Assessing Small Island Developing State Fragility

A chapter prepared for the volume on

Economic Vulnerability and Resilience of Small States
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1. Introduction

This chapter examines Small Island Developing State (SIDS) fragility with a specific focus on identifying risk indicators for the purposes of early warning. The chapter unfolds in six parts. Following this introduction, we examine current research themes on early warning and risk assessment. In the third part of the paper we assess the linkages, both theoretical and policy related, on vulnerability and state development. In the fourth and fifth parts of the chapter we present preliminary findings on SIDS and fragility drawing on the Country Indicators for Foreign Policy project (CIFP). In the sixth and final part of the chapter we draw some preliminary conclusions and identify areas for further research.

We argue that SIDS have very specific and individual vulnerabilities related to their economic conditions, governance, and international linkages. Few have all of the problems in extreme in comparison to larger countries; this suggests that SIDS could benefit from very specific and targeted policies where the problems are very specific and not compounded by other risk factors.

2. The Causes of State Failure

A considerable amount of research has been devoted to assessing state failure and fragility but little attention has been given in this literature to identifying the particular vulnerabilities of small island developing states. With emerging problems in Oceania, the Caribbean and South Asia, it seems reasonable to consider how and why these states become fragile and sometimes fail. They are in many important ways inherently more vulnerable than larger states if not by their remoteness, then by newness and weak economic structures.

More specifically, the literature on SIDS tends to focus on their vulnerabilities to natural and environmental disaster and the resulting social, economic, environmental consequences. There is also a heavy emphasis on economic vulnerabilities including trade, difficulties to integrate in the global economy, heavy dependence on agriculture and food imports as well as a narrow resource base. Recent studies, including chapters in this volume, draw attention to economic vulnerability as being a primary concern for small state economies. Using an index of vulnerability, Briguglio et al. (in this volume) identify a number of scenarios by which economic vulnerability in small states can either hasten weakness and collapse or, if countered with judiciously chosen policies, can create opportunities for growth, and positive and dynamic change.

Consider the contrasting cases of the following two SIDS: Solomon Islands and Mauritius. On the one hand the Solomon Islands is a small country heavily dependent on the export of a single commodity. This vulnerability resulted in immense political, economic and social problems for the state's leadership, which they were not adequately prepared to address. According to Anderson (2004), this problem is not unique to the Solomon Islands.

> In Melanesia (particularly the Solomon Islands) the logging industry has earned a notorious reputation for corruption. Politicians in the Solomon Islands have often received illegal "gifts" and other kickbacks from logging companies in return for looking the other way at illegal logging practices. These practices lead to the unsustainable use of resources and the squandering of the benefits of development in return for the enrichment of a privileged few (Anderson, 2004: 8).

The Solomon Islands' subsequent collapse and the intervention of the Australian government and several other regional partners through the Regional Assistance Mission to Solomon Islands (RAMSI) paved the way for a wholesale transformation in economic and political management. The current efforts of RAMSI give high priority to initiatives intended to both reduce the state's inherent vulnerability to future conflict, and to strengthen its political and economic institutions so that it can better cope with any future crises. While these efforts include elements common to previous peace building efforts seen elsewhere such as military deployment, a civilian police presence, weapons amnesties, and multitrack mediation, these elements have all been implemented in a manner reflective of the country's unique needs. In addition, these traditional elements of peace building have been combined with initiatives that respond to conditions that are unique to the Solomon Islands, including technical support for the country's national financial system, a comprehensive anti-corruption campaign extending throughout the dominant logging industry as well as the political system, and efforts to diversify the national economy into areas such as tourism (Harris, 2005; Edwards, 2004). In the language of Briguglio et al (2003), RAMSI thus represents a concerted attempt on the part of Australia and other regional partners to reduce the Solomon Islands' vulnerability and increase its resilience not only to conflict, but to economic and political shocks as well.

By way of contrast consider the case of Mauritius, which is often cited as one of the few economic and social success stories in sub-Saharan Africa. Independent from the British since 1968, this country was once a monocrop economy (heavily dependent on the sugar industry) vulnerable to terms of trade shocks, with high rates of population growth in the 1950s; and ethnic tensions because of its racial diversity were always a possibility. This led Nobel Prize

winner James Meade to argue in the 1960s that there was a high probability that Mauritius would fail and that its development prospects were bleak. Despite two short instances of ethnic rioting (in 1968 and 1999), Mauritius is now a middle-income country (as a result of two decades of sustained growth in the 1980s and 1990s) with a diversified economy, where manufacturing, tourism and the financial services sectors are also important pillars in addition to the sugar sector. In explaining this "Mauritian miracle", Subramanian and Roy (2001: 37) write:

> The econometric results, however, suggest that even after accounting for the role of institutions there is a sizable unexplained component to Mauritian growth. Cross-country growth models, by definition, cannot capture country-specific idiosyncratic effects. In Mauritius there were many. But one particularly important one, ironically, appears to be the very diversity and ethnic fragmentation that Meade lamented as a curse.

