

APPROACHES TO COUNTRY RISK ANALYSIS AND EARLY WARNING

1. INTRODUCTION

This article lays out a framework for country risk analysis and early warning drawing on the methodologies developed by the Country Indicators for Foreign Policy project (CIFP – www.carleton.ca/cifp)¹. Special attention is given to the identification of failed and fragile states using the CIFP state fragility index, and how the latter compares to other such indices. The rest of the paper proceeds in four parts. In the second section, we provide some concepts and definitions as they relate to early warning, state failure and country risk. The third section assesses structural risk indicators and events based monitoring methodologies. The fourth section provides a comparative ranking of countries, some initial findings and results for the Middle East and North Africa. The fifth and final section concludes by discussing the policy implications of the analysis.

2. CONCEPTS, DEFINITIONS, REQUIREMENTS

Effective early warning and country risk analysis requires a solid analytic base that:

- 1) Is sufficiently nuanced to allow the observer to understand differentiated performance in different areas of fragility, rather than presenting processes and performance in an oversimplified manner;
- 2) Identifies both positive and negative sectors in each state's

¹ The Country Indicators for Foreign Policy (CIFP) project has, since 1997 (together with the Canadian government, the private sector and NGOs), collected and analyzed statistical information on a range of issues related to the political, economic, social and cultural environments of countries around the world, and conducted research on early warning.

performance, thereby highlighting potential points of entry for external actors;

- 3) Combines real time dynamic event and actor analysis with long-term structural information to counter time lags between developments on the ground and their reflection in statistical indicators and resulting programming priorities and timelines;
- 4) Provides policy relevant diagnosis by matching the analysis to the end user's operational capacity; and
- 5) Provides an evaluative framework with which to assess policy impact both before and after programs are implemented.

Early warning represents a proactive political process whereby networks of organizations conduct analysis together in a collective effort to prevent likely events from occurring. Early warning is the systematic collection and analysis of information coming from areas of crises for the purposes of: anticipating the escalation of conflict; development of strategic responses to these crises; and the presentation of options to critical actors for the purposes of decision making. Formally, risk is an expected value indicating probabilities about consequences. Risk assessments provide policy relevant forecasting, where forecasting is about the likelihood that an event will happen. They are diagnostic, prescriptive, and take the form of a conditional generalization.

Risk assessments precede and complement early warning; by themselves, they cannot be expected to provide precise points at which specific events are likely to occur. Forecasting has traditionally referred to the estimation of the probability that some event will occur while the associated term gravity is used to describe the event's expected consequences. Combining these two notions, the risk associated with an event can be defined formally as the expected gravity of the event multiplied by the probability that it will occur. Correspondingly, the calculated risk associated with an event is weighted by both its probability of occurrence and the magnitude of the consequences. Formally:

$$R(e) = E(e)Pr(e)$$

where, $R(e)$ is the risk associated with a particular event 'e', $E(e)$ is the expected gravity of the event, and $Pr(e)$ is the probability of the event occurring. This technique produces an intuitively appealing means for policymakers to allocate risk management resources. Efforts are focused on events that are likely to occur and/or will be consequential, that is, policy makers need to think about both expected gravity $E(e)$ and probability $Pr(e)$. Conversely, policymakers

can reasonably afford to overlook events with remote possibilities unless their consequences are fairly disastrous or events that are likely but the consequences only moderate. Risk assessment models provide a framework that enables analysts to interpret the results of local monitoring.

Gurr and Marshall (2000, Chapter 7) make the distinction between early warning and risk assessment concisely:

“Risk assessments identify situations in which the conditions for a particular kind of conflict are present. They are not predictions in the sense that is usually meant by the terms ‘forecast’ or ‘early warning’ because risks are assessed on the basis of background and intervening conditions – the conditions that establish the potential for conflict. Whether or not risks are realized depends on whether the preconditions remain unchanged and on the occurrence of accelerating or triggering events. Early warnings by contrast, are derived from monitoring the flow of political events, with special attention to actions that are likely to precipitate the onset of conflict in high-risk situations. Risk assessments provide the context. Early warnings are interpretations that the outbreak of conflict in a high-risk situation is likely and imminent”.

Risk analysis can be undertaken with the goal of presenting analyses and policy recommendations that will assist policy makers in taking action to prevent, contain and mitigate economic, humanitarian and environmental crises, and the outbreak of violent conflicts and the collapse of fragile states. Therefore, a secondary concern is resource allocation that will make effective use of early warning information.

State failure and fragility are especially important in this regard and have become increasingly important for policymakers because of their various implications (for development, human security and international security). Though the concept of state failure is relatively new, it has quickly established itself as an indispensable part of the international lexicon. Various characterizations include difficult partners (OECD, 2001), difficult environments (Torres and Anderson, 2004), fragile states (Goldstone *et al.*, 2000), Low Income Countries Under Stress – LICUS – (World Bank, 2002), poor performers (AusAID, 2002), weak performers (Asian Development Bank, 2004), failing and/or failed states (Rotberg, 2004), and countries at risk of instability (Prime Minister’s Strategy Unit, 2005), the phrase encompasses a number of partially overlapping, yet analytically distinct concepts regarding vulnerability. Operationalization issues are obviously problematic when dealing with a class of events that are relatively rare, politically sensitive, ill-defined, and poorly understood. State failure, the overarching concept, is defined by the CIA’s State Failure

Task Force (now known as the Political Instability Task Force) as the collapse of authority of the central government to impose order in situations of civil war, revolutionary war, genocide, politicide, and adverse or disruptive regime transition. The Task Force definition weights conflict and governance factors significantly in its analysis and hence its key concern is with questions of instability.

As early as seven years ago, reports from the Center for International Development and Conflict Management, the Stockholm International Peace Research Institute, and the Peace Research Institute of Oslo, showed that large scale violence was in decline. The world, these reports showed, was a less risky place to live for a majority of the world's population than it had been at the end of the Cold War. Three positive trends contributed to this transformation. First, the number and magnitude of armed conflicts within and among states significantly decreased after the early 1990s. Second, ethnic groups are gaining greater autonomy and power globally. Third, democratic governments now outnumber autocratic governments two-to-one and continue to be more successful in resolving violent societal conflicts. If the peak point in organized armed violence measured over the last two decades occurred in the aftermath of the break-up of the Soviet Union, with a gradual decline since the mid-nineties, can we conclude that the world is a now safer place to live? Unfortunately, the answer is likely no. Armed violence is too narrow a construct to fully capture the varied foundations of human insecurity.

