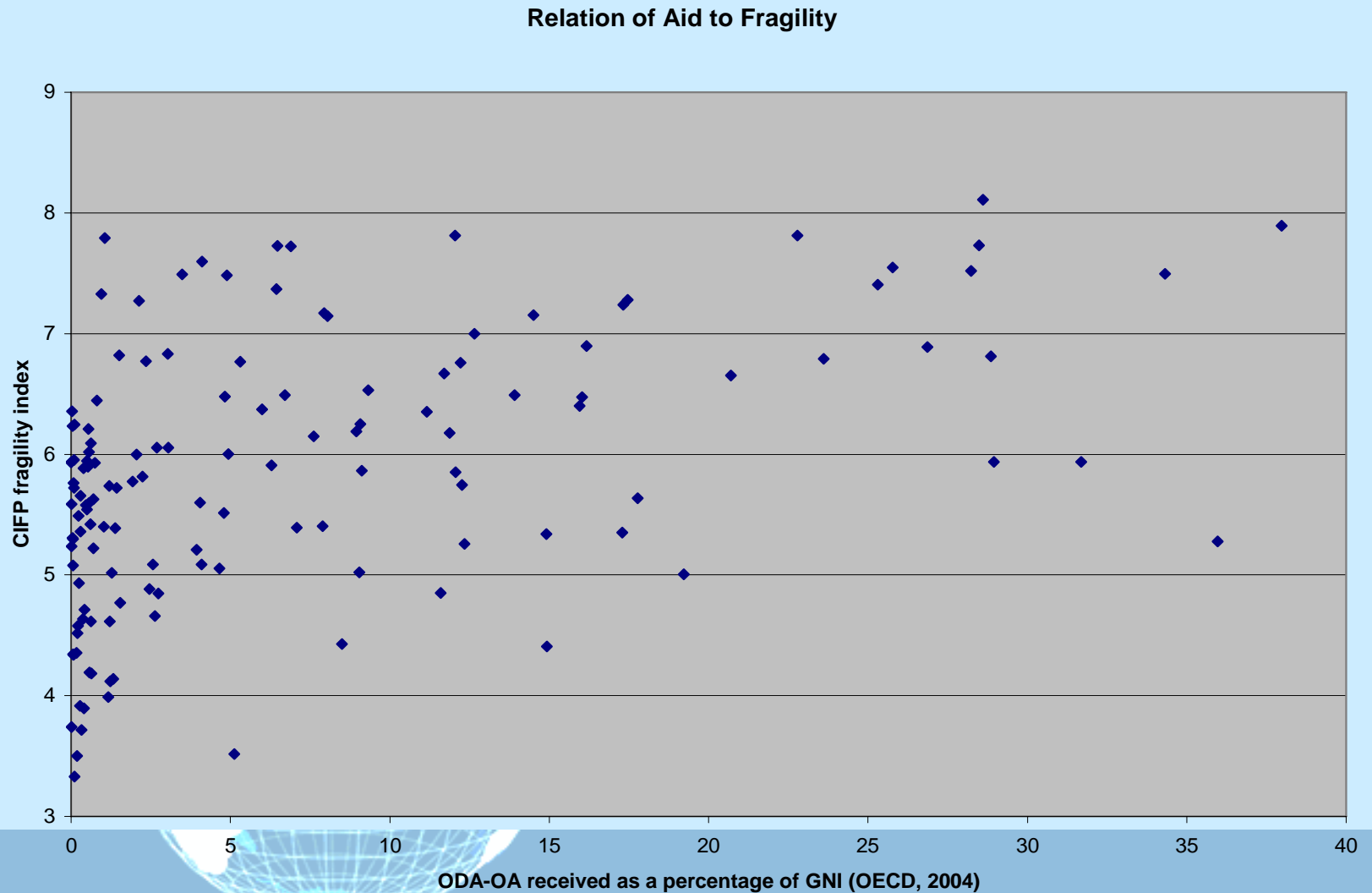


Correlates of Fragility: GDP

Not all Poor States are Fragile



Correlates of Fragility: Aid The Randomness of Aid



Causes: Growth Matters

Determinants of state fragility using structural data:

- Most highly significant factor is the level of development; robust to a barrage of tests (specification, estimation procedure, sample size, time period)**
- Other variables as specified above are also significant and with the expected signs
- Nonlinear relationship is confirmed in the case of “democracy level”
- income inequality does not matter when compared to the level of development**



Causes: A Simple Model Confirmed By Researchers

Determinants of state fragility using structural data

Carment *et al* (2008): CMPS

Cross-sectional analysis: 1999-2005

fragility = f (c, income, growth, level of democracy, trade openness, infant mortality)

-Together with **regional dummies**, the model explains **about 83% of the variation in fragility around the world** (using CIFP's measure of fragility)