More specifically, diversity allowed different ethnic communities in Mauritius to establish foreign links (in the form of foreign investment and technology) and facilitated entry into foreign markets. A compromise between economic power (which once resided mostly in the sugar sector and was controlled by a small French community) and political power (in the hands of the Hindu majority) allowed markets and industries to operate freely, thus preventing political elites from engaging in rent-seeking activities, as is often the case in other sub-Saharan African countries. Finally, the development of participatory political institutions (free and fair elections, respect for the rule of law and property rights and freedom of the press among others) in order to accommodate the demands of different ethnic groups made Mauritius an attractive destination for investment. In short, proper economic and social policies have reduced the vulnerability of Mauritius to external factors, and increased its resilience to both economic and political shocks. Even though the future of the country's economy is uncertain due to the phasing out of the multi-fibre agreement and erosion of trade preferences under the Sugar Protocol, because of its resilience, Mauritius is better equipped than other countries (and SIDS) in similar situations to deal with adverse economic shocks.

These disparate cases show how the causes of state failure and fragility can be used to identify how these might fit into a coherent framework of analysis for understanding SIDS fragility.1 There are many cases of state failure. Somalia, Congo, Liberia, Sierra Leone and Bosnia are examples of both state failure and collapse (Center for Defense Information: 1999). In each of

1 Alao (1999: 83-102) identifies a number of interrelated factors. These include: weak state structures and their inability to cope with post-Cold War transition; deteriorating economic conditions; and the rise in ethnic conflict. See also Helman and Ratner (1992).

these cases, the central government ceased to function, was unable to provide for the well-being of its population or protect it from internal and external threats.2 States weaken and fail when they are unable to provide basic functions for their citizens.3 The economy weakens. Education and health care are non-existent. Physical infrastructure breaks down. Crime and violence escalate out of control. These conditions generate opposition groups, which often turn to armed insurrection.

The proper referents for understanding state failure are not only a state's own past, present and future performance in absolute terms but its performance relative to other states. The rate of change (which is understood by examining a state's relative performance as opposed to absolute performance), whether progressive or regressive, tells us whether a state is moving either towards collapse or improvement. In other words, characteristics and indicators are useful for defining state failure only if there are appropriate reference cases from which to compare. And since these reference points are themselves evolving over time it is important to understand that "failure" is a relative term and has meaning only with respect to state performance at specific points in time.

This distinction between absolute and relative performance not only helps us separate out causes from consequences, it also provides us with some clues about where we should look for explanations.

Most scholars who seek to explain state failure are confronted by three distinct sets of empirical puzzles. Each puzzle is drawn from the perspectives of systemic transformation, state-society relations and violent interactions and events. The first perspective associates state failure with macro-level changes in the international system. The second emphasises intermediate state-society relations and the third emphasises micro-level strategic interactions between groups at specific points in time.

More generally:

- Macro or long-term processes associated with system-structure transformations and the associated problems of the emergence of weak states;
- Intermediate mechanisms associated with institutional viability and state weakness; and

2 To understand what a failed state is, it is important to understand a successful state. At its core, a successful state provides for the basic security of its population, protecting it from both internal and external threats. It also has the capacity to provide for the health and welfare of its population. See CDI (1999).

- Micro or short term selection processes and mechanisms that account for preferences of violence over pacific forms of strategic interactions and the subsequent escalation and/or duration of ethnic hatreds, violence, repression, and war at specific points in time.

Much of the literature addresses state failure from the perspective of the first two puzzles, while comparatively less time has been spent addressing micro questions about the timing, escalation and the duration of interactions leading to violence. This empirical gap is, of course, understandable – long and medium term perspectives furnish a very useful overarching historical framework for studying system change and comparing state performance over relatively long periods of time, while explanations for specific choices, events or behaviours tend to focus on environmental stimuli in the context of standard social scientific models. A second and related set of macro-level perspectives trace state failure to processes associated with economic development and the development of international norms of self-determination. Both affect the likelihood of state failure only indirectly. According to Rowlands and Joseph (2003), it is widely believed that economic factors are an important part of the set of conditions associated with the emergence of conflict. For example, Brown identifies high unemployment, high inflation, resource competition, inequality, and economic modernization as specific conditions that may contribute to the use of violence by some groups within a society (Brown, 1996).

According to Anderson (2004:10), in Oceania:

> The linkages between economic performance and potential for violent conflict are strong. Low or declining incomes, high inflation, exchange rate fluctuation or collapse, and volatile levels of foreign investment significantly impact material living standards, and can create or aggravate dissatisfaction with government performance, undermining government credibility. High levels of economic inequality contribute to social fragmentation, declining state legitimacy, and can cause scapegoating of economically privileged minorities. Low involvement in international trade is also associated with higher risk of state failure, given that the conditions that inhibit high levels of international trade and foreign investment (such as rampant corruption and poor infrastructure) also contribute to the risk of political crises. Poverty and the failure of a state to improve the welfare of its citizens can lead to increasing marginalization of people from the state. If the benefits of development are distributed in an unequal manner this can be a particularly strong conflict contributing factor.

