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METHODOLOGY REVIEW
DISCUSSION PAPER

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PREPARED FOR:
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Country Indicators for Foreign Policy (CIFP) is an online resource available at: http://www.carleton.ca/cifp An automated password system is under development and will be in place in August, 2000.

To orient yourself to the product, try the demonstration at: http://www.carleton.ca/cifp/getstarted/gstart.html

See also the online presentation about the Caucasus region: http://www.carleton.ca/~dcarment/presents/icca/index.htm

EXECUTIVE SUMMARY

This report provides direction for researchers working on the Country Indicators for Foreign Policy (CIFP) project to tailor it to the needs of foreign policy analysts, the early warning research community, and the user base identified in the May 2000 Needs Assessment—findings of which note that interest and enthusiasm for CIFP is growing, and that there is a desire for qualitative assessment to complement quantitative data.

Section II provides background information detailing the evolution of the project. Currently, CIFP is waiting on the necessary funding to begin a pilot project in partnership with the Forum on Early Warning and Early Response (FEWER) and the Maryland Global Events Data System (GEDS).

Section III reviews the theoretical foundations upon which the CIFP methodology is based, and section IV presents a brief review of previous models and their external applications.

Section V discusses modeling in the CIFP framework and details the proposed methodological procedures for translating information from the CIFP database into risk assessment reports—a precursor to more comprehensive early warning information that will be a compilation of CIFP Risk Assessments, GEDS events data, and FEWER reports from field level specialists.

In keeping with the 1999-2000 strategic priorities of the FEWER consortium, future directions for CIFP include development of integrated capabilities including a training component and a GIAS mapping facility. Additional areas for development are: research on demand, and a stand alone cd-rom.

This overview is intended to provide CIFP researchers and interested users with the opportunity to suggest methodological improvements before CIFP begins its formal venture into risk assessment reporting. CIFP researchers invite comments and constructive criticism that will add to the methodological rigour of risk assessment reporting.

I INTRODUCTION

This discussion paper was commissioned by the International Development Research Centre (IDRC) for the purpose of clarifying the methodological procedures to be employed by the Country Indicators for Foreign Policy (CIFP) project in generating risk assessment reports. Therefore, this paper examines the role for CIFP risk assessment reporting and the methods of accomplishing this to better meet the needs of foreign policy analysts, the early warning research community, and the growing user base identified in the May 2000 Needs Assessment.[1]

Before going further, it is important to clearly define the terms commonly used in this report and in the early warning discourse generally:

Early Warning

Early warning represents a proactive political process whereby networks of organizations conduct analysis together in a collective effort to prevent likely events from occurring as in the Forum for Early Warning and Early Response (FEWER).

FEWER defines early warning as the systematic collection and analysis of information coming from areas of crises for the purposes of:

1. Anticipating the escalation of violent conflict;
2. Development of strategic responses to these crises; and
3. The presentation of options to critical actors for the purposes of decision making

Risk Assessment

Formally, *risk* is an expected value indicating probabilities about consequences. Risk assessment provides 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.[2]

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. This technique produces an intuitively appealing means for policymakers to allocate risk management resources. Efforts are focused on events

[1] See Appendix A: Scout Report on CIFP
[2] Carment and Garner, 1999.

that are likely to occur and/or will be consequential. 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 assessments of what? For CIFP, the dependent variable is "conflict potential" as defined by FEWER. Therefore, areas whose leading indicators show a higher probability of conflict potential will have a corresponding level of risk.

Risk assessment models provide a framework that enables analysts to interpret the results of local monitoring. Political risk assessments rely on structural data such as cross-national indicators created by the World Bank, the International Monetary Fund, the United Nations Development Programme, as well as customized indicators. The CIFP product incorporates these open data sources and has unique indicators, all of which are coded and indexed on a 9 point scale.[3] The data set includes measures of government stability, population heterogeneity, incidents of state failure, political violence, crime and terrorism, relationships with neighbours, the regional balance of power, major arms importers and exporters and the leading players in regional security.

Gurr and Marshall 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, 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.[4]

The motivation that guides this work is simple: a pro-active approach to peace-building will be more cost-effective and humane. It is desirable, in terms of both economic and human resources, to *avoid* conflicts and disasters than to deal with their outbreak and aftermath in an ad-hoc manner as is currently common practice. Ultimately, this endeavor is 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. Therefore, a secondary concern is resource allocation that will make effective use of early warning information.

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[3] For a summary of CIFP indicators, see **Appendix B**
[4] Gurr and Marshall, 2000. Ch.7.

II BACKGROUND

The Early Warning Trend

In recent years policy makers, and the research community tasked with keeping them abreast of current events, have been faulted for failing to recognize the preconditions and preliminary events that erupted into outbreaks of ethnic conflict, genocide, and environmental disintegration. A general consensus exists that more effective policy, including monitoring of preliminary signals and the historical record, could and should be employed.

A number of facilitating events guide researchers in the direction of conflict prevention. During the 1990s researchers witnessed the outright disintegration of a number of long-established states, notably the Soviet Union in 1991 followed by the entire Soviet Bloc, the resurgence of ethnic strife in the former Yugoslavia, ethnic rivalry in Rwanda, and recently in Kosovo. In retrospect, these violent conflicts were foreseen by the policy community—warnings did in fact exist—but could have been avoided if historical and current information was properly employed.

As mentioned, accurate predictions existed that were overlooked by the policy community. Anderlini and Nyheim (1998) note:

> Rwanda was anything but spontaneous. . . It appeared that long before the tragedy, NGOs, UN agencies and other observers in the country were aware and concerned about the impending violence. They'd watched and listened and reported on the heightening tension and extremist rhetoric. Grave warnings of a planned coup, an assault on UN forces, provocation to resume the civil war, and even detailed plans of genocidal killings in the capital, reached the UN secretariat in January 1994. The cable documenting this information was placed in a separate 'black file', designed to draw attention to its content and be circulated throughout the UN Secretariat. But senior officials questioned its validity, and made no contingency plans to avert the crisis. Similar reports to the governments of France and Belgium were also ignored.

Are there in fact commonalities in how violent conflicts emerge? In comparing the crises in Rwanda and Kosovo, Howard Adelman (1999) comments:

> Both countries were run by elected dictators. Both countries had a legacy of nationalist authoritarianism. The concept of a loyal opposition would have been odd to both systems. Both countries lacked a strong middle class. Both countries had well-developed oppositions that had put considerable pressure on the regimes for reform. The dominant extremist Hutu tried to eliminate the Tutsi from Rwanda. The dominant Serbs are trying to eliminate the Kosovars from Yugoslavia. In both cases, there was plenty of early warning of the intentions and activities of the dominant group actively abusing the human rights of the minority.

