

# Profiling Vulnerability and Resilience

A Manual for Small States



Edited by Lino Briguglio, Gordon Cordina, Stephanie Vella  
and Constance Vigilance

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Commonwealth Secretariat



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# Foreword

The Commonwealth Secretariat has a long history of assisting small states through analysis, research, advocacy, consensus building and project implementation. This latest publication provides an important contribution to assist small states in formulating policies to build economic resilience to address their inherent vulnerability. The inherent vulnerability of small states stems from their high dependence on a narrow range of exports and on strategic imports such as food and fuel. These features render small states disproportionately exposed to external economic shocks. Other characteristics which pose disadvantages for small states include their limited ability to exploit economies of scale, and their limited opportunities for diversification.

The volume presents the process of resilience building in extensive detail, including clearly set out evidence-based and appropriate concepts, measurements, policy measures and technical assistance issues, information of substantial practical use to policy-makers in small states in resilience building efforts.

This volume is the latest outcome of an ongoing and long-standing collaboration between the Commonwealth Secretariat and the University of Malta. In recent years this collaboration has led to the development of the Economic Resilience Index and Resilience Building Framework, based on a series of workshops held in Malta; as well as three publications – *Economic Vulnerability and Resilience of Small States* (2004); *Building the Economic Resilience of Small States* (2006) and *Small States and the Pillars of Economic Resilience* (2008). Collectively, these workshops, frameworks and publications have led to the development of a conceptual understanding of how small states can examine their vulnerability and resilience profile and identify policies and projects to help them to withstand exogenous shocks. This conceptual framework has already been piloted with great success in three small states – St Lucia, Seychelles and Vanuatu.

This volume responds directly to the call in Article 81 of the Mauritius Strategy for the Further Implementation of the Barbados Programme of Action for the Sustainable Development of SIDS, proposing the establishment of a task force to elaborate a resilience index, supported by the international community.

The Secretariat is pleased to have collaborated with the University of Malta under the leadership of the eminent scholar on vulnerability and small states Professor Lino Briguglio. The dedication and commitment of all other members of the team at the University of Malta – Gordon Cordina, Stephanie Vella and the late Nadia Farrugia – is deeply appreciated. The outstanding contributions of Constance Vigilance and Janet Strachan, who have led this project at the Commonwealth Secretariat, together with past and present colleagues who have contributed to its development, are also recognised.

*Cyrus Rustomjee*  
Director, Economic Affairs Division  
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# Introduction

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## **The purpose of this publication**

This publication forms part of a project between the Commonwealth Secretariat and the Islands and Small States Institute of the University of Malta, involving a series of workshops and accompanying publications on the economic vulnerability and resilience of small states. One of the outcomes of the project was the development of an economic resilience index. The project has also led to the development of conceptual and practical approaches for profiling countries in terms of economic vulnerability and resilience.

## **Economic vulnerability**

Economic vulnerability may simply be defined as the proneness of an economy to be harmed by external shocks. The approach adopted in this publication to conceptualise and measure economic vulnerability builds on Briguglio (1995) which associated such vulnerability with inherent, and therefore permanent or quasi-permanent, features of an economy, including economic openness, dependence on a narrow range of exports and dependence on strategic imports, such as food, fuel and industrial supplies. It is assumed that the higher the degree of incidence of these features, the more exposed is a country to forces outside its control, and therefore the more economically vulnerable it is.

Chapter 2 of this publication elaborates on these notions, and presents a vulnerability index, covering 117 countries. The index is a composite one, with components relating to the inherent features just referred to. Like most studies on economic vulnerability, the study presented in Chapter 2 concludes that small states, as a group of countries, are more economically vulnerable than other group of countries.

## **Economic resilience**

Economic resilience can also be simply defined as the ability of an economy to withstand or bounce back from harmful external economic shocks. It can, therefore, be considered as the obverse of economic vulnerability. The approach adopted in this publication to conceptualise and measure economic resilience is based on Briguglio et al. (2006), which associated economic resilience with a policy framework conducive to macro-economic stability, market efficiency, good political governance and social development. Such a policy framework is also conducive to good economic governance.

Chapter 3 of this publication discusses these facets of economic resilience and presents a resilience index, covering 86 countries. Again, the index is a composite one, with components relating to the four aspects of economic resilience mentioned. Many of the small states included in the index had a relatively high resilience score, which, as we shall argue in the next section, could explain why small states may perform relatively well economically in spite of their economic vulnerability.

## **Juxtaposing vulnerability and resilience**

The risk of a country being harmed by external shocks therefore is likely to be higher for vulnerable economies and lower for resilient economies. In other words, an economy can be highly exposed to harmful external shocks, but it may be able to withstand or bounce back from such shocks due to a policy framework which builds economic resilience.

Chapter 4 of this volume juxtaposes economic vulnerability and economic resilience, using the two indices described in Chapter 2 and Chapter 3, to classify countries into four categories, in terms of their vulnerability and resilience scores, and to propose a methodological approach for assessing the risk of being harmed by shocks.

One of the country categories is the 'self-made' category referring to small states that are very economically vulnerable but at the same time are well-governed economically. On the other hand, the 'worst case' category refers to small vulnerable economies that are badly governed economically. The other two categories are the 'best case' category referring to countries that are not very economically vulnerable and at the same time are well-governed economically, and the 'prodigal son' category, referring to countries that are not very economically vulnerable and but are badly-governed economically.

On the basis of this country categorisation, Briguglio (2003) proposed the term 'Singapore Paradox' referring to the reality that although Singapore is highly exposed to exogenous shocks, this small island state has managed to register high rates of economic growth and to attain high GDP per capita. This reality can be explained in terms of the ability of Singapore to build resilience in the face of external shocks.

## **Profiling countries for vulnerability and resilience**

Part 2 of this volume relates to a country profiling exercise that can be conducted to assess the extent of economic vulnerability and the extent of economic resilience of a national economy.

Chapter 5 proposes a conceptual profiling approach based on the findings of chapters 2 and 3 of this volume, and extends these concepts as may be appropriate for an individual country setting. The derivation of the economic vulnerability/resilience profile proposed is based on three facets, namely:

- *An assessment of the symptoms of economic vulnerability.* This facet relates to the manifestations of vulnerability and attempts to determine whether a country appears to be suffering from any one or more of the symptoms of vulnerability or

otherwise. This gives a first indication within the country profile as to which areas of economic activity or policy may be conducive to economic vulnerability.

- *An assessment of the causes of economic vulnerability.* This facet of the profile relates to the underlying causes of vulnerability and is aimed at assessing the inherent fundamental conditions which may be rendering a country vulnerable to exogenous shocks.
- *An assessment of the sources of economic resilience.* This facet of the profile aims to highlight the strengths and weaknesses within the policy formulation milieu of a country towards the objective of economic resilience building.

A practical guide as to how the vulnerability/profiling exercise can be carried out is proposed in Chapter 6. The guide is aimed at enabling governments to conduct profiles for their own countries, and should also be useful.

## **Profiles of three small island developing states**

Part 3 of this publication presents three profiles of small island developing states that were undertaken by the Commonwealth Secretariat and the University of Malta in collaboration with the respective governments of these states. The three countries profiled are St Lucia, Seychelles and Vanuatu. In all three profiling exercises, public officials and civil society representatives were consulted and participated actively in the process.

The profiles produced interesting results, and although there were differences between the three small island states, there was a common characteristic, in that they all have very open economies, and are therefore very highly exposed to economic conditions in the rest of the world. There is a awareness in these states that good economic governance is conducive for resilience building, but the profiling exercises identified a number of gaps in the policy frameworks of these states.

## **Country analysis by international organisations**

The book carries an annex to provide readers with an overview of the country analysis undertaken by international and regional organisations. It should assist readers to identify the strengths and weaknesses of the various analyses and to conduct and compare the approaches by different organisations with the vulnerability and resilience profiling being proposed by the Commonwealth Secretariat. One of the strengths of the Commonwealth Secretariat's profiling exercise is that it is a framework focused on a particular category of countries – small states, and has therefore been tailored to the special challenges faced by these countries, moving away from the 'one size fits all' assessments conducted by other organisations.

The annex presents the work being undertaken by selected international organisations and regional development banks to assess the economic and social situation in countries. The focus is on:

- the IMF's vulnerability indicators, Article IV and Financial Sector Assessment Program (FSAP);

- the World Bank's reports such as the Country Economic Memorandum (CEM); Country Assistance Strategy (CAS) and Poverty Reduction Strategy Paper (PRSP);
- the UN's Common Country Assessment (CCA), UNCTAD's vulnerability profiles and its Economic Vulnerability Index (EVI);
- the WTO's Trade Policy Review Mechanism;
- the EC's Country Strategy Paper; and
- regional development banks, including the AfDB's Country Strategy Paper, as well as the IADB's Prevalent Vulnerability Index (PVI), country strategy and Country Program Evaluation (CPE).

## **Using this book**

The title of this volume contains the word 'manual' which can be defined as a reference book with instructions. This word has been purposely chosen in the title to convey the message that the book is intended for governments who wish to conduct the country vulnerability/resilience profile themselves, basing the conceptual underpinnings of Part 1 of the book and being guided by the practical steps carried in Part 2.

It is therefore hoped that the book will serve its purpose and that governments, particularly those of small states, make use of it in order to identify the resilience gaps in their policy frameworks so as to strengthen their economies abilities to withstand or bounce back from harmful external shocks.

## Part 1 Concepts and measurements

# Updating and augmenting the economic vulnerability index<sup>1</sup>

### Introduction

The economic vulnerability index (EVI) was initially developed by Briguglio (1992, 1993, 1995) to explain the seeming contradiction that a country can be economically vulnerable and yet register a relatively high GDP per capita. Many versions of the index were produced following Briguglio's work, including Chander (1996), Wells (1997), Atkins et al. (1998, 2001) and Crowards (1999). The general conclusion that emerged from these studies is that small island developing states tend to be more economically vulnerable than other groups of countries.

The characteristics of small island developing states (SIDS) are well documented (see for example, Briguglio, 1995), and include limited ability to exploit economies of scale; lack of natural resource endowments and a high import content (especially of strategic imports such as food and fuel). Other characteristics relate to limitations of production diversification possibilities; dependence on a narrow range of exports; limitations on the extent to which domestic competition policy can be applied; inability to influence international prices; and, in the case of island states, high international transport costs and uncertainties of industrial supplies due to insularity and remoteness.

Small size also creates problems associated with public administration, the most important of which is probably the small manpower resource base from which to draw experienced and efficient administrators. Another problem is that many government functions tend to be very expensive per capita when the population is small, due to the fact that certain expenses are not divisible in proportion to the number of users.

### Definition of vulnerability

For the purpose of this paper, the term 'economic vulnerability' refers to inherent, permanent or quasi-permanent features of a country which render that country exposed to economic forces outside its control.

It should be noted here that economic vulnerability can also be policy-induced and therefore not inherent or permanent. For the purpose of this paper, policy-induced vulnerability is being treated as the obverse of 'resilience' in the sense that countries adopting policies which exacerbate their inherent vulnerability, render themselves less resilient.

## What constitutes economic vulnerability?

The principal variables which are used in this study to construct an EVI are (a) economic openness, (b) export concentration, (c) dependence on strategic imports, and (d) peripherality.

### Economic openness

Economic openness relates to the degree to which a country is susceptible to economic conditions in the rest of the world. It is often measured as the ratio of exports or imports, or an average of both, to GDP. In the computation which follows, the openness index uses the average of imports and exports.

### Dependence on a narrow range of exports

The range of exports captures the extent to which a country lacks export diversification, a condition exacerbating the degree of economic openness. This is usually measured by the export concentration index devised by UNCTAD, which only covers merchandise. Briguglio (1997) argued that export concentration can also be observed in the trade in services, especially in tourism and financial services, and, for this purpose, he devised a concentration index with services exports included. In the computation that follows, the concentration index covers both goods and services.

### Dependence on strategic imports

This variable is intended to measure the extent to which a country's economy depends on imports. There are obvious vulnerability connotations when a country depends heavily on imported energy and industrial supplies for production and on imported food for consumption. Various indices have been used for this purpose. Several indices have been proposed to measure dependence on strategic imports. Galea (2003) suggested that this variable can be measured as ratio of food imports to GDP. This index is used in the computation of the Vulnerability Index presented below.

### Peripherality

Peripherality is associated with insularity and remoteness, leading to high transport costs and marginalisation from main commercial centres. This again exacerbates the problem of high dependence on international trade. The problem with the peripherality variable is that it cannot be measured directly by taking the number of kilometres from a main commercial centre, or from the nearest island or from the nearest continent. In the case of certain islands, a relatively large proportion of international trade is directed to and from their former colonial masters, even though other centres of commercial activity could be more proximate. In other words, measuring remoteness by taking distance in kilometres may convey the wrong sort of information regarding insularity and remoteness, for economic purposes. Two variables which may reflect the effects of remoteness are (1) the ratio of Free on Board/Cost Insurance and Freight (FOB/CIF) factors and (2) the ratio of transport and freight costs to imports. In the computation that follows, the second ratio was used, since it has been considered to be more meaningful.

## Updated computation of the vulnerability index

Below, we present an updated computation of the EVI, building on Briguglio (1995) and Briguglio (1997)<sup>2</sup>. The procedure involves three main steps, as follows:

- i measuring the individual components of the index
- ii standardising the values
- iii averaging the three components

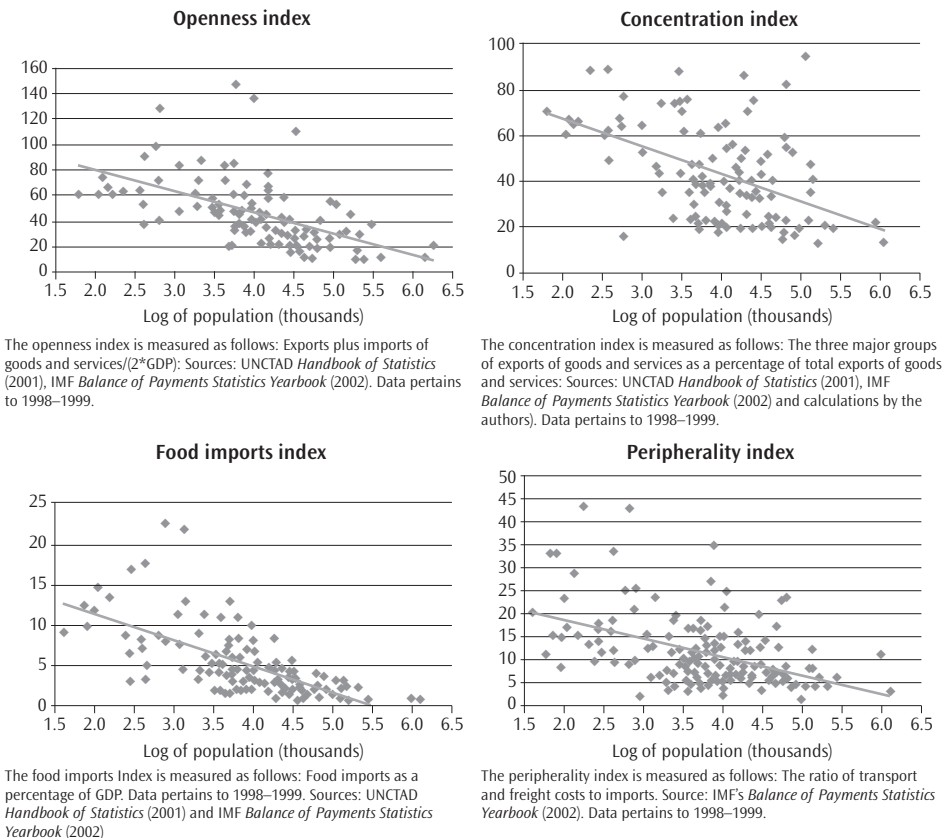
### Measuring the individual components of the index

The first step in constructing the vulnerability index is to obtain the values of the components of the index. The results confirm that SIDS, when compared to other groups of countries, tend to:

- be more exposed to international trade,
- have higher export concentration indices,
- are more dependent on strategic imports, and
- have relatively higher unit transport costs in international trade than other groups of countries.

These tendencies are shown in Figure 2.1. The diagrams show the relationships between the variables just described and population size, measured in  $\log^3$ .

**Figure 2.1. Population size and economic vulnerability features**



## Standardising the values of the components

The summation of the variables making up the composite index poses problems. The approach taken by Briguglio is to standardise the observations, using the following formula:

$$XS_{ij} = (X_{ij} - \text{Min } X_j) / (\text{Max } X_j - \text{Min } X_j)$$

Where:

$XS_{ij}$  is that standardised value of  $X_{ij}$ .

$X_{ij}$  is the  $i$ th observed value in an array of values of component  $j$  of the index.

$\text{Max } X_j$  is the highest value in the same array.

$\text{Min } X_j$  is the lowest value in the same array.

The procedure to calculate  $XS_{ij}$  is the following:

- i Take an array of observed values for the first component of the index (i.e.  $j = 1$ ).
- ii Find the minimum and the maximum values of this array of observations.
- iii Take an individual observation from this array and subtract from it the minimum value of the array. Repeat this for all observations.
- iv Take the maximum value of this array and subtract from it the minimum value of the same array.
- v Divide the result of (iii) by the result of (iv).
- vi Repeat this procedure for the other components of the index.

The array of standardised values of each component, using the formula just described, will be between 0 and 1.

## Weighting the components of the index

An important consideration in the construction of composite indices relates to the weight that is to be given to the individual components of the index. One approach is to use equal weighting, an approach which is often used, either because the components of the index are deemed to be of equal importance or because of lack of sound theoretical underpinnings, to justify variable weights. Variable weights can be used if there is sufficient reason to believe that some components have a stronger effect than others on the phenomenon that is being measured<sup>4</sup>.

## Constructing the vulnerability composite index

In order to calculate values on the composite index, the four variables just described were averaged out, using equal weights<sup>5</sup>. The results obtained are shown in Figure 2.2 based on the data shown in the Appendix to this chapter.

The results indicate that there is negative relationship between population size and economic vulnerability, as measured by the variables described above.

Table 2.1 shows the vulnerability scores classified by population size, where it is clear that smaller countries tend to have higher vulnerability scores than larger ones. This tendency is true for developed as well as for developing countries.

Figure 2.2. The economic vulnerability index (117 countries)

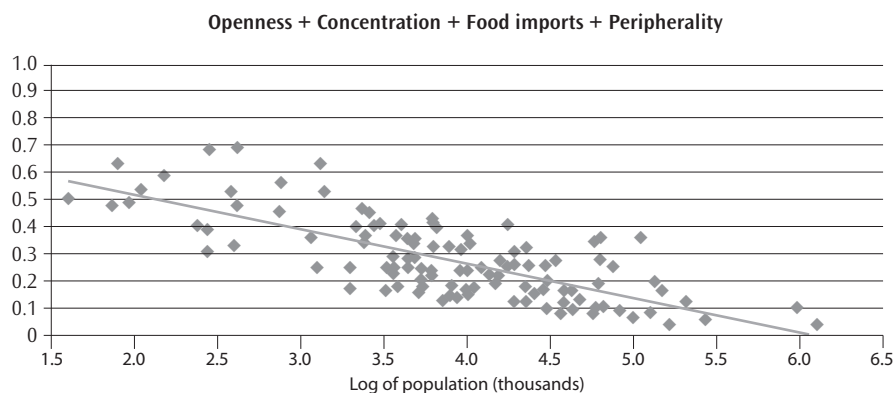


Table 2.1. Vulnerability score classified by population size

Population (millions)	Number of countries	Vulnerability score
0–1	17	.492
1–2	6	.359
2–5	21	.323
5–20	35	.237
20–50	17	.184
50–100	11	.182
100–200	6	.177
200+	4	.089
<b>Total</b>	<b>117</b>	

Table 2.2 shows the vulnerability scores, classified by category of countries. It can be seen that SIDS register the highest vulnerability scores. Other small developing states (OSDS) also register high scores. Large developing states (LDS), on the other hand, register relatively low vulnerability scores. The lowest scores are registered by large advanced states (LAS). Of particular interest is that small advanced states (SAS) also register higher scores than LDS.

Table 2.2. Vulnerability scores classified by Different Categories of Countries

Category	Number of countries	Vulnerability score
SIDS	19	.470
OSDS	20	.354
LDS	56	.220
SAS	5	.258
LAS	17	.148
<b>Total</b>	<b>117</b>	

## Economic resilience

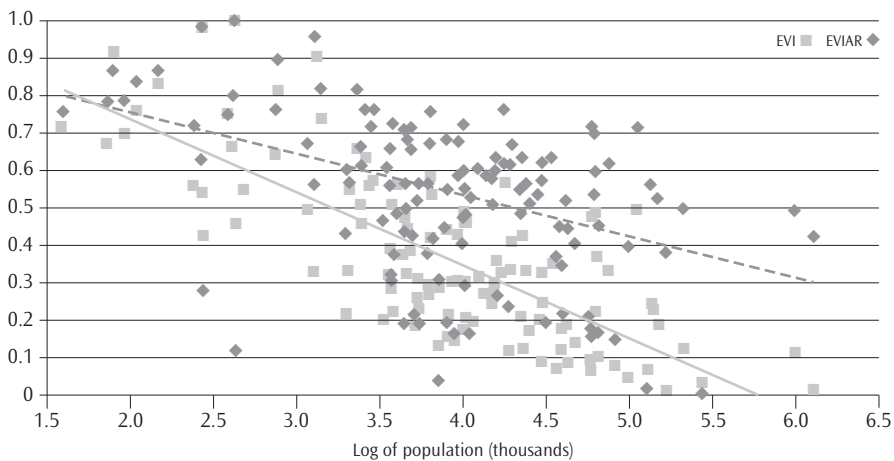
It would be useful to assess the degree to which economically vulnerable countries, as a group or individually, are coping with or withstanding their economic vulnerability. Such a measurement could especially be useful for small states to identify their weak points with regard to resilience-building and serve as a monitoring tool in this regard.

Such a resilience index does not exist<sup>6</sup>, and in its absence, we propose that a proxy indicator could be GDP per capita. This variable may capture a country's ex-post material success or otherwise to cope with its inherent vulnerability<sup>7</sup>.

Although we have not tested the relationship between the resilience factors outlined above and GDP per capita index, we are assuming that they are closely related. GDP per capita is an attractive index as it is readily available, and can be adjusted for purchasing power standards.

We have constructed an index which combines the EVI with the GDP per capita index, calling it EVIAR (Economic Vulnerability Index Augmented by Resilience). This result is shown graphically in Figure 2.3, which is based on the data given in Appendix 1.

**Figure 2.3. The EVI and the EVIAR**



The figure reproduces the EVI, so as to compare it with the EVIAR. It can be seen that the gradient of the EVIAR is lower than that of the EVI. This results from the fact that many vulnerable states have a relatively high GDP per capita.

For example, Singapore ranks 7th on the EVI, but because it has a high GDP per capita, it ranks 54th in the EVIAR out of 117 countries. Similarly, Malta ranks 5th on the EVI and 17th on the EVIAR. This is true of SIDS with a relatively high GDP per capita.

It should be noted here that vulnerability need not result in poverty. There are inherently vulnerable small states which have adopted policies to withstand their vulnerability. This suggests that vulnerable states should not accept their condition as a fait accompli as it is possible to build up resilience to cope with inherent vulnerability.

The fact that some SIDS have strengthened their resilience to withstand vulnerability would seem to be paradoxical, as SIDS are likely to have very limited resources to build economic resilience. In reality, some SIDS may have been able to register relatively high GDP per capita in the past partly due to internal policies and partly due to a number of 'props' they enjoyed, including preferential trade arrangements, attractive incentive packages to attract FDI, and development assistance. However, contrary to some other states, these SIDS would seem to have used these 'props' well.

The findings in this paper suggests also that SIDS which currently register relatively low GDP per capita, and are therefore vulnerable and poor, merit special attention and support by the donor community, to enable them to strengthen their resilience in a sustainable manner.

## **Concluding considerations**

A number of considerations emerge from the findings presented in this paper. First and foremost, the updated Economic Vulnerability Index produced above has confirmed the findings in Briguglio (1995) that SIDS, as a group, tend to be more economically vulnerable than other groups of countries.

The study also suggests that the fact that many SIDS register relatively high GDP per capita can be attributed to the possibility that these states are to an extent coping with their inherent vulnerability. This can possibly be due to the wise governance practices and sound economic management, as well as the props they enjoyed including preferential trade arrangements, attractive incentive packages to attract FDI, and development assistance from the former colonial masters.

A major implication of these considerations is that resilience-building should take centre stage in the sustainable development strategies of economically vulnerable economies, particularly SIDS with a low GNP per capita.

## **Notes**

- 1 This chapter is reproduced from Briguglio and Galea (2003), with minor changes to render it compatible for inclusion in this volume.
- 2 Some words of caution are warranted regarding the choice of variables that compose the index. As in the case of studies that involve the construction of composite indices, the choice of the components of the index is somewhat subjective. However, care was taken to base the choice on a set of desirable criteria related to relevance, appropriate coverage, simplicity and ease of comprehension, affordability, suitability for international comparisons and transparency. A more detailed consideration of these criteria is given in Briguglio (2003).
- 3 The reason for measuring population in logs is to reduce the spread of values on the horizontal axis, given that country populations range from thousands to over a billion.
- 4 Methods often used to justify variable weights include participatory methods, where experts are asked to assign the degree of importance of the different components (see Moldan and Billharz, 1997) and the benefit-of-the-doubt weighting system Melyn and Moesen (1991), which involves using weights that yield the highest possible composite value. Aktins et al. (2000), drawing on the approach used by Wells (1997), use the regression method to let the data determine the weights – a procedure that requires the choice of a proxy variable to represent the phenomenon being measured.

- 5 However, some experimentation was carried out with varying weights, with a 40 per cent weight assigned to the openness index and 20 per cent to the other three indices, but the result did not change significantly.
- 6 This paper was written in 2003 when the resilience index proposed by Briguglio et al. (2006) had not yet been constructed.
- 7 This issue will be discussed in more detail in Chapter 3.

## Appendix

### The vulnerability index and GDP per capita

	Log of population	Vulnerability index standardised	GDP per capita standardised	EVIAR
St Kitts and Nevis	3.689	0.685	0.827	0.756
Dominica	4.295	0.588	0.920	0.754
Seychelles	4.382	1.000	0.837	0.919
Grenada	4.536	0.645	0.909	0.777
St Vincent & the Grenadines	4.700	0.647	0.934	0.790
St Lucia	5.011	0.765	0.901	0.833
Belize	5.494	0.588	0.937	0.762
Barbados	5.598	0.549	0.796	0.672
Maldives	5.611	0.948	0.956	0.952
Iceland	5.623	0.465	0.310	0.387
Malta	5.958	0.765	0.790	0.778
Suriname	6.024	0.724	0.963	0.844
Cape Verde	6.052	0.950	0.972	0.961
Luxembourg	6.072	0.471	0.000	0.235
Cyprus	6.625	0.643	0.917	0.780
Guyana	6.646	0.605	0.982	0.793
Mauritius	7.068	0.484	0.915	0.699
Trinidad & Tobago	7.147	0.408	0.893	0.651
The Gambia	7.182	0.708	0.995	0.851
Estonia	7.247	0.695	0.918	0.807
Slovenia	7.594	0.235	0.781	0.508
Macedonia, FYR	7.601	0.296	0.963	0.629
Kuwait	7.654	0.560	0.675	0.617
Mauritania	7.762	0.725	0.992	0.858
Oman	7.796	0.413	0.846	0.630
Latvia	7.798	0.550	0.886	0.718
Jamaica	7.861	0.706	0.935	0.820
Panama	7.935	0.640	0.923	0.782
Congo, Republic of	7.984	0.654	0.983	0.819
Uruguay	8.106	0.221	0.857	0.539
Albania	8.149	0.263	0.980	0.622
Costa Rica	8.202	0.334	0.906	0.620
Moldova	8.202	0.794	0.994	0.894
Lithuania	8.212	0.357	0.521	0.439
Ireland	8.229	0.284	0.494	0.389

	<b>Log of population</b>	<b>Vulnerability index standardised</b>	<b>GDP per capita standardised</b>	<b>EVIAR</b>
Armenia	8.242	0.531	0.991	0.761
New Zealand	8.245	0.245	0.682	0.464
Singapore	8.294	0.743	0.528	0.635
Norway	8.403	0.416	0.214	0.315
Croatia	8.407	0.368	0.899	0.633
Togo	8.407	0.704	0.995	0.850
Papua New Guinea	8.445	0.389	0.985	0.687
Kyrgyz Republic	8.483	0.526	0.996	0.761
Nicaragua	8.504	0.442	0.988	0.715
Finland	8.550	0.219	0.444	0.332
Denmark	8.580	0.311	0.277	0.294
Paraguay	8.587	0.227	0.968	0.598
Slovak Republic	8.594	0.273	0.917	0.595
Israel	8.719	0.339	0.617	0.478
El Salvador	8.725	0.277	0.956	0.617
Honduras	8.753	0.409	0.982	0.696
Jordan	8.762	0.555	0.974	0.764
Hong Kong	8.796	0.546	0.443	0.494
Switzerland	8.873	0.136	0.191	0.164
Azerbaijan	8.980	0.447	0.990	0.718
Austria	8.999	0.166	0.430	0.298
Bolivia	9.005	0.229	0.979	0.604
Sweden	9.089	0.159	0.390	0.274
Senegal	9.136	0.355	0.991	0.673
Tunisia	9.154	0.326	0.954	0.640
Portugal	9.206	0.185	0.753	0.469
Hungary	9.217	0.225	0.895	0.560
Belarus	9.218	0.488	0.977	0.733
Niger	9.220	0.484	0.999	0.741
Belgium	9.233	0.294	0.458	0.376
Czech Republic	9.238	0.236	0.881	0.559
Greece	9.247	0.501	0.737	0.619
Guatemala	9.314	0.211	0.963	0.587
Ecuador	9.426	0.345	0.973	0.659
Cameroon	9.527	0.304	0.987	0.646
Kazakhstan	9.614	0.327	0.973	0.650
Chile	9.617	0.290	0.887	0.588
Madagascar	9.649	0.356	0.997	0.676
Netherlands	9.668	0.279	0.444	0.361
Cote d'Ivoire	9.669	0.401	0.987	0.694
Yemen, Republic of	9.780	0.526	0.994	0.760

	<b>Log of population</b>	<b>Vulnerability index standardised</b>	<b>GDP per capita standardised</b>	<b>EVIAR</b>
Ghana	9.782	0.420	0.994	0.707
Australia	9.850	0.141	0.545	0.343
Sri Lanka	9.855	0.318	0.983	0.650
Uganda	9.881	0.457	0.995	0.726
Nepal	10.015	0.250	0.997	0.624
Romania	10.020	0.158	0.964	0.561
Malaysia	10.031	0.449	0.921	0.685
Venezuela	10.074	0.356	0.898	0.627
Peru	10.136	0.186	0.953	0.570
Morocco	10.249	0.208	0.974	0.591
Sudan	10.302	0.260	0.994	0.627
Kenya	10.309	0.391	0.994	0.693
Canada	10.326	0.089	0.504	0.297
Tanzania	10.443	0.368	0.997	0.682
Argentina	10.507	0.077	0.821	0.449
Poland	10.562	0.134	0.909	0.522
Spain	10.582	0.192	0.670	0.431
Colombia	10.635	0.194	0.954	0.574
South Africa	10.668	0.113	0.933	0.523
Korea	10.755	0.225	0.812	0.518
Italy	10.962	0.062	0.547	0.305
France	10.984	0.099	0.460	0.279
United Kingdom	10.992	0.081	0.447	0.264
Ethiopia	11.000	0.543	1.000	0.771
Thailand	11.030	0.278	0.958	0.618
Egypt	11.045	0.504	0.970	0.737
Iran, Islamic Rep	11.047	0.389	0.905	0.647
Turkey	11.083	0.140	0.934	0.537
Philippines	11.231	0.371	0.981	0.676
Germany	11.316	0.076	0.436	0.256
Mexico	11.496	0.035	0.887	0.461
Nigeria	11.620	0.518	0.992	0.755
Japan	11.749	0.081	0.211	0.146
Pakistan	11.809	0.267	0.992	0.630
Bangladesh	11.810	0.240	0.995	0.617
Russia	11.890	0.184	0.965	0.575
Brazil	12.013	0.001	0.917	0.459
Indonesia	12.243	0.133	0.988	0.561
United States of America	12.516	0.046	0.221	0.134
India	13.794	0.154	0.992	0.573
China, P.R. (mainland)	14.051	0.000	0.984	0.492

# Economic resilience: Concepts and measurements<sup>1</sup>

## Introduction

In this paper, the term economic resilience is used in two senses respectively relating to the ability of an economy to (i) recover quickly from harmful external economic shocks; and (ii) withstand the effect of such shocks<sup>2</sup>.