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3 According to the Esty et al (1995: 1), a failed state is one that is "utterly incapable of sustaining itself as a member of the international community." More precisely, they define state failure as consisting of "instances in which central state authority collapses for several years."

The following chart includes vital economic indicators for the region. It is quite obvious from the numbers that there are important differences across countries, whether one considers income per capita, debt or aid per capita. Countries with high per capita incomes also receive a large amount of aid per capita, and growth rates vary substantially across these countries.

Table 1: Economic Indicators for Oceania (2002)

	GNI (US $)	GNI Per Capita (US$)	GDP Growth (annual%)	Debt (US$)	Aid Per Capita (US$)
Fiji	1.7 billion	2 130	4.1	200.6 million	41.4
French Polynesia	3.9 billion (1998)	16 920 (1998)	6.2 (1998)	---	1 741
Marshall Islands	126.3 million	2 380	4.0	---	1 177.7
Federated States of Micronesia	240.5 million	1 970	0.8	---	915.4
New Caledonia	3.2 billion (1998)	15 750 (1998)	-3.2 (1998)	---	1 472
Palau	136.4 million	6,820	3.0	--	1 562.5
Papua New Guinea	2.8 billion	530	-0.5	2.4 billion	37.8
Samoa	251.3 million	1 430	1.9	167.8 million	214.5
Solomon Islands	256.0 million	580	-2.7	129.7 million	59.4
Tonga	145.6 million	1 440	1.6	49.0 million	---
Vanuatu	221.1 million	1 070	-0.3	54.8 million	133.5

Source: World Bank Development Indicators, 2002.

Whereas system-structure perspectives emphasise the weakening of states as result of minority group mobilization in the face of system change, relative economic development and other exogenous factors, intermediate-level perspectives emphasise the weakening and in some cases the collapse of the state in the face of internal pressures (Rotberg, 2003). The assumption here is that the emergence of state disorder is the failure of prevailing values to legitimize existing divisions of labour and political order (Kohli, 1990). States in decay are in transitional stages in which existing ideologies fail to legitimize the positions of various actors in a hierarchical social structure. Under such conditions most scholars predict the result will be the breakdown of the social and political order.

Consequently, as Baker and Ausink (1996) argue, a fully collapsed state is one that has lost legitimacy, has few functioning institutions, offers little or no public service to its constituents and is unable to contain fragmentation. State collapse begins when the central state starts to deteriorate, leading to the fractionalization of society, with loyalties shifting from the state to traditional communities that seem to offer better protection. This process is a three-step progression. First, institutions fail to provide adequate services to the population. Second, improperly channelled ethnic, social, and ideological competition erodes the effectiveness of these weak institutions even more. Finally, the cumulative effects of poverty, over-population, rural flight and rapid urbanization, as well as environmental degradation overwhelm the weak state to the point of collapse (Dearth, 1996: 119-130).

Decay has both internal and external implications. As Vernon Hewitt (1997: 198) suggests, "high levels of domestic instability limit a state's ability to act authoritatively within the international community, limit its ability to act on domestic society with any legitimacy, and to deliver socio-economic packages aimed at bringing about widespread industrialization.

This partnership is reinforced when the state is challenged by minority groups, itself a response generated by assimilative pressures, policies on in-migration, economic competition and more direct political threats of secession. The net result is a lethal "policy feedback" process in which the central government's policies in the form of entitlements for the majority ethnic groups induce minority groups to organize for political action. This challenge in turn generates greater resistance to change from the state-centre.

According to Beverly Crawford and Ronnie Lipschutz (1999), broken social contracts and weakened oppressive institutions open political space for political entrepreneurs to mobilize support. If the political gains made available to these entrepreneurs are achieved through the re-allocation of resources or the disproportionate economic deprivation of one group in favour of another, the net result will be the escalation of conflict towards intergroup violence. Similarly, the successful use of coercion by a state in order to suppress local challenges enhances the assessment of its future utility. Hence, coercion against is also a normative factor since elites who use violence become habituated to violence. Violence becomes a useful political tool, part of elite political culture that is assimilated into the national identity (Tilly, !978, 1991).4

4 These include military regimes and one-party states. In states that have little or no experience in managing ethnic tensions, and constraints are low, hegemonial exchange and its more coercive variant, the control model, are the usual alternatives. Control models differ from hegemonial-exchange models to the extent that there is a superordinate ethnic group in power. The elites of these groups have developed the techniques of coercion, depoliticization and cooption in order to maintain power. Control becomes institutionalised and usually arises when the state is faced with imminent collapse.