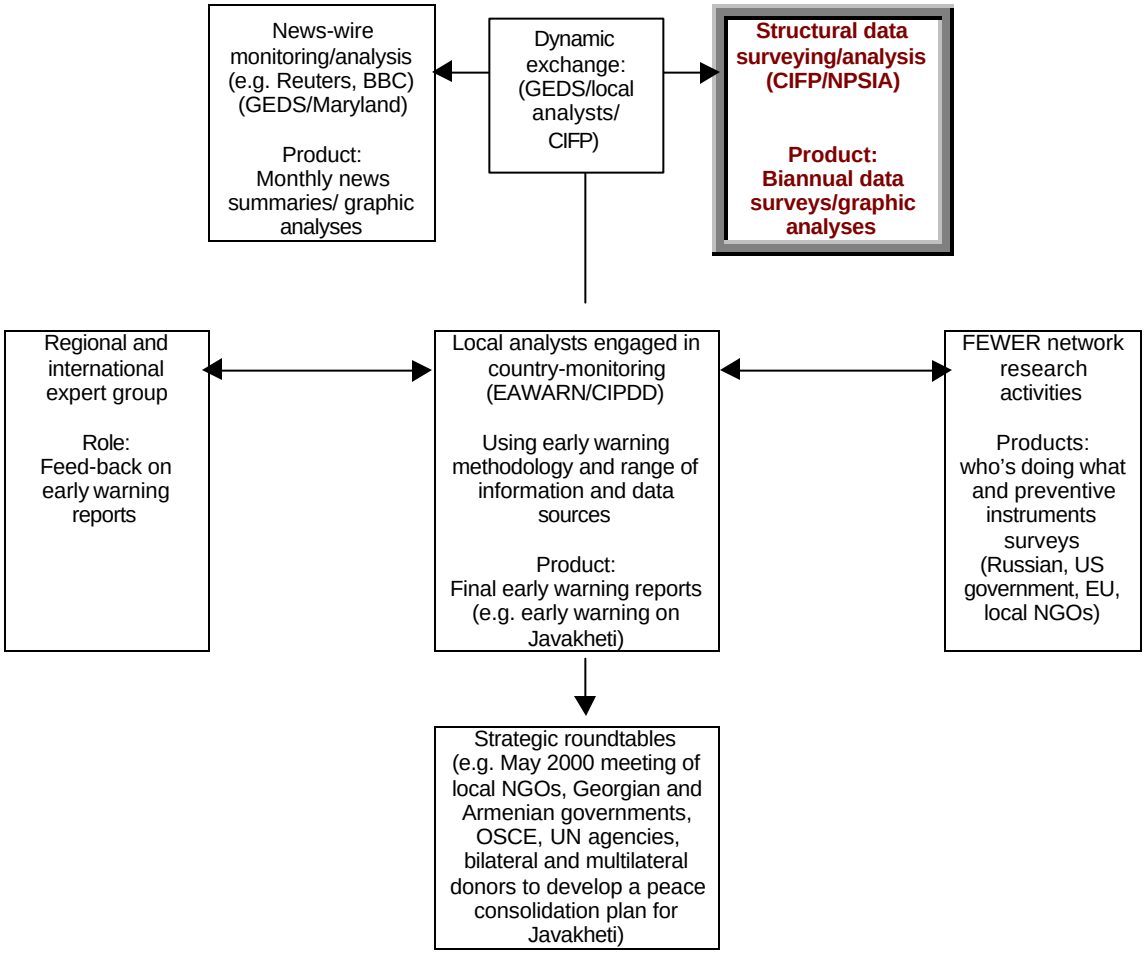
These examples serve to emphasize the need for and important role of transparent, open source early warning information—as provided by the FEWER consortium.

The accuracy of early warning research is promising, and demonstrates the potential to impose principals of cost-effectiveness in the resource allocation of external affairs departments.

A Role for CIFP *within FEWER early warning efforts.*

The CIFP Project encompasses over 80 indicators for 120 countries. CIFP became a core member of the FEWER initiative in January 2000, and recently established a working partnership with the Stockholm International Peace Research Institute (SIPRI). The data set provides indicators for cross-cutting themes including macro-economic and trade performance, international relations and global links, government stability and domestic conflict, militarization, social and human development and environmental sustainability. These structural indicators provide global overviews, country performance measures, and issue-based perspectives on economic, political, military, social, and environmental factors.

Illustration. Early warning systems: Emerging good practice. [5]



[5] Source: FEWER Secretariat

The above operational relevance of the system-described above can be further illustrated with a brief (and simplified) summary of early warning issues in Javakheti – and who would (and does) provide relevant information and analysis.

Table. Case-study application of FEWER methodology: Javakheti.[6]

Conflict generating factors		*Stakeholder agendas/grievances*		*Peace-generating factors*	
Indicator	*Source*	*Issue*	*Source*	*Indicator*	*Source*
Weak Georgian statehood	CIPDD and CIFP[7]	Armenians and Russians: Ambivalent to Georgian citizenship	CIPDD	Evolving Georgian statehood	CIPDD and CIFP[8]
Socio-economic isolation	CIPDD	Armenians: Isolation reflects governmental discrimination	CIPDD		
Ethnic tensions	GEDS[9], CIFP[10], CIPDD	Resource scarcity creates Armenian, Russian, and Georgian tensions	CIPDD	Strong Armenian-Georgian relations	GEDS[11]
Presence of Russian bases	CIPDD and GEDS[12]	Mixed perception: Bases provide jobs, but should go	CIPDD		
Repatriation of Meskhetian Turks	CIPDD	General perception: Return will increase hardship	CIPDD		
Economic under-development	CIPDD and CIFP[13]	Armenians: Poverty reflects governmental. discrimination	CIPDD	Seasonal migration of labour to Russia	CIPDD

Trends drawn out from assessing the balance between: (i) conflict generating factors; (ii) stakeholder agendas and grievances; and (iii) peace generating factors

The schematic presentation of a "good practice" early warning system, and the simplified analysis of the situation in Javakheti underscores the value added and role played by the different organisations involved:

(a) CIFP can play an important role in providing structural data and analysis on both conflict and peace generating factors;
(b) GEDS data and analysis sets the stage for real time perspectives ethnic tensions, presence of Russian bases, and Armenian-Georgian co-operation; and
(c) CIPDD, through its local network, is able to assess the importance of different indicators and understand the agendas and grievances of key stakeholders.

FEWER members see a clear role for CIFP in helping to ensure that their early warning efforts meet established good practice through the provision of critical structural data

[6] Source: FEWER Secretariat
[7] Data on political rights and civil liberties.
[8] Data on political rights and civil liberties.
[9] Media reports on ethnic violence incidents in Armenia, Russia and Georgia involving different groups.
[10] Data on minorities and minorities at risk.
[11] Media reports on Georgian and Armenian co-operation.
[12] Media reports on negotiations regarding the withdrawal of Russian bases in the Caucasus, and Russian troops fighting in Chechnya.
[13] Data on economic growth and government expenditure.

on both peace and conflict generating factors, and in engaging with local organizations in a dynamic analytical process.

Currently, NPSIA/CIFP is waiting on the necessary funding to begin a pilot project in partnership with the Forum on Early Warning and Early Response (FEWER) and the Maryland Global Events Data System (GEDS). This will consist of two regional concentrations (parts of East Africa and South East Asia), and will begin the integration of CIFP into the FEWER Network. This initial phase, therefore, sets the basis for sustained and active engagement with civil society organizations on a more global scale. The project will also emphasize the participation of local analysts[14], and will include analytical training and capacity building for these partners.

III THEORETICAL FOUNDATIONS

Emergent Violent Conflict

In order to establish a framework for analyzing the emergence of violent conflict and conflict management, it is necessary to understand how each given type of crisis typically develops and which possible avoidance efforts can be effective. In general terms, the factors that contribute to conflict escalation are categorized as: structural factors (root causes), accelerators (precipitators/facilitators), or triggers (catalysing events).[15]

Structural Factors:

- Background conditions that form the pre-conditions of crisis situations such as systematic political exclusion, inherent economic inequities, lack of adequate and responsive institutions, the presence of ethnic minorities, resource exhaustion, and over-dependence on international trade.

Accelerators:

- "feedback events that rapidly increase the level of significance of the most volatile of the general conditions, but may also signify system breakdown or basic changes in political causality"[16]

Triggers:

- Sudden events that act as catalysts igniting a crisis or conflict, such as the assassination of a leader, election fraud, a political scandal.

[14] FEWER members who provide event analysis and news monitoring, such as: Africa Peace Forum, Inter Africa Group, and the Gaston Z. Ortigas Peace Institute.
[15] Definitions of these terms are drawn from *A Manual for Early Warning and Early Response* (FEWER, 1998) and (Gurr and Harff, 1996).
[16] Gurr & Harff, 1996.

Early Warning Processes

➢ Identifying Conflict Potential

The international environment is characterised by a variety of risks of policy significance – the outbreak of conflict, natural disasters, abrupt regime changes, genocides, etc. Table 1 lists seven types of crises (not mutually exclusive) and provides a sample of data sources available to draw on.

Table 1
Types of Foreign Policy Crises

Type of Crisis	Description	Information Source
I. Conflicts: **1. Internal** **2. International**	violent clashes within a country violent clashes between countries	KOSIMO, ICB, COW, State Failure Report, Gros, Licklider, Wallensteen and Sollenberg, Regan,Heraclides
II. Political Crises	abrupt collapse of a governing regime (violent or non-violent)	Europa Yearbook, Political Handbook of the World, the Economist
III. Economic Crises	large drops in living standards, currency collapse, collapse of exports	UN, UNDP, World Bank, IMF, ICB
IV. Humanitarian Disasters	natural disasters, food shortages, mass refugee flows	UNHCR, Relief Organizations
V. Environmental Collapse	Unendurable pollution emissions	World Bank
VI. Resource Exhaustion	decline of resource stocks beyond recoverable levels	FAO, World Bank

Depending on the availability of information and frequency of occurrence, these broad categories may be specified in finer detail. For example, internal conflicts could be broken down into instances of ethnic wars, revolutionary wars, genocides or politicides, or abrupt regime transitions as in the *State Failure Report*[17].