### Ability of an economy to recover from the effects of adverse shocks

This is associated with the flexibility of an economy, enabling it to bounce back after being adversely affected by a shock. This ability will be severely limited if, for example, there is a chronic tendency for large fiscal deficits. On the other hand, this ability will be enhanced when the economy possesses discretionary policy tools which it can utilise to counteract the effects of negative shocks, such as a strong fiscal position, which would entail that policy-makers can utilise discretionary expenditure or tax cuts to contrast the effects of negative shocks. This type of resilience is therefore associated with 'shock-counteraction'.

### Ability to withstand shocks

This relates to the ability to absorb shocks, so that the end effect of a shock is neutered or rendered negligible. This type of resilience occurs when the economy has mechanisms in place to reduce the effects of shocks, which can be referred to as 'shock absorption'. For example, the existence of a flexible, multi-skilled labour force could act as an instrument of shock absorption, as negative external demand shocks affecting a particular sector of economic activity can be relatively easily met by shifting resources to another sector enjoying stronger demand.

### Importance of resilience considerations

The issue of resilience building is important for small states in view of the fact that such states tend to be inherently economically vulnerable, as already explained. In an analysis of the economic performance of small states, it is important to distinguish between vulnerability considerations and resilience factors.

For example, some studies argue that small economic size presents an economic advantage on the basis of simple correlations between small size and indicators of economic performance, such as GDP growth and GDP per capita. However, a proper analysis of the

relationship between size of countries and economic performance should factor in control variables, such as good economic governance. This paper suggests that the relatively good performance of some small states is certainly not due to small size, but is attributed to nurtured economic resilience. In other words, the relatively good economic performance of a number of small states is not because, but in spite, of their small size and inherent economic vulnerability.

Consideration of economic resilience building also conveys the message that small vulnerable states should not be complacent in the face of their economic vulnerability, but could, and should, adopt policy measures to enable them to improve their ability to cope with, or bounce back from, external shocks.

## The construction of a resilience index

The resilience index proposed in this study is intended to measure the effects of shock absorption or shock counteraction policies across countries<sup>3</sup>. It is hypothesised that the variables that capture these effects are the following:

- 1 macro-economic stability;
- 2 micro-economic market efficiency;
- 3 good political governance; and
- 4 social development.

### Macro-economic stability

Macro-economic stability relates to the interaction between an economy's aggregate demand and aggregate supply. If aggregate expenditure in an economy moves in equilibrium with aggregate supply, the economy would be characterised by internal balance, as manifested in a sustainable fiscal position, low price inflation and an unemployment rate close to the natural rate, as well as by external balance, as reflected in the international current account position or by the level of external debt.

These can be considered to be variables which are highly influenced by economic policy and which could act as good indicators of an economy's resilience in facing adverse shocks.

The macro-economic stability component of the resilience index proposed in this study consists of three variables, namely (i) the fiscal deficit-to-GDP ratio; (ii) the sum of the unemployment and inflation rates; and (iii) the external debt-to-GDP ratio. The variables are available for a reasonably wide set of countries spread over a spectrum of stages of development, size and geographical characteristics.

- *Fiscal deficit.* The government budget position is suitable for inclusion in the resilience index because it is the result of fiscal policy, which is one of the main tools available to government, and relates to resilience of a shock-counteracting nature. This is because a healthy fiscal position would allow adjustments to taxation and expenditure policies in the face of adverse shocks. The fiscal deficit, standardised as a ratio to GDP, is thus included in the resilience index proposed in this study.
- *Inflation and unemployment.* Price inflation and unemployment are also considered to

be suitable indicators of resilience and at the same time they potentially provide additional information to that contained in the fiscal deficit variable. This is because price inflation and unemployment are strongly influenced by other types of economic policy, including monetary and supply-side policies. They are associated with resilience because if an economy already has high levels of unemployment and inflation, it is likely that adverse shocks would impose significant costs on it. If, on the other hand, the economy has low levels of inflation and unemployment, then it can withstand adverse shocks to these variables without excessive welfare costs. In this sense, therefore, unemployment and inflation are associated with resilience of a shock-absorbing nature. The sum of these two variables, also known as the economic discomfort index (or economic misery index), is thus included in the resilience index proposed here.

- *External debt.* The adequacy of external policy may be gauged through the inclusion of the external debt-to-GDP ratio. This is considered to be a good measure of resilience, because a country with a high level of external debt may find it more difficult to mobilise resources in order to offset the effects of external shocks. Thus, this variable would indicate resilience of a shock-counteracting nature<sup>4</sup>.

The variables utilised for the macro-economic component of the resilience index are measured as period averages across business cycles so as to eliminate the effects of cyclical fluctuations and policies. The sources of the data and country rankings associated with this component are presented in the Appendix to this chapter. As can be seen, a number of small states, notably Singapore and Hong Kong, obtain relatively high scores on this component.

## Micro-economic market efficiency

The science of economics views markets and their efficient operation through the price mechanism as the best way to allocate resources in the economy. If markets adjust rapidly to achieve equilibrium following an external shock, the risk of being negatively affected by such a shock will be lower than if market disequilibria tend to persist. Indeed, with very slow or non-existent market adjustment, resources will not be efficiently allocated in the economy, resulting in welfare costs, manifested, for instance, in unemployed resources and waste or shortages in the goods markets. These considerations have important implications for shock-absorbing resilience.

Not many indicators of market efficiency are available which span a sufficiently wide range of countries as required for the purpose of this study. Following a search for suitable indicators, it was decided to use a component of the *Economic Freedom of the World Index* (Gwartney and Lawson 2005), entitled 'regulation of credit, labour and business' which is aimed at measuring the extent to which markets operate freely, competitively and efficiently across countries. It is designed to identify the effect of regulatory restraints and bureaucratic procedures on competition and the operation of markets.

In the financial market, this index assesses the extent to which (i) the banking industry is dominated by private firms; (ii) foreign banks are permitted to compete in the market; (iii) credit is supplied to the private sector; and (iv) controls on interest rates interfere with the

credit market. All these relate to the degree of interference by government in the financial market, which could preclude the economy from reacting flexibly to shocks.

Similar considerations apply in the case of the labour market. Here interference relates to unduly high unemployment benefits (which could undermine the incentive to accept employment), dismissal regulations, minimum wage impositions, centralised wage setting, extensions of union contracts to non-participating parties and conscription. All these are viewed as possibly precluding work effort, thereby limiting the ability of a country to recover from adverse shocks. A country would have a higher market efficiency score if it allows market forces to determine wages and establish conditions of dismissal, avoid excessive unemployment, and refrain from the use of conscription.

Bureaucratic control of business activities is also thought to inhibit market efficiency. This subcomponent is designed to identify the extent to which bureaucratic procedures limit competition and the operation of markets. When such activities retard entry into business and increase the cost of production, when prices are not market-determined and when governments use their power to extract financial payments and reward some businesses at the expense of others, private sector involvement is discouraged, thereby inhibiting the freely-operating markets to absorb shocks.

The relative data and country-ranking results with regard to this component of the resilience index are presented in the Appendix to this chapter. Small vulnerable countries can be found across the entire range of this component, indicating that such countries are adopting different policy approaches in terms of micro-economic market efficiency<sup>5</sup>.

## Good governance

Good governance is essential for an economic system to function properly and hence to be resilient. Governance relates to issues such as rule of law and property rights. Without mechanisms of this kind in place, it would be relatively easy for adverse shocks to result in economic and social chaos and unrest. Hence the effects of vulnerability would be exacerbated. On the other hand, good governance can strengthen an economy's resilience.

An explanation as to why the good governance component has been included alongside a market efficiency component is warranted at this juncture. The market efficiency index emphasises the importance of freely and properly operating markets for allocative efficiency and hence, relates to the ability of an economy to reallocate resources quickly and effectively following an economic shock. This fundamentally neo-liberal approach, which has been recently questioned with the market failures associated with the financial turmoil, is here balanced by an emphasis on appropriate government intervention to foster economic resilience as measured by the governance index. Thus, the resilience index proposed here views properly functioning markets and a framework of appropriate governance as two essential aspects of economic resilience.

The *Economic Freedom of the World Index* has a component which focuses on legal structure and security of property rights<sup>6</sup>. This is considered to be useful in the context of the present exercise in deriving an index of good governance. The component covers five subcomponents, namely (i) judicial independence; (ii) impartiality of courts; (iii) the

protection of intellectual property rights; (iv) military interference in the rule of law; and (v) the political system and the integrity of the legal system.

The relative data and country-ranking results are presented in the Appendix to this chapter. The highest rankings on the governance component are the more economically advanced countries, with the first five placings occupied by major industrialised economies. Singapore, which was among the most resilient economies according to economic criteria, ranks 15th in terms of governance. Vulnerable economies tend to obtain lower rankings on this count, but it still appears to be the case that the vulnerable economies enjoying a higher per capita GDP also tend to have better systems of governance.

## Social development

Social development is another essential component of economic resilience. This factor indicates the extent to which relations within a society are properly developed, enabling an effective functioning of the economic apparatus without the hindrance of civil unrest. Social development can also indicate the extent to which effective social dialogue takes place in an economy which, in turn, would enable collaborative approaches towards the undertaking of corrective measures in the face of adverse shocks.

Social development in a country can be measured in a number of ways. Variables relating to income, such as its dispersion and the proportion of the population living in poverty, the long-term unemployment rate (indicating the proportion of the population with low skills and inadequate employment prospects) and the proportion of the population with low levels of education, could be useful indicators. Still another possible approach would be to measure the number and extent of instances of industrial or civil unrest. These approaches are interesting but rather narrow in scope and very difficult to measure across countries.

The social development component of the resilience index in this paper consists of the education and health indicators utilised to construct the UNDP human development index (HDI).

- *Education:* Educational advancement, measured by the adult literacy rate and school enrolment ratios, is considered to be a good indicator of social development. In addition, an improved standard of education could be indicative of an improved ability to cohere in the face of external shocks—a condition conducive to economic resilience.
- *Health:* Life expectancy at birth is considered to be suitable for measuring the health aspects in a society. This in turn is likely to be related to medical facilities, housing and degree of proneness to accident or risk of injury. Again, advancement in health standards is considered to be conducive to economic resilience.

The relative data and country ranking results are presented in the Appendix to this chapter. Small island developing states occupy the entire range of the component, with those with a high per capita GDP obtaining higher rankings.

## Correlation between the components of the index

The components discussed above have been found to be positively related to each other, as shown in Table 3.1, but the correlation is somewhat weak.

**Table 3.1. Correlation matrix**

Macro-economic stability	1.00			
Market efficiency	0.17	1.00		
Good governance	0.29	0.68	1.00	
Social development	0.22	0.40	0.67	1.00

The highest correlation scores relate to good governance and social development and good governance and market efficiency.

The question arises therefore as to whether or not the good governance component is redundant. Given that its correlation with market efficiency and social development is not unduly high, it was decided to retain all four components in the composite index.

## Other determinants of economic resilience

Economic resilience can also be viewed to be determined by a plethora of other factors apart from those mentioned above. It may be argued, for example, that it could be useful to consider the effects of environmental management in this regard. The environment can be an important source of vulnerability by giving rise to shocks of an adverse nature, principally by rapid events, such as earthquakes and floods. In turn, these would have important repercussions on the economy and society.

In this regard, the efforts undertaken to compile the Environmental Sustainability Index (Esty et al., 2005) are commendable. Data on environmental matters are, however, not readily and extensively available across countries of different sizes and the inclusion of environmental variables for the present exercise would have drastically reduced the countries covered by the resilience index<sup>7</sup>. In addition, there is the possibility that incorporating an environmental management index could lead to the problem of redundancy, that is, using indicators which are highly correlated which would add no new information but would render the procedure unnecessary complex. In the case of environmental management factors, the socio-economic resilience aspects covered by the variables discussed above are likely to be highly correlated with environmental management, although in the absence of data, this assertion cannot be tested.

## Computation of the composite index

The composite index was computed by taking a simple average of the four components just described, namely: macro-economic stability, micro-economic market efficiency, good governance and social development. Data for 86 countries were obtained. All observations of the components of the index were standardised using the well-known transformation:

$$XS_{ij} = (X_{ij} - \text{Min}X_j) / (\text{Max}X_j - \text{Min}X_j) \quad j = 1, 2, \dots, 4; i = 1, 2, \dots, 86.$$

where:

- $XS_{ij}$  is the value of the standardised observation for country  $i$  of component  $j$ ;
- $X_{ij}$  is the actual value of the same observation;
- $MinX_j$  and  $MaxX_j$  are the minimum and maximum values of the same observations for component  $j$ .

This transforms the values of observations in a particular variable array so that they take a range of values from 0 to 1.

## The results

The results of averaging the four components of the economic resilience index are given in the table in the Appendix. These show that most of the small island states included in the index, namely Singapore, Barbados, Malta and Cyprus, register relatively high resilience scores. Other small states with relatively high resilience scores include Iceland, Hong Kong, Slovenia and Estonia. Unfortunately, data for small island developing states that register low resilience scores were available for two countries only, namely Jamaica and Papua New Guinea. It is, therefore, not possible to compare the performance of country groupings in this regard. However, it appears that the worst performers in terms of resilience building were a number of larger African, Asian and South American countries.

## The uses of the resilience index

The resilience index developed in this paper may be useful to support decision-making, especially for setting directions and justifying choice of priorities for resilience building. In particular it could help to:

- 1 disseminate information on, and draw attention to, the issue of resilience building;
- 2 focus the discussion on essential resilience-building issues; and
- 3 promote the idea of integrated action.

## Dissemination of information

An index is a very good instrument for drawing attention to the issue being investigated. Thus, for example, the exercise of computing an index of resilience may itself make decision makers and stakeholders more aware of the factors that lead to resilience building. Such an exercise may also generate academic discussion and enhance awareness amongst scholars and practitioners on the issues involved.

The resilience index can also be used to give high profile to certain policies which can strengthen resilience. In this regard, the index can be useful for communication and for alerting stakeholders about failures and success stories relating to resilience building.

## Focusing the discussion

Indices can help to develop a common language for discussion. One often finds that parties engaged in debate go off at tangents because of lack of common definitions. In the case of

indices, the quantification of their components requires precise definitions, and this could help focus the discussion on matters directly relevant to the issue.

## Promoting the idea of integrated action

Although a composite index yields a single-value measure of the phenomena under consideration, it summarises complex realities and therefore conveys the message that the issue under investigation is not the outcome of a single factor. This could help to foster an awareness of the interconnections between the components of the index. In the case of economic resilience, for example, it is often not enough, and may even be counterproductive, to take action in one area in isolation from others. The resilience index proposed here could therefore promote the need for an integrated action in this regard.

## Concluding considerations

This paper dealt with conceptual and methodological aspects associated with economic resilience and its measurement. The index developed here covers four aspects of economic resilience, namely macro-economic stability, micro-economic market efficiency, good governance and social development. Each of these components contains variables which are considered suitable to gauge the extent to which the policy framework is conducive to absorb and counteract the effects of economic shocks.

The results of this exercise can provide an explanation as to why inherently vulnerable countries may register high levels of GDP per capita. It is argued that countries may be economically successful because they are inherently not vulnerable, or because they are resilient in the face of the vulnerability they face. The obverse is also true, in that countries may be unsuccessful because they are not sufficiently resilient.

The paper has also shown that GDP per capita is positively related to economic resilience and negatively related to economic vulnerability. Furthermore, per capita GDP is found to be more sensitive to resilience variables than to vulnerability variables.

## Notes

- 1 This chapter is reproduced from sections of Briguglio et al. (2006), as revised and updated in Briguglio et al. (2009), with minor changes to render it compatible for inclusion in this volume.
- 2 An analogy relating to an attack of influenza virus may help explain the two senses in which the term 'resilience' is used. A person exposed to the virus may (i) get infected but recovers quickly; and/or (ii) withstand the effect of the virus, possibly by being immunised.
- 3 The choice of variables which compose the index is somewhat subjective. However, care was taken to base the choice on a set of desirable criteria related to appropriate coverage, simplicity and ease of comprehension, affordability, suitability for international comparisons and transparency. A more detailed consideration of these criteria is given in Briguglio (2003) and Farrugia (2007). In addition, the summing of the components of the index also involves subjective decisions, principally in selecting the weighting procedure. There is considerable debate in the literature on composite indices on this issue. Again, these questions are discussed in Briguglio (2003) and Farrugia (2007) and are not elaborated upon in this study.
- 4 It is, however, recognised that certain countries may have external debt not because of a weak

policy framework but due to a highly-developed international financial activity. This is a weakness in the use of this indicator. However, the inclusion of other variables related to market efficiency and governance would to an extent 'correct' this weakness, since these variables either exacerbate the effect of external debt in the presence of a weak policy framework or counteract it otherwise.

- 5 An attempt was made to augment the micro-economic market efficiency indicator used in the resilience index by assessing the degree of exchange rate and financial controls exercised by countries covered in the resilience index. The premise is based on the notion that countries that use capital controls are not likely to have efficient financial markets. In turn, due to the strong interlinkages between financial markets and the entire economy, inefficiencies in the financial markets are likely to reflect and result in inefficiencies in other sectors of the economy. The IMF *Annual Report on Exchange Arrangements and Exchange Restrictions* (2006) was used to identify the presence of such controls. This approach, however, met with a number of practical difficulties including the fact that the IMF yields a *de jure* classification of exchange rate regimes based on the stated intentions of the central banks. However, difficulties arise when actual policies diverge from the stated intentions. Moreover, given the numerous and often complicated controls exercised by a number of countries, a relevant comparison of the controls across countries is difficult to obtain.
- 6 An alternative governance index is presented by the World Bank (Kaufmann, Kraay and Mastruzzi 2006). A Pearson correlation test of the World Bank governance indicators and the *Economic Freedom of the World's* 'legal structure and security of property rights' component yielded a value of 0.92. Thus, both indices are likely to be measuring a similar phenomenon. In fact, when the Kaufmann index was used in the compilation of the resilience index, the ranking of countries only changed marginally.
- 7 Esty et al. (2005) do produce some results for a few small states but they are reluctant to include them in the Environmental Sustainability Index.

# Appendix

## The resilience index: Data and country rankings

Country	Macro-economic stability <sup>a</sup>	Micro-economic market efficiency <sup>b</sup>	Good governance <sup>c</sup>	Social development <sup>d</sup>	Resilience index <sup>e</sup>	Country ranking
Albania	0.250	0.387	0.411	0.765	0.453	62
Argentina	0.534	0.259	0.227	0.868	0.472	58
Australia	0.472	0.800	0.971	0.988	0.808	9
Austria	0.693	0.531	0.928	0.956	0.777	12
Bangladesh	0.635	0.305	0.174	0.223	0.334	80
Barbados	0.632	0.627	0.722	0.915	0.724	17
Belgium	0.661	0.474	0.800	0.982	0.729	16
Belize	0.186	0.671	0.607	0.754	0.554	49
Bolivia	0.468	0.360	0.174	0.619	0.405	69
Brazil	0.388	0.210	0.423	0.721	0.436	65
Cameroon	0.443	0.451	0.344	0.232	0.368	76
Canada	0.633	0.798	0.910	0.977	0.829	6
Chile	0.636	0.562	0.611	0.859	0.667	28
China	0.653	0.095	0.468	0.704	0.480	56
Colombia	0.417	0.273	0.220	0.754	0.416	67
Costa Rica	0.609	0.470	0.623	0.853	0.639	31
Côte d'Ivoire	0.422	0.327	0.237	0.000	0.246	86
Croatia	0.524	0.516	0.451	0.824	0.579	40
Cyprus	0.360	0.407	0.687	0.886	0.585	38
Czech Republic	0.571	0.444	0.631	0.856	0.626	35
Denmark	0.716	0.682	1.000	0.944	0.836	5
Dominican Republic	0.657	0.470	0.305	0.654	0.521	52
Egypt, Arab Rep.	0.588	0.151	0.403	0.504	0.412	68
El Salvador	0.655	0.485	0.351	0.645	0.534	51
Estonia	0.635	0.705	0.673	0.850	0.716	18
Finland	0.638	0.671	0.997	0.971	0.819	7
France	0.494	0.526	0.744	0.962	0.681	23
Germany	0.551	0.349	0.932	0.947	0.695	20
Honduras	0.425	0.388	0.157	0.584	0.389	71
Hong Kong, China	0.650	1.000	0.731	0.865	0.811	8
Hungary	0.435	0.598	0.656	0.830	0.630	34
Iceland	0.722	0.912	0.960	0.968	0.890	1
India	0.501	0.309	0.555	0.396	0.440	64
Indonesia	0.420	0.060	0.285	0.633	0.350	78

Country	Macro-economic stability <sup>a</sup>	Micro-economic market efficiency <sup>b</sup>	Good governance <sup>c</sup>	Social development <sup>d</sup>	Resilience index <sup>e</sup>	Country ranking
Iran, Islamic Rep.	0.595	0.000	0.555	0.630	0.445	63
Ireland	0.748	0.632	0.855	0.927	0.790	11
Israel	0.599	0.348	0.730	0.933	0.652	29
Italy	0.564	0.277	0.669	0.930	0.610	36
Jamaica	0.404	0.413	0.468	0.783	0.517	53
Japan	0.473	0.530	0.745	0.974	0.681	24
Jordan	0.388	0.480	0.637	0.727	0.558	48
Kenya	0.489	0.471	0.283	0.299	0.385	73
Kuwait	0.579	0.656	0.705	0.748	0.672	27
Latvia	0.523	0.490	0.555	0.824	0.598	37
Lithuania	0.548	0.391	0.471	0.848	0.564	46
Luxembourg	0.170	0.752	0.910	0.894	0.682	22
Madagascar	0.362	0.266	0.256	0.255	0.285	84
Malaysia	0.732	0.493	0.625	0.748	0.649	30
Malta	0.484	0.631	0.708	0.871	0.674	25
Mauritius	0.602	0.371	0.625	0.701	0.575	43
Mexico	0.607	0.281	0.294	0.777	0.490	55
Morocco	0.496	0.373	0.566	0.405	0.460	60
Nepal	0.492	0.458	0.310	0.261	0.380	74
Netherlands	0.483	0.656	0.971	0.979	0.772	13
New Zealand	0.690	0.882	0.951	0.974	0.874	2
Nicaragua	0.024	0.486	0.187	0.566	0.316	82
Nigeria	0.472	0.509	0.219	0.232	0.358	77
Norway	0.557	0.550	0.910	0.982	0.750	14
Pakistan	0.395	0.414	0.148	0.205	0.291	83
Panama	0.582	0.536	0.384	0.806	0.577	42
Papua New Guinea	0.509	0.434	0.310	0.290	0.386	72
Paraguay	0.578	0.164	0.106	0.730	0.395	70
Peru	0.568	0.401	0.316	0.739	0.506	54
Philippines	0.451	0.388	0.285	0.771	0.474	57
Poland	0.569	0.304	0.520	0.874	0.567	45
Portugal	0.595	0.458	0.768	0.915	0.684	21
Romania	0.388	0.290	0.409	0.765	0.463	59
Russian Federation	0.517	0.092	0.348	0.751	0.427	66
Senegal	0.403	0.225	0.342	0.067	0.260	85
Singapore	1.000	0.730	0.888	0.877	0.874	3
Slovak Republic	0.446	0.446	0.536	0.830	0.564	47
Slovenia	0.660	0.308	0.664	0.903	0.634	33
South Africa	0.576	0.600	0.664	0.446	0.571	44
Spain	0.545	0.556	0.625	0.968	0.673	26
Sri Lanka	0.318	0.407	0.356	0.751	0.458	61

Country	Macro-economic stability <sup>a</sup>	Micro-economic market efficiency <sup>b</sup>	Good governance <sup>c</sup>	Social development <sup>d</sup>	Resilience index <sup>e</sup>	Country ranking
Sweden	0.474	0.574	0.949	1.000	0.749	15
Switzerland	0.557	0.744	0.912	0.950	0.791	10
Thailand	0.399	0.473	0.582	0.733	0.547	50
Trinidad and Tobago	0.641	0.562	0.557	0.780	0.635	32
Tunisia	0.511	0.484	0.683	0.651	0.582	39
Turkey	0.000	0.213	0.391	0.674	0.320	81
Uganda	0.516	0.424	0.370	0.199	0.377	75
United Kingdom	0.062	0.844	0.977	0.971	0.714	19
United States	0.646	0.907	0.860	0.944	0.839	4
Uruguay	0.523	0.376	0.537	0.874	0.577	41
Venezuela, RB	0.511	0.091	0.000	0.777	0.345	79

## Notes to appendix

- a** The macro-economic stability sub-index is made up of the simple average of the following three variables: (i) the fiscal deficit to GDP ratio; (ii) the sum of the unemployment and inflation rates; and (iii) the external debt-to-GDP ratio. The data sources are IMF (2005) and World Bank (2004). National statistical offices were consulted for a few countries.
- b** The micro-economic market efficiency index is a component of the *Economic Freedom of the World Index* (Gwartney and Lawson, 2005), namely 'regulation of credit, labour and business' and is intended to measure the extent to which regulatory restraints and bureaucratic procedures limit competition and the operation of financial, labour and product markets. Data pertain to 2001 through 2003.
- c** The governance index consists of five components, namely (i) judicial independence; (ii) impartiality of courts; (iii) the protection of intellectual property rights; (iv) military interference in the rule of law; and (v) the political system and the integrity of the legal system (source: Gwartney and Lawson, 2005). Data pertain to 2001 through 2003.
- d** The social development index is the sum of the education and health indices of the HDI for the years 2000 to 2002 (see UNDP, 2002, 2003, 2004). Education is measured by the adult literacy rate and school enrolment rates, while health is measured by life expectancy at birth.
- e** The resilience index is the simple average of the four indices in the previous four columns.

# Juxtaposing economic vulnerability and resilience<sup>1</sup>

## Introduction

Many small states manage to generate a relatively high GDP per capita in comparison to other developing countries in spite of their high exposure to harmful exogenous economic shocks. This would seem to suggest that there are factors which may offset the disadvantages associated with economic vulnerability. As explained in the previous chapter, this could be associated with a policy framework conducive to resilience building.

This chapter examines the relationship between economic vulnerability and economic resilience and presents a number of implications associated with the juxtaposition of the two conditions.

## The ‘Singapore paradox’

The ‘Singapore paradox’ refers to the seeming contradiction that although Singapore is highly exposed to exogenous shocks, this small island state has managed to register high rates of economic growth and to attain high GDP per capita. This reality can be explained in terms of the ability of Singapore to build its resilience in the face of external shocks.

Briguglio (2003, 2004) explains this in terms of the juxtaposition of economic vulnerability and economic resilience and proposes a methodological approach in this regard. In this approach, economic vulnerability is ascribed to inherent conditions affecting a country’s exposure to exogenous shocks, while economic resilience is associated with actions, undertaken by policy-makers and private economic agents, which enable a country to withstand or recover from the negative effects of shocks<sup>2</sup>.

On the basis of this approach, Briguglio (2004) identifies four possible scenarios into which countries may be placed according to their vulnerability and resilience characteristics. These scenarios are termed as *best case*, *worst case*, *self-made*, and *prodigal son*.

The *best case* category applies to countries that are not inherently vulnerable and which, at the same time, adopt resilience-building policies. The *worst case* category refers to countries that compound the adverse effects of inherently high vulnerability by adopting policies that run counter to economic resilience. Countries classified as *self-made* are those with a high degree of inherent economic vulnerability, but which are economically resilient through the adoption of appropriate policies that enable them to cope with or withstand the

effects of their inherent vulnerability. Countries falling within the *prodigal son* category are those with a relatively low degree of inherent economic vulnerability but whose policies are deleterious to economic resilience, thereby exposing them to the adverse effects of shocks<sup>3</sup>. These four scenarios are depicted in Figure 4.1, where the axes measure inherent economic vulnerability and nurtured resilience, respectively.

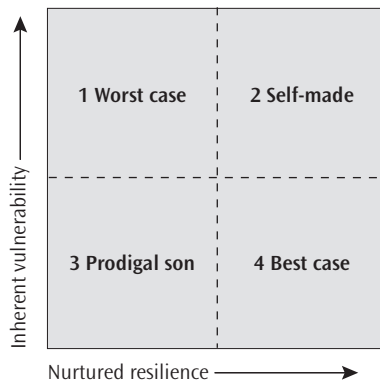
This method of defining vulnerability in terms of inherent features and resilience in terms of policy-induced changes has a number of advantages.