By many measures, the world has become more dangerous, rather than less, for the majority of the global population. Though the view that failure and conflict go hand-in-hand is predominant, it is not the only one. Rotberg (2004), for example, characterizes failed states as being marked by an inability to provide basic political goods, including human security and security of the state, dispute resolution and norm regulation, essential political freedoms, and economic opportunity to most, if not all, of the population. Capturing the diversity of failed state environments, Gros (1996) specifies a detailed taxonomy of five different failed state types: chaotic, phantom, anemic, captured, and aborted. The various types derive their dysfunction from different sources, both internal and external, and require different policy prescriptions as a result. The British Department for International Cooperation (DfID, 2005) defines state weakness in broadly similar terms, focusing on states in which

“the government cannot or will not deliver core functions to the majority of its people, including the poor”.

For its part, the German Government's (German Federal

Government, 2004) "Action Plan on Civilian Conflict Prevention, Conflict Resolution, and Post-Conflict Peace-Building" describes failed and failing states as being

"characterized by a gradual collapse of state structures and a lack of good governance".

One strength of these assessment methodologies is their reliance on multiple sources of data and a variety of analytical approaches. This type of approach was developed by the London-based Forum on Early Warning and Early Response (FEWER) working in partnership with research organisations, such as CIFP, and NGOs in the conflict prevention field. FEWER promoted a highly integrated and comprehensive framework, combining risk assessment and early warning.

A second strength of the above analytical frameworks stems from the fact that each one provides its state with an assessment of the impact that particular instances of state fragility or failure may have on national interests and an analysis of potential consequences that may follow from engagement². Building response strategies on such a foundation of relevancy enhances the likelihood that states will engage in a sufficiently robust and sustained manner to have a positive and measurable impact on the incidence of state fragility or failure. The second approach, grounded in the development literature (United Nations, 2000), is most concerned with the significant challenge that fragile and failed states pose to efforts to alleviate poverty and achieve the Millennium Development Goals (MDGs).

3. THE CIFP NET ASSESSMENT APPROACH

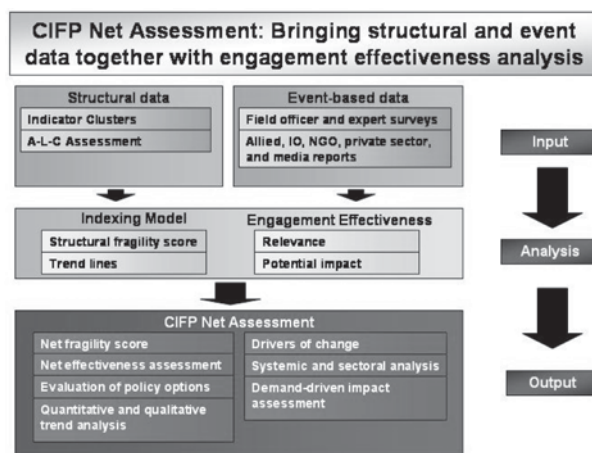
Most international actors have not spent sufficient time and resources to gain a nuanced understanding of state fragility; as a result, neither have they been able to incorporate such an understanding in their policies. Our argument is that effective engagement in, and response to, failed, fragile and dangerous states requires a multifaceted, quantitative and qualitative approach. The

² The impact assessment element is an outgrowth of the work on absorptive capacity, the ability of developing countries to absorb and effectively utilise development assistance. However, the focus is shifting to how donors can craft response strategies that are more appropriately attuned to the specific needs and capabilities of developing partners.

kinds of analyses we require depend in part on the time-line in which we expect to be engaged. Long term analyses are necessary if we expect to be able to respond strategically to structural problems (development, institution building, and establishing infrastructure). When escalation or a change in a state's level of fragility is expected to generate crises in the short term, a different kind of analysis may be required with a focus not just on broad underlying structural indicators but conjoining events, stakeholder interests and the role of spoilers. Here the challenge is to match the analyses to specific operational, as opposed to structural, tasks such as preventive diplomacy, dialogue, mediation and possibly intervention. For military forces, for example, projections of up to 25 years are required in order to develop appropriate weapons capabilities, communications technologies, and organizational structures. Naturally, short term analyses remain vital.

Providing policy makers with a comprehensive and complementary set of analytical tools to address both the short and long term has several advantages. First, by providing a sound analysis of structurally-based long term indicators, the range of response options, both structural and operational, will be much broader. Advance warning ensures that there is an optimal combination of interests and capacity³.

FIGURE 1 - *CIFP Net Assessment*



³ Long-term conflict prevention is associated with structural transformations and developmental aid and faces a time lag of approximately 15-20 years before results are easily visible. Positive change can be achieved through partnerships and linkages that emphasize clear, comprehensive strategic plans for high risk regions and priority areas of concern within them.

In strategic terms, forestalling a failing state requires long-term structural techniques that extend beyond the purview of any one department. The goal is to encourage behavioural change that can be induced by the promotion of, among other things, sustainable development, support for human rights, arms control mechanisms, membership in international organizations, security pacts and local participation in political decisions and governance. The results of these changes cannot be ascertained over-night. Nor can any single source of information provide a complete picture of whether the intended effects are indeed being achieved. In sum, responding to fragility, failure and dangerous states requires large investments in time and money, an unparalleled degree of precision in the development of evaluation techniques and above all sustained and broad political support for long-term engagement. The CIFP Net Assessment framework is provided in the diagram above and shows how structural and event-based data can be combined to provide effective engagement.

Second, such tools can assist decision-makers in knowing when, where and how to respond and help in the strategic allocation of resources⁴. In this regard, there is a need to reduce both Type I and Type II errors, situations that arise when a misdiagnosis occurs and resources are not allocated appropriately⁵. In-depth structured analyses

⁴ In particular, the 'greed vs. grievance' argument has grown in importance, and become more nuanced over time. For example, conflicts can be generated by the absolute scarcity of resources, an abundance but maldistributed resource base or quick access to lucrative resources. It is well known that dependence on a single commodity can lead to economic stagnation and regional conflagration wherein smuggling, black markets and illicit trade flows are encouraged. Compounding elements include the widespread availability of unemployed youths and collusion between rebel groups for personal gain. Both can prolong conflict through the creation of conflict entrepreneurs, dependents and exploiters. For applications of the Country Indicators for Foreign Policy (CIFP) template see: www.carleton.ca/cifp: Conflict Risk Assessment Report: Cambodia, Indonesia, Philippines (01/01/2002); Conflict Risk Assessment Report: West Africa: Mano River Union and Senegambia (01/04/2002); Conflict Risk Assessment Report Sub-Sahara Africa (4/11/2002); Conflict Risk Assessment Report African Great Lakes (6/9/2003); Conflict Risk Assessment Report: Bulgaria, Romania, Slovakia, and Ukraine (8/11/2002).