➢ What about Prevention Measures?

Conflict is sometimes avoided by prevention measures[18]--averted before an outbreak by successful last minute negotiations, possibly grounded in some form of formal or informal early warning analysis. What are the practical implications of this reality for CIFP risk assessment reporting and early warning initiatives generally? For any given risky situation or crisis, a formal notation of prevention efforts must be made.

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[17] Gurr et al. 1998.

[18] Lund (1998) provides a list of types of preventive measures we might include as conflict prevention tools. **See Appendix C, p.30.**

Identifying when interventions have succeeded and failed permits inferences about our ultimate question of concern: "Which types of foreign policy efforts are the most effective?" This can extend to peace analysis focusing on the opportunities for peacemaking and peace-building—where are the windows of opportunity for peacemaking and who are the most potentially effective mediators and facilitators?

- **Identifying Structural Factors**

In order to monitor the dynamics of conflict potential, it is necessary to identify a set of associated indicators. Often a crisis has no single cause and furthermore, the different contributing causes vary in importance—variables may reinforce each other, while other times confounding influences neutralize one another. Analysis of conflict potential requires an assessment of the relative importance of different indicators and their inter-relationships.

As depicted in section III, structural data is critical to the early warning process, as "structural conditions tend to change only slowly, and so form the basis for long-term risk assessments…"[19]. Employing coded assessments by country experts of current situations and trends, together with structural indicators, is a useful way of combining traditional and model based approaches as a basis for risk assessment. This, in effect, extends the "coded assessments by country experts back in time to reflect historical context and longer-term trends, which are then useful for projecting future trends."[20] The provision of structural data is the niche that CIFP fills in the early warning framework.

IV LITERATURE REVIEW

The "early warning" stream of academic discussion emphasizes the importance of identifying background conditions to establish the potential for crisis and conflict (Leatherman & Vayrynen 1995). Early warning theorists focus monitoring and analytical attention on high risk situations before they fully develop (Gurr and Moore 1997).

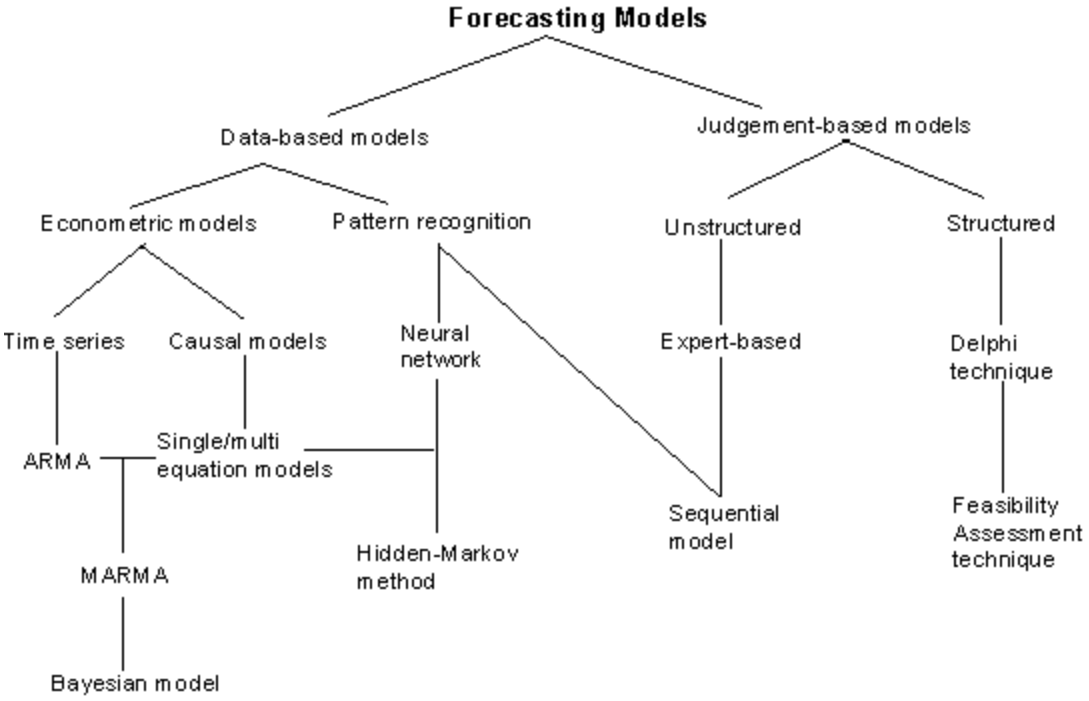
Intuitively, one of the most apparent means of predicting future international disturbances is to establish patterns in how they developed in the past. For example, analysts who have tracked patterns of ethnic conflict comment that regional and global observations from 1945 to the present demonstrate that ethnically-based rebellions, much less genocide, do not just erupt spontaneously without prior indication normally extending back over many years (Moore and Gurr 1997). At least in principle, such observations provide the basis for testing predictions regarding the correlates of crisis situations; a series of situations suspected to be of high risk can be compared to the incidence of crisis actually arising in these situations. Propositions established to be

[19] Davies J.L. & Gurr, T.R., 1998. p.4.
[20] Ibid. p.7.

empirically well-grounded can form the basis of predictive models of events that focus on the existence of certain preconditions (Gurr 1996).

A brief discussion of competing models and their applications and limitations in the CIFP context is relevant here. This is not an examination of the internal validity of such models, but rather a review of external applications and potential relevance to CIFP

Dipak Gupta (1997) provides an excellent overview of the types of forecasting models available. Gupta classifies these techniques as either *data-based* or *judgement-based*, where the former is the collection and analysis of large data sets and the latter is based on the subjective assessment of experts:[21]



Source: Gupta, D. 1997.

An example of a reasonably accurate and predictive judgement based model is the expected utility model put forth by Bruce Bueno de Mesquita et al., which also incorporates a risk calculation. CIFP is clearly an example of data-based forecasting and so this section will review a selection of models that fit into this category.

The "State Failure Task Force" was established in 1994 to try and identify the factors that distinguish failed states from those that averted crises over the last 40 years. The *State Failure Task Force Report: Phase II Findings* found that three variables were significantly correlated with subsequent state failure: infant mortality, openness to interantional trade, and level of democracy. Three distinct analytical techniques confirmed these findings: logistic regression and neural network analysis estimated the

[21] Bruce Bueno de Mesquita, 1996.

predictive accuracy of the model, and genetic algorithm modeling was used to identify candidate sets of variables and as a check on the univariate regression methodology.

The general models of state failure uncovered are useful, but less so in forecasting outcomes for individual countries. The project undertook a pilot study using GEDS to identify accelerator, de-accelerator, and trigger events and discovered that monitoring these factors is a powerful analytic tool. Their pilot study was small and so it was recommended that academic research make further inquiries in this area.

One note worthy recommendation from the phase II results suggests that it would be worthwhile to :

> Develop models that capture regional variation—or localized hotspots—within a country that are masked by national level analysis. We know that the environmental impact on material quality of life will be stronger if there is a spatial correlation among the variables.[22]

Barbara Harff (1996) developed a sequential model for early warning of genocides and politicides, resembling a processual model, but incorporating the role of accelerators. She distinguishes ten background conditions, four intervening conditions, and eight accelerators. What is unique is that she does not assume that crisis development is linear. Where processual models, without accelerators and triggers, identify stages of a conflict, these static models can not provide adequate risk assessments that will allow for planning of responses to "impending" situations. This is where the dynamic role of accelerators and triggers comes in, and ideally those that are essential and necessary. The event data from GEDS will be useful, although it cannot distinguish those critical factors. Conclusions suggest that the next step is to define specific categories of "de-accelerator" events and to test and refine category definitions and assigned weights.

In another interesting example, Moore and Gurr employ the 1991-95 data from the Minorities at Risk project to compare three empirical approaches to generating risk assessments:

1. Risk profile: a list of high risk factors are generated based on general theoretical knowledge such as group incentives, capacity, and opportunity

2. Theoretical regression model: an argument is expressed as a multiple equation model, and a statistical technique—three-stage least squares—is applied to the data to estimate the parameters of a predictive equation.