First, the vulnerability index would refer to permanent (or quasi-permanent) features over which a country can practically exercise no control and therefore cannot be attributed to inadequate policies. In other words, countries scoring highly on the index cannot be accused of inflicting vulnerability on themselves through misguided policy approaches.

Second, the resilience index would refer to what a country can do to mitigate or exacerbate its inherent vulnerability. Scores on this index would, therefore, reflect the appropriateness of policy measures.

Third, the juxtaposition of the two indices would indicate the overall risk of an economy being harmed by external shocks due to inherent vulnerability features counterbalanced by appropriate policy measures.

**Figure 4.1. The four scenarios**

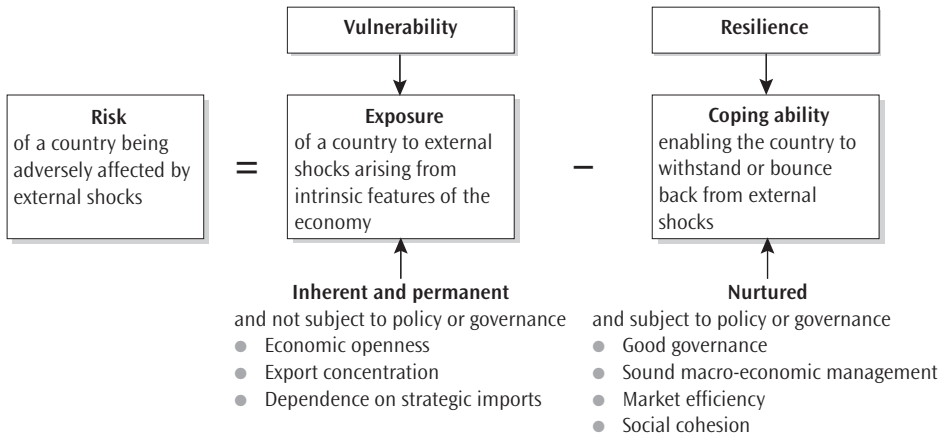


Source: Briguglio (2004)

Given that vulnerability refers to inherent characteristics which render countries prone to exogenous shocks, vulnerability scores for a particular country should not differ much over time, and therefore it is not expected that a country moves vertically along the quadrants of Figure 4.1. But horizontal movement is possible for those countries that adopt measures which build resilience and vice versa. It would thus be possible for countries to switch between the *worst case* and the *self-made* scenarios, or the *prodigal son* and the *best case* scenarios, through changes in their economic policies.

By distinguishing between inherent economic vulnerability and nurtured economic resilience, it is possible to create a methodological framework for assessing the risk of being affected by external shocks, as shown in Figure 4.2.

**Figure 4.2. Risks associated with being adversely affected by external shocks**



Source: Briguglio (2004)

Figure 4.2 shows that risk has two elements, the first is associated with the inherent conditions of the country that is exposed to external shocks and the second associated with conditions developed to absorb, cope with or bounce back from adverse shocks. The risk of being adversely affected by external shocks is therefore the combination of the two elements. The negative sign in front of the resilience element indicates that the risk is reduced as resilience builds up.

### The country scenarios

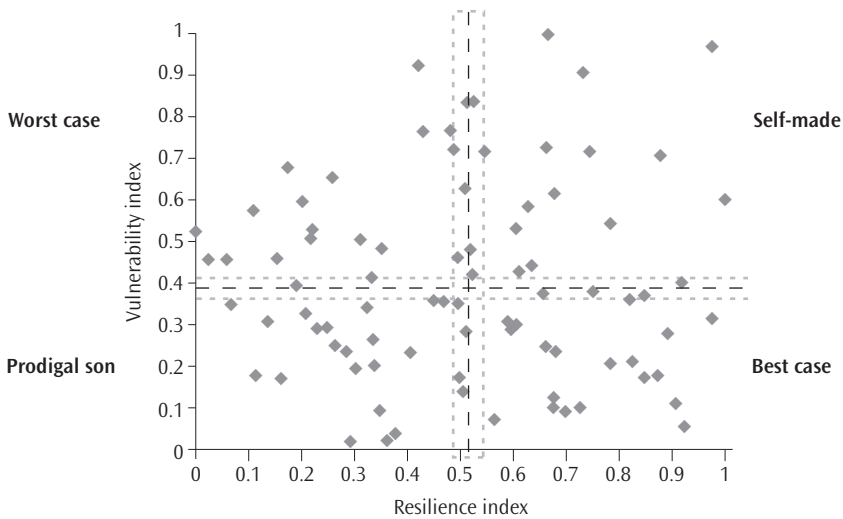
Going back to the scenarios proposed in Figure 4.1, it is possible to place the countries in the four quadrants shown therein, using the vulnerability index presented in Chapter 2 and the resilience index presented in Chapter 3. The results are shown in Figure 4.3. It should be pointed out that the cutoff values chosen for the quadrants (represented by the dashed lines in Figure 4.3) are the averages of the vulnerability and resilience scores for all countries.

This decision is subjective and the classification of countries will change if different cut-off points are chosen. Consequently, it was decided to allow a 'borderline' margin of +/-5 per cent for the vulnerability and resilience indices (shown by the dotted lines on each side of the dashed lines) and countries falling within these margins are classified as 'borderline' cases.

The Appendix to this chapter shows the classification of countries within the different quadrants. The overall tendencies that can be derived from this table are that:

- 1 countries falling in the *best case* quadrant are mostly the large 'developed countries';
- 2 countries falling in the *self-made* quadrant include a number of small states with a high vulnerability score;
- 3 countries which fall in the *prodigal son* quadrant include mostly large developing countries; and
- 4 countries falling in the *worst case* quadrant include a few vulnerable small countries with weak economic performance.

**Figure 4.3. Economic resilience and economic vulnerability**



Source: Computed by the authors

### **GDP per capita, resilience and vulnerability**

It would be interesting to investigate the extent to which GDP per capita of the different countries is related to vulnerability and resilience.

Using the ordinary least squares (OLS) method of regression, GDP per capita was regressed on the vulnerability index (as proposed in Briguglio and Galea 2003, reproduced in the Appendix of Chapter 1) and on the resilience index produced in this study. The results are shown in Table 4.1.

In Table 4.1, G represents GDP per capita; R represents the resilience index; and V represents the vulnerability index. All variables have been standardised as explained above, so that their values range between 0 and 1.

**Table 4.1. Regression results**

G =	0.14	+	0.95R	-	0.14V
<i>t</i> statistics	(3.5)		(17.2)		(-2.4)
<i>R</i> <sup>2</sup> = 0.78 Number of observations = 86					

As expected, the sign on R is positive while that on V is negative. This is not an extraordinary finding, as it validates a very plausible assumption that good economic governance leads to good economic performance<sup>4</sup>. The result confirms the hypothesis in Briguglio (2004) and Cordina (2004a, 2004b) that the performance of countries is related to their inherent vulnerability and their nurtured resilience. It also confirms that the resilience index is highly correlated with GDP per capita, with countries having the highest GDP per capita, being, as expected, those with the highest resilience scores<sup>5</sup>.

## Policy implications

The construction of indices to measure economic vulnerability and resilience have provided valuable insights into the development processes of small states. They have also provided a better understanding as to why small states can, in spite of their handicaps, perform well economically. The key phrase in this regard is 'good economic governance'. Many small states have adopted policies aimed at building economic resilience so as to enable them to withstand or cope with economic vulnerability. Other small states, however, failed to do so, with the end result that they fell backward economically, with some even facing the risk of becoming failed states.

In this regard, putting in place a policy framework to build economic resilience should be given major importance in the development strategy of small states, particularly those with a low GNP per capita.

Towards this end, the donor community could consider, as a priority in their aid packages to small developing states, assistance to help such states develop a policy framework conducive to resilience building. Although the provision of development assistance to satisfy basic needs, such as feeding mouths and curing the sick, is essential in emergency cases and in impoverished developing countries, it is of paramount importance that medium-term and long-term aid be aimed at enabling developing countries solve their own economic problems, notably through improved economic governance.

Because of country peculiarities and diversities in culture, size and political structures, the recipient countries themselves should be enabled to determine their development policies and to implement them in order to attain their development goals. For this reason, assessments regarding the need for ODA to identify policy and institutional weaknesses (through, for example, vulnerability and resilience profiling), should be carried out by the recipient countries themselves, in collaboration with the donors.

Development aid can then be directed towards the identified policy and institutional gaps, so as to enable the recipient country to enhance its economic governance capacity, with the ultimate aim of improving the possibilities for the country to generate growth and development.

The next part of this volume proposes a conceptual and practical approach aimed at building a template of variables to be considered in the derivation of a vulnerability/resilience profile of an individual country, through which resilience gaps can be identified and addressed, possibly with the assistance of donors.

## Notes

- 1 This chapter is reproduced from sections of Briguglio et al. (2006), as revised and updated in Briguglio et al. (2009), with minor changes to render it compatible for inclusion in this volume.
- 2 Cordina (2004a, 2004b) introduces the concept of exposure to shocks within a mainstream model of economic growth based on the neoclassical paradigm to show that the per capita GDP of a country depends positively on its resources and productivity and negatively on its inherent vulnerability. It is further shown that the negative impact of vulnerability depends

upon the degree of diminishing marginal productivity in a country, which can be influenced by policy actions and is therefore consistent with the notion of resilience. The application of this approach shows that capital formation and the fostering of economic conditions which retard the onset of diminishing marginal productivity, including amongst others, macro-economic buffers and micro-economic market flexibility can be important sources of resilience.

- 3 The analogy with the prodigal son is that these countries, though 'born rich', squander their riches.
- 4 This also validates the assumption put forward in Briguglio (2003).
- 5 The relationship between GDP per capita and the resilience index (i.e., excluding the vulnerability variable) exhibits a high correlation coefficient ( $R^2 = 0.77$ ) and t-statistic ( $t = 16.7$ ). However, the inclusion of the vulnerability variable in the equation improves the results by producing a higher correlation coefficient and a higher t-statistic on the resilience variable, as shown above.

# Appendix

## Four country scenarios

Country	Resilience index	Vulnerability index*	Country	Resilience index	Vulnerability index
<b>Self-made</b>			<b>Worst case</b>		
Barbados	0.741	0.717	Belize <sup>c</sup>	0.478	0.768
Costa Rica	0.609	0.436	Côte d'Ivoire	0.000	0.524
Croatia <sup>a</sup>	0.516	0.480	Dominican Republic	0.427	0.768
Cyprus	0.526	0.840	Egypt, Arab Rep.	0.257	0.658
Estonia	0.729	0.908	Honduras	0.221	0.534
Hong Kong, China	0.877	0.713	Iran, Islamic Rep.	0.309	0.508
Iceland	1.000	0.607	Jamaica	0.420	0.922
Israel	0.630	0.443	Jordan <sup>c</sup>	0.484	0.725
Kuwait	0.661	0.731	Kenya	0.216	0.511
Latvia	0.546	0.718	Lithuania <sup>c</sup>	0.494	0.466
Luxembourg	0.676	0.615	Madagascar	0.060	0.465
Malaysia	0.626	0.587	Nicaragua	0.107	0.578
Malta	0.663	1.000	Nigeria	0.173	0.677
Mauritius <sup>a</sup>	0.509	0.632	Papua New Guinea	0.216	0.508
Norway	0.781	0.543	Philippines	0.353	0.485
Panama <sup>a</sup>	0.514	0.837	Senegal	0.020	0.464
Singapore	0.974	0.971	Sri Lanka <sup>d</sup>	0.328	0.415
Tunisia <sup>a</sup>	0.521	0.426	Uganda	0.203	0.597
Trinidad & Tobago	0.603	0.533	Venezuela, RB	0.153	0.465
<b>Best case</b>			<b>Prodigal son</b>		
Australia	0.872	0.184	Albania	0.321	0.344
Austria	0.824	0.216	Argentina	0.350	0.100
Belgium	0.750	0.384	Bangladesh	0.136	0.313
Canada	0.905	0.117	Bolivia	0.247	0.299
Chile	0.653	0.379	Brazil	0.294	0.001
Czech Republic	0.589	0.309	Cameroon <sup>a</sup>	0.188	0.397
Denmark <sup>c</sup>	0.915	0.407	China	0.363	0.000
Finland	0.889	0.286	Colombia	0.263	0.254
France	0.675	0.129	El Salvador	0.447	0.362
Germany	0.696	0.100	India	0.301	0.201
Hungary	0.596	0.294	Indonesia	0.161	0.174
Ireland	0.845	0.371	Mexico	0.378	0.046
Italy	0.564	0.082	Morocco	0.332	0.272
Japan	0.674	0.106	Nepal	0.208	0.327
Netherlands	0.817	0.364	Pakistan	0.069	0.349

Country	Resilience index	Vulnerability index*	Country	Resilience index	Vulnerability index
<b>Best case</b>			<b>Prodigal son</b>		
New Zealand	0.975	0.320	Paraguay	0.230	0.297
Portugal	0.680	0.242	Peru	0.403	0.242
Slovenia	0.601	0.307	Poland <sup>b</sup>	0.497	0.175
South Africa <sup>d</sup>	0.505	0.147	Romania	0.336	0.206
Spain	0.663	0.250	Russian Federation	0.281	0.241
Sweden	0.780	0.208	Slovak Republic <sup>a</sup>	0.494	0.357
Switzerland	0.845	0.178	Thailand	0.467	0.363
United Kingdom	0.725	0.106	Turkey	0.114	0.182
United States	0.921	0.060			
Uruguay <sup>d</sup>	0.514	0.288			

## Notes to appendix

\* The vulnerability index is that presented in Chapter 1, produced by Briguglio and Galea (2003).

**a** Borderline with *worst case*.

**b** Borderline with *best case*.

**c** Borderline with *self-made*.

**d** Borderline with *prodigal son*.



# Profiling economic vulnerability and resilience conceptual underpinnings<sup>1</sup>

## Introduction

Studies on economic vulnerability and resilience indices undertaken so far focus on a cross-sectional approach, comparing one country with another in terms of a number of variables, with the aim of benchmarking countries within a global context. These indices are useful mainly for three purposes. One is to disseminate information on the issues of vulnerability and resilience because an index is a very good instrument for drawing attention to the issue being investigated. A second purpose is to help to develop a common language for discussion, because the derivation of indices requires quantification and hence, precise definitions of fundamental notions. The third is to promote the idea of integrated action because vulnerability and resilience indices are composite and therefore combine a number of factors thought to determine these conditions.

It is, however, also true that for the purposes of policy formulation and implementation, benchmarking within an international context is often merely a starting point, which needs to be followed by more in-depth investigation of issues within the specific context of the country and its circumstances. Briguglio et al. (2008) argued that while the notions of economic vulnerability and resilience have been crucial towards promoting a better understanding of development issues of small states especially in relation to the success of some of them as compared to larger countries, the practical applicability of these notions within the context of policy-setting for an individual country must go beyond the construction of indices derived from internationally comparable data.

An important limitation of cross-sectional approaches emanates from the fact that, in order to compare one country with another, a variable within an index may be considered redundant, and thereby omitted, if it is highly correlated with another that is already included in the index. While this is a valid action within a benchmarking study, it may not be suitable for a study focusing on an individual country, where all aspects of vulnerability and resilience need to be studied, irrespective of whether they are correlated or otherwise.

This chapter, based on Briguglio et al. (2008), describes a conceptual approach aimed at building a template of variables to be considered in the derivation of a vulnerability/resilience profile for an individual country.

### Three assessment facets

The proposed conceptual approach is based on the findings of the literature to date, and extends these concepts as may be appropriate for an individual country setting. The derivation of the economic vulnerability/resilience profile proposed here is based on three facets, namely:

- *An assessment of the symptoms of economic vulnerability.* This facet relates to the manifestations of vulnerability and attempts to determine whether a country appears to be suffering from any one or more of the symptoms of vulnerability or otherwise. This gives a first indication within the country profile as to which areas of economic activity or policy may be conducive to economic vulnerability.
- *An assessment of the causes of economic vulnerability.* This facet of the profile relates to the underlying causes of vulnerability and is aimed at assessing the inherent fundamental conditions which may be rendering a country vulnerable to exogenous shocks.
- *An assessment of the sources of economic resilience.* This facet of the profile aims to highlight the strengths and weaknesses within the policy formulation milieu of a country towards the objective of economic resilience building.

Each of these assessment facets can be carried out through quantitative variables. In cases where quantitative variables are not available or insufficiently representative of the issues under consideration, qualitative data can be used, which could then be expressed through a mapping scale of a number possibilities.

Tables 5.1 to 5.3 below present a number of variables which could be used for the purpose of country profiling. The variables and factors have been selected on the criteria of relevance and parsimony, in such a way that they are comprehensive of all important issues to be discussed without being excessively cumbersome for the purposes of analysis.

The quantitative variables are typically available from a statistical system that corresponds with the Generalised Data Dissemination Standard of the International Monetary Fund, although the requirements for the approach proposed here are less stringent than that of the Standard. The qualitative factors can be obtained from case-study approaches within the individual country, backed by relevant data as may be available.

### Assessing the symptoms of economic vulnerability or lack of resilience

Economic vulnerability is often manifested in four phenomena, as identified by Cordina (2008). These are:

- volatility in output and consumption over time;
- volatility in the value and volume of international transactions;
- volatility in exchange rates and prices; and,
- sustained deficits on the external current account deficit and high government expenditure.

The variables that could be used to measure these conditions are summarised in Table 5.1.

**Table 5.1. The symptoms of vulnerability**

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**Volatility in output and consumption**

---

GDP at current prices per capita, in domestic currency  
GDP at constant prices per capita, in domestic currency  
Consumption expenditure per capita at current prices, in domestic currency  
Consumption expenditure per capita at constant prices, in domestic currency

---

**Volatility in value and volume of international transactions**

---

Exports of goods and services at current prices, in domestic currency  
Exports of goods and services at constant prices, in domestic currency  
Imports of goods and services at current prices, in domestic currency  
Imports of goods and services at constant prices, in domestic currency

---

**Volatility in exchange rates and prices**

---

Nominal effective exchange rate: highest monthly average  
Nominal effective exchange rate: lowest monthly average  
Real effective exchange rate: highest monthly average  
Real effective exchange rate: lowest monthly average

---

**Short-term shock absorbers**

---

External current account balance as percent of GDP  
Government total expenditure as percent of GDP

---

Volatility in output and consumption can be gauged by developments in the respective variables in per capita terms, at current and constant prices, for a period of time which is sufficiently long to enable the observation of volatility. A ten-year period would be appropriate in this case, as this could indicate the assessment of medium to long-term growth trends, cyclical fluctuations as well the effects of specific shocks and their aftermath. Likewise, the volatility in the value and volume of financial transactions can be discerned from the developments in imports and exports of goods and services, at current and constant prices, over a sufficiently long period of time.

Depending on the type of exchange rate regime adopted, a country that is susceptible to external shocks may experience volatility in either the nominal or the real exchange rate. Volatility in either one or both of these variables, which can be as the maximum and minimum month values over a ten-year period, and this is considered to be a symptom of vulnerability to external shocks.

Economic vulnerability and/or insufficient resilience may also produce persistent deficits on the external current account of the balance of payments, a result of responses to shocks to strategic import prices and to specific demand shocks within a narrow range of exports (Cordina, 2008).

They may also result in relatively high levels of government expenditure, reflecting the need for stabilisation interventions to manage the effects of shocks.

Consideration of these variables yields a generic indication regarding the extent to which a country is being affected by shocks, which is a combination of its inherent vulnerability. In order to derive meaningful comparisons, the numerical values of the variables considered may be analysed over time or in relation to another country or a limited group of countries. This would be followed by an assessment of the specific causes of vulnerability and the sources of resilience, as explained in the following sections.

## Assessing the causes of economic vulnerability

From a conceptual viewpoint, the extent to which a country is subject to shocks is a function of two factors. The first is its inherent exposure to such shocks. Exposure on its own, however, does not imply that shocks of a significant nature would influence the economy of a country. For this to happen, exposure would have to be combined by the actual materialisation of shocks, here termed the incidence of shocks. Table 5.2 details the variables which are proposed to be considered in order to measure a country's exposure to shocks and the extent of incidence of shocks to which a country may be exposed.

**Table 5.2. The causes of vulnerability**

<b>Exposure to shocks</b>	<b>Trade openness</b>	Exports as percent of GDP Imports as percent of GDP
	<b>Export concentration</b>	Sum of three main categories of exports of merchandise at the 3-digit level, as percent of total merchandise exports Sum of three main categories of exports covering merchandise (3-digit level) and services (tourism and financial services) as percent of total exports of goods and services
	<b>Price elasticity of international trade</b>	Commodity exports as percent of total exports of merchandise Share of strategic imports (food, fuel and industrial supplies) as percent of imports of merchandise
<b>Incidence of shocks</b>	<b>Domestic shocks</b>	Gross fixed capital formation
	<b>International demand</b>	Foreign financial capital inflows as percent of GDP Average weighted GDP of three main partner countries, constant prices
	<b>Terms of trade shocks</b>	Export prices Import prices

The degree of exposure to shocks may be measured by variables which are in common use within the vulnerability literature. These are trade openness, defined as the share of exports and imports within GDP, the degree of export market concentration, measured by the share within total exports of the three main export products/services and a measure of the price elasticity involved in international trade transactions. The notion behind the last factor is that if a country is engaged in price inelastic exports and price inelastic imports, negative shocks to the terms of trade would imply significant welfare losses to the economy. Thus,

it is proposed that the price elasticity of international trade transactions be measured by the shares within the respective totals of commodity exports and of strategic imports, the latter defined to include food, fuel and industrial supplies.

The degree of incidence of shocks on an economy is here construed to depend upon three factors, namely the proneness to domestic demand shocks, to fluctuations in international demand and to terms of trade shocks. It is proposed that the proneness to domestic demand shocks can be evaluated by considering the volatility of gross fixed capital formation for a sufficiently long period of time, in terms of changes in the levels in index format. The choice of this variable is motivated by the fact that gross fixed capital formation is often one of the components of aggregate demand that is most sensitive to changes in economic conditions, including domestic economic policy.

Shocks to international demand can be proxied by considering the volatility of foreign non-direct capital flows in relation to GDP, and through fluctuations in the average GDP in the three main trading partner countries. The choice of non-direct foreign investment flows is motivated by the fact that international capital flows are often a source of monetary volatility in a country with possible repercussions on the real economy. The exclusion of direct investment flows from this section of the analysis is based on the argument that such flows would be already incorporated in the gross fixed capital formation variable.

The GDP of the main trading partner countries is assumed to influence economic activity in the country being analysed, and relates to the causes of external shocks. The volatility in exports of the country in question in this framework is considered as a symptom rather than a cause of vulnerability, as explained in the previous section.

The obvious choice to the modelling of terms of trade shocks is export and import prices. The consideration of the movements of these separate variables over time gives an indication of the sources of shocks to economic activity emanating from changes in prices of strategic imports and of exports which often contribute substantially to incomes.

Thus, the joint consideration of factors which generate exposure to shocks and the extent of the shocks themselves would give a picture of the overall level of economic vulnerability of a country and the primary sources of such vulnerability. Combined with the information collected in the process of analysing the symptoms of vulnerability, a better understanding of the reasons behind, and the effects of shocks on, an economy would be obtained.

## **Assessing the sources of economic resilience**

Following the mainstream literature, economic resilience is here considered to depend upon policy interventions in five areas, namely macro-economic stability, micro-economic market efficiency, adequate governance, social development and environmental management. As discussed earlier on, the issue of environmental management is as yet not given explicit consideration in cross-country measures of vulnerability, although its importance is widely recognised. At a country level, the issue of environmental management should therefore receive attention.

An obvious difficulty in the measurement of resilience performance is that, in practice, it

is often very difficult to identify variables which measure the adequacy of policy interventions. Rather, the variables available would often be the result of policy interventions and other factors which enter into play in determining performance. For example, the inflation, unemployment, deficit and other variables used by Briguglio et al. (2006, 2009) would certainly reflect the quality of policy-making in a country, but not exclusively so. Thus, quantitative approaches towards the measurement of resilience must rely on proxy variables, which would not necessarily reflect solely policy issues. For this reason, the approach proposed here to evaluate the sources of resilience relies in good part on qualitative assessments based on case-study approaches for an individual country.

Table 5.3 details the variables which are here proposed to be considered in the analysis of the sources of resilience of an individual country.

**Table 5.3. The sources of resilience\***

<b>Macro-economic</b>	Gross fixed capital formation as percent of GDP Consumer price inflation (percent) Unemployment rate (as percent of GDP) Fiscal balance as percent of GDP Net external assets (external reserves less external debt) as percent of GDP
<b>Micro-economic</b>	<b>Capital Mobility:</b> Exchange controls Interest rate control Quantitative controls (qualitative assessment over recent 3 years) <b>Labour Market Flexibility:</b> Skills mobility within the labour force Geographical mobility of labour (domestic and international) Government involvement in wage setting Union power <b>Product markets:</b> Government involvement in price setting (qualitative assessment over recent years) Level of domestic competition (qualitative assessment over recent years) Barriers to international trade (qualitative assessment over recent years) Participation in international trade arrangements/regional blocks (qualitative assessment over recent years)
<b>Governance</b>	Rule of law Security Property rights Institutional development Corruption Freedom of expression

Human rights  
Participation in regional political and security arrangements

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**Social** Percentage of government budget assigned for social development (current and capital expenditures to be treated separately)  
Poverty/deprivation (measured by the percentage of the population living below the poverty line)  
Health (possibly measured by the number of hospital beds per capita and life expectancy)  
Education (possibly measured by school enrolment ratios, literacy rates and early school leaving rates)  
Income distribution  
Social cohesion (index could be based on variables related to ethnic fractionalisation, incidence of civil strife, prison population rate and suicide rates)

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**Environmental** Percentage of government budget assigned for environmental management (current and capital expenditures to be treated separately)  
Generation of waste per capita (solid and liquid to be treated separately; sewage emissions into the oceans to be considered)  
Vehicles in use per square kilometre of populated land areas  
Carbon emissions per capita  
Percentage of land area designated as environmentally protected area  
Percentage of energy generated from renewable resources  
Number of international environmental instruments ratified and operationalised

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\* All data is to cover the five most recent years. Most variables, particularly those relating to micro-economic market efficiency, governance and social aspects require a qualitative assessment of policy stances and major changes, accompanied, when available, by quantitative data.

Under the macro-economic dimension, developments in price inflation, unemployment, the fiscal deficit as a percentage of GDP and net external assets as a percentage of GDP, are proposed to be considered, in line with the approach taken by Briguglio et al. (2006, 2009). In addition, developments in gross fixed capital formation as a percentage of GDP may be considered, because capital formation is often an essential element to resilience building within a country (Cordina, 2004a, 2004b).

The role of the gross fixed capital formation variable within the context of this analysis deserves further consideration. Viewed in terms of levels over time, the volatility of gross fixed capital formation can be discerned, and this would constitute a cause of vulnerability, as discussed within the context of Table 5.2. Viewed as a proportion of GDP, where the effects of shocks would tend to be mitigated since capital formation and GDP would be likely affected in similar manner, gross fixed capital formation would indicate the extent to which an economy is building buffers which would enable it to meet the effects of shocks. From this perspective, therefore, the gross fixed capital formation variable would indicate a source of resilience.

The issue of micro-economic market efficiency within a country requires in-depth study which often goes beyond the information provided by international organisations. It is here proposed that this issue be investigated through a qualitative and case-study approach specific to individual countries, backed by data and information that may be available.

The issues to be considered include the extent of capital mobility, as may be gauged by the presence of exchange controls, interest rate controls and quantitative controls on the financial system. The notion in this case is that frictions in the movement of capital within and outside the country would often constitute a barrier to the effective reallocation of resources following an external shock.

Similarly, labour market flexibility needs to be considered within this context. Issues which are relevant in this case would include the degree of skills present in the labour force, including the existence of multi-skilling, the geographical mobility of labour, at both domestic and international levels, as well as the extent of government interference in wage setting and of union power in the labour market. The latter two variables can be measured through, for example, the ratio of the average wage to the minimum wage and the level of union density, among other data-based and qualitative approaches.

As regards efficiency in product markets, the factors that need to be taken on board include the extent of government involvement in the price mechanism, which may be measured by the extent of price control. The level of domestic competition, as could be measured by market concentration ratios and the extent of barriers to international trade, as could be discerned by the average tariffs rates on imports, would also need to be investigated.

Finally, the extent of participation in international trading blocks, customs unions, single markets or monetary unions is to be measured in terms of the efficiencies that it would likely introduce within domestic markets. Data on this and other variables in the market efficiency group are not likely to be easily available. It is important to reiterate that within the individual country approach, quantitative data which cannot be obtained can be substituted by qualitative assessments based on case studies and expert opinion.

Governance issues may be also evaluated through quantitative and qualitative approaches according to the specific circumstances and needs of individual countries. At a conceptual level, the main issues to investigate in this case would include those studied by Kaufmann et al. (2006), including the rule of law, security, the enforcement of property rights, institutional development, absence of corruption, freedom of expression and the safeguarding of human rights. In addition, the effects of participation in international political and security arrangements on the governance structures within a country could be investigated in this context, following Pace (2006).

A similar approach may be adopted in the investigation of social development issues within the context of resilience building. Government budget allocations for social development would seem to be relevant in this regard, although care should be taken to take account of expenditure inefficiencies. Following Springer (2006), the main factors which may be considered in this context include the extent of poverty and deprivation and the situation with regard to health, education, income distribution and social cohesion. Social empowerment requires strong fundamentals with respect to health, education and income

status of the citizens and these variables should feature in the social development group of variables.

Specific issues relating to environmental management policies can be investigated through qualitative and quantitative approaches. The variables included in Table 5.3 were selected on the basis of their link with policy aimed at a more sustainable use of environmental resources. It is assumed that this should effectively improve the economic resilience of the economy.

## **Conclusion**

This chapter has described a conceptual approach at profiling economic vulnerability and resilience of an economy. The approach has been successfully applied in practice in three small island states, namely St Lucia, Seychelles and Vanuatu. On the basis of this exercise, three reports were drawn up, one for each of the three small states. These are reproduced in Part 3 of this publication.

The next chapter will propose a number of practical steps as to how such profiling can be conducted, building on the conceptual underpinnings described in this chapter.

## **Notes**

- 1 This chapter is a revised and updated versions of Briguglio et al. (2008) modified to fit with the style and content of this volume.