⁵ These errors are derived from unintended consequences and incomplete information. There has been substantial research conducted on unintended consequences and moral hazard problems. Moral hazards can arise from a number of different causes and the first source of moral hazard is the traditional one of incomplete information. There are also moral hazards in not only intervening militarily but also in providing humanitarian assistance to

can assist in reducing the potential for both types of errors. Third, such tools, if translated into meaningful policy-related results, can be rendered relevant to policy analysts as a complement in their country-wide (as opposed to operational or project level) strategic arsenal.

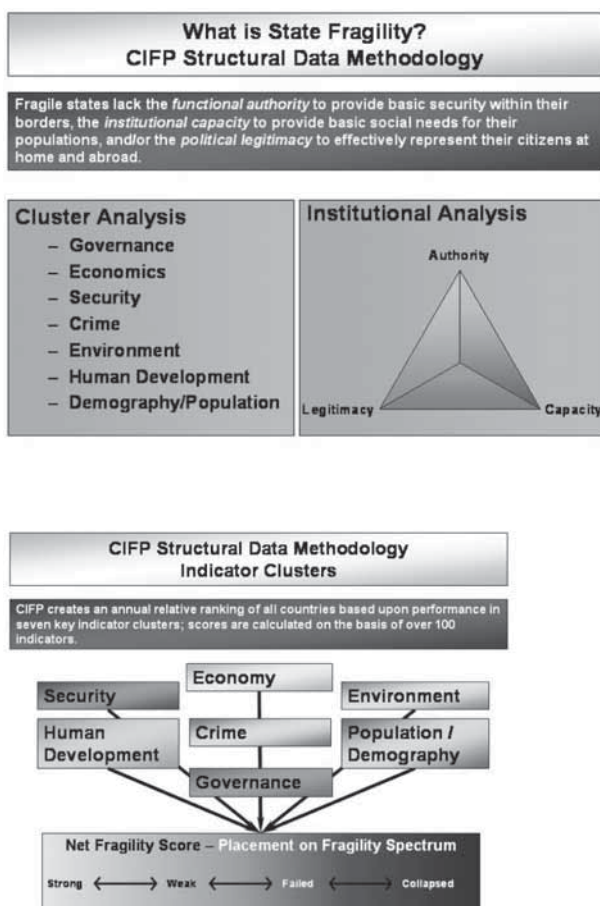
The following paragraphs outline a methodological framework for conducting operational net assessment of state fragility and failure: the CIFP Net Assessment (see above figure). The 'net' element denotes the intention of assessing the intended and unintended consequences of policy impacts in a failing or failed state, as well as the various nodes of activity towards which such efforts are directed. This type of assessment is essential when evaluating the various factors that contribute to the incidence of state fragility and the potential for state failure, along with the interplay between policy prescription and instability. To be effective, a net assessment approach must be comprehensive, drawing on quantitative and qualitative sources of data, as well as judgment-based analytical frameworks. It involves casting as wide a net as practicable in order to capture, to the greatest degree possible, the complex nature of state fragility, failure and collapse⁶.

The CNA framework provides an integrated approach with which to identify and analyse the potential for, and incidence of, state fragility and failure. The objective is to provide a research-based, policy relevant mechanism that promotes the timely and effective sharing of knowledge and expertise, thereby contributing to the planning and implementation of appropriate responses to state fragility and failure. At its core is the instability assessment, an approach that incorporates structural and dynamic elements to create nuanced and country-specific analyses of country fragility. This instability assessment is then supplemented with relevancy and impact assessments. The resulting net assessment can serve to inform the strategic, sectoral, and programme level planning and response options of an international actor.

vulnerable populations. Researchers have noted that outside assistance can do more harm than good or can become entangled in the local political economy that fuels the conflict.

⁶ The methodological framework presented below was developed by the Country Indicators for Foreign Policy (CIFP) project at Carleton University, Ottawa, in part, to respond to the specific needs of the Government of Canada as a whole, to meet the challenges posed by fragile states in an analysis-led and policy coherent manner. However, like any robust methodology, the framework is flexible and can be generalised and adopted by other donor governments interested in implementing a more analytical and integrated approach to fragility.

FIGURE 2 - CIFP Methodology



To determine where a country resides on the fragility spectrum, CIFP has developed a methodology, relying on structural data, to create an assessment of all countries on the basis of their performance on over one hundred indicators.