3. Empirical regression model: an inductive approach similar to the State Failure project, where statistical software determines what variables enter the analysis

[22] *State Failure Task Force Report: Phase II Findings.*

Each model procures slightly different results, although with a proportion of overlap. The conclusion of this study is that it is difficult to select one model over another therefore multiple approaches should be encouraged, and forecast early and often. They suggest it may be useful to focus analysis on those cases that appear on multiple assessment lists.

The above discussion reviews some of what has been done. The next section describes how the GEDS, FEWER, CIFP consortium will lead to a more reliable product within the early warning framework.

V MODELING IN THE CIFP FRAMEWORK

Risk Assessment and Early Warning

The complexity of acquiring meaningful and informative facts and accounts of country situations and translating them into admonitions of imminent possibilities presents a rather formidable challenge. The recent lackluster success in preventing conflict, referred to in section II, is not rooted in any underlying indifference, but is largely attributable to the inherent practical and technical limitations of translating the overwhelming body of international information into meaningful signals. With the motivation of improving policy success, we explore how existing information can be translated into more useful policy analysis and advice.

CIFP is a critical juncture in its development, particularly with respect to formulating risk assessment methodologies that will have an impact on the utility and policy relevance of the product. As outlined above, the value of structural data from CIFP to the broader FEWER framework is clear. Following the establishment of FEWER in June 1997, pilot early warning activities were undertaken in the Great Lakes and the Caucasus. In addition, research was carried out to survey and define "good" practice in the conflict early warning field. From FEWERs applied experience and research, the following conclusions regarding Early Warning best practice have emerged:[23]

- Prediction and trends definition in early warning requires an understanding of three elements: (i) conflict generating factors (dynamic and structural/local and international); (ii) stakeholder agendas and grievances; and (iii) peace generating factors (structural and dynamic peace developments, effectiveness of peace-making/building activities, etc.). A simplified equation is therefore: (i) + (ii) – (iii) = trends.

- Effective early warning requires the use of a range of data sources and analytical methods. Three categories of information sources can be listed: (i) local (e.g. events and perceptions not covered by the media); (ii) dynamic newswire reports (e.g. Reuters, ITAR-TASS, BBC); and (iii) structural data (e.g. World Bank, UNDP data, etc.). Relevant early warning data from these sources needs to be identified and analysed using both qualitative and quantitative methods.

[23] Source: FEWER Secretariat

- The best analysis emerges from a dynamic process between local, regional and international analysts. Given the complexity and specificity of violent conflicts, it is critical that the main source for the analysis is local.

The modeling component of CIFP is essential to its success, and as such must be carefully considered in terms of how the methodology chosen processes the data into an enriched, value-added risk-assessment tool for use in early warning.

Quantitative Indicators vs Qualitative Assessment

As noted in a previous report on CIFP, "the age-old battle over the merits of quantitative, qualitative or mixed-method approaches to political risk analysis remains unresolved". While qualitative analysis is obviously subjective, and vulnerable to the biases and errors of the analyst, purely quantitative methods have also produced widely ranging results. Indeed, of more than a dozen commercially available political risk tools surveyed, none relied exclusively on quantitative indicators, instead choosing to combine quantitative data with analytical judgements or Delphi-type ratings.[24] The point, identified by Ilan Kapoor, is not so much to create a flawless set of indicators as it is to identify the most suitable indicators and to use a range of them.[25] As outlined in the May 2000 CIFP needs assessment, this is the preferred approach for CIFP users.

The web-based CIFP data is intended to be a complement to qualitative risk-assessment. While quantitative indicators are relatively easy to collect and calculate, measurability alone does not necessarily make an indicator useful. Indeed, social and political institutions and processes—such as history, cultural values, and political culture—are complex and fluid, and cannot easily be reduced to numbers. [26] As such, CIFP adopts a mixed method approach to risk assessment.

Methodological Overview

Numerical data provides a more steady and continual flow of information to policy makers than media reports, but also presents of an overweighted body of information—important and unimportant information are mixed together with little distinction between them. Raw international time series data regularly delivers country information year by year, not all of which is useful to timely policy.

The development of many conflict situations is best perceived through a broad historical perspective. CIFP identifies a broad set of key structural factors that are alleged to be correlated with conflict potential. These structural factors will be incorporated in a model of the most prominent and powerful crisis predictors, with a consciousness of their synergies and mitigating effects.[27] To ensure consistency with

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[24] Heather Jeffries, *Country Indicators for Foreign Policy (CIFP): A Review of Current Progress, Existing Instruments and Future Options*, (Department of Foreign Affairs and International Trade, 1997), p. 12
[25] Kapoor, p.9
[26] Ilan Kapoor, *Indicators for Programming in Human Rights and Democratic Development: A Preliminary Study* (Canadian International Development Agency, 1996), p. 7
[27] **See Appendix D, p. 32.: Structural Factors and Crisis Accelerators**.

the notions of previous early warning research, CIFP adopted the conceptual framework proposed in *A Manual for Early Warning and Early Response*[28]*,* which incorporated input from various researchers and institutions.

- **The Internet Database**

All indicators are transformed into country indices based on comparisons of the levels of the indicators across countries. New country data will be added to the database as it becomes available, currently all of the data is up to 1998.

The Base Year
At the time of creation of the *CIFP* database, the most recent available measures for some country indicators were for 1998. For other indicators, the most recent measures were for 1995 and in many cases earlier. In order for indicators to be measured as consistently as possible, 1995 was selected as the base year. By choosing a period of reference a year and a half in the past, we minimize the common problem that the most recently published data is not always the most reliable and is often subject to revision; a gestation period was allowed. Nevertheless, the most recent editions of publications were used in collecting country data. Data of different vintages is often printed in different editions of publications. More recent editions typically reflect not only newly received information, but also revision to historical series and changes in methodology.

Single Year Measures
For most country characteristics, measures at a single point in time provide a reasonable representation of the current climate of the country, for instance population or distances from Canada, since these measures are unlikely to fluctuate erratically from year to year. Indicators pertained to the year 1995 unless otherwise specified.

Time Series Averages
In contrast to the stable country characteristics just described, a single point in time may not adequately convey country characteristics that fluctuate widely from year to year. For instance, international trade levels often vary significantly due to exchange rate volatility, fluctuations in commodity prices or year-to-year aberrations in trading patterns. Hence for some indicators, averages were taken over several years. Employing time series averages based on a larger number of years might also be expected to minimize the impacts of data mis-measurements on the relative country rankings.

Subjective Indicators
Given the subjective nature of many country characteristics (for instance, stature within international organizations), efforts were made to consistently represent this information across countries based on more tangible numerical criteria. The design of appropriate indices was undertaken with the objective of assessing country characteristics according to their significance to potential foreign policy involvement.

[28] FEWER, 1999

Indexing the Data
Raw country data was used to construct indices using a 9-point scale. The methods used for computing the summary measures for each indicator are described in the remainder of this report. The advantage of indexing the variables is that the relative global ranking of each country can be judged for each given indicator. In addition, given the units-free property of the indices, they can be used directly as an input in statistical models without alterations.

The 1 to 9 Scale
For nearly all variables in the *CIFP* database, index numbers were constructed on a 1 to 9 scale. A primary motive in choosing the 9-point scale was that it enabled the data generated by the project to be incorporated into DND's *GEOPOL* global geopolitical database. The creation of these indices will also have an immediate application as an input to the multiple regression study for which the *CIFP* indicators will be used. Generally, *a high index value denoted that the given country characteristic was likely to generate foreign policy attention*. For instance, China has a value of 9 for the population index indicating that Chinese population pressures are more likely to draw attention from foreign policy than countries with small populations. Analogously, South Korea was assigned a value of 1 for the ethnic diversity index indicating that ethnicity-related issues are not likely to demand attention from Canadian foreign policy. Of course, it is not always obvious whether a country characteristic at the high or low end of the spectrum is more likely to require foreign policy concern. Occasionally, the choice of the high and low end of the scale was somewhat arbitrary.

Interval-Based Indices
For some indices, the levels assigned relate directly to the magnitudes of the raw indicators. For instance, a value of 3 for the population index indicates that a country has a population between 1 and 10 million. Discretion was used to choose intervals that were readily interpretable and pertinent to the international climate.