# Practical steps for profiling economies in terms of vulnerability and resilience

## Introduction

As explained in the previous chapter, studies that produce indices of economic vulnerability and resilience are cross-sectional approaches, aimed at benchmarking countries within a global context. For the purposes of policy formulation and implementation, benchmarking within an international context is often merely a starting point which needs to be followed by more in-depth investigation of issues within the specific context of the country and its circumstances. A project towards this end was conducted by the Commonwealth Secretariat in collaboration with the University of Malta. This project led to the development of a conceptual approach for profiling an individual country in terms of vulnerability and resilience, as described in the previous chapter. Importantly, the project also led to the profiling of three small states namely St Lucia, Seychelles and Vanuatu, in terms of economic vulnerability and resilience.

This chapter puts forward a practical guide as to how the conceptual approach described in the previous chapter can be applied.

## Managing the profiling exercise

The implementation of the profiling exercise requires good management for its successful completion, and it is therefore very important that the persons selected to manage the project are familiar with Project Management Life Cycle (PMLC) approaches. There are various PMLC methods, but their objective is generally the same, namely to ensure that the activities are undertaken in a logical and coherent sequence. Generally speaking, the exercise involves the following stages:

- *Initiation phase.* In this stage, the project, its milestones and its work programme, with time frames, are defined and the outputs to be attained clearly identified. During this stage, the project manager and his team are appointed, ensuring that they have the right skills for this purpose.
- *Planning phase.* This stage involves, amongst other things, the putting in place of a governance structure, determining reporting requirements, establishing division of labour, and costing the whole exercise. A set of performance indicators and a risk analysis based on plausible assumptions should also be drawn up. The stakeholders are also to be identified at this stage.
- *Execution phase.* This stage involves the undertaking of the project activities, and

measures to ensure that these activities are effectively and efficiently carried out, accompanied by reports towards this end. Various procedures can be used for this purpose and many project management manuals can be consulted in this regard.

- *Completion phase.* This stage, involves, amongst other things, the matching of the indicators set with the results achieved, the client's acceptance of the final product and an overall evaluation of the project.

## **Practical application of the conceptual framework**

The profiling exercise being proposed requires nine practical steps, as follows:

- 1 Identification of focal person and a co-ordinating team;
- 2 Setting out clear deliverables with a work programme and a time frame;
- 3 Creating and maintaining a dedicated website;
- 4 Identification of stakeholder agencies that need to be consulted;
- 5 Setting up of four panels on specific resilience issues, consisting of a chairperson and four members;
- 6 Preparation of questionnaire;
- 7 Organisation of a national consultation conference;
- 8 Drawing up of a report on vulnerability and resilience profile of the country;
- 9 Drawing up of a report on project proposals aimed at resilience building.

It is assumed that the government of the country to be profiled is willing to undertake the profiling exercise and that the funding for such an exercise is in place. The costs of the exercise will be discussed further below.

What follows are practical suggestions as to how such a profiling exercise could be organised, based on the experiences derived from the pilot profiling exercises reported in Part 3 of this publication.

### **Step 1: Identification of the project team leader and a co-ordinating team**

The government would identify a person to act as leader of the project co-ordinating team, whose main remit would be to oversee and manage the whole exercise, reporting to the government about its progress. The team leader could be the CEO or a high-ranking person operating within the Ministry of Finance. This Ministry is well positioned to co-ordinate such an exercise due to its cross-cutting role in the economic management of the country.

The team leader would work closely with an inter-ministerial team (the co-ordinating team) who together would take care of the day-to-day management and co-ordination of the whole exercise, ensuring that activities are based on a Project Management Life Cycle approach.

The co-ordinating team would, amongst other things, carry out the following tasks:

- commission and maintain a dedicated website for the exercise, on which information about the conference, including the venue, dates, programme and background details are to be posted;
- identify the stakeholder agencies to be consulted;
- identify the panellists that will address the consultation conference;

- liaise with the chairs of the panels, instructing them to communicate with their panellists;
- prepare questionnaires for the panellists in collaboration with the chairs of the panels, so as to ensure that the presentations of the panellists will be focused on the profiling exercise;
- liaise with the agencies to be consulted and inform them about relevant documentation, and invite some agencies to participate in the consultation conference; and,
- organise the consultation conference, with the team leader acting as convener.

## **Step 2: Setting out clear deliverables with a work programme and a time frame**

The whole exercise can be spread over a period of six months as follows. The preparatory phase (steps 1 to 6) can take up to three months, so as to, among other things, identify and elicit the support of stakeholder agencies and the panellists for the consultation conference and lay the ground for the consultation conference. The conference itself (step 7) would be spread over two days. The drawing up of the profiling report (step 8) is likely to take up to two months to complete, given that considerable consultation would need to be undertaken between the author of the report and the government of the country being profiled. Following the completion of the profiling report, the Commonwealth Secretariat would finalise their report with project proposals, and this can take up to one month.

It should be noted that the circulation of the report to various stakeholders, attempts to fill in the resilience policy gaps identified in the profiling report, and the implementation of the identified projects would have a different life cycle.

## **Step 3: Creating a dedicated website**

An efficient way to keep all those involved in the exercise informed about matters associated with the profiling exercise is to create a dedicated website. Its contents should be organised as simply as possible, so that those interested would find it easy to keep up-to-date with developments including those relating to background material, conference programme, panel themes and presentations, and other relevant information.

If funds permit, such a website could be created and maintained by a specialist agency, which would operate in close collaboration with the co-ordinating team. If not, the web pages can be created as part of the Ministry of Finance website.

An additional advantage of the dedicated website is that all materials, including the programme, list of participants, list of speakers, presentations, summary of the discussions, final statement and picture gallery would be placed together as a record in electronic format. This should serve to disseminate information about the exercise before, during and after its completion.

Yet another advantage is that such a website would be useful for prospective profiling exercises, as it would serve as a model for similar exercises that could be conducted in the future.

## Step 4: The identification of stakeholder agencies to be consulted

The co-ordinating team would identify the agencies that need to be consulted, elicit their support and invite them to participate in the conference. The team would provide the agencies with relevant information, including details about the consultation conference and background material such as this publication, to ensure that the participation and the agency representatives would focus on the economic vulnerability/resilience nexus when participating in the discussion.

The following is an indicative list of agencies that could be consulted directly and/or invited to participate in the consultation conference:

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<b>Macro-economic</b>	The Ministry of Finance The Ministry of Labour The Ministry of Trade and Commerce The Economics Department of the University/ies The Central Bank The National Statistics Office: macro-economic statistics
<b>Micro-economic</b>	The Training and Employment Agency Trade unions The Office of Fair Trading Utilities regulators The Ministry of Trade and Commerce The Central Bank The Chamber of Commerce The agency in charge of competitiveness promotion
<b>Governance</b>	Ministry of Justice The Police Department The Chamber of Advocates The Press NGOs dealing with human rights Political parties The National Statistics Office: public finance statistics
<b>Social</b>	Ministry of Health Ministry of Education Ministry of Social Security Teachers' associations Medical professions' associations NGOs dealing with poverty eradication Women's organisations The National Statistics Office: social statistics
<b>Environmental</b>	Ministry of the Environment Ministry of Foreign Affairs Environmental NGOs The planning authority The National Statistics Office: environmental statistics

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## Step 5: The setting of four panels on specific themes

The co-ordinating team would organise four panels on the following themes:

Panel 1: Macro-economic stability

Panel 2: Market efficiency

Panel 3: Good governance

Panel 4: Social and environmental concerns

Each panel would consist of a chairperson and four panellists with each panellist focussing on a specific sub-theme, as shown in the following table. Each member of the panel would be an expert on the sub-theme assigned to him/her.

Panel main themes	Panel sub-themes
1 Macro-economic stability	1.1 GDP fluctuations in recent years 1.2 Government finances 1.3 Inflation and unemployment 1.4 Trade, balance of payments and external debt
2 Market efficiency	2.1 Competition in domestic consumer markets 2.2 The workings of the labour market 2.3 The workings of the financial market 2.4 Government involvement in price setting
3 Political governance	3.1 Judicial independence, impartiality of courts and rule of law 3.2 Government transparency and accountability 3.3 Freedom of expression 3.4 Integrity of the political and legal systems
4 Social development and environmental concerns	4.1 The education and health systems 4.2 Social security systems 4.3 Civil society participatory schemes in decision-making 4.4 Major environmental concerns

## Step 6: Drawing up a questionnaire for the panellists

To ensure that the panellists focus on the subject assigned to them, and to avoid repetition, the co-ordinating team would draw up a questionnaire in consultation with each panel chairperson. Each panellist would be requested to respond to questions relating to the sub-theme assigned to him/her.

Appendix 1 to this chapter provides a model of such a questionnaire, based on the one that was used for the Vanuatu profiling exercise.

## Step 7: The organisation of a national consultation conference

The consultation conference would be spread over two days, with the participation of about 80 participants, including public officials, representatives of the business community, civil society and other agencies as indicated above.

The conference can be structured as follows:

*Day 1*

- Introductory session;
- Panel Session 1: Macro-economic stability;
- Panel Session 2: Market efficiency;
- Report by the chairs of panel sessions 1 and 2 on main issues.

*Day 2*

- Panel Session 3: Political governance;
- Panel Session 4: Social and environmental concerns;
- Report by the chairs of panel sessions 3 and 4 on main issues;
- Breakout sessions to identify and formulate technical assistance projects;
- Report by the chairs of the breakout sessions;
- Approval of final statement on the outcome of the conference and the way forward;
- Concluding session.

A detailed programme of the conference is proposed in Appendix 2 to this chapter

The final statement, which is to be adopted by the conference, could be initially drafted by the co-ordinating team in consultation with the panellists. This first draft would be distributed to all participants during the conference, who would be invited to submit written or verbal feedback to the co-ordinating team. By the time the final statement is formally discussed at the end of the conference, there should be broad consensus on its content. Appendix 3 to this chapter carries the final statement adopted at the end of the Vanuatu consultation conference.

The conference should also have a ‘social’ component where the participants can interact informally, including coffee breaks, lunches and a reception at the end of day 1.

## **Step 8: Drawing up of a report on vulnerability and resilience profile of the country**

On the basis of the presentations of the panellists, the chairpersons’ summaries and the ensuing discussions, supplemented by internationally published data, a vulnerability and resilience profile for the country would be drawn up by a team of experts from the country being profiled, possibly supported by the Commonwealth Secretariat. This would ensure that the country would play a major role in the drawing up of the profiling report. If need be, the country being profiled can seek funding from the donor community to ensure that the report is of a high standard and meets the requirements laid out in the practical steps suggested in this chapter.

The vulnerability and resilience profile report can be structured as follows<sup>1</sup>:

- Section 1. Introduction, with definitions, aim of the profiling exercise and data issues;
- Section 2. Country background, with information relating to the exercise;
- Section 3. A vulnerability profile of the country, with assessments of the manifestations of economic vulnerability and of the causes of economic vulnerability;

- Section 4. A resilience profile covering macro-economic stability, micro-economic market efficiency, political governance, social development and environmental management, identifying gaps in the policy framework;
- Section 5. Policy implications and conclusions, highlighting resilience strengths and weaknesses of the country;
- Section 6. Conclusion, proposing a way forward.

Part 3 of this publication carries the three profiling reports relating to St Lucia, Seychelles and Vanuatu.

## Step 9: Drawing up of a report with project proposals

The policy framework gaps that are identified during the conference can be addressed by dedicated projects which could be supported by the donor community<sup>2</sup>. The conference itself would start the ball rolling in this regard, as it would contain a special session to identify such projects.

### Cost of the exercise

The profiling exercise involves expense, most of which would be associated with the organisation of the consultation conference, with the participation of about 80 persons.

The conference expenses to be covered relate to the:

- hiring of the venue (main hall, plus three smaller rooms for the breakout sessions);
- hiring of equipment (PA, computers and printers, computer projectors, photocopier, internet stations)<sup>3</sup>;
- supply of catering services, including refreshment during the coffee breaks, lunches and a reception;
- printing and dissemination of information material and conference documentation publicity in the press; and
- setting up a dedicated website.

The services of an independent consultant to assist in the whole process and to draw up the final report, in consultation with the government, would also involve expense. Assistance could be sought from the Commonwealth Secretariat in this regard.

Expense would also be incurred to engage persons to staff the reception desk, to assist with the roving microphones during the discussion sessions and to act as ushers during the conference. Government support staff can be used for this purpose to save on cost.

The co-ordination team and the panellists, who would mostly be public officials or university persons, would possibly offer their services free of charge as part of their duties.

The government may seek financial support to cover these expenses. The Commonwealth Secretariat has met a large proportion of the expenses for the three profiling exercises carried out so far, with the governments of the countries profiled providing some co-funding<sup>4</sup>. However, there may be other sources of funding for this purpose.

## Follow up

When the profiling exercise is completed, and the reports submitted, the government of the profiled country, through the team leader, should publish the reports and final statement and circulate them within country to the various stakeholders.

The team leader should also consult with the different line ministries to explore ways as to how the country can build up its economic resilience on the lines indicated in the profiling report.

The government could also use the project's report to seek funding locally and internationally for the proposed projects.

It is advisable that small states undertake such a profiling exercise periodically, possibly every five years, given that economic resilience building is an important requisite to enhance the country's ability to cope with or withstand harmful economic shocks.

## Conclusion

This practical guide seeks to enable countries, especially small states, to conduct a profiling exercise in terms of economic vulnerability and resilience. However, it is just a guide and should not be interpreted as some set of regulations. In practice, different countries would require different approaches, and would face different financial and human resources constraints. In addition, the questionnaires could be modified so as to address issues which the country being profiled considers to be of major importance and which may not be given due importance in the questionnaire suggested in Appendix 1 to this chapter.

## Notes

- 1 Examples of vulnerability and resilience profile reports are presented in Part 3 of this publication.
- 2 Appendix 4 to this chapter presents a template that can be used to request funds and technical assistance.
- 3 Equipment can be transported from government offices to the meeting venue to save on cost.
- 4 If funding is sought for the profiling exercise, the equipment and human resources contribution by the country being profiled can be assigned a monetary value and offered as co-financing by the country being profiled.

# Appendix 1

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## Questionnaires for panel members

The questions would relate to four main resilience aspects, as shown in the following table:

Main themes	Sub-themes
1 Macro-economic	1.1 GDP fluctuations in recent years 1.2 Government finances 1.3 Inflation and unemployment 1.4 Trade, balance of payments and external debt
2 Market efficiency	2.1 Competition in domestic consumer markets 2.2 The workings of the labour market 2.3 The workings of the financial market 2.4 Government involvement in price setting
3 Political governance	3.1 Judicial independence, impartiality of courts and rule of law 3.2 Government transparency and accountability 3.3 Freedom of expression 3.4 Integrity of the political and legal systems
4 Social development and environmental concerns	4.1 The education system 4.2 The health system 4.3 Civil society participatory schemes in decision-making 4.4 Major environmental concerns

Each main theme would be discussed by a separate panel, so that there would be four panels in all, with each panel being composed of a chairperson and four panellists. Each panellist is to attempt to answer the questions set out below in his/her presentation. This would facilitate the collection of quantitative and qualitative information regarding the various aspects of economic resilience in the country.

### Instructions to responding panellists:

- a Each panellist would be assigned a sub-theme.
- b When presenting time-series data, cover a period of the last 10 years, if data is available.
- c Time-series data should preferably be presented in a diagram, and the sources of the data should be shown.
- d The responses to these questions are to be sent electronically by each panellist to the chairperson of the panel, who would then forward the responses to the co-ordinating team of the profiling exercise.
- e Each panellist is to give his/her name and contact details when submitting his/her responses to the chairperson of the panel.

f Other topics may be added by a panellist if he/she considers such topics relevant to the aspect of resilience assigned to him/her.

## 1 Questions relating to Macro-economic Aspects of Resilience

There would be four experts forming the Panel on Macro-economic Aspects of Resilience, with each panellist being assigned one of the following sub-themes:

1.1 GDP fluctuations in recent years

1.2 Government finances

1.3 Inflation and unemployment

1.4 Trade, balance of payments and external debt

### 1.1 GDP fluctuations in recent years

- Do you consider GDP and its main components to have fluctuated excessively during the past 10 years? (Please produce diagrams and comment on GDP fluctuations during the past 10 years.)
- What are the major factors that gave rise to such fluctuations?
  - consumer expenditure
  - gross fixed capital formation
  - government expenditure patterns
  - exports
- What is the average import content of consumer expenditure and of exports?
- Has the government adopted policies to stabilise GDP fluctuations? (Please put forward a few recommendations in this regard.)

### 1.2 Government finances

- Do you consider the fiscal deficit in your country to be excessive? (Please produce diagrams and comment on the fiscal deficit during the past 10 years.)
- How have (i) tax and (ii) non-tax revenue policies influenced the fiscal balance in recent years?
- How have policies relating to (i) public sector wages, (ii) social expenditure (recurrent and capital), (iii) public debt servicing, and (iv) other expenditures influenced the fiscal balance in recent years?
- What policies have been in place relating to taxation and government expenditure to engender a healthy fiscal balance?
- What improvements would you suggest with regard to the fiscal balance?

### 1.3 Inflation and unemployment

#### *a Inflation*

- Describe movements in inflation in the past 10 years (Please produce diagrams and comment on the inflation during the past 10 years.)
- Do you consider the overall level of price inflation in your country to be high or adequate? Do you consider the overall level of price inflation in your country to be predictable?
- Explain how (i) fiscal policy, (ii) monetary policy and (iii) structural policy in your country have affected the rate of inflation in recent years.
- What improvements would you suggest with regard to the containment of inflation and improvement in inflation predictability.

*b Unemployment rate*

- Describe developments in the unemployment rate during the past 10 years (Please produce diagrams and comment on the unemployment rate during the past 10 years.)
- Do you consider the unemployment rate in your country to be close to the natural rate?
- Explain how (i) fiscal policy, (ii) monetary policy and (iii) structural policy in your country have affected the rate of unemployment in recent years?
- What improvements would you suggest with regard to the reduction of unemployment?

**1.4 Trade, balance of payments and foreign debt**

*a Trade and balance of payments*

- Do you consider the merchandise trade gap and the services trade gap in the balance of payments of your country to be sustainable? (Please produce diagrams and comment on the foreign the trade gap the past 10 years.)
- Do you consider your exports to be too concentrated on a few categories, and what are the constraints for export diversification?
- Explain how government policy has helped (or otherwise) to stabilise export earnings and to diversify your exports in recent years.
- What improvements would you suggest with regard to government policy with regard to export proceeds stabilisation and export diversification?

*b Foreign debt*

- Do you consider the external assets in your country to be adequate? (Please produce diagrams and comment on the foreign debt during the past 10 years.)
- Do you consider the external debt servicing burden of your country to be too high?
- Explain how (i) fiscal policy, (ii) monetary policy and (iii) structural policy in your country have affected the net external asset position in recent years
- What improvements would you suggest with regard to the reduction of the debt burden?

**2 Questions relating to Market Efficiency Aspects of Resilience**

There would be four experts forming the Panel on Market Efficiency Aspects of Resilience, with each panellist being assigned one of the following sub-themes:

- 2.1 Competition in domestic consumer markets
- 2.2 The workings of the labour market
- 2.3 The workings of the financial market
- 2.4 Government involvement in price setting

**2.1 Competition in domestic consumer markets**

*a Extent of domestic competition*

- How would you describe the extent and nature of domestic competition in product and services markets in your country?
- Is competition legislation enacted in your country? If yes, what are its main provisions and is it suitably enforced?
- How are government policies with respect to market competition in your country fostering or hindering market efficiency?

- What improvements to competition law and policy would you suggest for your country?

*b Barriers to international trade*

- Describe tariff, subsidies and other tax-related trade barriers in existence in your country.
- Describe quantitative (quota) and other non-tax trade barriers in existence in your country.
- Where there important changes in the nature and extent of such barriers over the past 10 years?
- In what ways are such barriers contributing to or hindering market efficiency?
- What improvements to trade policies would you suggest for your country?

*c Participation in international trade agreements/regional trading blocks*

- Describe your country's involvement in bilateral arrangements and regional trade blocks, including coverage of products.
- In what ways are bilateral agreements and participation in trade blocks contributing to or hindering market efficiency?
- In your opinion, are there other arrangements in which your country can enter which would improve its economic resilience?

## **2.2 The workings of the labour market**

*a Skills mobility in the labour market*

- What is the proportion of the labour force with no skills and no primary education?
- What is the proportion of the labour force with only a primary level of education?
- What is the proportion of the labour force with only primary and secondary education?
- What is the proportion of the labour force with a university degree?

*b Skills (rate as follows: very high, high, moderate, low, absent)*

- What is, in your opinion, the contribution of skill mismatches to the unemployment rate?
- What is, in your opinion, the extent of multi-skilling in the labour force?
- What is, in your opinion, the extent of adaptability/learning ability in the labour force?
- What major improvements are required to improve skills among members of the labour force?

*c Provision of basic education*

- What are the primary and secondary school enrolment ratios and how do you rate the system?
- Have there been important changes in basic education over the past five years?
- In what ways does basic education contribute to market efficiency?
- What major improvements are required to enhance the contribution of basic education to promote market efficiency?

*d Provision of other education levels*

- How do you rate the system of (a) vocational education, (b) tertiary education and (c) lifelong learning?
- Have there been important changes in (a) vocational education, (b) tertiary education and (c) lifelong learning over the past five years?

- What major improvements would you suggest to enhance the contribution of this type education to market efficiency?
- e Geographic mobility*
- Are constraints to the geographical mobility of labour contributing to unemployment in a significant way in your country?
- Do you consider a need for specific policies to encourage the geographic mobility of labour or for an improvement to existing policies?
- In what ways is labour mobility contributing to or hindering market efficiency?
- f Government involvement in wage setting*
- Describe the involvement (if any) of government in (a) minimum wage setting and (b) wage setting at the national and sectoral levels.
- What major changes have occurred in the nature and extent of government involvement in (a) minimum wage setting and (b) wage setting at the national and sectoral levels over the past five years (if any)?
- In what ways is government involvement in (a) minimum wage setting and (b) wage setting at the national and sectoral levels contributing to or hindering market efficiency?
- g Union power*
- To what extent are labour unions powerful in your country (if possible give the ratio of unionised workers to total employment).
- How is collective bargaining undertaken in your country? (At the national level, at the sectoral level and at the firm level, mixed?)
- What are the major priorities of unions in your country in collective bargaining (increase wages, improve conditions, others?)
- In what ways is union activity contributing to or hindering market efficiency?

### 2.3 The workings of the financial market

#### *a Exchange controls*

- What types of (a) controls on current account transactions, (b) controls on short term capital flows and (c) controls on long term capital flows including foreign direct investment and repatriation of profits are in place at present?
- In what ways have (a) controls on current account transactions, (b) controls on short term capital flows and (c) controls on long term capital flows changed over the past 10 years?
- In what ways are current controls contributing to or hindering market efficiency?

#### *b Interest rate controls*

- What types of direct controls on (a) bank deposit rates, (b) bank lending rates and (c) other interest rates such as corporate and government bonds, short term debt, etc. are in place at present?
- In what ways have such controls changed over the past ten years?
- In what ways are current controls contributing to or hindering market efficiency?

#### *c Quantitative controls of capital flows to the rest of the world*

- What types of capital flows controls are in place at present?
- In what ways have such controls changed over the past five years?
- In what ways are current controls contributing to or hindering market efficiency?

## 2.4 Government involvement in price setting

*a Direct price fixing by regulation, including minimum and maximum prices*

- Describe government involvement in price setting (if any) including coverage of products and extent of price distortions. Make reference to direct price fixing by regulation, including minimum and maximum prices.
- Have there been important changes in the nature and extent of involvement in price setting over the past ten years?
- In what ways is such involvement contributing to or hindering market efficiency?

*b Indirect taxation on products and services*

- Describe indirect taxation on products and services (if any), including coverage of products and extent of price distortions.
- Have there been important changes in the nature and extent of indirect taxation on products and services over the past ten years?
- In what ways is indirect taxation contributing to or hindering market efficiency?

*c Subsidies on products and services*

- Describe subsidies on products and services (if any), including coverage of products and extent of price distortions
- Have there been important changes in the nature and extent of subsidies on products and services over the past ten years?
- In what ways are subsidies on products and services contributing to or hindering market efficiency?

## 3 Questions relating to Governance Aspects of Resilience

There would be four experts forming the Panel on Governance Aspects of Resilience, with each panellist being assigned one of the following sub-themes:

- 3.1 Judicial independence, impartiality of courts and the rule of law
- 3.2 Government transparency and accountability
- 3.3 Freedom of expression
- 3.4 Integrity of the political and legal systems

### 3.1 Judicial independence, impartiality of courts and the rule of law

*a Rule of law including adequacy of the legislative process, law enforcement and the judiciary (Rank as very high, high, moderate, low, very low)*

- How would you describe the present situation regarding rule of the law in the country (as it compares to countries considered to be highly ranked in terms of this attribute)?
- What developments have occurred in this governance aspect over the past ten years?
- In what ways is this governance aspect contributing to or hindering the country's ability to respond to external shocks?
- What policy improvements would you suggest regarding this governance aspect?

### 3.2 Government transparency and accountability

*a Property rights, including the freedom to exclusively own and trade assets*

- How would you describe the present situation in the country, (as it compares to countries considered to be highly ranked in terms of this attribute)?
- What developments have occurred in this governance aspect over the past ten years?

- In what ways is this governance aspect hindering the country's ability to respond to external shocks?
  - What policy improvements would you suggest regarding this governance aspect?
- b Freedom from corruption*  
(Rank as very high, high, moderate, low, very low)
- How would you describe the present situation in the country, (as it compares to countries considered to be highly ranked in terms of this attribute)?
  - What developments have occurred in this governance aspect over the past ten years?
  - In what ways is this governance aspect contributing to or hindering the country's ability to respond to external shocks?
  - What policy improvements would you suggest regarding this governance aspect?

### 3.3 Freedom of expression

*a Freedom of expression, including the effective action of independent media*

(Rank as very high, high, moderate, low, very low)

- How would you describe the present situation in the country, (as it compares to countries considered to be highly ranked in terms of this attribute)?
- What developments have occurred in this governance aspect over the past ten years?
- In what ways is this governance aspect contributing to or hindering the country's ability to respond to external shocks?
- What policy improvements would you suggest regarding this governance aspect?

*b Respect for human rights*

- How would you describe the present situation in the country, (as it compares to countries considered to be highly ranked in terms of this attribute)?
- What developments have occurred in this governance aspect over the past ten years?
- In what ways is this governance aspect contributing to or hindering the country's ability to respond to external shocks?
- What policy improvements would you suggest regarding this governance aspect?

### 3.4 Integrity of the political and legal systems

*a Security, including freedom from crime, civil strife and from threats of international aggression*

(Rank as very high, high, moderate, low, very low)

- How would you describe the present situation in the country, (as it compares to countries considered to be highly ranked in terms of this attribute)?
- What developments have occurred in this governance aspect over the past ten years?
- In what ways is this governance aspect contributing to or hindering the country's ability to respond to external shocks?
- What policy improvements would you suggest regarding this governance aspect?

*b Institutional development, including the presence of governance structures in the public and private sectors*

- How would you describe the present situation in the country, (as it compares to countries considered to be highly ranked in terms of this attribute)?
- What developments have occurred in this governance aspect over the past ten years?
- In what ways is this governance aspect contributing to or hindering the country's ability to respond to external shocks?

- What policy improvements would you suggest regarding this governance aspect?  
*c Participation in regional political and security arrangements*
- How would you describe the present situation in the country, (as it compares to countries considered to be highly ranked in terms of this attribute)?
- What developments have occurred in this governance aspect over the past ten years?
- In what ways is this governance aspect contributing to or hindering the country's ability to respond to external shocks?
- What policy improvements would you suggest regarding this governance aspect?

#### **4 Questions relating to Social Development and Environmental Concerns**

There would be four experts forming the Panel on Social Development and Environmental Aspects of Resilience, with each panellist being assigned one of the following sub-themes:

- 4.1 The education system
- 4.2 The health system
- 4.3 Civil society participatory schemes in decision-making
- 4.4 Major environmental concerns

##### **4.1 The education system**

- Describe present policy approaches and the extent of assistance provided to ensure a high level of primary, secondary and tertiary education in the country.
- What important developments have occurred in education over the past 10 years?
- In what ways are government education policies contributing to or hindering social development?
- What improvements would you suggest to such policies?

##### **4.2 The health system**

- Describe present policy approaches and the extent of assistance provided to ensure a high level of health services in the country.
- What important developments have occurred in health services over the past 10 years?
- In what ways are government health policies contributing to or hindering social development?
- What improvements would you suggest to such policies?

##### **4.3 Social cohesion, civil society participatory schemes in decision-making and dialogue between the social partners (i.e. dialogue between employee unions, the business community and the government)**

- Describe present policy approaches and the extent of assistance provided to ensure a high level of social cohesion, civil society participation and social dialogue in the country.
- What important developments have occurred in social cohesion, civil society participation and social dialogue over the past 10 years?
- In what ways are government policies relating to social cohesion, civil society participation and social dialogue contributing to or hindering social development?
- What improvements would you suggest to such policies?

#### 4.4 Major environmental concerns

##### *a Environmental policies*

- Describe present policy approaches and the extent of assistance provided to ensure environmental sustainability, including (a) solid waste management, (b) liquid waste management, (c) reduction of carbon emissions, (d) management of environmentally-protected areas, (e) promotion of renewable energy, (f) coastal zone management, (g) fresh water management and (h) sustainable land-use.
- What important developments have occurred in environmental policy over the past 10 years?
- In what ways are government policies relating to the environment contributing to or hindering environmental sustainability?
- What improvements would you suggest to such policies?

##### *b Ratification of international instruments*

- Which of the following international instruments have been ratified by your country?
  - The UN Framework Convention on Climate Change and the Kyoto Protocol
  - The Vienna Convention on the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer
  - The Convention on Long Range Transboundary Air Pollution
  - The UN Convention on the Law of the Sea
  - The London Dumping Convention
  - The International Convention for the Prevention of Pollution from Ships (MARPOL)
  - The Convention on Biological Diversity
  - The Convention on International Trade in Endangered Species of Wild Fauna and Flora
  - The Ramsar Convention on Wetlands
  - The Bonn Convention on Migratory Species
  - The Basel convention on the Transboundary Movement of Hazardous Wastes and their Disposal
  - The Aarhus Convention on Access to Environmental Information, Access to Public Participation and Access to Justice in Environmental Matters
  - Others (which?)