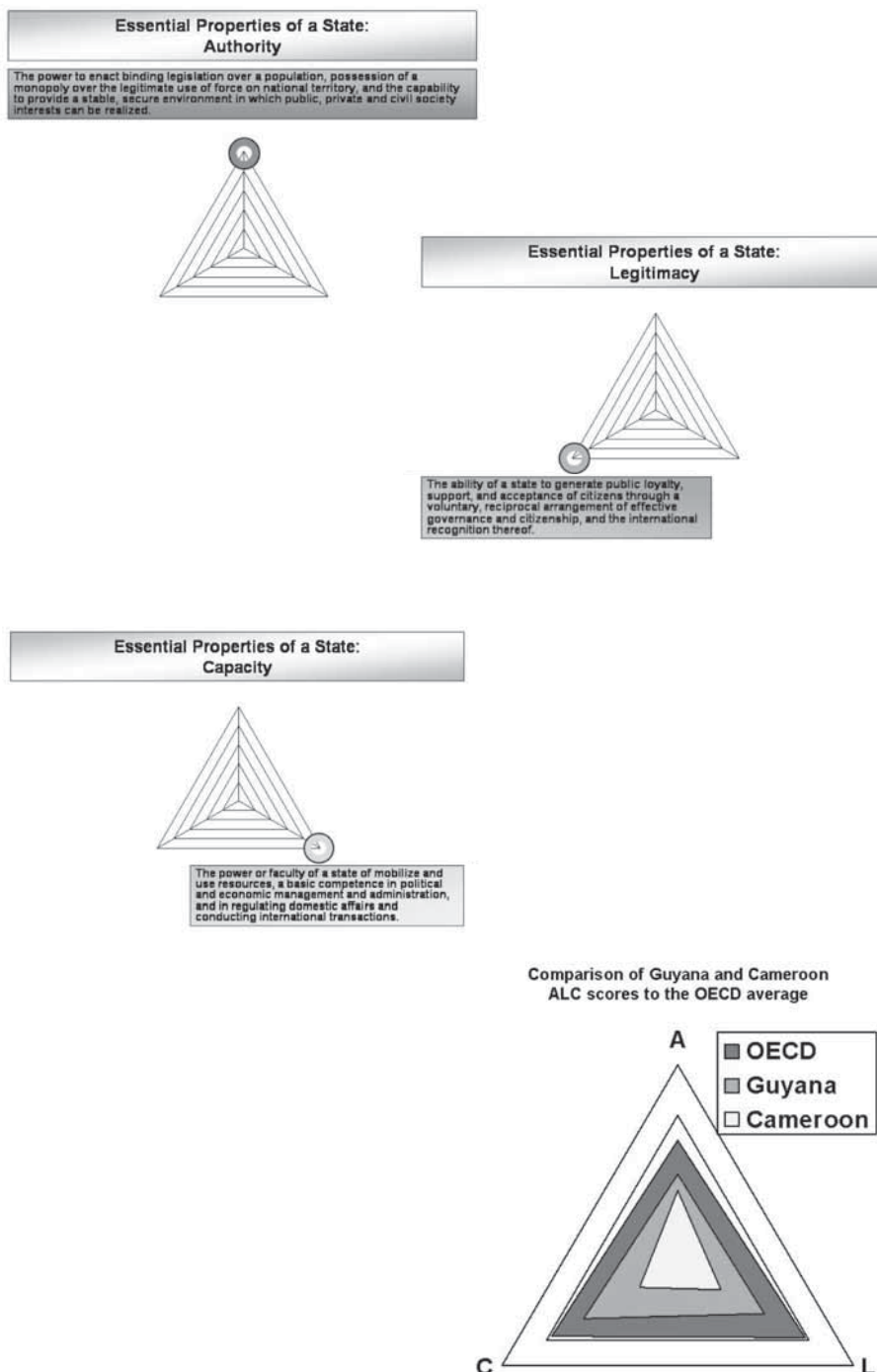
3.1 Structural Indicators

Presented here are the initial results of CIFP's state fragility index. The current analysis uses data from more than 70 indicators that have been selected from an initial list of more than 100, with

indicators selected on the basis of their relation to state fragility and their level of country coverage. In addition to the assessment of a state's relative levels of authority, legitimacy, and capacity, each country profile includes a cluster-based summary of state performance. Cluster areas include governance, economics, security and crime, human development, demography, and environment (as well as gender as a cross-cutting theme). Like its predecessor the CIFP conflict risk index, the fragility index employs a methodology of relative assessment. In ranking state performance on a given indicator, global scores are divided into nine equal groups, and converted to a 9-point index. The best performing ninth of states receive a score of 1, the second ninth a score of 2, and so on. For example, the countries with the highest GDP *per capita* score a 1, while those with the lowest GDP score a 9. Since relative country performance can vary significantly from year to year – as in the case of economic shocks, natural disasters, and other externalities – averages are taken for global rank scores over a five-year time frame. The most recent five years contained in the CIFP data set are used for this index. In addition, scores are modified to reflect positive or negative trend lines, as well as excessive volatility. Once all indicators have been indexed using this method, the results for a given country are then averaged to produce its final score. In calculating particular dimensions of fragility – such as the authority component or human development cluster – only those indicators considered relevant are included in the average. In general, a high score – 6.5 or higher – indicates that a country is performing poorly relative to other states. Such a score may be indicative of an arbitrary and autocratic government, poor economic performance, low levels of human development, or the presence of a destabilizing structural condition such as a significant youth bulge or a critical lack of arable land. A low score – in the range of 1 to 3.5 – indicates that a country is performing well relative to others, or that a country's structural conditions present little cause for concern. Values in the moderate 3.5 to 6.5 range indicate performance approaching the global mean.

TABLE 1 - *Fragility Index Scoring Scale*

Score	Description
1-3.5	Country performing well relative to others
3.5-6.5	Country performing at or around the median
6.5+	Country performing poorly relative to others
Highest 5%	Country among worst global performers

FIGURE 3 - *The ALC Framework*

CIFP analysis of state fragility begins with the understanding that, to function effectively, any state must exhibit three fundamental properties: authority, legitimacy, and capacity. These terms are explained in detail below, along with their implications for the analysis of state fragility and failure. Obviously, they are constructs, reflecting the functions of a state and its component parts. The three dimensions are inextricably interlinked (see Table 5 below for correlations); shortfalls in any one dimension will have implications for a given state's functionality along the other two. ALC scores provide insight into the relative fragility of a state. The results of the ALC assessment not only indicate the presence of weakness, but indicate the type and extent of that weakness, thus assisting policymakers both in the initial decision to engage and in subsequent discussions regarding the form any engagement should take.

Table 2 below presents a list of the 40 top fragile states for 2006 as calculated by the CIFP Fragility Index, based on the last five years of available data. Even among the extreme cases which are found at the top of our list, we can find substantial variations across ALC and indicator clusters, thus providing us with a nuanced understanding of fragility. For example, Somalia and Liberia are ranked 4th and 5th on our list. However, Somalia does very poorly on A, L, and C while Liberia does much better on A and not as well on L and C. For each state, the table includes the net fragility score, ALC scores, cluster scores, and the score for the cross-cutting theme of gender. Our point about variability among the worst performers is further supported by table 3 below, which provides a list of the 20 most fragile states within the categories of authority, legitimacy, and capacity. These results once again provide clear evidence of the multifaceted nature of state fragility. While some states display weakness along virtually all dimensions, the situation for most is more complex, with states exhibiting elements of both stability and fragility.

On the basis of the fragility index, one may not only identify broad areas of relative strength or weakness, but drill down in detailed country profiles to identify the precise source of the phenomenon. This drill-down capability in turn assists in programming decisions and identifies areas or trends of concern that require further monitoring. In addition, the information provides a framework with which to evaluate policy effectiveness; this aspect of the methodology is discussed in further detail below. Ultimately, the results in tables 2 and 3 provide an important validation of the ALC framework, demonstrating its ability to capture a breadth and depth of state performance.

TABLE 2 - The 40 Top Fragile States (2006)