3. Risk Fragility and Conflict Potential

Though often intimately related to one another, fragility and violent conflict are distinct concepts that should not be conflated. Conflict is perhaps the more directly observable of the two; even so, it often remains somewhat difficult to analyse quantitatively. Much of the research on the subject employs definitions of conflict based upon a certain number of battle-related deaths, as well as the presence of well-established and (at least ostensibly) politically motivated antagonists to operationalise econometric models. Such an approach has provided many insights into the permissive causes of conflict at both the macro- and intermediate levels; however, such an arbitrary structure unfortunately forces researchers to exclude a number of highly significant examples, thus limiting the general applicability of any results. The limitations of such an approach rapidly become apparent in the context of SIDS; in such states the absolute number of casualties may be low, and participants may remain only loosely organized throughout the course of the conflict. Again, the Solomon Islands provides an effective example. Throughout the state's extended period of upheaval, violence continued at a relatively low intensity, with battle-related deaths rarely totalling more than a few dozen per year.5 Moreover, the violence remained relatively diffuse, with the participants never coalescing into a limited number of observable groups possessed of well-defined political priorities. As a result, though the violence effectively paralyzed the country's political and economic systems and eventually required the Australian-led RAMSI intervention to begin to stabilize and rehabilitate the state, it is nonetheless excluded from most large-scale studies of conflict.6

At first glance, fragility appears to be an even more analytically ambiguous concept. Though there exist a number of different definitions for the term, in all cases it is concerned with the relative political and economic weakness of a particular state (Carment et al, 2005) States in which governing structures have been captured by self-interested groups, criminality and corruption threaten to overwhelm legitimate economic activity, individual security has broken down, or public infrastructure has been either significantly diminished or disappeared completely all provide examples of states that must be considered at best weak, and at worst failing. In such cases, conflict may be a symptom, rather than a cause, of state failure. Returning to the example of the Solomon Islands, the violence there may be most effectively understood as a

5 There is some degree of uncertainty regarding the exact number of casualties over the course of the conflict; see for instance the discussion in Amnesty International (2000). One recent rough estimate by the United Nations Development Program (UNDP) suggests that the total number killed over the course of the entire conflict is in the hundreds, though it is not clear if this estimate includes civilian casualties in addition to battle-related deaths (Scharf and Hartmann, 2004).
6 Sambanis (2001) explores provides a sound exploration of the complexities involved in coding civil wars.

result of state failure. The intermittent conflict there did not induce state weakness and paralysis; on the contrary, the continuing weakness of political and economic structures within the state eventually led to growing violence and a general breakdown in order.7 In the case of Solomon Islands therefore, a thorough consideration of the state's underlying fragility must precede any analysis of the state's potential for violent conflict, with the latter grounded in a broad understanding of the former. The same is likely true for many SIDS, insofar as such states may experience limited, though persistent and highly disruptive outbreaks of violence, which in turn can only be understood in the context of broader and ultimately more fundamental questions regarding the underlying fragility of the state.

Thus, any analysis of the risk of fragility among SIDS must utilize robust conceptualizations of the phenomenon capable of incorporating the complex and dynamic relationship between state failure and violent conflict. At the same time, it must avoid the problems of arbitrariness associated with traditional analyses of conflict, and possess the ability to comment effectively on the particularized and often highly specific sources of fragility that may be unique to a given small state environment. Generalized analyses intended to assess the overall risk of fragility within large, relatively diverse states likely will not produce sufficiently perceptive analysis of SIDS to effectively guide decisions regarding policy. Instead, a disaggregated approach employing indicators across a wide variety of relevant issue areas provides a greater sensitivity to the particular weaknesses within each small state, not only providing a more nuanced assessment of its relative stability, but also generating targeted policy recommendations.

4. The CIFP Approach

Identifying state failure and fragility is a three-step process involving the use of both composite and configurational variables. These three steps are: 1) identifying the relevant configurational and composite variables; 2) postulating thresholds in order to identify significant transformations and shifts from states of equilibria; and 3) determining the independence of variables in order to isolate the causal significance of each variable. Articulating such constructs and concepts is useful in the generation of propositions or hypotheses about state change. These propositions can in turn be tested empirically to determine whether or not they have factual support.

The structural indicators included in the CIFP risk assessment methodology cross nine interrelated issue areas identified as potential "problem areas:" History of Armed Conflict;

7 Of course, the converse remains true as well; conflict often pushes a previously weak state into total failure. Stewart

Governance and Political Instability; Militarization; Population Heterogeneity; Demographic Stress; Economic Performance; Human Development; Environmental Stress; and International Linkages. Table 2 cites a number of indicative concerns within each "issue area," and includes specific indicators that can be used to assess the relative severity of these issues.