## Appendix 2

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### A model programme for the Consultation Conference

#### Day 1

0800–0900 Registration and welcome coffee

#### Introductory session

0900–0915 Introductory speech on the purpose and structure of the conference by the convener of the conference

0915–0945 Inauguration speech by representative of the government

0945–1030 ‘Juxtaposing Economic Vulnerability and Economic Resilience’  
Keynote speech by invited expert  
Questions and comments from the floor

1030–1100 *Coffee break*

#### Panel Sessions 1 and 2

1100–1300 **Panel session 1: Macro-economic stability**

Four brief presentations on different aspects of the theme  
Questions and comments from the floor and brief response by speakers

1300–1400 *Lunch*

1400–1600 **Panel session 2: Market efficiency**

Four brief presentations on different aspects of the theme  
Questions and comments from the floor and brief response by speakers

1600–1630 *Coffee break*

1630–1730 **Report by the chairs of panel sessions 1 and 2 on main issues**

Followed by questions and comments from the floor and brief response by chairs

1900 *Reception*

#### Day 2

#### Panel Sessions 3 and 4

0900–1030 **Panel session 3: Governance**

Four brief presentations on different aspects of the theme  
Questions and comments from the floor and brief response by speakers

1030–1100 *Coffee break*

- 1100–1230 **Panel session 4: Social and environmental concerns**  
Four brief presentations on different aspects of the theme  
Questions and comments from the floor and brief response by speakers
- 1230–1315 **Report by the chairs of panel sessions 3 and 4 on main issues**  
Followed by questions and comments from the floor and brief response by chairs
- 1315–1400 *Lunch*
- 1400–1600 **Breakout into groups to propose projects to address resilience gaps**  
Group 1: Macro-economic stability projects  
Group 2: Market efficiency projects  
Group 3: Good governance projects  
Group 4: Social and environmental concerns projects
- 1600–1700 **Report by the chairs of the breakout sessions on main conclusions of each group**  
Questions and comments from the floor and brief response by chairs
- 1700–1730 **Discussion and approval of final statement**
- 1730–1800 **Concluding session**  
Next steps and concluding remarks by a government representative

## Appendix 3

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### **Final statement of the Consultation Conference on the Economic Vulnerability and Resilience Profiling of Vanuatu**

We, participants attending the Consultation Conference on Profiling Economic Vulnerability and Resilience held at Port Vila, Vanuatu, between 22 and 24 June 2009:

#### **The Consultation Conference**

- 1 Recognise that the Vanuatu Consultation Conference has started a process of country profiling to assess the inherent features which lead to economic vulnerability, as well as the policies which are conducive to resilience building;
- 2 Recognise also that the conference has enabled us to discuss opportunities for economic resilience building relating to macro-economic stability, micro-economic market efficiency, political and environmental governance and social development, as well as to **identify priorities for action through a number of practical projects which can be funded for the purpose of economic resilience building in Vanuatu;**
- 3 Anticipate that such profiling would complement the existing vulnerability and resilience indices with an in-depth quantitative and qualitative data to enable the authorities of Vanuatu as well as the donor community to identify gaps in capacity and to propose measures that need to be undertaken in order to enable the country to strengthen its ability to withstand and recover from economic shocks;

#### **Economic Vulnerability**

- 4 Reaffirm that economic vulnerability limits the options of Vanuatu in pursuing sustainable development goals;
- 5 Recognise that various inherent features of Vanuatu lead to economic vulnerability including:
  - its high dependence on international trade which, while bringing benefits to economic activity, also results in high degree of exposure to events in global markets and to developments in the global trade regime, including preference erosion, over which it has little influence;
  - its high dependence on a narrow range of exports, dependence on strategic imports and limited options for diversification;
  - its susceptibility to climate change and to natural disasters;
- 6 Recognise also that the economic vulnerability of Vanuatu can exacerbate social and environmental vulnerabilities which should be addressed by relevant policy intervention;

## Economic Resilience Building

- 7 Note that some small states have been able to achieve high levels of economic development in spite of their inherent vulnerabilities through appropriate policy orientations focused on building resilience while, at the same time, other vulnerable small states continue to face considerable development challenges;
- 8 Agree that resilience building in Vanuatu should be given priority in view of the country's high degree of economic vulnerability and reaffirm that the concept of economic resilience does not detract from Vanuatu's need for special consideration by the donor community by virtue of its inherent vulnerability. This should be done in the context of dialogue and partnership with all stakeholders;

## The Role of the International Development Partners in Supporting Economic Resilience Building

- 9 Recall the Mauritius Strategy adopted at the International Meeting to Review the Implementation of the Barbados Programme of Action for the Sustainable Development of Small Island Developing States, wherein, in Article 81 it was stated that 'Consideration should be given to the establishment of a task force to elaborate a resilience index, supported by the international community' and call upon the international community to continue supporting small states in their attempt to build and strengthen their economic resilience in order to withstand the effects of adverse exogenous shocks;
- 10 Commend the work carried out by the Commonwealth Secretariat and the Islands and Small States Institute of the University of Malta in developing the vulnerability and resilience indices and of international and regional organisations that have supported efforts by small states towards the promotion of their sustainable development;
- 11 Stress that while Vanuatu has an important responsibility for building its own economic resilience, there is a crucial role to be played by the international community in supporting Vanuatu in this endeavour;
- 12 Call upon the international development partners to develop a resilience funding facility in order to support the endeavours of small states, including Vanuatu, in building capacity so as to strengthen their economic resilience with the aim of withstanding or bouncing back from the impacts of adverse exogenous shocks;
- 13 Propose that in addition to countries preparing their Article 4 Consultation within the IMF structure, the Poverty Reduction Strategy and Action Plan (PRSAP) and the government's annual budget, small states in particular should prepare a vulnerability and resilience profile in conjunction with the preparation of the Medium Term Development Strategy and in line with the template prepared in this consultation conference;
- 14 Propose that the issue of resilience building be mainstreamed into the discussion related to the WTO Work Programme for Small Vulnerable Economies;

## **Follow-up by Government of Vanuatu**

- 15 Agree that this statement be submitted to the Cabinet of Ministers of Vanuatu for the attention and note of the government;
- 16 Agree that the country profile report identifying the resilience gaps and suggested policy interventions that would be drawn up in due course by the Commonwealth Secretariat would also be submitted to the Cabinet of Ministers of Vanuatu for the attention and note of the government;

## **Expression of Gratitude**

- 17 Express our gratitude to the Government of Vanuatu, the Commonwealth Secretariat and the Islands and Small States Institute of the University of Malta for taking the initiative to organise this successful conference.

# Appendix 4

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## **Guidelines for requesting technical assistance for resilience building projects**

### **1 Project Details**

**Project title:**

*(The title should reflect the development objective(s) of the project)*

**Requesting agency/organisation:**

**Implementing agency/organisation:**

*(Ministry or host organisation that would be the main implementing agency)*

**Name and Surname of the designated Project Manager:**

**Contact details:**

*(Contact details of assigned officer who would be the main contact person for operational and implementation purposes)*

Postal Address:

Telephone number:

Fax No:

Email address:

**Proposed project duration:**

**Proposed date of commencement:**

### **2 Project Definition and Context**

**Rationale and context:**

*(Brief description of the policy and operational context of the project including specific problem being addressed)*

**Project goal:**

*(Statement outlining the wider or longer term impact the project is intended to achieve)*

**Purpose of the project:**

*(Description of the benefits to the target group and/or changes that would occur if project outputs are delivered)*

**Expected outputs:**

*(What are the intended results of project activities? What does the project hope to achieve in the short run?)*

**Description of the project:**

*(How would planned strategies and/or activities lead to/produce the expected outputs/outcomes?)*

**Main beneficiaries and expected impact:**

*(Country/regional target beneficiary group including composition, e.g. gender, youth or other relevant factors)*

**National/regional relevance:**

*(Alignment and relevance to member country's national/regional priorities as outlined in National/Regional Development Plan or Poverty Reduction Strategy)*

**Assessment of sustainability:**

*(Explanation of measures to be incorporated within the project and outside to ensure the sustainability of project benefits beyond completion e.g. arrangements for a local counterpart to understudy the consultant or alternative arrangements for support and transfer of learning)*

**Collaborating/partner organisations:**

*(Details of any partners who would be collaborating on the project and the nature of relationship, roles, responsibilities and contributions of each)*

**Contribution of requesting authority/implementing agency:**

*(Outline the contributions – in cash or in-kind – to be given by the requesting authority or implementing agency in support of the project)*



# St Lucia: A country profile of economic vulnerability and economic resilience<sup>1</sup>

## Introduction

### Definitions

This report presents a profile of the economic vulnerability and economic resilience of St Lucia. Economic vulnerability is defined as the exposure of an economy to harmful external economic shocks that are outside the economy's control, typically resulting from high degrees of economic openness and dependence on a narrow range of exports. Economic resilience refers to policy-induced ability of an economy to withstand and rebound from the negative effects of such shocks. In this report, such resilience is associated with macro-economic stability, market efficiency, good political governance, social development and good environmental management, as explained in Briguglio et al. (2006, 2009). Economic vulnerability and insufficient resilience typically lead to a slower and more volatile pattern of economic development (Cordina 2004a, 2004b).

### Aim of the profiling exercise

This profile attempts to identify the sources of inherent economic vulnerability and to identify gaps in policy-induced resilience in St Lucia. It also proposes policy orientations aimed at economic resilience building. The treatment of specific issues of vulnerability and resilience in this report is at a high and strategic level, which could be eventually followed by further in-depth and specific studies.

### Data issues

The conceptual framework for building a country profile of economic vulnerability and resilience requires an array of quantitative and qualitative information<sup>2</sup>. The information used in this report was compiled through:

- available statistical sources from St Lucia sources, the International Monetary Fund and the World Bank;
- presentations delivered during a two-day country consultation conference organised for the purposes of compiling this report<sup>3</sup>;
- a key-stakeholder survey undertaken by means of a detailed questionnaire on the four aspects of economic resilience, namely macro-economic stability, market efficiency, governance and social and environmental concerns.

With regard to statistical sources, St Lucia participates in the IMF General Data Dissemination System (GDDS)<sup>4</sup>. This indicates that the basic statistical data required for the purposes of the economic vulnerability and resilience profile is largely available, and is in itself an indicator of good governance that is conducive towards economic resilience.

The two-day consultation conference yielded a significant amount of qualitative information regarding the sources of vulnerability and resilience of St Lucia.

The key-stakeholder survey was intended to elicit qualitative information to complement the quantitative data. Useful information was obtained from these surveys, however the response rate was lower than expected.

## Country background

St Lucia is a small island state located in the Caribbean Sea. It has a population of approximately 171,000 persons. The country has a stable democracy and is a member of the Organisation of Eastern Caribbean States (OECS), CARICOM and various international organisations<sup>5</sup>. In terms of population and economic size, St Lucia is the largest among the nine small island developing states (SIDS) within the OECS, which account for a total population of 606,000 persons<sup>6</sup>. Membership within the OECS entails regional co-operation in trade and development issues. St Lucia also participates within the Eastern Caribbean Central Bank, the currency of which, the Eastern Caribbean dollar, is fixed to the US dollar<sup>7</sup>.

The challenges to economic development faced by St Lucia are similar to those faced by other SIDS including a high degree of economic openness, relatively high dependence on a narrow range of exports, resource limitations, peripherality from major markets, high costs associated with international transport, and limited ability to exploit economies of scale. These realities lead to economic vulnerability mostly due to exposure to external economic shocks. In addition, the economic growth of St Lucia over the past ten years has been negatively affected by natural disasters as well as loss of preferential treatment in its exports of bananas.

Table 7.1 details a number of key economic and social indicators for St Lucia. The country had a per capita GDP of US\$5,721 in 2007, which the World Bank classifies as within the upper middle category.

Economic growth was sluggish during 2007, at 0.5 per cent in real terms. This reflected a marked downturn from the relatively high rates of growth sustained since 2001, which had peaked at 4.9 per cent in 2006. The slowdown in 2007 reflected a weak performance in the tourism sector, in good part due to the effects of global demand and high oil prices on holiday travel. It was also a result of lower construction activity following an investment boom in recent years (St Lucia, 2008). Adverse meteorological conditions and the continuing effects of declining preferential treatment and its ensuing uncertainty on production also affected banana exports in 2007. The IMF expects growth to recover somewhat in 2008 and 2009, mainly on account of increased tourism capacity generated by foreign direct investment inflows. However, the challenges to growth experienced in

2007, including the gradual erosion of preferences with respect to banana exports, are expected to persist.

The unemployment rate remained high at 14 per cent. The unemployment rate in St Lucia is strongly conditioned by demographic factors featuring a strong growth in the labour force entry age category, which has to some extent attenuated in 2007. Inflation for the entire year was contained at 2.7 per cent, although significant incipient inflationary pressures were in the offing on account of the weakening of the US dollar and the increase in commodity prices. This was reflected in an inflation rate at the year-end which reached 6.8 per cent and is likely to persist in 2008.

St Lucia has high and persistent fiscal deficits, which stood at almost 7 per cent of GDP in 2007. The authorities have embarked on a programme of fiscal consolidation, but the IMF (2008) comments that achieving sound public finances, particularly in relation to the current deficit, and ensuring debt sustainability remains a key challenge. The country also experienced persistent deficits on the external current account in recent years, which reached 30.3 per cent of GDP in 2007. This was partly a marked rise in imports related to foreign direct investment in the tourism industry, but in part also reflected difficulties, in spite of the depreciating US dollar, in export markets as well as the increase in prices of imported strategic commodities leading to adverse terms of trade. The IMF (2008) expects current account deficits to be reversed in the medium term and comments that they were in good part financed by non-debt-creating external capital inflows.

The country experienced significant shifts in economic activity during the past decade. Agriculture shrank from over 8 per cent to around 3 per cent of GDP, mainly on account of preference erosion in banana export markets. At the same time, the share of financial sector activity increased by over 6 percentage points to 13 per cent of GDP, with the IMF (2008) commenting upon the positive developments in the regulation and supervision of banks and international financial services providers. This sector was actually the main engine of economic growth in 2007. Manufacturing, construction and tourism maintained roughly constant shares of GDP over the past decade, with the latter two sectors, however, showing a significant degree of volatility. In the case of construction, this is due to the cycle of the completion of projects. With respect to tourism, volatility reflects tendencies in international demand. Within manufacturing, one half of the output consists of food and beverages. The real estate sector increased its share within GDP by two percentage points during the past decade in a stable manner, and now accounts for around one-ninth of economic activity.

From the perspective of social development, St Lucia has a life expectancy at birth of 74 years, a relatively high infant mortality rate of 23.5 per thousand, and a literacy rate of almost 95 per cent. In this respect, it is to be commented that death rates, particularly those of infants, have increased significantly since 2003. The Government of St Lucia (2008) attributes this to lifestyle diseases.

**Table 7.1. St Lucia: Key indicators**

Variable	Level	Period
GDP – total (US\$M)	978	2007
– per capita (US\$)	5,721	2007
– real growth	0.5%	2007
Unemployment rate	14.0%	2007
Inflation rate	2.7%	2007
Fiscal balance (as a proportion of GDP)	–6.9%	2007
External current account balance (as a proportion of GDP)	–30.3%	2007
GDP composition:		
Agriculture	2.9%	2007
Manufacturing	5.6%	2007
Construction	7.0%	2007
Wholesale and retail	11.3%	2007
Hotels and restaurants	10.4%	2007
Transport	9.5%	2007
Communications	9.4%	2007
Banking and insurance	13.0%	2007
Real estate	10.9%	2007
Life expectancy (years)	74.0	2006
Infant mortality (per thousand)	23.5	2007
Literacy rate	94.8%	2004

Sources: St Lucia (2008), World Bank (2008)

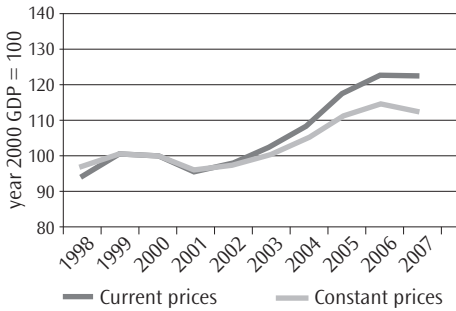
## A vulnerability profile of St Lucia

Briguglio et al. (2008) propose a methodology to derive an economic vulnerability/resilience profile based on three facets, namely, an assessment of the extent of symptoms of economic vulnerability, an analysis of the causes of vulnerability and a study of the sources of economic resilience which would enable the derivation of a policy gap analysis. This section of the report utilises the variable list template developed within this conceptual framework in order to derive an economic vulnerability and resilience profile for St Lucia.

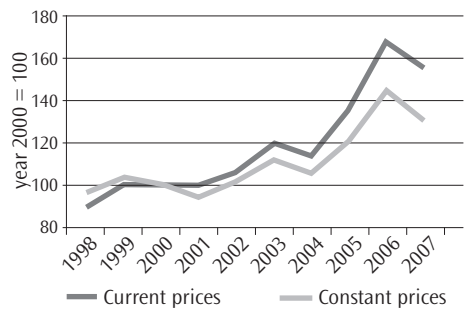
### An assessment of the symptoms of economic vulnerability

This facet relates to the manifestation of vulnerability or lack of resilience and attempts to determine whether a country appears to be suffering from any one or more of the symptoms of vulnerability or otherwise. This may be discerned by considering the levels and volatility over time of a number of key variables including: GDP; consumption; imports; exports; exchange rates and prices. The extent of reliance on short-term shock absorbers which may attenuate the effects of shocks and of insufficient resilience to them is also to be considered. These shock-absorbers include the extent of deficits on the external current account and the size of government expenditure. An analysis of these variables for the economy of St Lucia is presented in Figures 7.1 through to 7.6.

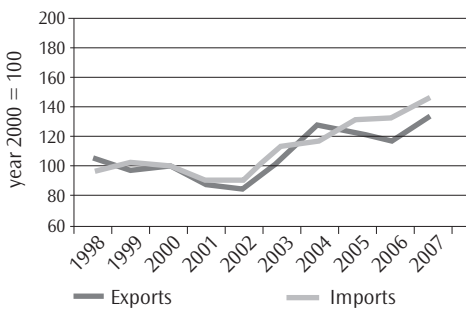
**Figure 7.1. GDP per capita**



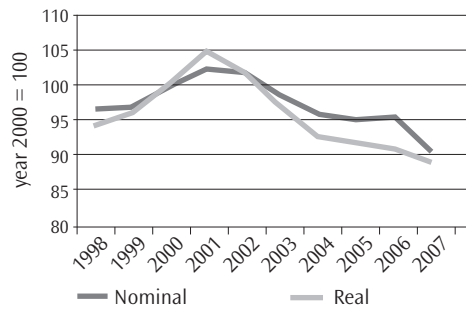
**Figure 7.2. Private consumption expenditure**



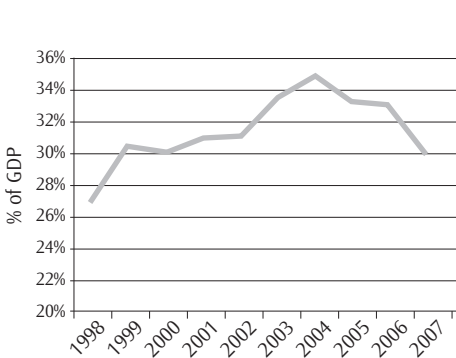
**Figure 7.3. Exports and imports of goods and services**



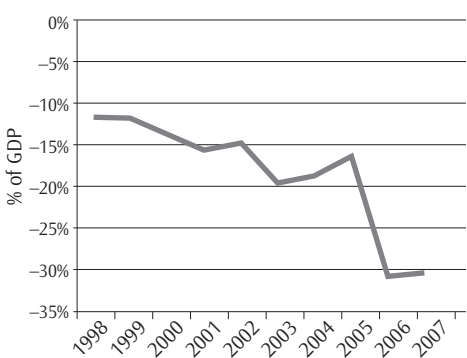
**Figure 7.4. Real and nominal effective exchange rates**



**Figure 7.5. Government expenditure**



**Figure 7.6. External current account balance**



Source: St Lucia (2008), World Bank (2008)

During the decade to 2007<sup>8</sup>, St Lucia experienced an increase in per capita real GDP averaging 1.5 per cent per annum, which may be perceived to be relatively low for a country at its current state of development<sup>9</sup>. This was underpinned by notable fluctuations in the level of real per capita GDP during the decade, which actually fell in 2001 and 2007, and recovered significantly especially between 2003 and 2005 (see Figure 7.1). This indicates a significant exposure to the effects of vulnerability and lack of resilience during the period under consideration, which includes a slow and relatively volatile pattern of growth. The development of GDP at current prices followed a similar trend, averaging at relatively low 2.6 per cent per annum. It may be noted that in recent years,

growth in GDP at current market prices has been increasingly subject to inflationary pressures.

An analysis of private per capita consumption expenditure, presented in Figure 7.2, shows more accentuated trends of this nature. At constant prices, the variable advanced at an average rate of 3 per cent per annum between 1998 and 2007, but with notable fluctuations around the trend. At current prices consumption grew at a rapid pace during the decade under consideration, averaging 5.6 per cent per annum. It is noted that the average growth in consumption, as well as its volatility, significantly outstripped that registered in GDP.

The volatility in output during the decade under consideration in good part mirrored fluctuations in exports, which during the period were conditioned by shocks to international demand, commodity prices, trade preference erosion and natural disasters. As a result of these factors, exports actually dropped in 2001/2 and in 2005/6. In the last three years of the analysis, GDP growth was also strongly affected by developments in construction, in turn resulting from foreign direct investment in the tourism sector (see Figure 7.3)<sup>10</sup>. The same factors conditioned the development of imports during the period, which in the final two years were especially influenced by the increases in international commodity prices.

Briguglio et al. (2008) propose the consideration of the real and nominal effective exchange rates indexes as a measure of volatility to prices. Within the context of the currency anchor provided within the East Caribbean Central Bank arrangement, it does not appear that exchange rate shocks are being a significant source of vulnerability for St Lucia. This is indicated in Figure 7.4, which shows a persistent but gradual effective exchange rate depreciation in line with developments in the US dollar over past years, which has tended to contribute to external competitiveness without inducing currency volatility. On the other hand, inflationary pressures are starting to dent competitiveness advantages associated with a depreciating real exchange rate.

Turning next to the shock absorbers in the face of the effects of economic vulnerability, it is noted that St Lucia has a relatively high government expenditure to GDP ratio which increased progressively right up to 2004, as shown in Figure 7.5. Efforts at fiscal consolidation since then led to a reduction in this ratio, implying that this tool cannot be resorted to indefinitely to absorb economic shocks.

St Lucia experienced a consistently negative and volatile performance on its external current account during the decade to 2007, as shown in Figure 7.6. This indicates a high degree of susceptibility to external economic conditions as discussed above, affecting export demand, the terms of trade as well as foreign direct investment into the country.

St Lucia, therefore, went through developments manifesting economic vulnerability and lack of resilience during the decade to 2007. These were especially reflected in the low and sometimes negative rates of real economic growth, export volatility and a negative and volatile performance on the external current account. Data for 2007 and 2008 also indicate the emergence of significant inflationary pressures induced by shocks to import prices.

## An assessment of the causes of economic vulnerability

The next step in developing the economic vulnerability and resilience profile is to determine the causes of the vulnerability giving rise to these manifestations of vulnerability. This facet of the profile relates to the underlying causes of vulnerability and is aimed at assessing the inherent fundamental conditions which may be rendering a country vulnerable to exogenous shocks. In the conceptual framework developed in this regard, Briguglio et al. (2008) ascribe the causes of vulnerability to the degree to which a country is exposed to shocks and the extent of incidence of such shocks. In turn the degree of exposure to shocks depends upon openness to international trade, the concentration of output, and the price elasticity of imports and exports. The incidence of shocks is proxied by the volatility of gross fixed capital formation, of foreign direct investment and of the terms of trade.

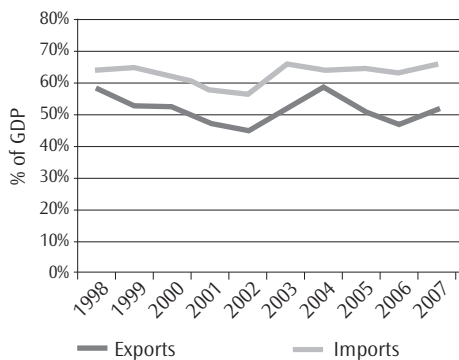
Figures 7.7 through 7.9 provide information on variables which proxy the exposure of St Lucia to exogenous shocks.

Figure 7.7 indicates that both imports and exports are substantial when compared to the country's GDP, typical of the levels of a country of the size of St Lucia. As a result, the economy is strongly influenced by developments in international markets.

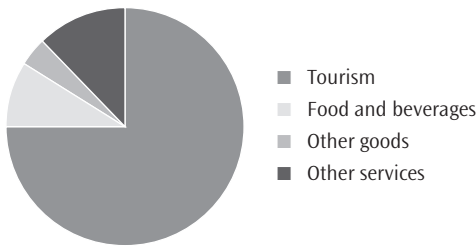
The risk of being affected by external shocks is even greater when the high degree of export concentration is taken into account. Around three-quarters of export receipts accrue from tourism, while another one-eighth is generated by food and beverages, as shown in Figure 7.8. Diversification into exports of other products and services remains limited, albeit it has been increasing in recent years. This implies that shocks to the two main export revenue sources are bound to have profound effects on the economy.

It is to be further considered that food exports still consist, to a considerable extent, of bananas, which is a commodity export, with the consequent implications for volatility in prices and demand and trade preference erosion. Likewise, tourism has a volatile demand, conditioned by factors such as international economic growth, environmental risks, domestic and international political developments, changes in the availability of transport facilities and business decisions of international tour operators.

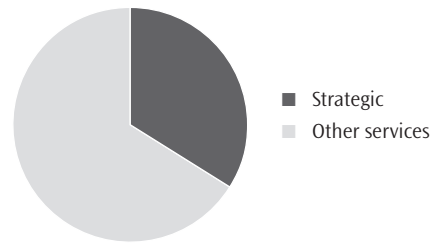
**Figure 7.7. Trade openness (% of GDP)**



**Figure 7.8. Export concentration**



**Figure 7.9. Distribution of imports**



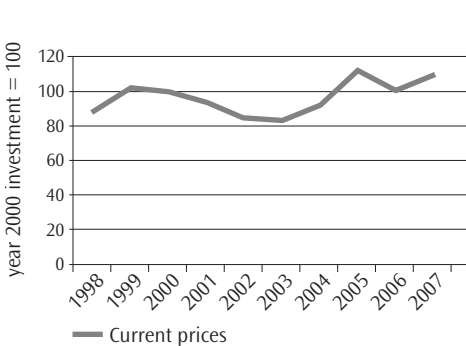
Source: St Lucia (2008)

On the import side, close to 35 per cent of imports are made up of strategic commodities which are of the nature of necessities, including energy and food, as shown in Figure 7.9. This leaves the economy exposed to shocks in the international supply of these commodities, typically affecting their prices.

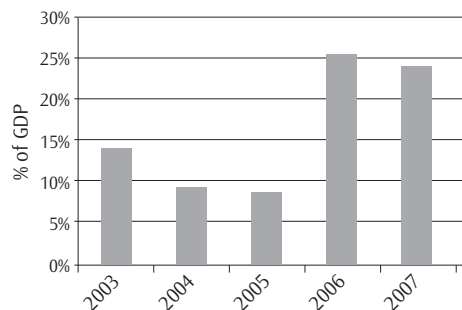
The exposure to external shocks was an important determinant of the symptoms of vulnerability identified in the preceding section, including the relatively slow and volatile growth as well as the adverse and fluctuating performance on the external current account. This, however, must also be viewed in terms of the incidence or extent of occurrence of the shocks to which the country is exposed.

Figure 7.10 shows the part played by changes in gross fixed capital formation to economic development in St Lucia. Over the past decade, gross fixed capital formation has fluctuated significantly. This in good part reflected changes to demand from the international sector, particularly with regard to the development of tourism infrastructure which in turn affected construction activity. The volatility in gross fixed capital formation in part reflects significant swings in foreign direct investment flows, which over the past five years has fluctuated from 7 per cent to 25 per cent of GDP, as shown in Figure 7.11.

**Figure 7.10. Gross fixed capital formation**



**Figure 7.11. Foreign direct investment**



Source: St Lucia (2008)

The incidence of shocks needs also to be evaluated, according to Briguglio et al. (2008), by fluctuations to the GDPs of the main trading partner countries and to the terms of trade. In this regard, it may be commented that the main trading partners of St Lucia are other members of the OECS, which are themselves economically vulnerable countries as well as the United Kingdom, which is presently experiencing a significant slowdown in demand growth. Adverse terms of trade shocks are also known to have taken place, particularly with respect to the prices of banana exports and those of strategic commodity imports.

Thus, it can be concluded that the symptoms of vulnerability which St Lucia has experienced in the past decade are in part due to inherent structural features in the economy including its exposure to international business and commodity concentration, together with notable fluctuations in gross fixed capital formation. It cannot be excluded that frequent and significant shocks to external demand and to the terms of trade took place. Countries facing these types of shocks can however be successful in overcoming their effects through appropriate resilience-building policies, the assessment of which is the next element in this profile.

## **A resilience profile of St Lucia**

This facet of the profile aims to highlight the strengths and weaknesses within the policy formulation milieu of a country towards the objective of economic resilience building. Economic resilience counteracts the effects of economic vulnerability by increasing the economy's ability to cope with the adverse effects of exogenous shocks. Briguglio et al. (2008) propose an approach which evaluates policy-induced economic resilience based on five dimensions, namely: macro-economic; market efficiency; governance; social development; and environmental management.