Country	Fragility Index	A L C Scores			Cross-cutting Theme	Indicator Clusters					
		A	L	C		Gender	Governance	Economics	Security and Crime	Human Development	Demography
Burundi	8.25	8.04	7.58	8.65	7.42	7.18	8.08	9.17	8.89	7.25	8.00
Congo (Kinshasa)	8.11	7.93	7.58	8.49	7.72	7.67	6.93	9.15	9.70	7.35	5.47
Afghanistan	7.89	9.06	8.42	6.68	..	9.56	6.00	9.53	7.78	7.57	4.33
Somalia	7.86	7.53	8.41	7.82	..	8.90	8.42	7.18	8.51	7.34	7.13
Liberia	7.84	6.18	8.82	8.64	8.52	9.22	7.58	7.20	8.91	6.78	5.40
Chad	7.81	6.79	8.13	8.43	9.33	7.96	7.04	6.89	9.83	7.57	4.87
Ethiopia	7.81	7.58	7.14	8.31	7.47	6.59	7.44	8.07	8.83	8.35	6.40
Cote d'Ivoire	7.79	7.74	7.89	7.79	8.51	7.83	7.09	7.46	8.64	8.15	6.40
Eritrea	7.73	7.04	7.91	8.14	7.00	6.93	7.45	7.68	9.02	7.49	6.07
Angola	7.73	7.98	7.66	7.55	6.62	7.62	7.21	7.88	9.28	7.58	4.00
Haiti	7.72	6.81	8.53	7.94	7.27	8.32	7.24	8.05	7.95	6.90	7.67
Kenya	7.60	7.46	7.68	7.66	8.60	7.32	7.25	6.98	8.40	8.30	6.67
Rwanda	7.55	6.27	7.47	8.51	6.42	6.93	6.74	6.47	8.69	8.43	8.20
Zimbabwe	7.54	6.77	8.33	7.76	7.62	7.49	8.21	6.79	8.40	6.05	6.27
Guinea-Bissau	7.52	6.66	7.42	8.25	8.38	6.93	8.11	5.43	8.60	8.40	4.67
Sierra Leone	7.50	6.55	7.22	8.46	7.60	7.38	8.18	5.70	8.46	7.33	6.00
Congo (Brazzaville)	7.49	6.70	7.57	8.02	7.06	7.68	7.47	6.69	8.17	8.23	4.20
Sudan	7.48	7.83	7.58	7.21	7.82	7.13	6.38	9.22	8.22	6.95	6.00
West Bank and Gaza	7.41	6.69	10.33	7.50	8.30	6.85	9.08	8.16	4.78	7.00	9.00
Nepal	7.37	6.58	7.76	7.71	7.42	7.63	6.69	8.28	7.73	7.34	6.00

TABLE 2 - Continued

Country	Fragility Index	A L C Scores			Cross-cutting Theme	Indicator Clusters					
		A	L	C		Governance	Economics	Security and Crime	Human Development	Demography	Environment
Nigeria	7.33	7.19	7.46	7.37	7.64	7.19	6.65	7.02	8.08	8.30	6.67
Niger	7.28	5.61	7.09	8.63	9.07	6.92	7.58	3.22	9.16	7.70	6.67
Yemen	7.27	6.59	8.32	7.31	8.93	8.00	6.56	7.44	7.20	7.63	8.33
Uganda	7.24	7.38	6.50	7.51	5.33	6.51	6.11	7.38	8.27	8.95	6.67
Central African Republic	7.17	5.47	8.19	7.97	8.33	7.91	7.49	4.96	8.58	7.23	2.67
Mauritania	7.16	5.99	7.81	7.69	9.34	7.64	6.89	5.67	8.23	6.68	6.93
Guinea	7.15	5.97	7.56	7.92	7.40	7.40	7.36	4.87	8.94	6.90	4.93
Burkina Faso	7.00	5.50	6.39	8.28	7.90	5.61	7.16	3.25	8.94	8.40	5.00
Iraq	6.94	7.52	7.50	6.15	6.42	7.60	7.80	9.38	5.53	6.30	4.33
Tanzania	6.90	6.48	6.14	7.61	6.74	5.99	6.23	5.85	9.16	7.28	5.33
Malawi	6.89	5.87	6.29	7.90	7.42	5.78	7.84	3.52	8.45	8.43	7.00
Togo	6.83	5.50	7.54	7.48	8.17	7.56	6.56	4.26	8.21	6.98	6.33
Pakistan	6.82	7.08	6.43	6.83	6.11	6.47	6.01	8.58	6.44	7.34	6.73
Madagascar	6.81	5.06	7.24	7.83	7.94	6.68	6.88	4.89	8.15	7.74	5.00
Mozambique	6.79	5.53	6.12	8.05	6.80	5.05	7.23	5.05	9.20	7.15	3.67
Myanmar (Burma)	6.79	6.96	7.15	6.47	6.25	6.75	6.96	8.81	6.75	5.20	4.73
Bangladesh	6.77	6.25	7.68	6.72	7.76	8.25	5.77	7.68	6.48	7.03	4.33
Cameroon	6.77	6.02	7.06	7.23	6.60	7.28	6.52	5.56	7.81	7.48	4.33
Mali	6.76	5.40	6.34	8.01	9.02	5.73	7.13	4.14	9.34	7.20	4.33
Laos	6.67	5.83	7.05	7.15	6.16	5.93	7.11	6.41	7.14	7.00	3.67

TABLE 3 - *Twenty Most Fragile States, by ALC Component*

Authority		Legitimacy		Capacity	
Afghanistan	9.06	West Bank and Gaza	10.33	Burundi	8.65
Burundi	8.04	Liberia	8.82	Liberia	8.64
Angola	7.98	Haiti	8.53	Niger	8.63
Congo (Kinshasa)	7.93	Afghanistan	8.42	Rwanda	8.51
Sudan	7.83	Somalia	8.41	Congo (Kinshasa)	8.49
Cote d'Ivoire	7.74	Zimbabwe	8.33	Sierra Leone	8.46
Ethiopia	7.58	Yemen	8.32	Chad	8.43
Somalia	7.53	Swaziland	8.23	Ethiopia	8.31
Iraq	7.52	Central African Republic	8.19	Burkina Faso	8.28
Kenya	7.46	Chad	8.13	Guinea-Bissau	8.25
Uganda	7.38	Eritrea	7.91	Eritrea	8.14
Colombia	7.26	Cote d'Ivoire	7.89	Mozambique	8.05
Nigeria	7.19	Equatorial Guinea	7.82	Congo (Brazzaville)	8.02
Indonesia	7.19	Belarus	7.82	Mali	8.01
Pakistan	7.08	Mauritania	7.81	Central African Republic	7.97
Eritrea	7.04	Nepal	7.76	Haiti	7.94
Iran	7.00	Kenya	7.68	Guinea	7.92
Myanmar (Burma)	6.96	Bangladesh	7.68	Malawi	7.90
Sri Lanka	6.95	Angola	7.66	Comoros	7.86
Haiti	6.81	Congo (Kinshasa)	7.58	Madagascar	7.83

The above tables clarify the diverse challenges faced by various fragile states. A number of sub-Saharan African nations face serious problems arising from limited capacity. Some countries – including Mozambique, Mali, and several others that perform relatively well in areas of authority and legitimacy – face enormous challenges in terms of state capacity. Others, such as Colombia and Sri Lanka, score poorly in the area of authority as a result of the security challenges they face, but perform relatively well in measures of capacity and legitimacy. Still others, such as Belarus, demonstrate problems with government legitimacy even as they continue to maintain some degree of state authority and capacity. Similarly, certain countries face particular challenges in specific cluster areas (see Table 4 below). For instance, despite the presence of reliable governing institutions and robust economic development, many small states, particularly island nations such as St. Lucia, exhibit high levels of environmental stress. While all these countries may benefit from assistance provided by members of the international community, the nature of that assistance and its method of delivery clearly will vary widely in each case. While a number of states appear on more than one list, only three – the DRC, Eritrea, and Haiti – appear on all three.