Table 2: Issue Areas

Issue Areas	Indicative Issues of Concern	Leading Indicators
History of Armed Conflict	• Indicates conflictual political culture, with higher risk of parties continuing to resort to violence as a means of airing grievances • Indicates inability of the state to resolve conflicts through institutional channels, and a greater inclination for armed forces to engage in political disputes • Indicates low state capacity to provide basic security, potentially resulting in the loss of popular confidence in state institutions and state legitimacy • Refugees or Internally Displaced Persons produced by past or ongoing violent conflict can have destabilizing effects within affected regions and countries, potentially spiralling into larger problems	• History of Armed Conflict, including Annual Conflict-Related Deaths • Number of Refugees Produced • Number of Refugees Hosted, Internally Displaced Persons (IDPs) or other Populations of Concern
Governance and Political Instability	• The lack of representative and accountable political institutions through which to channel grievances can aggravate the risk of outbursts of violent conflict • Transitional states are at higher risk of experiencing abrupt or violent change, as are new or unconsolidated democracies • The denial of civil and political liberties, such as the rights of expression, assembly and association, or the censorship of media, increases the likelihood dissenting views will be expressed through violence • Endemic corruption of political elites can result in the loss of popular confidence in state institutions	• Level of Democracy • Regime Durability (years since regime change) • Restrictions on Civil and Political Rights • Restrictions on Press Freedom • Level of Corruption
Militarization	• Excessive military expenditures can indicate general militarization of the state apparatus and potential for increased military involvement in political affairs • Excessive military expenditures reduce investment in the social sectors, indicating state priorities focused upon military rather than developmental solutions to potential crises, which can in turn influence state legitimacy • Fluctuations in military spending can create tensions or resentment within the armed forces • Shifting military expenditures and arms imports/exports can destabilize regional balance of power	• Military Expenditure • Military Expenditure (% of GDP) • Fraction of Regional Military Expenditure • Total Armed Forces • Armed Forces per 10,000 persons
Population Heterogeneity	• Potential for tensions and cleavages is greater in ethnically or religiously heterogeneous populations • Issues of governance are further complicated by diverse and often competing group expectations and demands • The historical loss of group autonomy can serve as a motivation for ethno-political protest and secessionist movements • Political or economic inequalities along group lines can give rise to communal or separatist mobilization and aggravate the potential for conflict • Restrictions on specific groups' cultural practices limit opportunities for expression of grievances through non-violent means • The greater the strength of a group's identity, the greater its potential for mobilization	• Ethnic Diversity • Religious Diversity • Risk of Ethnic Rebellion 1. Lost Autonomy 2. Economic Discrimination 3. Political Discrimination 4. Cultural Discrimination 5. Strength of Ethnic Identity

and Fitzgerald (2000) provide a cogent discussion of the calamitous effects of conflict on underdeveloped states.

	• External support for communal groups can be a major determinant of the magnitude of ethno-political rebellion	6. Mobilization of Militant Orgs. 7. Support from Kindred Groups
Demographic Stress	• High population density and growth rates can accentuate the risk of conflict by heightening competition for physical and social resources • Economic conditions can result in migration to urban centres, increasing the burden on municipal services and resulting in worsening scarcity and urban living conditions • Young, unemployed populations can be political volatile and prone to violence, and may place far less trust in political institutions and patterns of authority	• Total Population • Population Growth Rate • Population Density • Urban Population (% of Total) • Urban Population Growth Rate • Youth Bulge
Economic Performance	• Economic decline (including declining incomes, inflation, exchange rate collapse, and declining levels of foreign investment) affects material living standards, and can aggravate dissatisfaction with government performance, or cause scapegoating of economically privileged minorities • High debt burdens negatively affect social investments, fuelling popular unrest and other preconditions of conflict • Low involvement in international trade is associated with higher risk of state failure, given that the conditions that inhibit high levels of international trade and foreign investment (such as rampant corruption and poor infrastructure) also contribute to the risk of political crises • High levels of economic inequality can contribute to social fragmentation and declining state legitimacy	• GDP • GDP Growth Rate (Annual %) • GDP Per Capita • Inflation rates • Exchange rates • Foreign Investment • Debt Service • Trade Openness (Trade as a % of GDP) • Inequality Score (GINI Coefficient)
Human Development	• Poor material living standards correlate strongly with higher risk of violent conflict and state failure; poverty is a fundamental cause of civil strife • Lack or decline in public services such as health services, education, safe water and sanitation indicate weak state capacity to distribute and allocate vital services that can decrease popular confidence in the state leading to political instability and social unrest • Unmet expectations regarding educational opportunities or other opportunities for social advancement increase discontent and the likelihood and severity of civil strife	• Access to Improved Water Source • Access to Sanitation • Life Expectancy • Infant Mortality Rate • Maternal Mortality Rate • HIV/AIDS • Primary School Enrolment • Secondary School Enrolment • Children in Labour Force
Environmental Stress	• The degradation and depletion of renewable resources can generate effects such as constrained economic productivity and growth, poverty and migration, which underlie social or political instability • Scarcities in natural resources can result in increased demand and/or unequal distribution, raising the potential for conflict • Environmental factors interact powerfully with demographic shifts such as population growth and density, and scarcity risks sharpening existing disparities between groups or regions	• Rate of Deforestation • People per Sq. km of Arable Land • Access to Fresh Water
International Linkages	• Countries with fewer diplomatic, political, commercial, trade or cultural linkages with regional organizations and neighbouring states are less likely to profit from constructive engagement with outside actors, in areas such as developmental assistance, mediation, or support in peace processes • Participation in international regimes and organizations can help decrease security risks by codifying broad rules and processes by which to resolve disputes peacefully • Frequent or intense inter-state political or territorial disputes can undermine regional security • Prevalence of armed conflict in neighbouring states can have a destabilizing effect on national stability, through cross-border refugee flows or movement of rebel forces, or through their contribution to regional war economies	• Participation in Regional and International Organizations, including: 1. Economic Organizations 2. Military/Security Alliances 3. UN Organizations 4. Multipurpose Organizations 5. Miscellaneous Organizations