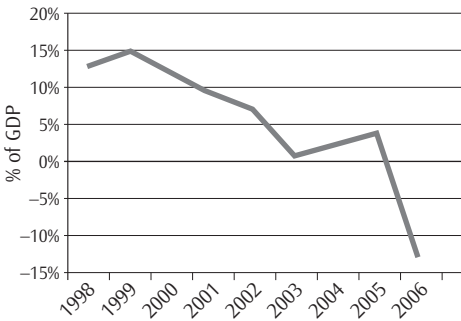
### **An assessment of the sources of economic resilience**

#### **Macro-economic stability**

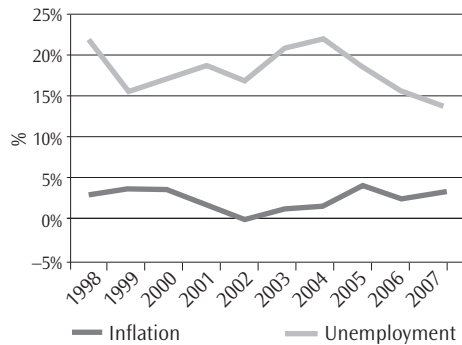
Figures 7.12 through 7.15 present an analysis of the variables that are considered to proxy the extent to which macro-economic policy is creating conditions that are conducive to the establishment of economic resilience. A fundamental requisite towards economic resilience is for a country to generate sufficient savings to create a buffer against potential shocks. The saving rate of the economy of St Lucia fluctuated around 15 per cent in 1999, but has since then slumped and became negative in 2006 at around -14 per cent of GDP, as shown in Figure 7.12. This is a direct result of consumption growth which exceeded that of GDP during the past decade, as observed earlier on. It also reflects the persistence of fiscal deficits, particularly on the current fiscal balance. An insufficient level of saving is not sustainable in the medium term and could adversely impact on the economic resilience of the economy of St Lucia.

Developments in inflation and unemployment are shown in Figure 7.13. To promote economic resilience, it is important for these variables to be at low levels so that if adverse shocks should hit the economy, they would not further aggravate a serious situation. On account of the currency anchor combined with low inflation in trading partner countries,

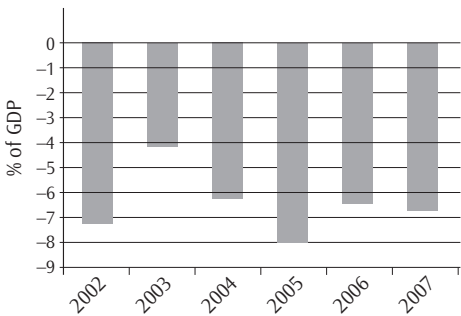
**Figure 7.12. Total saving (investment plus current account balance)**



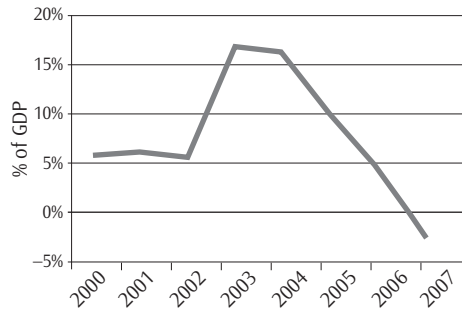
**Figure 7.13. Inflation and unemployment**



**Figure 7.14. Fiscal balance**



**Figure 7.15. Net external assets**



Source: St Lucia (2008)

inflation was relatively low during the past decade, but has responded to the increase in prices of commodity imports in the past two years.

The unemployment rate is persistently high in St Lucia, a reflection of a significant inflow of population into the working age category which is not being matched by demand for jobs<sup>11</sup>. The difference between supply and demand has tended to narrow since 2005, albeit this trend has slowed down in 2007 owing to the lacklustre economic growth. High unemployment, with its economic, social and political implications, may be considered as a serious drawback to the resilience of St Lucia.

The fiscal balance showed a persistent deficit which is lately being to some extent addressed, as shown in Figure 7.14. A lack of fiscal policy discipline, which has also impinged negatively on the levels of public and external debt, is another important constraint to the economic resilience of St Lucia.

The net external asset position gives another indication of the availability of buffer reserves from which to meet the effects of adverse shocks. Figure 7.15 shows that the net external asset position of St Lucia was healthy for a number of years, but it turned negative in 2007. This, once again, is a reflection of excessive expenditure relative to output as well as of the effects of economic vulnerability. This is another matter of potential concern regarding the resilience of St Lucia from a macro-economic viewpoint.

### **Market efficiency**

Micro-economic market efficiency is essential for economic resilience as it will contribute to an efficient allocation of resources enabling the economy to better withstand the effects of adverse shocks. There are three components to micro-economic market efficiency relating to: capital mobility, labour market flexibility and product market efficiency.

In terms of capital mobility and financial market efficiency, conditioned as they are by participation in the Eastern Caribbean Central Bank, St Lucia does not appear to have any serious threats to resilience. Further development in regulatory structures are warranted so as to continue to consolidate the sector.

With regard to labour market efficiency, policy structures or directions aimed at addressing the persistently high rates of unemployment appear to be weak. Education structures, while delivering high primary and secondary enrolment rates and high literacy rates, appear to be somewhat detached from the needs associated with the country's economic development potential. Opportunities for higher education, lifelong learning, re-skilling and multi-skilling may be severely limited in St Lucia. St Lucia is a contributing member of the University of the West Indies and is also the beneficiary of grant/scholarship assistance from several countries, but the country has not adapted well enough to the changing needs in education. There are also significant challenges in pre-tertiary education, reflected in drop-out rates by young people from the formal education system and a low quality of education in some areas.

In terms of product market efficiency, there are, in general, no grave concerns save for the pricing of fuels, which is an important production and consumption element in the country. Regulatory interventions within monopolistic markets are not producing the desired results in terms of pricing efficiency, such that an overhaul of the system is advocated. There otherwise appear to be sufficient structures for the proper operation of product markets, although this comment is to be qualified by the fact that small market size may be leading to insufficiencies in the overall competition environment.

The involvement by St Lucia in regional trading arrangements is fostered by its participation in the OECS and CARICOM, which is considered to be a positive resilience element for the country. Property rights, including those of an intellectual nature, are generally well-protected in St Lucia.

In terms of fostering productivity, competitiveness and growth, it appears that the bulk of investment and economic development is being directed to the tourism sector. While this sector presents considerable opportunities for St Lucia, such an approach may result in an unbalanced pattern of growth with an increasing production concentration, and hence proneness to vulnerability. A development strategy involving a broader base of production, including the development of higher-value added and innovative areas such as ICT and renewable energy technological development may be contemplated, as well as the pursuit of better inter-industry linkages between tourism and agri-processing.

### **Political governance**

With respect to political governance, St Lucia has a system based on democratic principles. However, the country appears to need a deeper engagement in social dialogue, as the policy-

making agenda is often dominated by two major political parties leaving little space for NGOs and other organisations. Within this context, there is growing recognition for the need to further develop notions of government accountability and transparency with the active participation and development of existing institutions. The rule of law, the quality of the judiciary and the impartiality of the Law Courts are sufficient to contribute to effective governance in St Lucia.

### **Social development**

With regard to social development, there are concerns surrounding the health system in St Lucia, due to the increases in death rates, particularly those of infants, in recent years. The economy's income levels as well as constraints on fiscal expenditure have resulted in an underdeveloped system of welfare and poverty prevention. This problem is further accentuated by the high levels of unemployment in the country, entailing that poverty and its prevention remain crucial challenges to be tackled in order to effectively build social cohesion. In view of the resource limitations, poverty alleviation programmes must be implemented efficiently and selectively so as to target the most urgent needs, making the best possible use of donor engagement. Social cohesion is also adversely affected by the emergence of vulnerable economic categories of society, particularly the people who are involved in banana production, as well as by linguistic and urban-rural dichotomies. Statistical tools to better assess the poverty and social cohesion concerns of St Lucia also need to be developed.

### **Environmental management**

Man-made environmental problems do not appear to impinge to any significant extent in St Lucia, however, the incidence of natural disasters is a matter of concern. Disaster management and civil protection management systems have improved in recent years, but further progress is called for in this crucial area, especially in the development of appropriate insurance schemes and early warning systems. Environmental governance institutions are also relatively underdeveloped and can be expected to become a necessity in future with the further development of construction, real estate and tourism activity. Issues such as deforestation and coastal zone management may call for attention in the near future.

## **Policy implications and conclusions**

### **Resilience strengths**

The principal economic resilience strengths that can be identified from this analysis include:

- the potential of further developing the economy in key areas such as tourism and financial services, the latter having attracted considerable foreign direct investment in recent years;
- participation in the OECS and in the Eastern Caribbean Central Bank which provide a measure of resilience in the external trade and monetary dimensions;
- the maintenance of stable governance structures based on democratic principles and the rule of law;
- a relatively successful system of basic education.

## Resilience weaknesses

The principal economic resilience weaknesses that can be discerned include:

*From the macro-economic perspective:*

- an insufficient level of savings to sustain the significant level of investment needed at the current stage of the country's economic development;
- excessive fiscal deficits, in part due to the mounting demand on the public sector for economic and social services in the wake of shocks, including those arising from natural events;
- excessive domestic consumption relative to the production of income, which is leading to an unsustainable external asset position;

*From a micro-economic perspective:*

- the absence of labour market policy structures and lacunae in higher and further education and skills acquisition;
- inefficiencies in the pricing of fuel;
- an excessive focus on the key sectors of tourism, leading to a high dependence on this sector, and possibly precluding the development of other potentially innovative areas of economic success for St Lucia, such as those related to ICT or environmental technologies;

*From a social perspective:*

- an insufficient involvement in social dialogue and NGO involvement in policy-making;
- the persistence of poverty in the face of resource constraints and high rates of unemployment, with the relative problems likely to exacerbate in the wake of the increases in energy and food prices;

*From an environmental perspective:*

- the need for further improvement in governance structures for environmental and disaster management, particularly in the development of insurance schemes and early warning systems.

The policy implications that emerge from this analysis may be synthesised in terms of the need to:

- engender macro-economic balance, first and foremost by addressing the fiscal deficit through efficient and inexpensive revenue generating mechanisms (such as VAT) and an effective prioritisation of expenditures (especially for capital programmes);
- address insufficient demand for labour by promoting a balanced and diversified growth strategy while enhancing opportunities for skills acquisition, particularly with regards to re-skilling and multi-skilling of the labour force, including the possibility of a managed influx of skilled labour within CARICOM arrangements;
- develop the social model in an effective and efficient manner so as to be able to build social cohesion at the lowest possible cost;
- enhance environmental and disaster management governance structures.

An ancillary issue is the need to have better statistical reporting systems particularly in the

area of social development in order to be better able to gauge the extent of the challenges and to devise appropriate policy interventions.

Other small island developing states have successfully dealt with these basic development issues in recent years and now enjoy a substantial degree of economic resilience. It is probably useful for St Lucia to closely follow instances of best practice from other small island developing states in order to devise solutions that are most suited to its current and future development needs. It is, however, recognised that in the case of St Lucia, the reliance on international donor involvement and assistance remains crucial for the development of economic resilience.

## Notes

- 1 This report was prepared for the Commonwealth Secretariat by Lino Briguglio, Gordon Cordina, Nadia Farrugia and Stephanie Vella. It was completed on 3 September 2008.
- 2 The conceptual framework for country profiling of economic vulnerability and resilience was developed in Briguglio et al. (2008).
- 3 The conference entitled 'Profiling Economic Vulnerability and Economic Resilience in Small States: The Case of St Lucia' was held on 16–17 June 2008 at the Gaiety, Rodney Bay, St Lucia.
- 4 Member countries of the IMF voluntarily elect to participate in the GDDS. The GDDS framework is built around four dimensions – data characteristics, quality, access, and integrity. It is intended to provide guidance for macro-economic, financial, and social data.  
<http://dsbb.imf.org/Applications/web/getpage/?pagename=gddswhatgdds>
- 5 Including the Commonwealth, United Nations, IMF and World Bank.
- 6 <http://www.oecs.org/about-the-oecs/member-states> accessed on 26 July 2008.
- 7 <http://www.oecs.org/about-the-oecs/institutions> accessed on 26 July 2008. One US dollar is equivalent to 2.7 Eastern Caribbean dollars.
- 8 A complete and final dataset for the purposes of this analysis is available up to 2007. Reference to provisional data and estimates for 2008 is made, where relevant.
- 9 The average growth over the decade for St Lucia is estimated at around 0.5 percentage points lower than that in the Latin American and East Caribbean group, and around 3 percentage points lower than the middle-income country group (source: World Bank, 2008).
- 10 Data for imports and exports for St Lucia is only available at current market prices. This reflects the absence of expenditure side GDP at constant prices.
- 11 The youth unemployment rate is estimated at around 34 per cent.

# Seychelles: A profile of economic vulnerability and economic resilience<sup>1</sup>

## Introduction

### Definitions

This report presents a profile of the economic vulnerability and economic resilience of Seychelles. Economic vulnerability is defined as the exposure of an economy to harmful external economic shocks that are outside the economy's control, typically resulting from high degrees of economic openness and dependence on a narrow range of exports. Economic resilience refers to the policy-induced ability of an economy to withstand and rebound from the negative effects of such shocks. In this report, such resilience is associated with macro-economic stability, market efficiency, good political governance, social development and good environmental management, as explained in Briguglio et al. (2006, 2009). Economic vulnerability and insufficient resilience typically lead to a slower and more volatile pattern of economic development (Cordina 2004a, 2004b).

### Aim of the profiling exercise

This profile attempts to identify the sources of inherent economic vulnerability and to identify gaps in policy-induced resilience in Seychelles. It also proposes policy orientations aimed at economic resilience building. The treatment of specific issues of vulnerability and resilience in this report is at a high and strategic level, which could be eventually followed by further in-depth and specific studies.

### Data issues

The conceptual framework for building a country profile of economic vulnerability and resilience requires an array of quantitative and qualitative information<sup>2</sup>. The information used in this report was compiled through:

- available statistics from Seychelles' sources, the International Monetary Fund and the World Bank;
- presentations delivered during a two-day country consultation conference organised for the purposes of compiling this report<sup>3</sup>;
- a key-stakeholder survey undertaken by means of a detailed questionnaire on the four aspects of economic resilience, namely macro-economic stability, market efficiency, governance and social and environmental concerns.

With regard to statistical sources, Seychelles participates in the IMF General Data Dissemination System (GDDS)<sup>4</sup>. This indicates that the basic statistical data required for the purposes of the economic vulnerability and resilience profile is largely available, and is in itself an indicator of good governance that is conducive towards economic resilience.

The key-stakeholder survey and the country conference yielded a significant amount of qualitative information regarding the sources of vulnerability and resilience of Seychelles, which complemented the statistical data.

## Country background

Seychelles is made up of 115 islands located in the Western Indian Ocean with a population of approximately 85,000 persons. The country has a stable democracy and is a member of various international organisations<sup>5</sup>. Its economic development process is subject to the challenges usually faced by small island developing states (SIDS) including resource limitations, peripherality from major markets and difficulties associated with international transport, geographical territorial dispersion including multiple insularity, limited ability to exploit economies of scale and to diversify economic activities, and vulnerability to external economic shocks and adverse environmental impacts.

Table 8.1 details a number of key economic and social indicators for Seychelles. The country had a per capita GDP of US\$10,733 in 2007, thereby placing it in the upper-middle category according to the World Bank classification. Economic growth continued at a rapid pace during 2008, at 5.1 per cent, sustained mainly by investment and export activity. These emanated mainly from activities in tourism and in the fisheries sector. These developments helped reduce the unemployment rate to 1.9 per cent, which was a historic low. During the same year, inflation was relatively high at 5.3 per cent during that year, reflecting a gradual depreciation of the local currency<sup>6</sup> to correct for an overvalued rate being set historically and which resulted in an informal market for foreign currency within the country. This managed depreciation of the currency towards levels which are likely to be closer to equilibrium could also have been conducive to increasing the country's external competitiveness. International financial transactions are subject to exchange controls, which are being gradually dismantled.

The country is undergoing a range of structural reforms constituting a marked departure from the command-and-control style of economic management. These include significant upward revisions of utility prices, removal of price controls on imports, and foreign exchange market liberalisation measures. According to the IMF (2008), the reforms will reduce subsidies to public enterprises, limit budgetary pressures, and improve market signals. The government's announcement that privatisation will continue strengthens the prospects for private sector development.

From the perspective of social development, Seychelles has a life expectancy at birth of 72.2 years, an infant mortality rate of 9.5 per thousand, and a literacy rate of 96 per cent.

From the perspective of the Human Development Index, Seychelles tends to rank around 50th in terms of social development variables, significantly behind the 40th ranking

**Table 8.1. Seychelles: Key indicators**

Variable	Level	Period
GDP – total (US\$M)	911	2007
– per capita (US\$)	10,733	2007
– growth	5.1%	2007
Unemployment rate	1.9%	2007
Inflation rate	5.3%	2007
Fiscal balance (as a proportion of GDP)	1.1%	2007
Export sources:		
Tourism	55.4%	2007
Fisheries	41.7%	2007
Other	2.9%	2007
Life expectancy (years)	72.2	2006
Infant mortality (per thousand)	9.5	2006
Literacy rate	96.0%	2006

Source: Central Bank of Seychelles (2008)

obtained for economic development measured in terms of GDP per capita<sup>7</sup>. It thereby appears that economic achievements of recent years have not yet sufficiently percolated towards the ambit of social development.

In 2007, the Government of Seychelles launched the Strategy 2017 initiative (Seychelles, 2007), which is aimed at doubling the country's GDP within a period of ten years, by promoting the key economic sectors of tourism, fisheries and financial services, enhancing government efficiency, improving the functioning of the labour market, fostering private business and enhancing social structures. The Strategy also calls for participation in regional trading blocks.

## A vulnerability profile of Seychelles

Briguglio et al. (2008) propose a methodology to derive an economic vulnerability/resilience profile based on three facets, namely, an assessment of the extent of symptoms of economic vulnerability, an analysis of the causes of vulnerability and a study of the sources of economic resilience which would enable the derivation of a policy gap analysis. This section of the report utilises the variable list template developed within this conceptual framework in order to derive an economic vulnerability and resilience profile for Seychelles.

### An assessment of the manifestations of economic vulnerability

This facet relates to the manifestation of vulnerability or lack of resilience and attempts to determine whether a country appears to be suffering from any one or more of the symptoms of vulnerability or otherwise. This may be discerned by considering the levels and volatility over time of a number of key variables including: GDP; consumption; imports; exports; exchange rates and prices. The extent of reliance on short-term shock absorbers which

may attenuate the effects of shocks and of insufficient resilience to them are also to be considered. These shock-absorbers include the extent of deficits on the external current account and the size of government expenditure. An analysis of these variables for the economy of Seychelles is presented in Figures 8.1 through 8.6.

During the decade to 2006<sup>8</sup>, Seychelles experienced no effective increase in per capita real GDP, with the level in 2006 being practically unchanged from that in 1997. This was underpinned by an increase in per capita real GDP of around 11 per cent between 1997 and 2000, followed by persistent drops through 2005, with a recovery in 2006 which appears to have been sustained in 2007 according to provisional data (see Figure 8.1). This indicates a significant exposure to the effects of vulnerability and lack of resilience during the period under consideration, which includes a slow and relatively volatile pattern of growth. The development of per capita GDP at current prices has been more stable, but averaging at relatively low 2.5 per cent per annum, which may be wholly ascribed to increases in the prices of output.

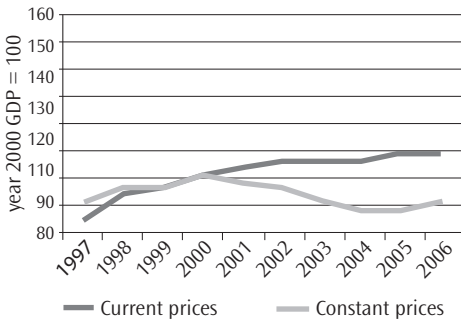
Similar trends emerge from an analysis of per capita private consumption expenditure, as shown in Figure 8.2. At constant prices, there was only a marginal progress in consumption, averaging a mere 0.6 per cent per annum. This was underpinned by a 9 per cent drop between 1997 and 2001, which was reversed in later years, and which followed a counter-cyclical trend with GDP. At current prices consumption grew at a rapid pace during the decade under consideration, averaging 5.8 per cent per annum. Nine-tenths of this growth was due to the effects of price inflation.

During the decade to 2007, Seychelles experienced a sustained and stable rate of growth of exports, which averaged 9.8 per cent at both current and constant market prices (see Figure 8.3). This would seem to indicate that export volumes have increased, with average export prices remaining relatively stable. At current prices, imports have kept the pace with exports during the decade under review (see Figure 8.4), growing by almost 10 per cent per annum. At constant prices however, growth in imports was significantly more restrained, at 6.4 per cent per year. This indicates an adverse development in import prices which was not matched by an increase in the prices of exports.

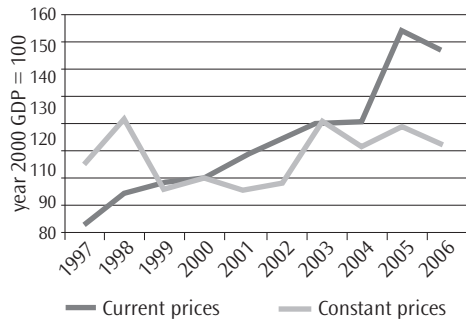
While Briguglio et al. (2008) propose the consideration of the real and nominal effective exchange rates indexes as a measure of volatility to prices, these variables are not considered to be relevant in the analysis of the economy of Seychelles, owing to the fact that the exchange rate was in recent years managed at an artificially high level and propped up by exchange controls, which led to the proliferation of an informal market for foreign currency.

The symptoms of economic vulnerability are here assessed through developments in the deflators for GDP and for consumption expenditure, shown in Figure 8.5. The former rose at a stable pace during the decade to 2006, at an average rate of 2.5 per cent per year. The latter showed significant swings around an upward trend which averaged 5.2 per cent per year. Consumption prices thus grew at a significantly faster pace than the prices of the economy's output, partly a reflection of the trends in import and export prices discussed earlier. This indicates restraints on the economy's consumption possibilities generated by its price taking behaviour in the international markets.

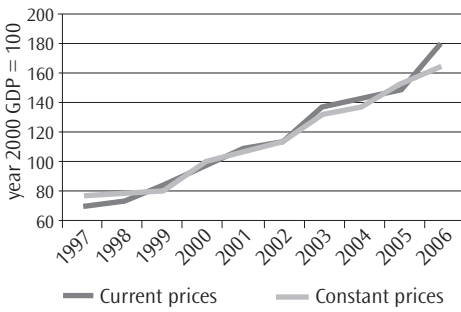
**Figure 8.1. GDP per capita**



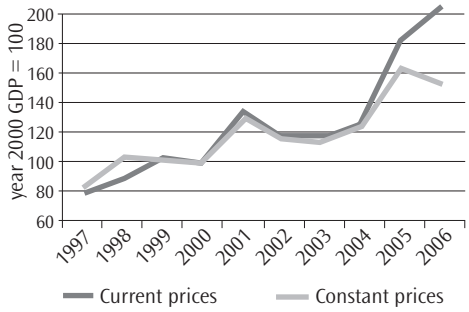
**Figure 8.2. Per capita consumption expenditure**



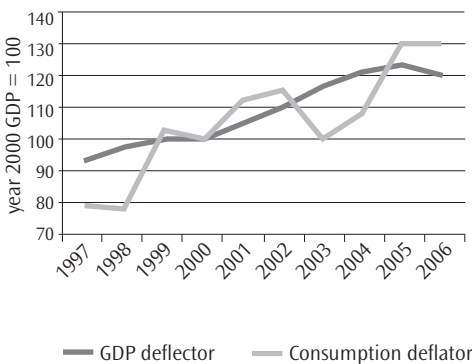
**Figure 8.3. Exports of goods and services**



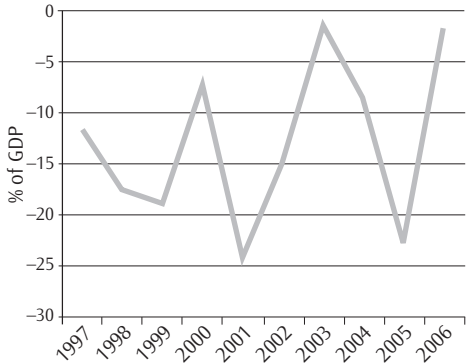
**Figure 8.4. Imports of goods and services**



**Figure 8.5. Developments in prices**



**Figure 8.6. External current account balance**



Source: World Bank

Seychelles experienced a consistently negative and volatile performance on its external current account during the decade to 2006, as shown in Figure 8.6. This indicates a high degree of susceptibility to external economic conditions, affecting especially the terms of trade as well as foreign direct investment into the country.

It thus appears that Seychelles has experienced a number of symptoms usually associated with economic vulnerability and lack of resilience during the decade to 2006. These were especially reflected in the low rate of real economic growth, adverse terms of trade developments which led to high inflation and reduced consumption possibilities, and a negative

and volatile performance on the balance of payments. Data for 2006 and 2007 in general seems to point to a degree of recovery from these conditions, at least from the viewpoint of economic growth.

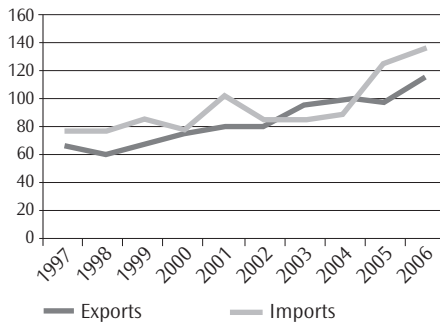
### An assessment of the causes of economic vulnerability

The next step in developing the economic vulnerability and resilience profile is to determine the causes of the vulnerability giving rise to these symptoms. This facet of the profile relates to the underlying causes of vulnerability and is aimed at assessing the inherent fundamental conditions which may be rendering a country vulnerable to exogenous shocks. In the conceptual framework developed in this regard, Briguglio et al. (2008) ascribe the causes of vulnerability to the degree to which a country is exposed to shocks and the extent of incidence of such shocks. In turn the degree of exposure to shocks depends upon openness to international trade, the concentration of output, and the price elasticity of imports and exports. The incidence of shocks is proxied by the volatility of gross fixed capital formation, of foreign direct investment and of the terms of trade.

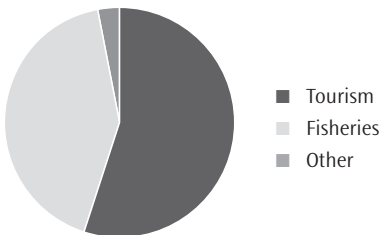
Figures 8.7 through 8.9 provide information on variables which proxy the exposure of Seychelles to exogenous shocks.

Figure 8.7 indicates that both imports and exports are substantial when compared to the country’s GDP and have been rising over time to levels well above 100 per cent. This is an indication of the fact that the economy is strongly influenced by developments in international markets. The risk of being affected by external shocks is even greater when

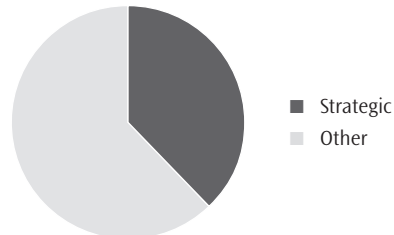
**Figure 8.7. Trade openness (% of GDP)**



**Figure 8.8. Export concentration**



**Figure 8.9. Distribution of imports**



Source: World Bank, UNCTAD

the high degree of export concentration is taken into account. More than half of export receipts accrue from tourism, while over two-fifths originate from fisheries, as shown in Figure 8.8. Other activities account for less than 3 per cent of exports. This entails that shocks to the two main export revenue sources are bound to have profound effects on the economy.

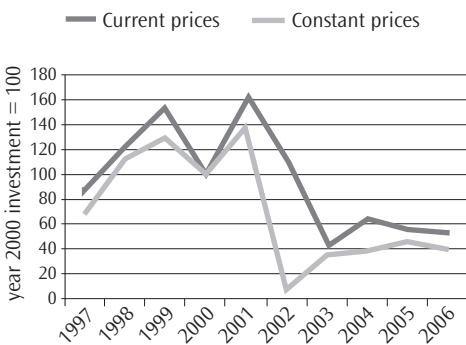
It is to be further considered that fisheries essentially entail a commodity export, with the consequent implications for volatility in prices and demand. Likewise, tourism has a volatile demand, conditioned by factors such as international economic growth, environmental risks, domestic and international political developments<sup>9</sup>, changes in the availability of transport facilities and business decisions of international tour operators.

On the import side, close to four-tenths of imports are made up of strategic commodities which are of the nature of necessities, including energy and food, as shown in Figure 8.9. This leaves the economy exposed to shocks in the international supply of these commodities, typically affecting their prices.

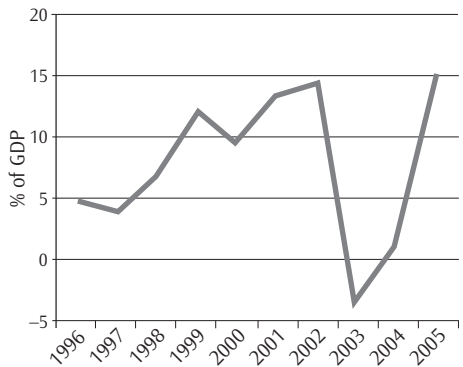
This significant exposure to external shocks played a part in generating the symptoms of vulnerability identified in the preceding section, including the sluggish and volatile growth as well as the generally adverse and fluctuating performance on the external balance of payments. This, however, must also be viewed in terms of the incidence or extent of occurrence of the shocks to which the country is exposed. Figures 8.10 through 8.13 present an analysis of this factor.

Figure 8.10 shows the significant part played by fluctuations in gross fixed capital formation to economic development in Seychelles. Over the past decade, gross fixed capital formation has fluctuated significantly, ending in 2006 at roughly half the level in the year 2000. This reflected changes to demand from the international sector, particularly with regard to the development of tourism infrastructure and has played an important part in the decline in real GDP experienced since the turn of the decade. The volatility in gross fixed capital formation in part reflects significant swings in foreign direct investment flows, which over a decade have fluctuated between -3 per cent to 15 per cent of GDP, as shown in Figure 8.11. Fluctuations in the overall levels of GDP of the three main trading partner countries, namely France, Italy and the United Kingdom, were not pronounced during the period (see

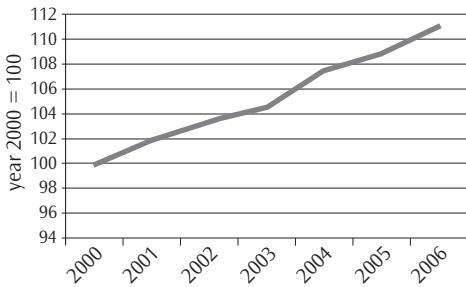
**Figure 8.10. Gross fixed capital formation**



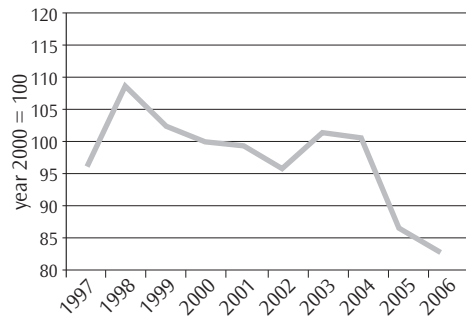
**Figure 8.11. Foreign direct investment**



**Figure 8.12. Average GDP of three main trading partners**



**Figure 8.13. Terms of trade**



Source: World Bank

Figure 8.12) and cannot be identified to have caused the symptoms of vulnerability which Seychelles experienced. Indeed, the latter are probably more due to the commodity concentration in exports and imports and to the share which the latter occupy within total economic activity.