TABLE 4 - *Twenty Most Fragile States, by Indicator Cluster*

Governance		Economics		Security and Crime	
Afghanistan	9.56	West Bank and Gaza	9.08	Afghanistan	9.53
Liberia	9.22	Somalia	8.42	Iraq	9.38
Somalia	8.90	Zimbabwe	8.21	Sudan	9.22
Haiti	8.32	Sierra Leone	8.18	Burundi	9.17
Bangladesh	8.25	Guinea-Bissau	8.11	Congo (Kinshasa)	9.15
Tonga	8.08	Burundi	8.08	Myanmar (Burma)	8.81
Saudi Arabia	8.03	Solomon Islands	7.98	Russia	8.65
Yemen	8.00	Malawi	7.84	Sri Lanka	8.62
Chad	7.96	Iraq	7.80	Pakistan	8.58
Central African Republic	7.91	Zambia	7.63	Iran	8.51
Brunei Darussalam	7.83	Comoros	7.61	Colombia	8.35
Cote d'Ivoire	7.83	Liberia	7.58	Philippines	8.31
Azerbaijan	7.82	Niger	7.58	Nepal	8.28
Lebanon	7.78	Central African Republic	7.49	West Bank and Gaza	8.16
Tajikistan	7.70	Congo (Brazzaville)	7.47	Indonesia	8.11
Congo (Brazzaville)	7.68	Eritrea	7.45	Ethiopia	8.07
Congo (Kinshasa)	7.67	Ethiopia	7.44	Haiti	8.05
Mauritania	7.64	East Timor	7.44	Angola	7.88
Kazakhstan	7.64	Guinea	7.36	Azerbaijan	7.81
Iran	7.63	Kenya	7.25	Turkey	7.77

Human Development		Demography		Environment	
Chad	9.83	Uganda	8.95	Saint Lucia	9.20
Congo (Kinshasa)	9.70	Malawi	8.43	West Bank and Gaza	9.00
Mali	9.34	Rwanda	8.43	Andorra	9.00
Angola	9.28	Burkina Faso	8.40	Bahrain	9.00
Mozambique	9.20	Guinea-Bissau	8.40	Qatar	9.00
Niger	9.16	Ethiopia	8.35	Malta	9.00
Tanzania	9.16	Kenya	8.30	Yemen	8.33
Eritrea	9.02	Nigeria	8.30	Rwanda	8.20
Guinea	8.94	Congo (Brazzaville)	8.23	Burundi	8.00
Burkina Faso	8.94	Cote d'Ivoire	8.15	Saint Vincent and the Grenadines	7.70
Liberia	8.91	Ghana	7.90	Comoros	7.67
Burundi	8.89	Equatorial Guinea	7.90	Haiti	7.67
Ethiopia	8.83	Madagascar	7.74	Dominica	7.50
Rwanda	8.69	Niger	7.70	Somalia	7.13
Cote d'Ivoire	8.64	Yemen	7.63	Lebanon	7.07
Guinea-Bissau	8.60	Angola	7.58	Malawi	7.00
Central African Republic	8.58	Chad	7.57	El Salvador	7.00
Gambia	8.52	Afghanistan	7.57	Sri Lanka	7.00
Somalia	8.51	Cape Verde	7.51	Bahamas	7.00
Sierra Leone	8.46	Eritrea	7.49	Ghana	6.93

This intriguing fact both underscores the variety of ways in which states exhibit fragility, and demonstrates utility of the ALC methodology in isolating and clarifying those varied experiences. These three states face challenges beyond those of other developing states; should members of the international community hope to engage such states effectively, their efforts must be carefully planned, closely coordinated, and well funded. States that appear on one or two of the lists also face particular challenges that require carefully tailored policy approaches. International engagement in Iraq, Colombia, or Sri Lanka obviously must take careful note of the volatile security situations in each country. Conversely, international development programs in states such as Mali, Mozambique, and Chad must make government capacity and human development a priority, aside from any considerations of security. Though all are in some ways fragile, all require unique policy approaches. In the table above, the diversity between and within lists is notable, reinforcing the point that no single index can capture the full measurement of state performance. No country appears on all six lists, or even on five. While a number of countries appear on two or three lists, only a few – including Ethiopia, Somalia, and Burundi – appear on four. The information provided by the CIFP assessment methodology identifies the particular challenges faced by each country listed providing invaluable information to policy makers attempting to engage these states effectively. To cite just one example, Yemen is among the top 20 states in terms of its legitimacy gap. It is also among the top 20 states in terms of governance, demography, and environment.

TABLE 5 - *Correlation of Fragility Index Components*

Index component	Number of indicators	Fragility Index	Authority	Legitimacy	Capacity
Authority	24	0.83			
Legitimacy	16	0.84	0.58		
Capacity	34	0.94	0.62	0.75	
Gender	8	0.74	0.40	0.75	0.77
Governance	12	0.77	0.57	0.93	0.64
Economics	19	0.79	0.49	0.75	0.85
Security and Crime	13	0.68	0.91	0.56	0.41
Human Development	19	0.91	0.69	0.63	0.94
Demographics	8	0.83	0.60	0.61	0.87
Environment	3	0.29	0.11	0.31	0.33

Clearly, any development program that does not take into account all these areas of state weakness has little hope of success. Simply put, policymakers must take the particular pattern of fragility in a given state into account when crafting their engagement strategies; to do otherwise is to invite ineffective and even destabilizing policy.

4. FINDINGS FOR MIDDLE EAST AND NORTH AFRICA

Home to more than 300 million inhabitants and with a per capita income of \$6,710 (PPP\$) in 2006, the Middle East and North Africa region (made up of 21 countries) is an interesting group of countries to focus our attention on. Most of them are, as is well known, big energy producers and have recently also become big energy consumers to sustain growth in their economies. Not all of them are affected by relatively large-scale conflicts such as Iraq but most, if not all, are somewhat unstable for different reasons. Their social indicators such as life expectancy or primary school completion rates are not bad when compared, for example, to some of the countries in the sub-Saharan African region. Beyond their reliance on oil as a source of revenue, they also receive large amounts of aid per capita as well as remittances, making them very vulnerable to external shocks. Although none of the countries in this region are what we would call extremely fragile as a group based on the CIFP methodology, once we focus on specific indicators, weaknesses are more visible. For example, our data on gender (which is a cross-cutting theme) shows that there are limited opportunities for women in these societies as evidenced by their low labor force participation rates or high unemployment rates. A smaller sub-group, the Mediterranean African Countries (consisting of Algeria, Egypt, Libya, Morocco, and Tunisia) is also considered separately as they are strategically different, being separated from Europe by the Mediterranean Sea, and a big platform for illegal migrants to the European continent as well as being affected by Islamic extremism.