	• Prevalence of non-democratic or transitional regimes across the region can impact national security through heightened risk of regional instability	• Interstate Disputes, including: 1. Resource and Territorial Disputes 2. Political and Cultural Disputes • Prevalence of Armed Conflicts across Region • Prevailing Regime Types Across Region

A country's overall risk index is calculated on the basis of the weighted mean of the nine composite issue area scores, employing the weighting scheme elaborated in the CIFP Risk Assessment Template on the cifp site. The formula for calculating this weighted mean is as follows:

$$\text{Overall Risk Index} = (w_1x_1 + w_2x_2 + ... + w_9x_9) / (w_1 + w_2 + ... + w_9)$$

where x_n are the values of the nine composite issue area scores, and w_n are their corresponding weights for 'n' ranging from 1 to 9.

Table 3 below provides an example how these indicators can be used in conjunction with additional event information such as stakeholder behaviour to provide a complete portrait of conflict potential in a given country and policy recommendations.

Table 3 – Conflict potential in Papua New Guinea 2004

STAKEHOLDERS	**EVENTS & INDICATORS**
• National Alliance Party Prime Minister, Sir Michael Somare. • Political Parties; 43 as of 2002. • Government of Australia; ECP • Spoilers: Indonesian enclaves within Bougainville Island. Sources: CNN, UNICEF, World Bank, IRIN, CIDCM,	• Linguistic Divisions: 840 languages, many living in small tribes – therefore a high degree of autonomy from Government. • Secessionist Movement: 1988-1997 Indonesian secessionist revolt on Bougainville Island, – 20,000 lives lost. A fragile peace has held since. • Electoral Difficulties: June 17, 2002, even the Prime Minister was unable to vote due to 'missing' ballot box. No violence erupted, however latent dissatisfaction with system evident. Next election to be held no later than 2007. • Internal Military Unrest: March 24, 2002 – mutiny occurred over low pay; no violence, thirteen charged. • Economic Stagnation: Agriculture provides subsistence livelihood for 85% of population. Crime is rampant in more urban areas. • Environmental Issues: Tsunamis and volcanic eruptions are an ever-present danger. ABSENCE/PRESENCE OF THIRD PARTIES:

U.S. State/ CIA –Factbook.	Regional: • December 2003, Enhanced Co-Operation Program (ECP) created between Australia and PNG; 230 Australian police, 64 government staff awaiting deployment. • UN agencies. • Spartan attention overall. ENTRY POINTS: • Policing, elections monitoring, governmental capacity building, infrastructure enhancement, etc. • Government appears to welcome assistance, expertise, etc. • More robust engagement built upon ECP would appear appropriate. RECOMMENDATIONS: • Given that the situation is in flux (namely the recent presence of the ECP), the next few months will be a crucial period for observation. As a result, this analysis comes at the start of a peace-bolstering initiative, as opposed to during one. It would be good to re-evaluate the situation on the ground once the ECP has had time to take effect. • Possible partners include ECP, national government, donor agencies.

5. Findings on SIDS

The following analysis draws on the CIFP dataset for all countries for the years 2000-2004. Within the full dataset, there are 37 SIDS for which there is sufficient data to calculate a risk index score (see Appendix A for a list). In calculating the weighted CIFP risk index, scores can theoretically range from a low of 1.0 to a high of 12.0. In practice however, they tend to occupy a narrower band, as it is unlikely that any nation would rank either first or last in every single category. Scores typically range from a low of about 2.5 to a high of about 7.5. Anything below 3.5 is considered "low risk," while scores of 6.5 and higher are considered "high risk." At first glance, the SIDS fall in the middle range; all 37 fall within the "medium" range of risk, with scores between 3.5 and 6.5. While none of the states are devoid of conflict warning factors, none seem to possess a sufficient number to be considered truly "high risk."

However, this portrait changes once the disaggregated scores are examined. The most striking finding is that all SIDS have relatively little history of armed conflict. Average scores for SIDS on the History of Armed Conflict Index is 1.35, far below the average for all states. Of the entire SIDS group, East Timor scored highest with a rating of 5.2; all other SIDS scored less than 3.5. If history of conflict is removed from the risk calculation, the average weighted risk score for all

SIDS increases by nearly a full point. Such evidence would seem to indicate that as a group, SIDS experience less conflict, and host fewer refugees and internally displaced persons (IDPs) than one would expect given their socioeconomic, environmental, and demographic conditions. This lack of previous conflict in turn lowers expectations of future conflict as expressed in the risk index.

Two possible conclusions follow from these findings. The first is that there are some mitigating factors within SIDS not found in the broader panel set that serve to lessen the overall incidence of conflict. The second is that, as a group, SIDS tend to experience low-level conflict in ways that are not related to conventional war-based definitions and measurements of large scale violence. Evidence in support of the first conclusion includes the relatively weak international linkages that SIDS experience as a group. Though a lack of international linkages is often considered to increase the likelihood of conflict, in the case of SIDS it may actually have a countervailing effect as well. Being small and relatively isolated, such states may be less vulnerable to conflict contagion, escalation, and diffusion effects of the sort characterized by Gurr (1993), Lake and Rothchild (1998), and others. SIDS receive relatively few refugees from conflict regions, and may be less likely to have kindred minorities at risk in neighbouring states as well. Such factors are closely related to increased risk of conflict; their absence within SIDS as a group may partially explain the abnormally low levels of conflict recorded.