Global Rank-Based Indices
For many indicators, countries were sorted from lowest to highest, divided into nine equal categories, and then assigned numbers ranging from 1 to 9 based on the category to which they belonged. The index numbers that use this procedure are specified in the following indicator descriptions.

Timely information about the presence of accelerators and triggers may be better suited to country specialists and field level observations:

- **The CIFP Survey of Country Specialists** (Appendix E)

Notably, some of the notions emerging from the FEWER framework have no obvious published sources from which we can gather them. Nonetheless, since such hard to find information is often the most vital to predicting crisis outbreak, we operationalize all the proposed indicators through a combination of existing CIFP indicators and a

proposed survey of expert foreign affairs personnel, ideally including those working abroad. Gathering information via a survey has several advantages:

1. it addresses the major factors proposed to be important to early warning research.
2. the model would incorporate field level observations of significant developments.
3. by confining field level observations to only the most difficult to observe crisis causes, we minimize the costs of gathering this key information.
4. survey questions can ask for numerical responses to our questions which will be comparable to our existing indicators.

The information that is required of the CIFP survey is both objective and subjective information. A thirty-question model survey of country experts that would provide the required information is included in **Appendix E.**

- **The CIFP Survey of Foreign Policy Personnel** (Appendix F)

An important question that lingers is "What is the appropriate means to combine the various sub indicators into broadly-based indicators of country risk?" Conceptually, there is no end to the number of influences we could consider that are correlated to a given form of crisis. One means of determining causal links would be through multivariate regression procedures. However, the ability to identify causal links is somewhat limited. Indeed, in a binary regression framework, it's hard to conceive of any model specification for which an analyst could not be accused of "omitted variable bias" in determining what factors culminate in crises. Researchers following this approach could fall into the trap of empiricism - the practice of identifying correlations, both causal and spurious, and subsequently adopting and then theoretically rationalizing only the strongest ones. This is not a recommended approach since meaningful theoretical relationships often have no support statistically (especially through mis-specified regression models) while misguided notions sometimes are favoured by statistical grounding.

Our approach emphasizes the notion of tradeoffs in determining well-being. For instance, in developing an overall measure of economic well-being in a country, how should we weight the following measures:

a_1 prevalence of poverty;
a_2 unemployment;
a_3 inflation;

It is apparent that the various components of an index are not of equal importance. But how should we determine appropriate weights? Since scientific methods fail to suggest an exact approach, one means to proceed would be to weight the individual

indicators based on the expertise of those knowledgeable about the emergence of crisis situations in the international environment.

A second survey, this one targeted at foreign policy personnel is included in the Appendix as a model for this procedure. The objective of the eighteen-question survey is to have the CIFP indicators reflect the state of our understanding of the relative importance of the various subcomponents of each of our indices. Averages would be taken from those in the policy community which in turn would form the basis of our indicator weights. **See Appendix F.**

Formal Modeling

Regression techniques lend themselves well to assessing the explanatory power of competing theories in the presence of multiple influences. Consider for example, the impact that the movement of displaced ethnic groups (through refugee flows or ethnic cleansing) has on a neighbouring state. Changes of demography, rapid and spontaneous, can drastically alter the ethnic balance in a neighbouring state thereby adding to regional instability. But without a theory connecting refugee flows to conflict, it would be difficult to know precisely the impact the movements will have on the possibility of diffusion. For example, if we hypothesized that a combination of socio-political and economic factors were associated with ethnic political mobilisation, rebellion and outflows, we might develop a model based on poor economic performance, IMF economic intervention, ethnic dominance and a low level of economic development (Norton & Miskel 1997). If on the other hand our concern was to explain the linkage between full-scale ethnic wars and refugee flows, the primary explanatory variables would include, low levels of democracy, a history of political violence, divisions within societies based on ethnicity and ethnic wars in contagious states (Gros 1996). Finally, if our concern was explaining ethnic migration, we would examine divisions of ethnic groups and the allocation of parts of them to different states; persecution of minorities, dictatorial regimes, the use of coercion to implement policy and the decline of certain groups in society due to economic obsolescence (Gros 1996).

The proposed procedure for translating the CIFP indicators into meaningful risk assessment, entails collecting, analyzing and presenting information that can empower policy makers to take action in identifiable situations of risk within their sphere of influence. CIFP will produce tangible predictions of where and when conflicts are most likely to occur.

At this stage in the collection effort CIFP will have: a list of crises and near crises, a set of key indexed structural factors that have led to their development, a list of incidents that acted as accelerators and triggers, and finally a set of field surveys reporting where key conditions are currently present. Finally, by processing this information in a systematic fashion, we will finally be able to assess which countries are most at risk.

Regression procedures, as in the *State Failure Project*, are useful for this purpose. Logit regressions could provide a practical form of linking the incidence of a given type of crisis (definitionally, a zero one variable) to the myriad of underlying factors.

$$\text{Crisis Occurrence}_i = \text{constant} + \beta_k \cdot X_i + \text{random error}_i$$

where i: number of observations;
k: number of indices.

Lagged variables will be included where appropriate. CIFP will also need to include the factors that acted to prevent crisis occurrence among the explanatory variables. Additionally, the presence or absence of accelerators and triggers will be included. The specification of logit regression models will involve a number of trials before arriving at models with sufficient explanatory power. The degree of explanatory power could be judged by the percentage of correct predictions of crisis situations that a given set of independent variables produce in a least squares framework.

After estimating an empirical model based on past data, CIFP will generate country risk assessments. By substituting current country variables into the given regressions, the estimated probabilities of crisis occurrence—the degree of risk—for the seven types of crises for every country will be generated. In the prevention domain, the coefficients of a prevention tools variables may lead to a recommendation based on the strategies that have worked most effectively in the past at averting similar situations.

Outputs

Phase II output:

Focused, biannual risk assessment reports for all countries—grounded in the data provided by reputable organizations, the observations of country specialists and a combined analysis of both with an eye toward where similar conditions have produced problems in the past. The non-occurrence of a crisis need not signify that the underlying conditions should not merit attention.

Current CIFP outputs include:

1. a description of the methodology, procedures, and data sources for the country indicators used in the project;
2. a set of summary tables providing an overview of all country indicators;
3. a series of 122 country profiles presenting the entire series of indicators for each country diplomatically recognized by Canada;
4. an on-line Internet database.

To further understanding of the root causes of violent conflict, and to relate aid directly to preventive initiatives, CIFP will attempt to identify key cause-and-effect relationships through simple two-way correlation analyses of variables, and in the presence of

multiple influences, by controlling for various factors through regression techniques and assessments of goodness of fit.

VI FUTURE DIRECTIONS

Funds are now required to up-date the data set and engage in a joint effort to provide quality early warning.

The proposed partnership between CIFP, GEDS, and FEWER, will be of great benefit:

- it will enhance the capacity of local networks to produce quality early warning reports
- it will ensure CIFP data is highly relevant to development practitioners dealing with conflict prone/affected countries; and
- interaction between GEDS and CIFP is likely to lead to new in coding practice and automated (quantitative and qualitative) data analysis.

In keeping with the 1999-2001 strategic priorities of the FEWER consortium future directions for CIFP include the development of integrated capabilities such as a training component and online Geographic Information and Analysis System (GIAS).

The FEWER Council has identified training as a key instrument for capacity building and assisting NGOs, IGOs, and governments with their conflict prevention endeavors. Experience shows that databases, like CIFP, and the methods used can be transferred to organizations in conflict affected regions—enhancing the sustainability of the project. For CIFP the task is to develop a training facility that will engage local analysts with the goal of enhancing their capabilities. This will involve developing workshops that will provide instruction on the ways of using CIFP and GEDS information in conjunction with local real-time knowledge, and self-producing risk assessment reports on a sustained basis. One method of delivering instruction that may be explored is the development of an on-line course. This would enable participants from a wider audience to participate and may reduce costs. Of course this assumes that technology is available for participants—this access issue is improving rapidly in many countries.

In more concrete terms, the project director will conduct 2-5 day workshops on conflict prevention tailored to the specific needs of both academic researchers and field staff at NGOs and IGOs actively engaged in local situations. A central task is to assist practitioners in developing specific analytical skills, risk assessment techniques, and conflict resolution capacity. In addition, these workshops will serve to provide feedback and additional experience that will facilitate future work and follow up activities for both participants and CIFP. These activities will serve to develop an active network of local specialists who will subsequently be able to run conflict prevention seminars.