Furthermore, shocks to terms of trade have been significant and strongly adverse in the past decade, with the purchasing power of exports falling from a base of 100 in the year 2000 to 83 by 2006, as shown in Figure 8.13. This reflects the dependence on commodity and price-sensitive tourism exports coupled with the dependence on strategic imports undergoing significant price increases in the international markets.

Thus, it can be concluded that the symptoms of vulnerability which Seychelles has experienced in the past decade are in part due to inherent structural features in the economy including its exposure to international business and commodity concentration, coupled with a strong incidence of shocks to gross fixed capital formation and to the external terms of trade. Countries facing these types of shocks can however be successful in overcoming their effects through appropriate resilience-building policies, the assessment of which is the next element in this profile.

## **A resilience profile of Seychelles**

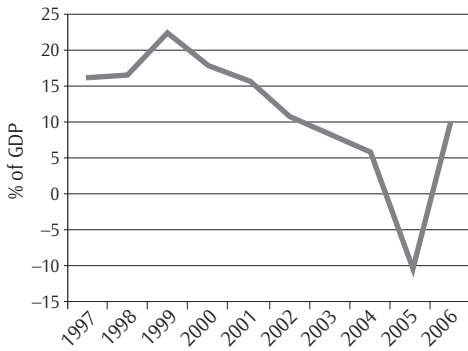
This facet of the profile aims to highlight the strengths and weaknesses within the policy formulation milieu of a country towards the objective of economic resilience building. Economic resilience counteracts the effects of economic vulnerability by increasing the economy's ability to cope with the adverse effects of exogenous shocks. Briguglio et al. (2008) propose an approach which evaluates policy-induced economic resilience based on five dimensions, namely: macro-economic; market efficiency; governance; social development; and environmental management.

### **An assessment of the sources of economic resilience**

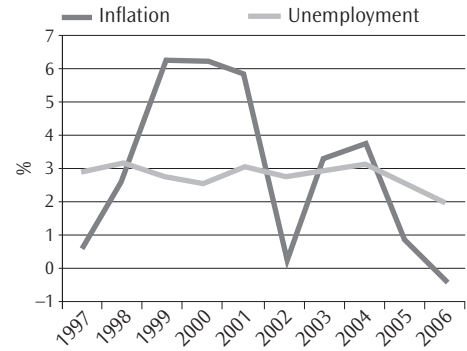
#### **Macro-economic stability**

Figures 8.14 through 8.17 present an analysis of the variables that are considered to proxy the extent to which macro-economic policy is creating conditions that are conducive to the

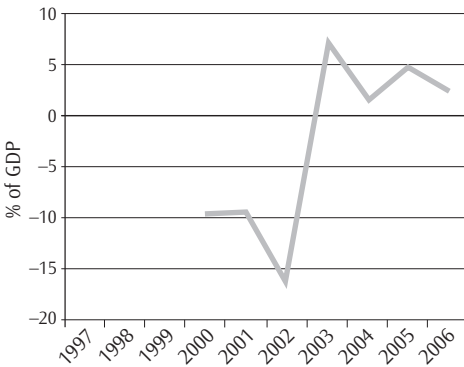
**Figure 8.14. Total saving (investment plus current account balance)**



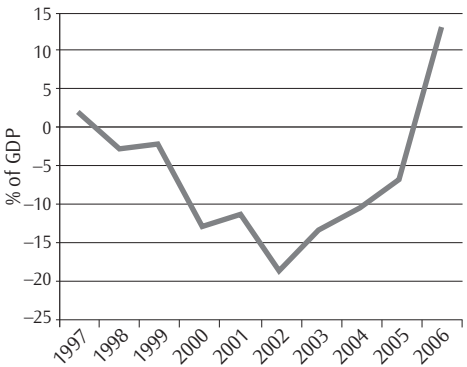
**Figure 8.15. Inflation and unemployment**



**Figure 8.16. Fiscal balance**



**Figure 8.17. Next external assets**



Source: National Statistics Bureau – Seychelles, World Bank

establishment of economic resilience. A fundamental requisite towards economic resilience is for a country to effect sufficient savings to create a buffer against potential shocks. As Figure 8.14 shows, the saving rate of the economy of Seychelles fluctuated around a healthy 20 per cent of GDP between 1997 and 2001, but has since then slumped and it became negative in 2005 before settling at around 10 per cent in 2006. An insufficient level of saving is not sustainable in the medium term and could adversely impact on the economic resilience of the economy of Seychelles.

Developments in inflation and unemployment are shown in Figure 8.15. It is important for these variables to be at low levels so that if adverse shocks should hit the economy, they would not further aggravate a serious situation. Inflation was relatively high albeit declining in the past decade, in spite of price controls and an overvalued exchange rate. As the economy is moving to a more free-market oriented system, short term inflationary pressures can be expected, compounded by developments in import prices. These factors contributed to an inflation rate exceeding 5 per cent in 2007.

The unemployment rate has gone down to a historic low of 1.9 per cent in 2007, mainly in response to a pick-up in economic activity. As Figure 8.15 shows, the unemployment rate tends to fluctuate around low and stable levels, which is, however, mainly an indication

of insufficient supply of labour in the country, where the labour market participation rate out of the entire population is around 55 per cent. This is also evidenced by the significant number of expatriate workers, which amounted to almost 15 per cent of the labour force in 2007.

The fiscal balance moved from a persistent deficit right up to 2002 to consistent surpluses since 2003, as shown in Figure 8.16. This creates an important buffer of fiscal resources through which to meet the potentially adverse effects of shocks. With the economy's total saving being relatively low, however, it may be concluded that fiscal consolidation may not be sufficient in this respect, and further headway needs to be made in order to restore macro-economic balance. Indeed, a primary surplus of at least 5 per cent of GDP is needed in order to be able to meet annual loan servicing commitments. This is expected to be achieved in 2008. It is to be noted that fiscal policy discipline is being instilled, through measures including a cap on borrowing as determined by capital expenditure and the use of privatisation proceeds to reduce public debt.

The net external asset position gives another indication of the availability of buffer reserves from which to meet the effects of adverse shocks. Figure 8.17 shows that the net external asset position of Seychelles was negative right through to 2005, indicating a relatively strong reliance on foreign debt and a marked preference by Seychellois to hold their assets overseas, before moving into surplus in 2006. The volatility in this variable may, however, raise doubts regarding the ability of the economy to safeguard a positive level of net external assets.

### **Market efficiency**

Micro-economic market efficiency is essential for economic resilience as it will contribute to an efficient allocation of resources enabling the economy to better withstand the effects of adverse shocks. There are three components to micro-economic market efficiency relating to: capital mobility, labour market flexibility and product market efficiency.

In terms of capital mobility, Seychelles has a recent history of restraints on domestic financial activity, exchange rate overvaluation and the imposition of exchange controls. These restrictions are recently being gradually lifted, and significantly, the Central Bank is now operating independently of Government as part of the Macro-economic Reform Programme initially launched in 2003. Contributing to the enhancement in the efficiency of capital resources allocation were the initiation of a proactive monetary policy since mid-2006, the enactment of a legislative framework to enable the development of a modern financial system since 2004<sup>10</sup>, and the initiation of a gradual process of exchange control liberalisation in October 2006. These developments are steps in the right direction but call for further progress in this area.

With regards to labour market efficiency, policy structures or directions in this sense are being put in place only very recently, in spite of the chronic shortages in labour supply which resulted in significant inflows of expatriate workers. An employment agency will be set up as a result of the 2008 Budget. The Strategy 2017 is possibly the first concrete approach to an explicit labour market policy in Seychelles, which encompasses a National Human Resources Development Policy which places significant emphasis on multi-skilling. There is, however, no information available regarding the availability of skills in the labour

force which could enable the undertaking of a skills-gap analysis. Higher education opportunities are very constrained in Seychelles, with the setting up of a university as yet being contemplated.

In terms of product market efficiency, it is noted that post-independence<sup>11</sup> economic policy relied substantially on command systems with strong involvement of government in productive activities. In early 1990s, however, the government initiated a process of gradual reform based mainly on the privatisation of state-owned firms, the relaxation of quantitative and tax controls on imports and on product prices, and the abolition of monopolies, with appropriate competition legislation being introduced. In particular, the establishment of the Seychelles Marketing Board in 1984 to control the export and import of goods and, eventually, their prices was a significant disincentive to private sector development. The Board was privatised in 2007. However, controls on mark-ups on a wide variety of products remain, which are resulting in generally higher prices, shortages in some instances and possible wide variations of the same products in different shops with different cost structures. This is a significant drag on the efficient allocation of resources, as it incentivises the maintenance of high cost structures.

The involvement by Seychelles in regional trading arrangements is limited and is contemplated in the Strategy 2017 document. Property rights, including those of an intellectual nature, are generally well-protected in Seychelles.

On the other hand, the Strategy 2017 document details a number of objectives to enhance efficiency in specific areas of activity. In the tourism sector, the actions contemplated include a revision of the marketing strategy by the Seychelles Tourism Board, rationalisation of existing tourism investment legislation, product enhancement, industry service improvement ensuring value for money, product base diversification, improvement in access to Seychelles and between the country's islands and the enhanced management of the tourism sector by restructuring the existing hotel school as a centre of tourism excellence. In the fisheries sector, there is the objective of increasing domestic processing, promoting exports and increasing Seychellois stakeholding in the industry with a long-term objective to turn Seychelles from being a fisheries transshipment hub to the primary seafood processing centre in the Indian Ocean. The Strategy 2017 document also aims at developing financial services into the third pillar of economic activity through the active promotion of available financial services, such as registration of international business companies, mutual and hedge funds, trading in securities and insurance activities.

### **Political governance**

With respect to political governance, Seychelles has a system based on democratic principles. However, the country has been subject to pervasive state interference up to recent years but is now moving towards a stronger private sector involvement in economic affairs. Attempts at social dialogue are sporadic. Within this context, there is growing recognition for the need to further develop notions of government accountability and transparency with the active participation and development of existing institutions, primarily that of the Auditor General. The rule of law, the quality of the judiciary and the impartiality of the Law Courts are sufficient to contribute to effective governance in Seychelles.

## **Social development**

With regard to social development, there are universal welfare programmes for education, health and housing in Seychelles. However, official statistics indicate that around 9 per cent of the population suffered from undernourishment right up to 2004 and 20 per cent live under the poverty line. The distribution of income is becoming more equitable over time, with social development being listed as a main objective of the 2017 document. As observed in the background section of this study, social development in terms of life expectancy and literacy tend to lag behind the state of economic development in Seychelles. In 2005, a pension fund replaced the pension system; this fund covers the workforce population who have worked continuously for ten years or more. It thus does not cover casual workers, who are working part-time, and therefore these workers may have inadequate savings for retirement.

## **Environmental management**

While man-made environmental problems do not appear to impinge to any significant extent in Seychelles, environmental management structures appear to be lacking such that there is the risk that economic development could compromise the sustainability of the environment. Disaster and civil protection management systems also need to be improved in the face of the possible incidence of natural disasters and climate change.

## **Policy implications and conclusions**

### **Resilience strengths**

The principal economic resilience strengths that can be identified from this analysis include:

- efforts at promoting macro-economic stability, as reinforced by the Strategy 2017 document, which, however, have so far not been sufficient to ensure long-term macro-economic equilibrium;
- the liberalisation and modernisation of financial activities and the incipient development of the financial services sector;
- plans to enhance efficiency and the international competitiveness of the main pillars of the economy, namely tourism, fisheries and financial services;
- the maintenance of stable governance structures based on democratic principles and the rule of law;
- the operation of universal welfare programmes aimed at promoting social cohesion.

### **Resilience weaknesses**

The principal economic resilience weaknesses that can be discerned include:

*From the macro-economic perspective:*

- an insufficient level of savings to sustain the significant level of investment needed at the current stage of the country's economic development;

*From a micro-economic perspective:*

- the relatively slow pace of exchange control liberalisation with the persistence of an informal market for foreign currency, possibly hampering confidence in the economy, with savers looking overseas for investment;

- the absence of labour market policy structures and lacunae in higher education;
- the maintenance of margin controls on product prices, leading to overinvoicing and artificially high prices;
- an excessive focus on the key sectors of fishing and tourism, leading to a very high dependence on these sectors, and possibly precluding the development of other potentially innovative areas of economic success for Seychelles, such as those related to ICT;

*From a social perspective:*

- an insufficient involvement in social dialogue and NGO involvement in policy-making;
- the persistence of poverty as evidenced by the percentage of persons who are undernourished;

*From an environmental perspective:*

- inadequate governance structures for environmental management.

The policy implications that emerge from this analysis refer to the need for further reinforcing the resilience strengths while tackling the weaknesses. In general, the Strategy 2017 document (Seychelles, 2007) is conducive towards these aims. Its main lacuna is probably its excessive concentration on the three main pillars of activity which have already been substantially exploited by small island developing states and which leave little room for innovation in the global marketplace. Long-term competitive advantages can only be built through activities which allow for substantial innovation, and nowadays these can be found in the fields of ICT and scientific research. In the case of Seychelles, these can be associated with climate change and environmental management. It is probable that Seychelles can enjoy a comparative advantage in these activities.

The issues being faced by Seychelles may be summarised as:

- the need to promote macro-economic balance;
- the need to accelerate the shift of the economy away from a command style to a free-market driven system;
- the need to develop the sectors in which the economy can enjoy an international competitive advantage.

Other small island developing states, such as Cyprus, Malta and Mauritius have successfully dealt with these issues in recent years and nowadays enjoy a substantial degree of economic resilience. It is probably useful for Seychelles to closely follow instances of best practice from other small island developing states in order to devise solutions that are most suited to its current and future development needs.

## Notes

- 1 This report was prepared for the Commonwealth Secretariat by Lino Briguglio, Gordon Cordina, Nadia Farrugia and Stephanie Vella, University of Malta. It was completed on 28 July 2008.
- 2 The conceptual framework for country profiling of economic vulnerability and resilience was developed in Briguglio et al. (2008).

- 3 The conference entitled 'Profiling Economic Vulnerability and Economic Resilience in Small States: The Case of the Seychelles' was held on 25–26 June 2008 at the Maison de Football, Mahe, Seychelles.
- 4 Member countries of the IMF voluntarily elect to participate in the GDDS. The GDDS framework is built around four dimensions - data characteristics, quality, access, and integrity. It is intended to provide guidance for macro-economic, financial, and social data.  
<http://dsbb.imf.org/Applications/web/getpage/?pagename=gddswhatgdds>
- 5 Including the Commonwealth, United Nations, IMF, World Bank, African Development Bank and COMESA.
- 6 Seychelles rupee, which is managed with a target rate of 8 rupees to 1 US dollar.
- 7 [http://hdrstats.undp.org/en/countries/country\\_fact\\_sheets/cty\\_fs\\_SYC.html](http://hdrstats.undp.org/en/countries/country_fact_sheets/cty_fs_SYC.html) accessed on 14 July 2008.
- 8 A complete and final dataset for the purposes of this analysis is available up to 2006. Reference to provisional data for 2007 is made, where relevant.
- 9 For example, the terrorist attacks of September 11, 2001 affected tourism world-wide.
- 10 Including the Central Bank Act, 2004; Financial Institutions Act, 2004; Anti-Money Laundering Act, 2006; and the Investment Code, 2005.
- 11 Seychelles gained independence in 1976.

# Vanuatu: A profile of economic vulnerability and economic resilience<sup>1</sup>

## Introduction

### Definitions

This report presents a profile of Vanuatu's economic vulnerability and economic resilience. Economic vulnerability is defined as the exposure of an economy to harmful external economic shocks that are outside the economy's control, typically resulting from high degrees of economic openness and dependence on a narrow range of exports. Economic resilience is the policy-induced ability of an economy to withstand and rebound from the negative effects of such shocks. In this report, such resilience is associated with macro-economic stability, market efficiency, good political governance, social development and good environmental management, as explained in Briguglio et al. (2006, 2009). Economic vulnerability and insufficient resilience typically lead to a slower and more volatile pattern of economic development (Cordina 2004a, 2004b).

### Aim of the profiling exercise

This profile attempts to identify the sources of inherent economic vulnerability and to identify gaps in policy-induced resilience in Vanuatu. It also proposes policy orientations aimed at economic resilience building. The treatment of specific issues of vulnerability and resilience in this report is at a high and strategic level, which could be eventually followed by further in-depth and specific studies.

### Data issues

The conceptual framework for building an economy's vulnerability and resilience profile requires an array of quantitative and qualitative information<sup>2</sup>. The information used in this report was compiled through:

- available statistical sources from domestic sources, mostly the Vanuatu National Statistics Office and the Reserve Bank of Vanuatu<sup>3</sup>, and from International Databases, mostly those provided by International Monetary Fund and the World Bank;
- presentations delivered during a two-day country consultation conference organised for the purposes of compiling this report<sup>4</sup>;
- a key-stakeholder survey undertaken by means of a detailed questionnaire on the

four aspects of economic resilience, namely macro-economic stability, market efficiency, governance and social and environmental concerns.

The key-stakeholder survey and the country conference yielded a significant amount of qualitative information regarding the sources of vulnerability and resilience of Vanuatu, which complemented the statistical data.

## Country background

Formerly known as the New Hebrides, Vanuatu is a group of islands in the South Pacific Ocean. They were colonised by the British and French in the nineteenth century, and this led to an Anglo-French condominium as from 1906. This lasted until political independence in 1980, when the new name of Vanuatu was adopted.

Vanuatu consists of more than 80 islands, about 65 of which are inhabited, with a total land area of about 12 thousand square kilometers. The islands have a tropical climate, and are mostly mountainous of volcanic origin. Their major natural resources are manganese, hardwood and fish. The islands are prone to natural hazards including tropical cyclones, volcanic eruptions and earthquakes.

The country has a stable democracy and is a member of various international and regional organisations<sup>5</sup>. Its economic development process is subject to the challenges usually faced by small island developing states (SIDS) including resource limitations, peripherality from major markets and difficulties associated with international transport, geographical territorial dispersion including multiple insularity, limited ability to exploit economies of scale and to diversify the economy, and vulnerability to external economic shocks and environmental impacts.

Table 9.1 details a number of key economic and social indicators for Vanuatu. The country had a per capita GDP of approximately US\$2,000 in 2007, which the World Bank classifies as an lower middle-income country. Economic growth continued at a satisfactory pace between 2004 and 2008, with an average growth rate of 6 per cent in real GDP, sustained mainly by tourism activities<sup>6</sup> and aid inflows. Inflation was not unduly high at about 3 per cent between 2007 and 2008 although there was a tendency for prices to increase between 2008 and 2009, particularly due to increases in the price of food and foodstuffs. The exchange rate of the national currency, the vatu, is pegged to an undisclosed basket of currencies. Although the vatu depreciated against the US dollar between 2004 and 2008, the real effective exchange rate remained relatively stable (IMF, 2009) during the same period, suggesting that the country has maintained roughly a constant level of external competitiveness during that period. Vanuatu does not impose exchange control and capital in any currency is allowed to enter and leave the country freely.

**Table 9.1. Vanuatu: Key indicators**

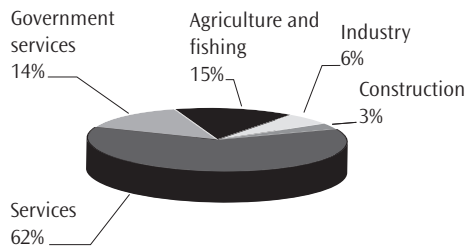
Variable	Level	Period	Source
GDP – total (vatu million)	51677	2007	Vanuatu National Statistics Office
GDP per capita (vatu)	227,206	2007	Vanuatu National Statistics Office
GDP per capita (US\$)	2000 (approx)	2007	UNCTAD Handbook of Statistics (2008)
Country Rank of GDP per capita \$PPP	120 of 179	2006	UNDP Human Development Report (2008)
Average growth rate in real GDP	6%	2003–2007	Vanuatu National Statistics Office
Inflation rate (period average)	2.3%	2003–2007	Vanuatu National Statistics Office
Life expectancy at birth (years)	69.6	2006	UNDP Human Development Report (2008)
Infant mortality (per thousand)	50.8	2008	CIA World Factbook (2009)
Adult Literacy rate	77.3	1999–2006	UNDP Human Development Report (2008)
Gross enrollment in education (all levels)	62.3%	2006	UNDP Human Development Report (2008)
Country Rank on the HDI	123 of 179	2006	UNDP Human Development Report (2008)

## Economic structure and employment

Figure 9.1 shows the economic structure of Vanuatu's GDP. It can be seen that the agricultural sector contributes about 15 per cent to the economy. Industry contributes only about 6 per cent. Non-government services contribute about 62 per cent to the economy, of which about 40 per cent are associated with tourism.

Employment statistics are deficient in Vanuatu<sup>7</sup>. According to a 2000 census, the number of persons employed in 1999 amounted to just over 75,000, giving rise to an employment rate of 77 per cent (as a percentage of the working age population), with the bulk of employment being in subsistence activities. The unemployment rate in the same year was 1.7 per cent with the urban unemployment rate being much higher at 6.6 per cent.

**Figure 9.1. The structure of the Vanuatu economy**



## Government finance

In 2008 Vanuatu registered a budget surplus of about 2.5 per cent of GDP, aided by an increase in tax revenues. A major problem in public finances is that a sizeable proportion of such spending is on non-productive activities, including compensation for employment.

It is expected that the 2009 budget will not register a surplus due to the slowdown in the economy.

The public debt-to-GDP ratio has tended to go down between 2004 and 2008, from about 34 per cent to about 17 per cent. The IMF (2009) considers the public debt of Vanuatu to be sustainable and manageable, although debt is vulnerable to GDP shocks, to which Vanuatu is exposed given its high dependence on tourism and export of commodities

From the perspective of social development, Vanuatu had a life expectancy at birth of just under 70 years, an infant mortality rate of about 50 per thousand, and an adult literacy rate of about 77 per cent. The Human Development Report (UNDP, 2009) ranks Vanuatu in the 120th place in terms of social development variables (namely income per capita, education and health) from a list of 177 countries.

Vanuatu has so far not been strongly affected by the financial turmoil of 2008 and 2009, but given its high dependence on tourism, and its close trade and investment relation with Australia and New Zealand, it may yet be affected and there were indications of a slower growth rate in 2009 than was the case in previous years.

## **A vulnerability profile of Vanuatu**

Briguglio et al. (2008) proposed a methodology to derive an economic vulnerability/resilience profile based on three facets, namely, an assessment of the extent of symptoms of economic vulnerability, an analysis of the causes of vulnerability and a study of the sources of economic resilience which would enable the derivation of a policy gap analysis. This section of the report utilises the variable list template developed within this conceptual framework in order to derive an economic vulnerability and resilience profile for Vanuatu.

## **An assessment of the manifestations of economic vulnerability**

Economic vulnerability manifests itself in volatility of certain variables over time, including GDP; consumption; imports; exports; exchange rates and prices.

### **GDP and exports fluctuations**

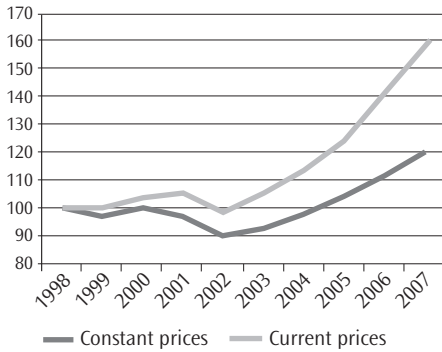
During the decade to 2007, Vanuatu experienced a decrease in real GDP between 1998 and 2002, after which year real GDP grew at a healthy rate of about 4 per cent per annum (see Figure 9.2). Similar trends emerge from an analysis of exports of goods and services, as shown in Figure 9.3.

In the case of exports, Vanuatu's high dependence on exports of primary commodities and on tourism has had a marked affect on export earnings. These two categories of exports experienced considerable fluctuations during the period under consideration, as shown in Figures 9.4 and 9.5.

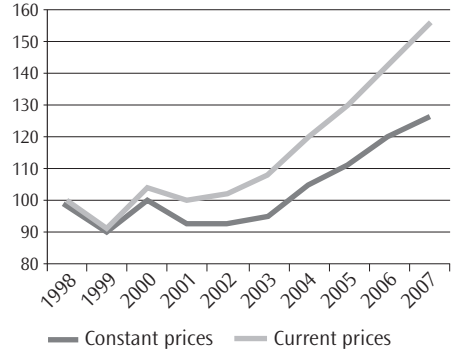
### **Exchange rates**

While Briguglio et al. (2008) propose the consideration of the real and nominal effective exchange rates indexes as a measure of volatility to prices, these variables are not considered to be relevant in the analysis of the economy of Vanuatu, owing to the fact that the exchange rate was in recent years managed by an undisclosed basket of currency.

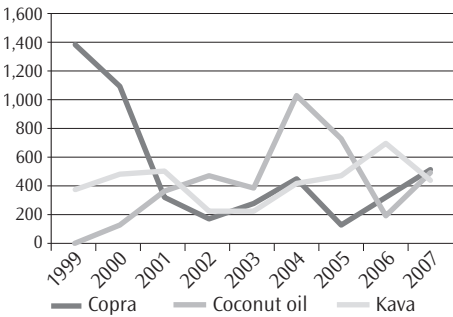
**Figure 9.2. Developments in GDP**



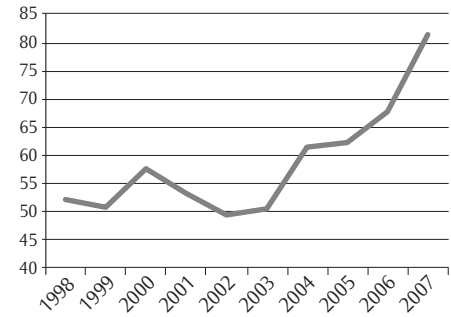
**Figure 9.3. Developments in exports**



**Figure 9.4. Receipts from exported commodities (million vatu)**



**Figure 9.5. Number of visitors '000**

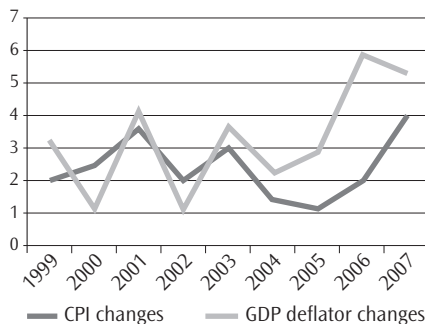


Source: Vanuatu National Statistics Office

**Prices**

Additional symptoms of economic vulnerability may also be assessed through developments in prices, measured by the GDP deflator and the Consumer Price Index, as shown in Figure 9.6. Prices fluctuated around 2.5 per cent per annum during the decade up to 2007, with a tendency to increase further in 2006. The fluctuations in consumer prices may reflect inherent vulnerability, notably because of relatively high dependence on imports of food and fuel, while changes in the GDP deflator may be highly affected by exports, notably tourism and primary commodities. Price changes may also be influenced by economic policies, such as monetary policy.

**Figure 9.6. Annual % changes in prices**



Source: Vanuatu National Statistics Office

## Balance of Payments

Between 2001 and 2007, Vanuatu experienced a consistently negative and volatile performance on its external current account, as shown in Figure 9.7. Again, this indicates a high degree of susceptibility to external economic conditions.

## Investment

The volatility in gross fixed capital formation (Figure 9.8) in part reflects significant swings in foreign direct investment flows, which over a decade have fluctuated between 4 per cent to 10 per cent of GDP, as shown in Figure 9.9. As can be seen from Figure 9.10, there were also fluctuations in domestic savings, which could also have given rise to investment fluctuations.

From the foregoing analysis, therefore, it emerges that Vanuatu experienced considerable fluctuation in key economic variables.

## An assessment of the causes of economic vulnerability

In order to develop the economic vulnerability profile, the features of the economy which gave rise to the vulnerability effects described in the previous section need to be explored.

This facet of the profile relates to the underlying causes of vulnerability and is aimed at assessing the inherent fundamental conditions which may render a country vulnerable to exogenous shocks. In the conceptual framework developed in this regard, Briguglio et al. (2008) ascribe the associate economic vulnerability with openness to international trade, the concentration of exports and high degree of dependence on strategic imports.

Figure 9.7. Current account balance

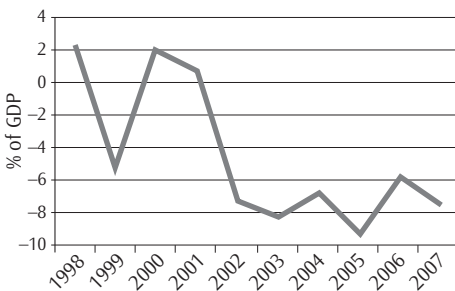


Figure 9.8. Gross fixed capital formation

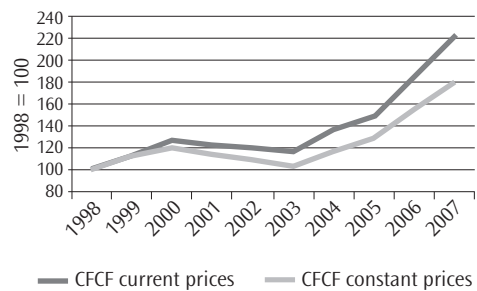


Figure 9.9. Foreign direct investment

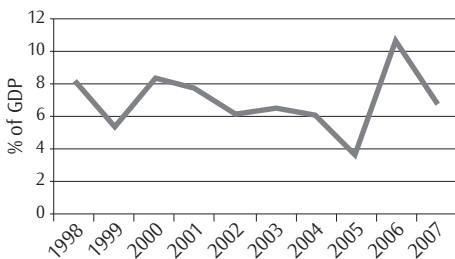
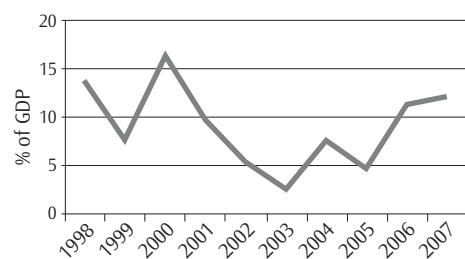
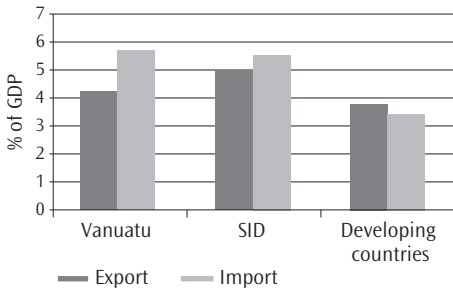


Figure 9.10. Savings

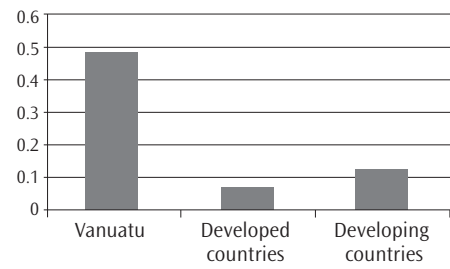


Source: Vanuatu National Statistics Office

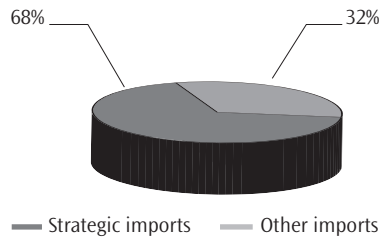
**Figure 9.11. Trade openness**



**Figure 9.12. Merchandise exports concentration index**



**Figure 9.13. Composition of imports of merchandise**



Source: UNCTAD (2008). Data are averages 1997–2007

Figures 9.11 through 9.13 provide information on variables which proxy the exposure of Vanuatu to exogenous shocks.