There is some evidence to support the second conclusion as well. Though there is little open conflict found among SIDS in comparison with all states, many experience different, though equally disruptive types of violence. For instance, Haiti, the Solomon Islands, Fiji, and Papua New Guinea all exhibit low levels of internal conflict, with few recorded battle-related deaths. Yet all three have experienced prolonged and highly disruptive civil strife; at various times they have all been considered either fragile or failed states. Jamaica, meanwhile, has relatively low levels of civil strife, but has a crime rate that far exceeds that of its neighbours.

Beyond the particular experience of conflict, other patterns emerge as well. SIDS appear to experience levels of both demographic and environmental stress that exceed the average for all states, along with lower than average economic performance. Nearly a third of them experience high levels of environmental stress, and Guyana is the only one that registers a low level of demographic stress. Further, as stated earlier, SIDS score poorly on international linkages as well. Such results are all consistent with the findings of Briguglio and Galea (2003), and Briguglio et al (2003), who indicate that SIDS fall universally within the upper half of all states on their

economic vulnerability index. These parallel general findings suggest that, as one might expect, certain elements of conflict risk are related to measurements of economic vulnerability.

When restricting the comparison to SIDS alone however, the results become much less clear-cut. Although direct comparison of the analyses provided by the two methodologies is limited by the fact that there are only 10 SIDS common to both the datasets of both CIFP and Briguglio et al, nonetheless the results are suggestive and point the way to further research.8 The evidence suggests that there are significant differences in the ways the two methodologies evaluate both the risks faced by SIDS and the political and economic structures designed to mitigate those risks. For instance, scores for the 10 SIDS states included in both Briguglio and Galea's economic vulnerability index and the CIFP risk index correlate at -0.54, which is not the expected; both indices consider a high score to be associated with an elevated level of risk. Using a modified version of the CIFP risk index that includes only issue indicators related to 'inherent' structural vulnerability – demographic stress, environmental stress, population heterogeneity, and human development – that correlation score rises to -0.77. To a certain extent, the effect may be due to outliers within the limited dataset. When using the full set of all states included in both the vulnerability and CIFP risk indices, the two correlate at -0.052, suggesting very little statistical congruence, whether positive or negative.

As the discussion moves beyond questions of inherent structural risk, the results of the two indices continue to differ markedly. The CIFP risk index and Briguglio et al. resilience index correlate at only -0.03 for SIDS states; for all intents and purposes, the two are completely independent. Even if one only includes CIFP clusters closely linked to measures of robust and flexible policy – government, economy, and militarization – the correlation score still languishes at 0.16. Again however, such results may be unduly affected by outliers in the reduced sample, as the full set of states correlate at -0.68 when using the full CIFP risk index. The negative sign is expected for this correlation, as a high score on the resilience index is associated with a lower risk of economic instability. The results are similarly inconclusive when the vulnerability and resilience scores are combined into a net economic risk index as Briguglio et al (2005) suggest (though do not themselves attempt). When including only SIDS, the combined economic risk score correlates with the CIFP risk index at -0.18; when including all states, the two correlate at 0.42. In this case, the expected sign is positive. Taken together, the results suggest there may be substantial differences both between the risk for SIDS and the full set of states, and between the estimations of economic risk and state fragility.

6. Conclusion

Given the limited number of SIDS common to both datasets, any conclusions arising from such a comparative analysis must be treated with caution. Keeping that caveat in mind, two potential insights emerge from the results. The first is that, consistent with the premise posited at the beginning of this chapter, small island developing states appear to face specific challenges unlike those encountered by larger and more diverse states. Further, it seems that SIDS' vulnerabilities are likely to manifest themselves in ways other than the emergence of large-scale violent conflict. As a result, SIDS would likely benefit from policy prescriptions specifically tailored to their particular circumstances, with special attention paid to the areas of economic and political vulnerability encountered by small, remote, and underdeveloped populations.

The second, and in many ways the more surprising potential implication is that there appears to be a need to examine further the interrelationship between the literature on economic vulnerability that Briguglio et al. use to operationalise their index, and the literature on state fragility and conflict that informs the CIFP risk index. This gap becomes particularly apparent in the two indices' analysis of SIDS. The fact that Briguglio and Galea's economic vulnerability index produces results virtually independent of, or in the case of SIDS even contrary to, those of CIFP suggests that the perceived causes of economic instability differ markedly from those of conflict and state fragility. While the results may be at least partially the result of outliers in the limited data set, the evidence is certainly strong enough to warrant further research.