Extending CIFP capabilities to include geographic analysis is a priority. Online GIAS is a powerful feature that will enable users to perform a number of information creating operations with map and tabular data. GEDS is also exploring this type of development, and this presents a unique opportunity for embedded data sharing for

expanded analytical capability. The development of this product will require a significant commitment of resources.

Additional areas for development include “research on demand”, and a CD-rom product for distribution. ***Ongoing funding will enable CIFP to engage staff to develop the capabilities outlined, and will be essential to the future success of the project.***

VI CONCLUSIONS

This discussion paper has reviewed the proposed methods of developing CIFP indicators, along with supplementary information, into risk assessment reports as part of a larger early warning framework. These indicators will be presented to international affairs and other analysts in a format that is readily interpretable, easy to use and available through the Internet.

The effectiveness and usefulness of risk assessment modeling will ultimately be judged by its success as a predictive apparatus. The percentage of crises that would have been predicted before they happened provides an appealing measure. In a very real sense, the penultimate goal of early warning is a zero success rate; that is, the objective of such predictive analysis is to recommend actions to ensure that undesirable situations don't occur. Unlike a meteorologist, an early warning researcher can often have an influence on disaster avoidance. Even if CIFP fails to satisfy numerical measures of success, the initiative would still reap dividends to policy makers through the presentation and analysis of the most important information from the various actors in the world of international affairs

The research design is at the planning stage. This overview is intended to provide CIFP researchers and interested users with the opportunity to suggest methodological improvements before CIFP begins its formal venture into risk assessment modeling and reporting. We hope to expand and further refine our methods in the very near future. Feedback from policy makers and researchers is welcome--additional variables could be incorporated or indexing methods can be enhanced. CIFP invites comments and constructive criticism that will add to the methodological rigour of risk assessment reporting.

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Correlates of War
Minorities at Risk http://wizard.ucr.edu/~wm/M@R.HTM
International Crisis Behaviour Project

APPENDIX A

Scout Report June 3, 2000.

Country Indicators for Foreign Policy
http://www.carleton.ca/cifp/

Created and maintained by the Department of Foreign Affairs and International Trade and Norman Paterson School of International Affairs, Country Indicators for Foreign Policy (CIFP) "represents an on-going effort to identify and assemble statistical information conveying the key features of the economic, political, social and cultural environments of countries around the world." Started in 1997, this flexible database project is intended to serve the needs of NGOs, government departments, and the private sector, and can potentially be used to aid in strategic decision-making, for risk analysis, and to monitor countries for possible "peacebuilding intervention." The database may be searched by region, regional and global organization, or by issue area. New users will want to visit the Users Guide, which offers detailed instructions for searching the database. Registration by email is required, and a user name and password will be emailed within two days.

From The Scout Report for Business & Economics, Copyright Internet Scout Project 1994-2000. http://scout.cs.wisc.edu/

APPENDIX B

Summary of CIFP Indicators[29]

A. Internal Stability

Democracy Index
Autocracy Index
Number of Coups

Population Heterogeneity

Ethnic Diversity Rank
Ethnic Diversity Index
Religious Diversity Rank
Religious Diversity Index
Total Cultural Diversity Rank
Total Cultural Diversity Index
Ethnic Cleavage—Political Status
Ethnic Cleavage—Cohesion

Political Violence/Refugees

Political Violence Index
Number of Refugees
Refugee Index

Crime

Terrorist Incidents (by location, Group Homeland, Victim's Nationality)
Terrorism Index
Corruption Index
- Transparency International
- Knack & Keefer 1980-89
- Mauro 1981-83

Drug Activity
Black Market Index

B. Local Geopolitical Stability

Arms Imports—Volume
Arms Imports—Index
Arms Exports—Volume
Arms Exports—Index
Resource/Territorial Disputes—Number
Resource/Territorial Disputes—Index
Political/Cultural Disputes—Number
Political/Cultural Disputes—Index
Canadians Living Abroad—Number
Canadians Living Abroad—Index

[29] *Each indicator is indexed on a nine-point scale according to its relevance to foreign policy.*

Regional Balance of Power & Security Influence

Fraction of Regional GDP
Regional Balance of Power Index
Regional Security Index

C. National Power/Influence

Population Index
GDP Index
GDP Per Capita Index
Inequality Index

Military/Security Arrangement

Economic Organizations Index
    Fraction of World GDP Economic Organizations
    Economic Membership Index
Military/Security Alliances Index
    Fraction World Armed Forces in Military Alliances
    Military/Security Alliance Index
UN Organizations Index
Miscellaneous Organizations Index

Militarization Indicators

Total Military Expenditure—Average
Total Military Expenditure—Index
Military Expenditure as a % of GDP—Average
Military Expenditure as a % of GDP—Index
Total Armed Forces—1995
Total armed Forces—Index
Armed Forces Per 1000—Average
Armed Forces Per 1000—Index

International Trade Indicators

Exposure—Rank
Exposure—Index
Self-Sufficiency—Rank
Self-Sufficiency—Index
Dependency—Rank
Dependency—Index
    International Trade Measures
Exports
    Imports
    Primary Commodities—Exports
    Primary Commodities—Imports
    Exports to Most Important Partner
    Exposure Measure
    Self-Sufficiency Measure
    Dependency Measure

Accessibility Indicators

Sea Distance from Canadian Port
Coast/Port Rating

Port Facilities Rating
Rail Link Rating
Inland Transportation (road, rail) Rating
Composite Seaport Rating
Air Distance Rating
Number of Airports Rating
Overall Accessibility Rating

D. Social Development

Human Development Index
- HDI Rank
- HDI Index

Gender Development Index
- GDI Rank
- GDI Index

Gender Empowerment Measure
- GEM Rank
- GEM Index

Health Indicators

Life Expectancy Rank & Index
Maternal Mortality Rank & Index
Infant Mortality Rank & Index

E. The Environment

Absolute Environmental Impacts

CO_2 Emissions—Rank & Index
Fishery Landings—Rank & Index
Forest Area—Rank & Index
Number of Threatened Species—Rank & Index
Energy Consumption—Rank & Index
Average Environmental Score
Environmental Rank
Absolute Environmental Index

Per Capita Environmental Indices

CO_2 Emissions Per Capita—Rank & Index
Fish Consumption Per Capita—Rank & Index
Energy Consumption Per Capita—Rank & Index
Average Per Capita Environmental Score
Per Capita Environmental Rank
Per Capita Environment Index

APPENDIX C

Conflict Prevention Tools

Human Rights

- Mediation
- Negotiation
- Conciliation
- Informal consultation
- Peace conference
- Unilateral gestures of good will
- Civilian fact-finding missions
- Observers/ monitoring/ verification teams
- Special envoys
- Conflict prevention/ management centres
- Human rights monitoring
- Promotion/ advocacy of HR standards
- HR institution building

Communication and Education

- Support local conflict management/ resolution
- Conflict management/ resolution training
- Peace commissions
- Non-official facilitation/ problem solving workshops
- Civilian peace monitors
- Internationally sponsored peace consultations
- Exchange visits
- Conflict resolution/ prevention centres
- Peace education
- Visits by eminent organisation/ individuals

Military Measures

- Pre-emptive peacekeeping forces
- Professionalise/ restructure military forces
- Demobilisation/ reintegration
- Military to military programmes
- Military confidence building and security measures
- Non-aggression agreements
- Security guarantees
- Targeted deterrence
- Demilitarised zones
- Arms embargo/ blockade
- Threat/ projection of force
- Crisis management

Economic and Social Development

- Targeted economic assistance
- Economic reform
- Economic co-operation/ integration
- Inter-communal trade
- Private economic investment
- Health assistance
- Agricultural programmes
- Conditionality for conflict prevention

Environment/ natural resource management

Judicial/Legal Process and Arrangements

Commissions of enquiry/war crimes tribunals
Constitution-al commissions
Judicial/legal reforms
Police reforms
Support local indigenous legal institutions
Arbitration
Adjudication

Media/ Journalism

Peace Radio/TV
Joint investigative reporting projects
Media professionalisation
International journalist training
Civic education projects
Peace education

Humanitarian Assistance

Humanitarian aid
Repatriation/ resettlement of refugees
Capacity building for public welfare

Political Development Governance

Political institution building
Election monitoring
National conferences
Capacity building of civil society
Power-sharing arrangement
Sub-national devolution and autonomy
Capacity building of authorities/ training public servants

APPENDIX D

CATEGORIZATION OF INDICATORS

The first columns present the categorization of early warning indicators with some minor reclassifications and a few additional indicators. Table 1 identifies the *structural causes* of crises while Table 2 lists the factors that act as *accelerators*. The second columns of each table present CIFP proxy variables that can be used to make the conceptual notions workable. The third columns complete each table by presenting sources from which we can draw these indicators for inclusion in the CIFP (though most are already included).