In order to assess overall fragility, we consider our CIFP fragility index as well as two other popular indices in the literature, namely the Failed States Index from the Fund for Peace (<http://www.fundforpeace.org>) and the Marshall-Goldstone State Fragility Index (Marshall and Goldstone, 2007) for purposes of comparison with ours. Each of these indices has its own limitations in that it has its own conceptualization of fragility and may be biased towards particular aspects of stateness, such as for example, the existence of

conflicts. As discussed in the previous section, the CIFP analysis of state fragility begins with the notion that states need to exhibit three crucial properties for them to function effectively, namely authority, legitimacy, and capacity (ALC). This ALC assessment can then enable policymakers to decide where and how to engage, a decision that can be further supported by taking a look at the different indicator clusters, including the cross-cutting theme of gender. The Failed States Index (2006) from the Fund for Peace ranks countries based on ratings for 12 indicators (4 social, 2 economic and 6 political), where rating is done on a scale of zero to ten, with zero being lowest intensity and ten being highest intensity. The total vulnerability of a country is the sum of all the scores and a higher aggregate score means that the country is more vulnerable. In the case of the Marshall-Goldstone Index (constructed in collaboration with USAID), country performance is ranked in terms of effectiveness and legitimacy across four dimensions of state function (economic development, governance, security and social development). Effectiveness and legitimacy scores are generated in each of these four dimensions from about sixteen underlying data sources, and the eight resulting scores are added together to yield an overall fragility score for more than 160 (developed and developing) countries. Each score ranges from zero (no fragility) to three (high fragility), so that the overall fragility index ranges from zero to twenty-four. In the present case, we only have access to this index as of 2007 and as such will be comparing it to ours and the Failed States Index (both for 2006).

Table 6 below shows how our CIFP fragility index compares to the other two, for the sample of Middle East and North African countries, for the countries in the Mediterranean African region, and for larger samples consisting of all countries in our dataset, and all countries excluding OECD ones. Compared to all countries in our sample, the Middle East and North African countries (MENA) are more fragile, but once all OECD countries are excluded, the result reverses. On average, these countries perform at or around the median of the CIFP fragility index and only 3 of them (West Bank and Gaza, Yemen and Iraq) show up in the top 40 fragile states (see Table 2 above). When the Fund for Peace Index is used to rank countries, it is interesting to note that Egypt and Syria show up in the top 40 fragile countries as 'warning' countries, together with Yemen and Iraq (there is no data for the West Bank and Gaza). When ranked using the Marshall-Goldstone fragility index, only Algeria shows up in the top 40 fragile countries together with

Iraq and Yemen. So, overall, the only two countries that are part of MENA and that are what we (and others) consider quite weak/fragile are Iraq and Yemen. For the others, listed in this paragraph, all one can say is that these are countries that should be monitored closely. As indicated in Table 6 below, all these indices are highly correlated (in excess of 0.7 in all cases) and yet produce different rankings, reflecting both their similarities in terms of what they are trying to achieve and their differences in what they are trying to highlight.

TABLE 6 - *Fragility Indices and Correlations*

Country Groups	CIFP Fragility Index	Failed States Index (Fund For Peace)	Marshall- Goldstone State Fragility Index
Average MENA (21 countries)	5.55	78.31	8.95
Average MEDAFR (5 countries)	5.46	75.54	9.80
Average ALL excl. OECD	5.87	79.56	10.56
Average ALL	5.45	70.79	8.91

Correlation of Fragility Indices: MENA (21 countries)	CIFP Fragility Index	Failed States Index (Fund For Peace)	Marshall- Goldstone State Fragility Index
CIFP Fragility Index	1.00		
Failed States Index (Fund for Peace)	0.71	1.00	
Marshall-Goldstone State Fragility Index	0.85	0.81	1.00

Correlation of Fragility Indices: All countries			
CIFP Fragility Index	1.00		
Failed States Index (Fund for Peace)	0.89	1.00	
Marshall-Goldstone State Fragility Index	0.92	0.84	1.00

Continuing with the CIFP fragility index and its associated methodology, the next table shows the ALC scores and indicator clusters for the MENA countries, as well as how they compare with other country groups. Countries in the Mediterranean African region are highlighted.

TABLE 7 - Middle East and North African Countries

Country	Fragility Index	ALC Scores			Cross-cutting Theme	Indicator Clusters					
		A	L	C		Governance	Economics	Security and Crime	Human Development	Demography	Environment
Algeria	5.88	6.25	6.90	5.05	6.41	6.98	6.00	7.43	4.97	3.63	5.00
Bahrain	4.96	4.13	7.33	4.48	5.80	7.42	3.85	4.44	3.75	5.67	9.00
Djibouti	6.19	4.80	6.98	7.06	8.40	6.81	6.61	4.45	7.27	5.20	6.67
Egypt	5.78	5.34	7.32	5.34	7.08	7.31	5.62	6.55	4.79	4.83	5.67
Iran	6.25	7.00	6.96	5.38	6.77	7.63	5.99	8.51	5.23	5.35	5.20
Iraq	6.94	7.52	7.50	6.15	6.42	7.60	7.80	9.38	5.53	6.30	4.33
Israel	4.71	6.39	4.52	3.49	4.51	3.99	4.31	7.49	2.79	5.03	6.00
Jordan	5.21	4.70	6.79	4.89	7.21	6.50	5.40	4.95	4.13	5.00	6.67
Kuwait	5.31	5.23	6.86	4.76	6.16	7.52	5.04	4.63	4.21	5.70	6.33
Lebanon	5.74	6.35	7.29	4.62	6.90	7.78	5.58	7.34	3.61	5.15	7.07
Libya	5.30	4.80	7.15	4.86	5.40	7.07	6.46	4.70	4.51	4.40	4.73
Malta	3.33	2.96	3.58	3.49	4.56	3.46	4.87	1.47	2.26	3.00	9.00
Morocco	5.72	4.94	7.17	5.64	7.93	6.62	6.08	4.93	5.91	4.65	5.00
Oman	5.31	4.47	6.48	5.41	7.80	5.79	4.95	3.60	5.57	6.31	6.67