If the disconnect is confirmed in subsequent studies, the implications for both theory and policy will be profound. In terms of theory, the results suggest that current models of economic development and state fragility take insufficient account of one another. An economic model that proves unable to respond to the inherent political weakness and social tensions within a state, or even worse, one that inadvertently hastens a state's decline into fragility and failure must be regarded as undesirable, regardless of its positive effects on macroeconomic fundamentals and economic growth. Similarly, models of state fragility must incorporate sufficient considerations of sustained long term economic development, given its tremendous importance to long-term peace and stability. While distinct, the two phenomena are inextricably linked, and cannot be considered in complete isolation from one another.

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8 The 10 SIDS found in both datasets are Barbados, Belize, Cyprus, Dominican Republic, Jamaica, Malta, Mauritius, Papua

Similarly, on a practical level, such findings suggest that policymakers have much to gain by considering economic vulnerability and state fragility in tandem. Towards that end, indicator-based analytical methodologies of the sort created by CIFP may provide effective analytical tools in the policy toolbox. By combining baseline structural data with information on stakeholders and recent events, such methodologies provide a comprehensive assessment framework capable of informing policy decisions in highly complex and dynamic fragile state environments. Such indices enable a thorough consideration of the consequences of policy decisions, allowing policymakers to examine the non-economic ramifications of structural economic adjustments, the economic consequences of political developments, and the potential for both political and economic policy changes to enhance or undermine personal and communal security within a developing state.

Above all, the results signal the need for continuing research into the relationship between economic vulnerability and state fragility. Several avenues of inquiry immediately suggest themselves. First, the relationship between economic vulnerability and state fragility remains imperfectly understood; efforts to clarify the ways in which each affects the other are sorely needed. While statistical analysis may provide some additional insight, the research must also include detailed case study analysis in order to uncover the precise causal linkages that drive the relationship. Potential candidates for case study analysis include states that have recently undergone economic structural adjustment at the behest of the World Bank or IMF and experienced some degree of civil conflict or state failure either concomitantly or subsequently to that adjustment. Examples include Papua New Guinea, Mexico in the late 1980s and 1990s, Indonesia in the wake of the 1997 Asian financial crisis, and a number of sub-Saharan African countries such as Angola and Cote d'Ivoire.

Finally, there is clearly a need for more structural data on SIDS. Unfortunately, given the small size and unconventional political status of many small island developing states (some of which continue to defer some elements of sovereignty to former colonial powers such as the U.K. and France, or to dominant powers such as the U.S.), there is a dearth of reliable information on which to build an analysis of either the fragility or the economic vulnerability of such states. So long as this situation endures, both theoretical analysis and policy decisions regarding SIDS will remain under-informed, and therefore problematic.

New Guinea, Singapore, and Trinidad and Tobago.

Appendix A: List of SIDS in CIFP Conflict Index

Small Island Developing States	Risk Index (weighted average)	Small Island Developing States	Risk Index (weighted average)
Barbados	3.53	Palau	4.54
Malta	3.56	Tonga	4.54
Bahamas	3.77	Seychelles	4.6
Guyana	3.9	Belize	4.76
Antigua and Barbuda	3.91	Cape Verde	4.77
Jamaica	4.01	Dominican Republic	4.83
Cyprus	4.07	Singapore	4.86
Mauritius	4.13	Bahrain	4.93
Samoa	4.15	Cuba	4.93
Micronesia (Federated States of)	4.17	Maldives	4.93
Vanuatu	4.19	Papua New Guinea	5.04
St. Lucia	4.2	Kiribati	5.09
Trinidad and Tobago	4.21	Sao Tome and Principe	5.18
Grenada	4.35	Solomon Islands	5.25
Suriname	4.36	Comoros	5.63
Fiji	4.39	Timor-Leste	5.82
St. Vincent and the Grenadines	4.4	Haiti	6.03
St. Kitts and Nevis	4.49	Guinea-Bissau	6.31
Dominica	4.5		

Source: CIFP Conflict Database (2000-2004).

Appendix B: Comparative Results of SIDS in Briguglio et al. Economic Vulnerability Risk Index and CIFP Risk Index

	CIFP Proxy Vulnerability Average	CIFP Proxy Resilience Average	CIFP Weighted Average	Briguglio et al. Economic Resilience	Briguglio and Galea Economic Vulnerability	Briguglio et al. Net Economic Risk
Barbados	5.59	3.64	3.53	0.397	0.717	0.32
Belize	5.76	4.90	4.76	0.269	0.768	0.499
Cyprus	4.51	4.48	4.07	0.445	0.840	0.395
Dominican Republic	5.27	5.73	4.83	0.427	0.768	0.341
Jamaica	5.06	4.27	4.01	0.446	0.922	0.476
Malta	4.69	3.51	3.56	0.518	1.000	0.482
Mauritius	5.54	4.18	4.13	0.550	0.632	0.082
Papua New Guinea	5.61	5.56	5.04	0.146	0.508	0.362
Singapore	5.10	6.01	4.86	1.000	0.971	-0.029
Trinidad and Tobago	6.08	3.95	4.21	0.521	0.533	0.012

Sources: CIFP Conflict Database (2000-2004); Briguglio et al (2003).

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