1. Structural Factors Underlying Crisis Development

Structural Factors	Proxy	Source
Political Performance		
Unwillingness to effectively govern		
• **human rights abuses**	civil liberties index	Freedom House
• **constitutional abuses**	executive constraint index	Polity 2000
• **abuses of power**	political rights index	Freedom House
Inability to effectively govern		
• **systemic instability**	regime durability index	Polity 2000
• **illegitimacy**	competitiveness of participation	Polity 2000
• **unconsolidated power**	perception of experts	country specialist survey
• **incomplete territorial control**	perception of experts	country specialist survey
Mismanagement		
• **corruption**	bureaucratic corruption index	Transparency International
Unstable social structure		
• **changing elites**	perception of experts	country specialist survey
• **pronounced social stratification**	perception of experts	country specialist survey
Economic Performance		
Economic Stability		
• **prevalence of poverty**	fraction of population below poverty line	UNDP
• **degree of unemployment**	unemployment rate	World Bank
• **inflation/ price stability**	inflation rate	World Bank
Economic Inequality		
• **disparity and inequality**	Gini coefficient, GEM, primary schooling	UNDP
• **land distribution**	perception of residents	country specialist survey
• **access to social security/welfare**	social program spending	UN
Military and security		
• **security expenditure**	military expenditure/GDP ratio	SIPRI
• **growing illicit arms trade**	arms imports	SIPRI
• **number of private security firms**	estimates	country specialist survey
Environment & Resource Management		
• **agricultural failure**	crop yields	FAO
• **pollution**	ground level smog, safe drinking water	World Bank
• **environmental disaster**	resource stocks	FAO
Socio-cultural Factors		
Media and Propaganda		
• **inflammatory statements**	perception of experts	country specialist survey
• **exploitation of divisions/tensions**	perception of experts	country specialist survey

Institutions and Events		
Institutional		
• **lack of civil institutions**	regulation of participation	Polity 2000
• **link between populous-government**	competitiveness of participation	Polity 2000
Religious institutions		
• **antagonistic behaviour**	perception of experts	country specialist survey
• **propaganda**	perception of experts	country specialist survey
Police and judiciary		
• **institutional bias**	perception of experts	country specialist survey

2. Crisis Accelerators

Accelerators	Proxy	Source
Political		
Domestic insecurity		
• **inability, on the part of the state, to deliver security and stability**	perception of experts	country specialist survey
• **security forces on the streets**	perception of experts	country specialist survey
• **inability to maintain territorial control**	perception of experts	country specialist survey
• **imposition of curfews**	perception of experts	country specialist survey
Population movements		
• **civilian movement across border**	perception of experts	country specialist survey
• **restriction of movement into and out of the state**	perception of experts	country specialist survey
• **IDPs and refugees**	number of refugees and IDPs	UNHCR
Political opposition/ Government oppression		
• **Proliferation of opposition groups**	executive recruitment competition	Polity 98
• **Frequency of political arrests**	perception of residents, human rights agency reports	country specialist survey, Amnesty International
• **Miniaturisation of dissent**	political influence of minorities index	Minorities at Risk
• **Problems processing dissent**	perception of experts	country specialist survey
• **Disillusionment with security apparatus**	perception of experts	country specialist survey
• **Dissatisfaction with the management of state affairs**	perception of experts	country specialist survey
• **Unfulfilled expectations**	perception of experts	country specialist survey
Consolidation of opposition		
• **Increased opposition activity**	perception of experts	country specialist survey
• **Increase in size and cohesion of opposition groups**	perception of experts	country specialist survey
Economic		
International confidence		
• **Capital flight**	financial market credit ratings	Financial Institutions
• **Foreign debt**	foreign debt to GDP ratio	World Bank
• **Currency stability**	variance of exchange rate	IMF
• **Foreign exchange reserves**	depletion of foreign exchange reserves	IMF

Economic decline		
• **Increasing poverty/ economic disparity**	change in fraction below poverty line	World Bank
• **food shortages**	perception of residents, calories per day	country specialist survey, World Bank
Socio-cultural		
Ethnicity		
• **ethnic tension/violence**	presence of ethnic disputes	Minorities at Risk
• **historical rivalries**	perception of experts	country specialist survey
• **territorial disputes**	number of territorial disputes	CIA World Factbook
• **antagonistic behaviour**	perception of experts	country specialist survey
• **institutionalised persecution**	perception of experts	country specialist survey
• **language laws**	perception of experts	country specialist survey

APPENDIX E

THE CIFP SURVEY OF COUNTRY SPECIALISTS

EXAMPLE: KYRGYZSTAN

CIFP Country Survey

Kyrgyzstan

CIFP
Country Indicators for Foreign Policy

July 1, 2000

To: John Smith, Diplomat

The *Country Indicators for Foreign Policy (CIFP)* team has identified you as an expert in the present state of affairs in Kyrgyztan. We hope you'll be willing to share your insights by completing the enclosed survey regarding the conditions of foreign policy concern that presently exist in Kyrgyztan.

At present, the *CIFP* Internet database provides a comprehensive and up-to-date collection of international data for use by those in the international affairs and policy communities. Our indicators provide global overviews, country performance measures and issue-based perspectives for a variety of economic, political, military, social and environmental country traits. Feel free to explore our international database at the following Internet location:

www.carleton.ca/cifp

We have created the following account so that you may access the database:

```
username:   jsmith
password:   *******
```

In return, we hope you will kindly complete the following thirty-question survey regarding the present state of affairs in Kyrgyztan. An honorarium of $30 U.S. will be sent to you upon receipt of your completed questionnaire.

Your responses will be combined with the indicators in the database to generate an early warning report of the future issues most likely to arise in Kyrgyztan. We hope that by furnishing information in a consistent and timely manner, the *CIFP* can assist policymakers in directing their efforts and resources and in monitoring and responding to potential, emerging and existing issues of concern.

The views expressed in your survey need not reflect your organization's official position and won't be disclosed nor published without your permission. Please respond in a manner that best conveys the state of affairs in Kyrgyztan.

Thanks in advance for your cooperation and please do not hesitate to contact me regarding any aspect of this survey or the *CIFP* project.

Best Regards,

David Carment
Principal Investigator
Country Indicators for Foreign Policy
dcarment@ccs.carleton.ca

CIFP Survey of Country Specialists

Please provide responses to the following 30 questions that best reflect the present state of Kyrgyzstan over the past year.

1. On a scale of 1 to 9, to what extent do problems of unconsolidated government power exist in Kyrgyzstan?

1	2	3	4	5	6	7	8	9
Not a Problem								Extremely Problematic

2. To what extent are problems of incomplete territorial control present?

1	2	3	4	5	6	7	8	9
Not a Problem								Extremely Problematic

3. To what degree have there been changing elites?

1	2	3	4	5	6	7	8	9
Not at All								Rapidly Changing

4. To what extent is social stratification present?

1	2	3	4	5	6	7	8	9
Not at All Present								Extremely Present

5. On a scale of 1 to 9, to what extent do inequalities in land distribution exist?

1	2	3	4	5	6	7	8	9
Very Equal Distribution								Very Unequal Distribution

6. How many private security firms would you estimate exist in Kyrgyzstan?
   - ❑ None
   - ❑ 1
   - ❑ 2
   - ❑ 3 - 5
   - ❑ 5 - 9
   - ❑ 10 - 14
   - ❑ 15 - 19
   - ❑ 20 - 24
   - ❑ 25 or more

7. To what extent has the government made statements that were inflammatory over the past year?

1	2	3	4	5	6	7	8	9
No Inflammatory Statements								Numerous Inflammatory Statements