TABLE 7 - *Continued*

Country	Fragility Index	ALC Scores			Cross-cutting Theme	Indicator Clusters					
		A	L	C		Governance	Economics	Security and Crime	Human Development	Demography	Environment
Qatar	4.55	3.92	6.14	4.26	3.35	5.96	4.92	3.64	3.04	4.45	9.00
Saudi Arabia	5.59	5.79	7.47	4.67	7.92	8.03	4.72	6.88	4.71	4.73	6.00
Syria	5.90	5.21	6.97	5.95	6.40	6.13	6.23	6.47	5.48	5.53	4.67
Tunisia	4.61	3.72	6.11	4.60	5.38	5.50	5.11	3.47	4.82	3.28	5.00
United Arab Emirates	4.61	3.81	6.63	4.17	5.17	6.65	3.48	3.88	3.81	5.18	6.67
West Bank and Gaza	7.41	6.69	10.33	7.50	8.30	6.85	9.08	8.16	4.78	7.00	9.00
Yemen	7.27	6.59	8.32	7.31	8.93	8.00	6.56	7.44	7.20	7.63	8.33
Average MENA	5.55	5.27	6.90	5.19	6.51	6.65	5.65	5.70	4.68	5.14	6.48
Average MEDAFR	5.46	5.01	6.93	5.10	6.44	6.70	5.85	5.42	5.00	4.16	5.08
Average ALL	5.45	5.10	5.87	5.51	5.91	5.90	5.80	4.87	5.30	5.29	4.94
Average ALL (EXCL OECD)	5.87	5.37	6.43	5.99	6.45	6.37	6.19	5.22	5.84	5.69	5.15
	5.88	6.25	6.90	5.05	6.41	6.98	6.00	7.43	4.97	3.63	5.00

As usual, for each state, the above table shows the net fragility score, ALC scores, cluster scores and scores for gender (as a cross-cutting theme). We have also included averages for different country groups at the bottom of the table, as discussed above, and for purposes of comparison. MENA countries have a problem of legitimacy and to a certain extent authority when compared to all the countries in our sample. When compared to the sample of countries excluding OECD countries, legitimacy remains an important concern but not authority. Capacity continues to be less of a factor⁷. Looking further, an examination of the indicator clusters shows us that gender, governance, security and crime, and the environment are issue areas that deserve more attention, compared to those of economics, human development and demography, when one compares average scores for MENA to the overall sample, and the overall sample excluding OECD countries. All of these observations apply equally to the group of Mediterranean African countries. There is also (sometimes substantial) variation across ALC and indicator clusters when one looks at cross- or bilateral-country comparisons, providing helpful entry points for policymakers. For example, several of the countries in the MENA do quite poorly on governance or when it comes to security and crime, and yet have relatively good human development records. In sum, the countries of the Middle East and North Africa, require close monitoring. Special attention should be given to specific clusters of performance and subsets of indicators.

5. SYNTHESIS AND IMPACT

This article has demonstrated the utility of a fragile states approach to country risk assessment and has provided some empirical results for a subset of countries. Once analysis is complete, the assessment framework can feed into policy analysis at both the strategic and operational level. Strategically, such assessments allow policymakers to evaluate the strengths and weaknesses of a given state, specify entry points where the international community might

⁷ This does not imply that policymakers should not worry about capacity at all; however, our data does give us an indication of where one would want to focus more resources.

profitably direct its energy and resources, and provide a metric with which to measure fragile state performance over time in comparison to itself and others. Such analyses seek to answer the following questions for policymakers: What are the priority countries? Where can the international community respond most effectively? Which department(s) should lead/contribute to the response? How should resources be allocated?

In answering these questions, CIFP produces detailed assessments for each country in our annual fragility index (see www.carleton.ca/cifp). These country profiles enable users to drill down to the level of individual indicator, assisting efforts to assess performance in specific subject areas. The detailed reports provide insight into the nature of the particular risks facing a given country; they also highlight areas of relative strength – those areas ripe for increased investment. Obviously, an index cannot provide complete answers to all the issues outlined above. However, it does open a new avenue of inquiry, presenting researchers with the opportunity to quantitatively explore the phenomenon of state fragility. The underlying database – comprising more than 96,000 points of data covering 191 countries – provides a rich resource to test many fundamental assumptions regarding the causes and effects related to state fragility and failure. The previous section began that effort by presenting some initial statistical results.

To conclude, international best practice in fragile states places particular emphasis on the need for fully integrated analysis and engagement in fragile states. To be effective, government policy must be coordinated across all relevant departments; moreover, that policy must be informed by timely and comprehensive risk assessment. Without a shared understanding of both the nature of the problems facing a given state and the likely solution to those problems, engagement is likely to be at best ineffective, and at worst counter-productive. The CIFP fragility index provides some indication of the location and types of engagement that third parties will face in the medium to long term. Despite the best efforts of local and international leaders, some of today's fragile states will become tomorrow's failed states, requiring early warning and robust international engagement, including military intervention. Even as the index provides guidance to government agencies as they work to strengthen weak and vulnerable states, it can provide government agencies involved in long-term planning with information regarding how and where government resources may be required to deploy in the future. This information will doubtless be of great utility

to agencies requiring significant lead time when formulating and implementing recruitment and procurement strategies.

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ABSTRACT

This article lays out a framework for country risk analysis and early warning drawing on the methodologies developed by the Country Indicators for Foreign Policy Project (CIFP – www.carleton.ca/cifp). Special attention is given to the identification of failed and fragile states using the CIFP state fragility index, and how the latter compares to other such indices. The rest of the paper proceeds in four parts. In the second section, we provide some concepts and definitions as they relate to early warning, state failure and country risk. The third section assesses structural risk indicators and events based monitoring methodologies. The fourth section provides a comparative ranking of countries, some initial findings and results for the Middle East and North Africa. The fifth and final section concludes by discussing the policy implications of the analysis.

Keywords: Fragile States, Failed States, Conflict, Indicators, Early Warning, Risk Analysis, CIFP, Middle East, Yemen, Iraq, OECD, Development Assistance, Military Intervention

JEL Classification: O10, O11, O19, O53

RIASSUNTO

Approcci all'analisi del rischio paese e segnali di allerta

Questo articolo delinea uno schema per l'analisi del rischio paese e per l'individuazione dei segnali di allerta basandosi sulle metodologie sviluppate dal progetto CIFP (Country Indicators for Foreign Policy, www.carleton.ca/cifp). Particolare attenzione è riservata all'identificazione di stati deboli o insolventi attraverso l'utilizzo dell'indice di fragilità CIFP e alla comparazione tra quest'ultimo ed alcuni indici similari. Il resto dello studio è suddiviso in quattro parti. La seconda sezione fornisce concetti e definizioni relativi ai segnali di allerta, alla insolvenza degli stati e al rischio paese. La terza sezione valuta indicatori strutturali di rischio ed eventi sulla base di metodologie di controllo. La quarta sezione fornisce una graduatoria di rischio per un'ampia gamma di paesi, con alcune evidenze e risultati per la regione Medio Oriente-Nord Africa. La sezione finale discute le implicazioni di *policy* dell'analisi svolta.