Causes

- 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	

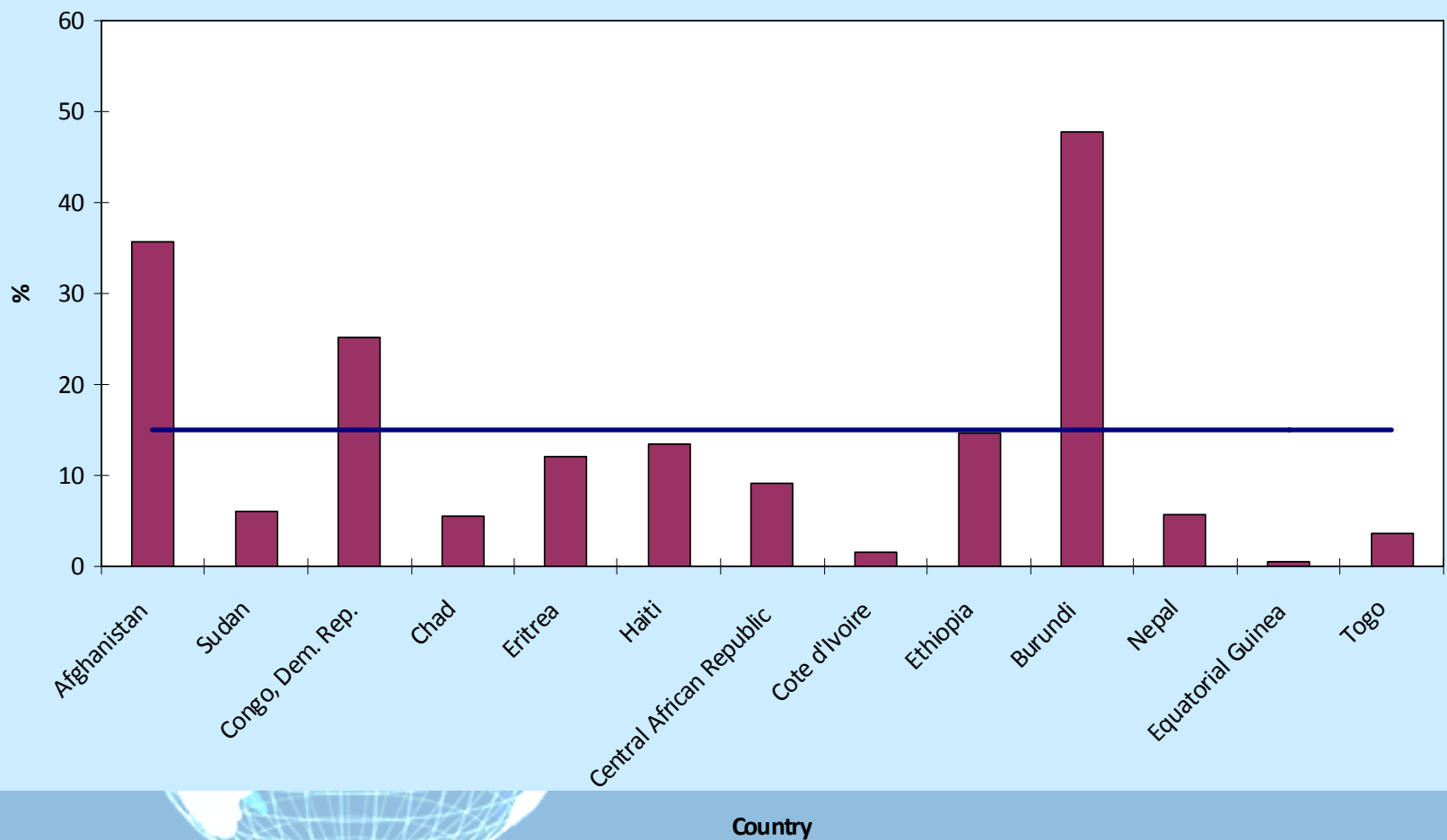
Aid and Fragility: Effectiveness, Volatility and Capacity

Application to aid allocation and aid effectiveness (that is, usefulness of the ALC framework)

- Fragile states tend to be under-aided when compared to the overall sample of aid recipients (measured in terms of aid per capita)
- Volatility of aid flows to fragile states has increased over time
- Capacity is a significant determinant of aid allocation (not the authority or legitimacy of states)
- Aid effectiveness tends to decrease in more fragile environments

Aid Policy: Orphans and Darlings

Aid (% of GNI) to the Most Fragile States (2006)



Aid and Fragility: The Most Fragile are Underfunded

	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

Aid and ALC: Capacity a Significant Determinant

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

Fragility of SDS: Less Conflict But Still Very Vulnerable

- **Carment, Prest, Samy (2006): we find that Small (Island) Developing States (37) are at medium risk – small population, arbitrary borders, geographic isolation (Collier's Bottom Billion)**
- **Mitigating factors within SDS 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**

Fragility of SDS

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		

Policy Implications

By identifying the aspects of fragility that are associated with Authority, Legitimacy and Capacity, policies can be better targeted to structural weaknesses;

Various tool must be used to Monitor and to Evaluate impact and to assess risk

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

Details and Results can be found in: Carment, Prest Samy ***Security, Development and The Fragile State: Bridging the Gap Between Theory and Policy*** (Routledge2009) and www.carleton.ca/cifp

Project goals: www.carleton.ca/cifp

- 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;
- To develop evidence-based analysis of fragility in specific countries through **data gathering and model development ;**
- To provide coherent and focused decision-support to policy-makers in development, defence and diplomacy **through partnerships.**