8. To what extent has the government exploited divisions or tensions?

1	2	3	4	5	6	7	8	9
Not at All								Extreme Exploitation of tensions

9. To what extent have religious institutions incited antagonistic behaviour in Kyrgyzstan?

1	2	3	4	5	6	7	8	9
Not at All								Very Actively

10. To what extent have religious institutions participated in the spread political propaganda in Kyrgyzstan?

1	2	3	4	5	6	7	8	9
Not at All								Very Actively

11. To what degree are the police and judiciary perceived to be biased in Kyrgyzstan?

1	2	3	4	5	6	7	8	9
Not at All								Widespread Perception of Bias

12. To what extent is the inability on the part of the state to deliver security and stability a problem?

1	2	3	4	5	6	7	8	9
Not a Problem								Extremely Problematic

13. Are there security forces on the streets of Kyrgyzstan?

1	2	3	4	5	6	7	8	9
Not at All								Very Many

14. Does the government have difficulty maintaining territorial control?

1	2	3	4	5	6	7	8	9
Not a Problem								Extremely Problematic

15. Has there been the imposition of curfews over the past year?

1	2	3	4	5	6	7	8	9
Never								Regularly

16. Have there been mass civilian movements across the borders of Kyrgyzstan in the past year?

1	2	3	4	5	6	7	8	9
Not at All								Many

17. Has there been a restriction of movement into and out of Kyrgyzstan?

1	2	3	4	5	6	7	8	9
Not at All								Many Restrictions

18. Have there been political arrests over the past year?

1	2	3	4	5	6	7	8	9
None								Many

19. To what degree would you say that there has been disillusionment with the security apparatus in Kyrgyzstan?

1	2	3	4	5	6	7	8	9
Full Confidence								No Faith

20. To what extent has there been dissatisfaction with the management of state affairs in Kyrgyzstan?

1	2	3	4	5	6	7	8	9
High Satisfaction								Extreme Dissatisfaction

21. To what extent would you say the population has unfulfilled expectations of governments in Kyrgyzstan?

1	2	3	4	5	6	7	8	9
No Unfulfilled Expectations								Many Unfulfilled Expectations

22. Has there been an increase in opposition activity over the past year?

1	2	3	4	5	6	7	8	9
No Change								Large Increase

23. Has there been an increase in the size and cohesion of opposition groups?

1	2	3	4	5	6	7	8	9
No Change								Large Increase

24. Have there been food shortages over the past year?

1	2	3	4	5	6	7	8	9
None								Widespread Shortages

25. To what extent are historical rivalries among ethnic groups present in Kyrgyzstan?

1	2	3	4	5	6	7	8	9
Not at All								Numerous and Intense Rivalries

26. Has there been antagonistic behaviour among ethnic groups over the past year?

1	2	3	4	5	6	7	8	9
Not at All								Frequent Antagonistic Incidents

27. Has institutionalized persecution of ethnic groups been present over the past year?

1	2	3	4	5	6	7	8	9
Not at All								Strongly Present

28. To what extent are language laws present in Kyrgyzstan?

1	2	3	4	5	6	7	8	9
Not at All								Numerous Laws

29. To what extent is the movement of citizens around the country restricted in Kyrgyzstan?

1	2	3	4	5	6	7	8	9
Not at All								Many Restrictions

30. Which of the following crises, if any, are likely to arise in Kyrgyzstan in the near future?
    - ❑ Economic
    - ❑ Political
    - ❑ Humanitarian
    - ❑ Domestic Conflict
    - ❑ International Conflict
    - ❑ Environmental Collapse
    - ❑ Collapse of Resource Stocks

APPENDIX F

THE CIFP SURVEY OF FOREIGN POLICY PERSONNEL

CIFP Survey of Foreign Policy Analysts

Thank you for your cooperation in completing the following survey. The objective of this effort is to determine how we should weight various factors in determining the extent to which problems exist in different countries. For your responses, please fill in the blanks with percentages that sum to 100 percent. For instance:

option 1	__50__
option 2	__10__
option 3	__30__
option 4	__20__
Total	**__100__**

1. In assessing a state's "unwillingness to effectively govern", what percentage weights would you attach to the following criteria?

abuses of power	_____
constitutional abuses	_____
human rights abuses	_____
Other (identify: _____)	_____
Other (identify: _____)	_____

2. In assessing the a state's "inability to effectively govern", what percentage weights would you attach to the following criteria?

systematic instability	_____
illegitimacy	_____
unconsolidated power	_____
incomplete territorial control	_____
Other (identify: _____)	_____
Other (identify: _____)	_____

3. In assessing the "stability of a state's social structure", what percentage weights would you attach to the following criteria?

changing elites	_____
pronounced social stratification	_____
Other (identify: _____)	_____
Other (identify: _____)	_____

4. For a well-grounded measure of "economic stability", what percentage weights would you attach to the following measures?

prevalence of poverty	_____
rate of unemployment	_____
inflation / price stability	_____

5. For a well-grounded measure of "economic inequality", what percentage weights would you attach to the following measures?
   - access to social security/welfare _____
   - extent of social stratification _____
   - presence of income disparities _____
   - inequities in land distribution _____
   - Other (identify: _____) _____
   - Other (identify: _____) _____

6. For a measure of "media and propaganda", what percentage weights would you attach to the following measures?
   - inflammatory statements _____
   - exploitation of divisions/tensions _____
   - Other (identify: _____) _____
   - Other (identify: _____) _____

7. For measure of "institutional weakness", what percentage weights would you attach to the following measures?
   - lack of civil institutions _____
   - link between populous and government _____
   - Other (identify: _____) _____
   - Other (identify: _____) _____

8. To assess "the contribution of religious institutions to instability" what percentage weights would you attach to the following measures?
   - antagonistic behaviour _____
   - spread of political propaganda _____
   - Other (identify: _____) _____
   - Other (identify: _____) _____

9. To assess "domestic insecurity" what percentage weights would you attach to the following measures?
   - inability on the part of the state to deliver security and stability _____
   - security forces on the streets _____
   - inability to maintain territorial control _____
   - imposition of curfews _____
   - Other (identify: _____) _____
   - Other (identify: _____) _____

10. To determine the presence of "population movements" what percentage weights would you attach to the following measures?
    - civilian movement across the border _____
    - restriction of movement into and out of the state _____
    - internally displaced persons and refugees _____
    - Other (identify: _____) _____
    - Other (identify: _____) _____

11. To assess the extent of "government oppression" what percentage weights would you attach to the following measures?
    - proliferation of opposition groups _____
    - frequency of political arrests _____
    - miniaturisation of dissent _____
    - problems processing dissent _____
    - disillusion with the security apparatus _____
    - dissatisfaction with the management of state affairs _____
    - unfulfilled expectations _____
    - Other (identify: _____) _____
    - Other (identify: _____) _____

12. To determine the "consolidation of opposition" what percentage weights would you attach to the following measures?
    - increased opposition activity _____
    - increase in the size and cohesion of opposition groups _____
    - Other (identify: _____) _____
    - Other (identify: _____) _____

13. To determine "international economic confidence" what percentage weights would you attach to the following measures?
    - capital flight _____
    - foreign debt _____
    - currency stability _____
    - foreign exchange reserves _____
    - Other (identify: _____) _____
    - Other (identify: _____) _____

14. To gauge "economic decline" what percentage weights would you attach to the following measures?
    - increasing poverty/economic disparity _____
    - food shortages _____
    - Other (identify: _____) _____
    - Other (identify: _____) _____

15. To assess the presence of "ethnicity" within a country, what percentage weights would you attach to the following measures?

ethnic tensions/violence	_____
historical rivalries	_____
territorial disputes	_____
antagonistic behaviour	_____
institutionalised persecution	_____
language laws	_____
Other (identify: _____)	_____
Other (identify: _____)	_____

16. What is your highest level of post-secondary education (consider programs that are past the halfway point as complete)?
    - ❑ No degree or college certificate
    - ❑ College Certificate/Diploma
    - ❑ Bachelor's Degree
    - ❑ Master's Degree
    - ❑ Doctorate

17. Can your academic background be reasonably interpreted as international affairs?
    - ❑ Yes
    - ❑ No What Discipline? _____

18. Which sector best identifies your sector of employment or study?
    - ❑ Academia
    - ❑ Government
    - ❑ Non-governmental Organization
    - ❑ Private Sector
    - ❑ Other

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