Figure 9.11 shows that Vanuatu has a very open economy, in that both imports and exports are substantial when compared to the country's GDP. This is an indication that the economy is strongly influenced by developments in international markets. The degree of trade openness of Vanuatu is much higher than that of larger developing countries. This feature is common among small island developing states as can be seen from Figure 9.11.

The risk of being affected by external shocks is even greater when the high degree of export concentration is taken into account. Vanuatu has a relatively high concentration index with regard to merchandise, as shown in Figure 9.12. With regard to exports of services, Vanuatu is highly dependent on tourism, again contributing to export concentration. This entails that shocks in the exports of commodities and tourism, two main export revenue sources for Vanuatu, are bound to have profound effects on the economy. As already argued, both forms of exports tend to be volatile in terms of demand.

On the import side, Figure 9.13 shows that about 32 per cent of imports are made up of fuel and food – strategic commodities which are classed as necessities. This leaves the economy exposed to shocks in the international supply of these commodities, typically affecting their prices.

## A resilience profile of Vanuatu

This facet of the profile aims to highlight the strengths and weaknesses within the policy formulation milieu of a country towards the objective of economic resilience building. Economic resilience counteracts the effects of economic vulnerability by increasing the economy's ability to cope with the adverse effects of exogenous shocks. Briguglio et al. (2008) propose an approach which evaluates policy-induced economic resilience based on five dimensions namely: macro-economic; market efficiency; governance; social development; and environmental management.

### Macro-economic stability

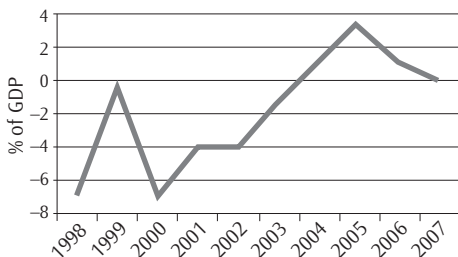
Figures 9.14 to 9.16 present an analysis of the variables that are considered to proxy the extent to which macro-economic policy is creating conditions that are conducive to economic resilience.

#### Fiscal balance

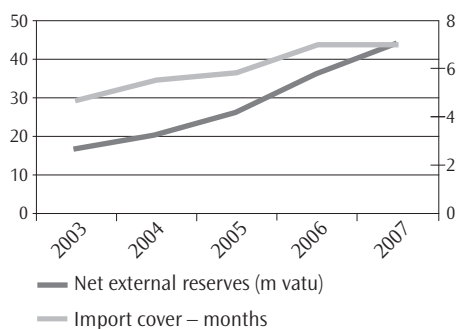
Briguglio et al. (2006) regard the government budget position as a suitable indicator of economic resilience. This is because a healthy fiscal position would allow adjustments to taxation and expenditure policies in the face of adverse shocks. It can be seen from Figure 9.14 that on average, between 1998 and 2003, there were fiscal deficits averaging 4 per cent of GDP per annum. After that year, government revenue tended to exceed government expenditure, registering an average surplus of about 1.2 per cent of GDP annually between 2004 and 2007. This indicates that as far as public finance are concerned, the government has room for manoeuvre to meet the potentially adverse effects of shocks.

The government has undertaken fiscal reforms which proved to be successful. However, a deeper analysis of government revenue would reveal a very narrow tax base. Another weakness is that in the case of expenditure, the wage bill takes a very high percentage. Further fiscal reforms are therefore necessary to widen the tax base and to reduce un-productive expenditures.

**Figure 9.14. Fiscal balance as a percentage of GDP**

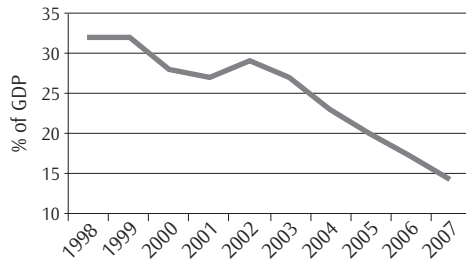


**Figure 9.15. External reserves and import coverage**



Source: Vanuatu National Statistics Office

**Figure 9.16. External debt as percentage of GDP**



### **External assets**

The net external asset position gives another indication of the availability of buffer reserves from which to meet the effects of adverse shocks. Figure 9.15 shows that the net external asset position of Vanuatu was satisfactory in terms of import cover and tended to increase during the period under consideration. One positive outcome of this tendency is that it has permitted Vanuatu not to rely excessively on foreign debt.

### **Debt**

The extent of debt is also an important consideration in this regard. The external debt-to-GDP is considered by Briguglio et al. (2008) to be related to resilience, because a country with a high level of external debt may find it more difficult to mobilise resources in order to offset the effects of external shocks.

Thus, this variable would indicate resilience of a shock-counteracting nature. In the case of Vanuatu, this ratio does not seem to be excessively high, as shown in Figure 9.16.

### **Savings**

A fundamental requisite towards economic resilience is the generation of sufficient savings to create a buffer against potential shocks. As Figure 9.10 shows, the saving rate of the economy of Vanuatu fluctuated around a 10 per cent of GDP between 1998 and 2007. It has been considerably lower than that between 2001 and 2005, but has increased since then, reaching 12 per cent in 2007.

### **Price inflation**

Briguglio et al. (2008) consider price inflation and unemployment (which combined together are known as the 'misery index') as suitable indicators of resilience. This is because price inflation and unemployment are strongly influenced by other types of economic policy, including monetary and supply-side policies. They are associated with resilience because, if an economy already has high levels of unemployment and inflation, it is likely that adverse shocks would impose high social costs of adjustment. If, on the other hand, the economy has low levels of inflation and unemployment, then it can withstand adverse shocks to these variables without excessive welfare costs.

Figure 9.6 shows that inflation, as measured by the Consumer Price Index was relatively low during the period under consideration, averaging 2.4 per cent, although it has exhibited a marked tendency to increase in 2007. It would have been useful to complement the inflation index with an index of unemployment, but this is not available for Vanuatu. It appears that the labour market of Vanuatu was relatively tight during the period under

consideration in some sectors of the economy, although there might be underemployment in the agricultural sector. As the economy is moving to a more free-market oriented system, short-term inflationary pressures can be expected to occur, compounded by developments in import prices. It is interesting to note that the monetary policy conducted by the Reserve Bank of Vanuatu, through amongst other things open-market operation, was successful in mopping up excess liquidity in the banking system, thereby indirectly helping to contain inflation. In addition, the exchange rate policy in Vanuatu operated in such a way as to reduce some impact of inflation from abroad (IMF, 2009).

## Micro-economic market efficiency<sup>8</sup>

Market efficiency is an essential element of economic resilience as it contributes to the speedy reallocation of resources following the impacts of external economic shocks. Briguglio et al. (2008) suggest that three major market segments have to be considered in this regard, namely, the product market, the capital market and the labour market.

### **The Financial Market**

Vanuatu's financial market is relatively small with most of the financial institutions located mainly in the two major urban centres, Port Vila and Luganville. The institutional set-up includes the Reserve Bank of Vanuatu (RBV), commercial banks, other formal financial institutions, and semi-formal institutions. The role of the RBV includes promotion of monetary stability, supervision and regulation of banking business and the fostering of financial conditions conducive to the orderly and balanced economic growth of Vanuatu.

The application of financial market controls is very limited in the domestic financial sector, as the stance adopted by the monetary authority is that the financial market would operate more efficiently and effectively without direct controls. There are no exchange controls in Vanuatu, however, the Reserve Bank of Vanuatu imposes a minimum dealing amount per importer. Interest rate controls are not generally applied, although interest rate cap on wholesale deposit of 8 per cent has been imposed recently.

The OECD designated Vanuatu as an unco-operative tax haven in April 2002. However, Vanuatu managed to stay off the Financial Action Task Force list of unco-operative countries on money laundering after introducing 'know-your-customer' guidelines in mid-2002.

The overall financial regulatory framework in Vanuatu is satisfactory. However, there are some constraints, including lack of accurate and updated information on procedures, discretionary requirements of documents, repetitive due diligence exercises, difficulties in finding dispute-free property, shortage of skilled labour leading to high labour costs, restrictive immigration rules, high export/import and utility costs, and inadequacies in the implementation of existing legislation.

To improve the investment climate and increase private sector activity, there is a need for further reforms to streamline regulatory and administrative processes and foster investment policy and promotion. There is also the need to improve Vanuatu's performance with regard to the ease of doing business.

### **The Labour Market**

The workings of the labour market depend on a number of variables including unemployment benefits (which could undermine the incentive to accept employment), dismissal regulations, minimum wage impositions, centralised wage setting, extensions of union contracts to non-participating parties and conscription. All these are viewed as possibly precluding work effort, thereby limiting the ability of a country to recover from adverse shocks. A country would have a higher market efficiency performance if it allowed market forces to determine wages and establish conditions of dismissal as much as possible.

The labour force in Vanuatu is composed of three segments, namely subsistence, non-formal and formal. Non-subsistence economic activities are mainly concentrated on service industries including retailing, tourism, transport and government services, including health and education. The formal segment relates to businesses which have a legal standing. On the other hand, the non-formal segment relates to businesses that are not VAT-registered and operate on a small scale, with limited or no financial accounting. The subsistence segment, which is relatively large in Vanuatu, relates to workers who operate in the rural areas and produce their own food and other goods needed for daily living. In this segment, little or no job protection exists. This reality renders it difficult to have precise figures of unemployment in Vanuatu and the tightness or otherwise of the labour market. However, it is likely that the labour market is somewhat tight.

In Vanuatu, the Employment Act (1983) is the principal law governing the terms and conditions of employment. There are attempts to improve labour mobility and in April 2007, Vanuatu launched the first labour mobility programmes with New Zealand's Department of Labour. The Department of Labour and Employment Services is currently implementing the ILO Youth Programme entitled 'Education, Employability and Decent Work for Youth in Pacific Island Countries'. The programme of activities include entrepreneurship, business development and skills training and building of tri-partite partnership.

Vanuatu imposes a minimum wage, and this could introduce market rigidities if it is set on the high side, as this would render businesses non-competitive, leading more workers to seek work in the informal sector.

According to ESCAP (2008), there are other rigidities in the labour market of Vanuatu hindering overall employment and productivity growth, principally related to market rigidities. ESCAP proposes greater flexibility in the labour market to render it more efficient but admits that such reform will not be easy and will require considerable political will to put it into effect.

In addition, labour market statistics are not well developed, and this hinders timely and informed action relating to labour market reform.

### **The Product Market**

Briguglio et al. (2006) argue that state interference in business activities could inhibit market efficiency. Such interference often leads to high cost of doing business and protection of inefficient producers, thereby possibly inhibiting efficient firms from entering

the market and making it possible for lame ducks to remain in operation. This discourages entrepreneurial activity, and as a result works against a resilient economy.

In general, Vanuatu does not fare too well in terms of product market efficiency as there are various factors that have negative effects in this regard including:

- opening up a new business in Vanuatu is a somewhat lengthy process and start-up costs are relatively high;
- bankruptcy proceedings are relatively time-consuming and costly;
- state participation in marketing boards for agriculture exports often creates market distortions;
- there are very few retailers in the product market, which is dominated by Au Bon Marché and Wilco hardware, resulting in lack of competitive pricing;
- wharf costs are among the highest in the Pacific region;
- Competition and consumer protection laws are not enacted in Vanuatu.

Government currently has an open market for telecommunications. The objective is to operate telecommunications through a market-driven environment. In December 2007, the Telecommunications Act was amended giving the Minister power to delegate responsibilities except for the issue of licences. As a result private service providers entered the market and prices have gone down. However, internet charges are still relatively high, probably due to lack of competition in this sector, although at the time of completing this report (September 2009) there were plans to issue new licences to additional internet providers.

Competition was also introduced in air travel. Vanuatu opened its air transport market to international airlines, ushering in competition, with the result that air fares became significantly lower, thereby encouraging tourism. A side-effect of this is that there is more awareness of improved efficiency in Air Vanuatu so as to reduce the drain on government funds and to enable the company to compete better. A pocket of monopoly in the aviation sector relates to the airports where charges remain relatively high.

## Political governance

Briguglio et al. (2006) argue that good governance is essential for an economic system to function properly and hence to be resilient in the face of external shocks. Governance relates to issues such as rule of law and the security of property rights. Without mechanisms of this kind in place, it would be relatively easy for adverse shocks to result in economic and social chaos and unrest. Hence, the effects of vulnerability would be exacerbated. On the other hand, good governance can strengthen an economy's resilience.

An explanation as to why the good governance component has been included alongside a market efficiency component is warranted at this juncture. The market efficiency component emphasises the importance of freely and properly operating markets for allocative efficiency and, hence, relates to the ability of an economy to reallocate resources quickly and effectively following an economic shock. This fundamentally neo-liberal approach, which has been questioned recently as a result of the market failures associated with the financial turmoil, is here balanced by an emphasis on the need for appropriate oversight by the government.

In general, Vanuatu is well governed when compared with other Pacific Island Countries (USP, 2008). For example, the Courts have generally maintained their impartiality and independence, and the rule of law is upheld in the country.

There are however various areas of governance which could be improved, including the following:

- With regard to transparency, several past, ongoing and recent instances have called government's action into question, as evidenced in some Ombudsman's Reports.
- Another weakness relates to corruption<sup>9</sup>, mostly as a result of the influence by politicians in economic activity, leading to political patronage.
- There is a lack of clear demarcation between traditional authority (the chiefly and bigman system) and the elected government. Regarding freedom of expression, there is no law or government policy prohibiting such freedom, but in practice there have been criticisms of what seems to be perceived inhibitions on this freedom.
- With regard to the integrity of the political system, the most significant problem is that MPs often switch sides, thus bringing the system into disrepute.

However, the situation has been improving over the years, and a number of governance indices, including the Kaufman Governance Index, the Freedom of the World Index and the Corruption Perception Index, indicate that the governance situation in Vanuatu is improving. Similar remarks are also made in the Good Governance Indicators for Seven Pacific Island Countries compiled by the University of the South Pacific.

## Social development

According to Briguglio et al. (2006) social development is another essential component of economic resilience. This variable indicates the extent to which relations within a society are properly developed, enabling an effective functioning of the economic apparatus without the hindrance of civil unrest. Social development can also indicate the extent to which effective social dialogue takes place in an economy, which, in turn, would enable collaborative approaches towards the undertaking of corrective measures in the face of adverse shocks.

Although social development per se is difficult to measure, several proxy variables have been proposed. Briguglio et al. (2006) used indices of education and health for this purpose. The Human Development Index (UNDP, 2007: Indicators, Table 2), which is a composite index of income per capita, health and education, indicates that Vanuatu, compared to other states, including small Pacific countries, registers relatively low scores in education and health.

### Education

In 2006, the adult literacy rate in Vanuatu was 77 per cent of the population aged 15 and over (UNDP, 2007), while school enrolment at all levels was 62.3 per cent. These are national averages, but in the rural areas the scores are likely to be much lower. For example, adult literacy rates could be as low as 30 per cent in the rural areas and outer islands and secondary school enrolment as low as 25 per cent in some areas (UNESCO, 2008). One reason for this is that primary and secondary education are not free of charge (although

this is set to change in 2010), while another is that children living in remote rural areas find it difficult to travel to school. In addition, these averages hide gender differences, as literacy and school enrolment are generally higher for males.

### **Health**

Health indices often relate to life expectancy (as in the HDI) or to health facilities (such as number of hospitals or hospital beds in relation to the population) or health personnel (such as the number of doctors in relation to the population). If we use life expectancy at birth as an indicator of health, this was 69.6 years according to the Human Development Index for 2006 (UNDP, 2007: Indicators, Table 9.2), about the average life expectancy world-wide. Again, here there are likely to be marked differences between the urban and rural areas.

Although precise health statistics could not be obtained, it appears that Vanuatu's health system lacks sufficient qualified staff, and there is lack of clean water supply and sanitation facilities in rural areas, leading to water-borne and skin diseases.

### **Poverty**

Regarding poverty, going by the Human Poverty Index (HPI-1), Vanuatu ranks 83rd among 135 developing countries for which the index has been calculated (UNDP, 2007: Indicators, Table 3).

According to the Asian Development Bank (ADB, 2002), the poverty level in Vanuatu had, at the turn of the century, not reached the level where it could be considered a threat to society, however, about half the population in rural areas had incomes below the International Poverty Line (defined by the World Bank as US\$1.25 per day at 2005 prices, although this definition has been disputed).

Matters have improved since then, as the economy grew at a very fast pace, but growth has largely impacted the urban areas. The major problems regarding social development in Vanuatu occur in the rural areas and it is therefore important that the government steps up investment in physical and human resources in education and health in the rural areas. Government investment, possibly supported by donors, could also be aimed at enhancing family support and participation in the education system. The recent agreement between the Government of Vanuatu and the Asian Development Bank regarding a new strategic partnership aimed at reducing poverty, especially in the rural areas (ADB, 2009), is therefore a step in the right direction.

## **Environmental management**

Briguglio et al. (2006), in associating environmental management with economic resilience, argue that inherent environmental vulnerabilities, such as proneness to natural disasters, give rise to economic shocks, and environmental management enhances the ability of an economy to withstand or bounce back from such shocks.

### **Natural Disasters**

Vanuatu experienced various natural disasters in recent decades, caused mostly by cyclones and earthquakes (see Table 9.2). Nothing much can be done to prevent these events from

**Table 9.2. Top 10 natural disasters in Vanuatu for the period 1950 to 2009**

Number of people killed			Number of people affected		
Disaster	Date	Number	Disaster	Date	Number
Storm	24 Dec 1951	100	Storm	16 Jan 1985	117,500
Earthquake	21 Apr 1997	100	Storm	25 Feb 2004	54,008
Storm	7 Feb 1987	48	Storm	7 Feb 1987	48,000
Storm	8 May 1999	32	Earthquake	27 Nov 1999	14,100
Earthquake	27 Nov 1999	12	Storm	30 Mar 1993	12,005
Storm	16 Jan 1985	9	Volcano	Dec 2008	9,000
Storm	2 Feb 1972	4	Volcano	27 Nov 2005	5,000
Storm	30 Mar 1993	4	Storm	11 Jan 1988	4,700
Storm	9 Jan 1992	2	Volcano	8 Jun 2001	4,500
Storm	25 Feb 2004	2	Flood	21 Dec 2002	3,001

Source: Em-dat database (<http://www.em-dat.net>)

happening, but early warning systems and disaster management can mitigate their effects. In Vanuatu, measures aimed at reducing the risk of death and damage from a natural events are not sufficiently developed and funded. This may be creating moral hazard against risk reduction (GFDR, 2009) as the government may be relying too much on donor support to provide disaster relief after the event takes place (World Bank, 2006).

### **Man-made environmental problems**

Like many other small island states, Vanuatu faces various man-made environmental problems associated mostly with solid and liquid waste generation and pollution. Also, being an archipelagic country, coastal zone management and potential sea-level rise pose major environmental challenges.

Although environmental impact assessments must be undertaken for all major development projects, land-use planning both in urban and rural areas is deficient and environmental malpractices are common.

Another major environmental threat in Vanuatu relates to biodiversity loss as a result of a number of introduced species of plants and animals, and also human intrusion in previously undisturbed areas.

These man-made environmental problems are set to become more intense as the population density increases and the economy continues to develop.

Although various policy and strategy documents have been developed, according to ADB, there is 'lack of political commitment to the environment, as evidenced by a tiny allocation of the national budget to environmental issues and widespread evasion or abuse of the carefully crafted laws' (ADB, 2007).

A recent positive development is that the Vanuatu Environment Unit, which was described as practically defunct in ADP (2007), is to be upgraded to a government Department of Environment and Conservation.

Vanuatu has ratified or acceded to a number of international instruments relating to the environment including the UN Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol, the International Convention for the Prevention of Pollution from ships (MARPOL), the UN Convention on the Law of the Sea, the Convention on Biological Diversity, the Convention on International Trade in Endangered Species of Wild Fauna and Flora, and the Basel Convention on the Transboundary Movement of Hazardous Wastes and their Disposal.

## **Policy implications and conclusions**

### **Resilience strengths**

The principal economic resilience strengths that can be identified from this analysis include:

- efforts by the government to introduce economic reforms so as to promote macro-economic stability in international competitiveness;
- strong fiscal position, enabling the authorities to use fiscal measures in response to external shocks;
- sound exchange rate policies leading to stability in the Real Effective Exchange Rates;
- prudent monetary policy aimed mostly at containing inflation and to manage inflation expectations;
- attempts to reduce disparities between urban and rural areas in the social sphere;
- effort by the government to improve the workings of the market, by liberalising telecommunications and air transport services. The decision to adopt the so-called 'open-sky policy' brought about a rapid increase in tourist inflows and introduced healthy competition in travel industry;
- Overall improvements in governance and respect for the rule of law.

### **Resilience weaknesses**

The principal economic resilience weaknesses that can be discerned from this analysis include:

*From the macro-economic perspective:*

- the private sector is not sufficiently developed;
- the cost of doing business is relatively high, partly due to bureaucratic state induced costs and inefficiencies at the wharves;
- there are constraints arising from underdeveloped business infrastructure, road transport networks, etc. which are creating additional costs to business;
- business start-ups face bureaucratic delays;
- although tourism has been a boon to the economy and offered employment opportunities to a large proportion of the population, care should be taken not to have too many eggs in one basket;

*From a micro-economic perspective:*

- there is interference by the government in price setting and this can lead to market distortions, inhibiting the market from giving the right signal;

- there is an absence of competition and consumer legislation – its introduction should enhance market efficiency;
- lack of data on unemployment hinders policy stances to be based on appropriate information;
- although telecommunications have been open to competition, there is still room for further improvement, particularly by further opening the market in internet service provision;

*From a social perspective:*

- poverty and lack of education are major problems in the rural areas;

*From a governance perspective:*

- there are major inefficiencies in public enterprises;
- although public finances are generally soundly managed, the tax base is still very narrow and the share of the wage bill is very high;
- there is inadequate service delivery (particularly in education and health) especially in the rural areas;
- there is still a relatively high degree of perceived government corruption;

*From an environmental perspective:*

- disaster management is not sufficiently developed, and there is too much reliance on donors when a disaster occurs;
- there are inadequate management structures in various environmental areas.

*Policy implications:*

Various policy implications can be derived from this study. What follows are suggestions to maximise the strengths and minimise the weaknesses just described.

In the area of macro-economics, the structural reforms undertaken by the Government of Vanuatu, as identified in the document 'Priorities and Action Agenda' (Vanuatu, 2006) (hereafter referred to as PAA) and other policy documents, are, in general, steps in the right direction, as they promote macro-economic stability and enhance competitiveness. However, further reform is necessary to widen encourage private sector development, to simplify procedures for business start-ups, improve efficiency in wharf services, and upgrade the infrastructure, notably land transport.

In order to improve the investment climate and increase private sector activity, it is necessary to improve coherence in the regulatory and administrative processes, and to put in place schemes that attract foreign direct investment, particularly by simplifying procedures and reducing bureaucratic delays.

In the area of market efficiency, it is important to continue the process of shifting the economy away from a command-and-control style to a free-market driven system. The interference by the government in price setting should be minimised and price signals should be allowed to determine demand and supply in the product market. Competition law and policy should be introduced and enforced to reduce abuse of dominant positions and collusion, and to enable the market to operate more efficiently. Employment and unemployment statistics should be improved, possibly by conducting quarterly labour

market surveys. This would permit policy stances to be timely and based on informed decisions.

In the area of governance, the Government of Vanuatu, in the PAA, identified as the main governance objectives the provision of policy and institutional stability, and public sector productivity. These critical issues necessitate strong political will, and their attainment requires, among other things, timely and efficient service delivery (particularly in education and health, especially in the rural areas), effective regulatory structures, timely disciplinary action within the public service, and privatisation of public enterprises that could be more efficiently run by the private sector.

In the area of social development, there are still unacceptable divergences in the urban areas as distinguished from the rural areas and the outer islands. The process of reducing such disparities should be stepped up and the government made a commitment to this effect in the PAA document.

Likewise, in the area of environmental management, considerable progress has been registered, and in the PAA document the government stated that it aims to promote sound and sustainable environmental management practices, ensure sustainable management and conservation of Vanuatu's biodiversity, and integrate hazard and risk management into policies in order to reduce environmental risk. However, the resources available towards this end do not match always these laudable aims, as a result of which implementation of these objectives is being hampered.

## Conclusion

Many small island states are, like Vanuatu, very economically vulnerable, but a number of them, including Cyprus, Malta, Barbados and Mauritius have managed to generate a relatively high GDP per capita and attained high scores on indices of economic and social development such as the HDI. The main reason for the success of these small island states can be attributed to the fact that they have adopted sound economic and governance approaches, enabling them to enhance their economic resilience. It is probably useful for Vanuatu to closely follow instances of best practice in other small island states in order to devise solutions that are most suited to its current and future development needs.

## Notes

- 1 This report was prepared for the Commonwealth Secretariat by Lino Briguglio, Gordon Cordina, Nadia Farrugia and Stephanie Vella, University of Malta. It was completed on 30 September 2009.
- 2 The conceptual framework for country profiling of economic vulnerability and resilience was developed in Briguglio et al. (2008).
- 3 With regard to statistical sources, Vanuatu participates in the IMF General Data Dissemination System (GDDS). Member countries of the IMF voluntarily elect to participate in the GDDS. The GDDS framework is built around four dimensions - data characteristics, quality, access, and integrity. It is intended to provide guidance for macro-economic, financial, and social data. (<http://dsbb.imf.org/Applications/web/getpage/?pagename=gddswhatgdds>) This indicates that the basic statistical data required for the purposes of the economic vulnerability and resilience

profile is largely available, and is in itself an indicator of good governance that is conducive towards economic resilience.

- 4 The conference entitled 'Profiling Economic Vulnerability and Economic Resilience in Small States: The Case of Vanuatu' was held on 22–24 June 2009, Port Vila, Vanuatu.
- 5 The Commonwealth, United Nations, IMF, the World Bank and the Pacific Forum.
- 6 Tourism contributes about 40 per cent to GDP and employs more than 6,000 persons.
- 7 For example, there is no recent data on the unemployment rate, with the Vanuatu Statistics Office only offering data for 1999.
- 8 This section relies heavily on information gathered during the consultation conference held in Port Vila in June 2009.
- 9 Transparency International in its Corruption Perception Index (2008) ranks Vanuatu in 109th place (with rank 1 referring to the least corrupt country) among 180 countries in terms of perceived corruption by business people and country analysts. Information is available at: [http://www.transparency.org/policy\\_research/surveys\\_indices/cpi/2008](http://www.transparency.org/policy_research/surveys_indices/cpi/2008)

# Recent developments in St Lucia, Seychelles and Vanuatu

## Introduction

The global financial crisis of 2008 and 2009 and resulting global recession have impacted most economies, including those of small states, which are characterised by a high degree of economic openness. All three small island states that were profiled in the previous chapters were adversely affected but not with the same intensity, with Vanuatu still registering positive growth in 2009, whereas St Lucia and Seychelles are estimated to have experienced negative growth rates (IMF, 2010e).

Recent evidence would seem to suggest that the major effects on these small states were not mostly felt on the financial sector, due to the fact that the banking industry in these states did not indulge in excessively risky business, but on aggregate demand, especially on exports of goods and services.

This chapter will briefly describe recent changes in the economies of these three small island states, with information derived mostly from IMF surveys.

## St Lucia

St Lucia, like many other small states, was impacted by the global economic turmoil, and this was manifested in 2009 through, amongst other things, a contraction of economic activity of 5.2 per cent, mostly due to fewer tourist arrivals as well as a slowdown in construction activity, which over the past few years had contributed towards the economic development of the country.

The drop in visitors has been accompanied by marked reductions in tourist expenditure which in turn led to losses in employment in the sector. Despite attempts at maintaining employment, the rate of unemployment in St Lucia as at 2009 increased to 20.5 per cent compared to 16.8 per cent in 2008.

The number of stay-over tourists in St Lucia started to recover in the fourth quarter of 2009 and continued into the first two months of 2010, albeit at a slow pace. This notwithstanding, the increase in tourist arrivals has not been matched by an increase in tourist expenditure as hotels have significantly reduced prices in a bid to increase tourist arrivals.

In addition, the global economic downturn has also had an impact on government revenue and foreign exchange reserves as well as foreign remittances.

In response to the economic crisis, the Government of St Lucia increased tax incentives to the hotel industry, deferred the remittance of Hotel Accommodation Tax to the tax authorities, lowered personal income tax and increased expenditure on short-term employment programmes aimed at creating jobs. Increased provisions were made in the budget for subsidies on basic food items and cash transfers to the poor were increased.

While the fiscal stimulus had the impact of mitigating the effects of external shocks and limiting the impact on unemployment, the limited fiscal space was a major constraining factor in this regard and the government budget deficit is expected to reach 6.5 per cent of GDP over the period 2009 to 2010 (IMF, 2010a).

Given these manifestations of economic vulnerability, authorities requested a disbursement under the Fund's Rapid Access Component of Exogenous Shocks Facility (RAC-ESF) to help mitigate the impact of the crisis on the economy. The request was met by the IMF, alleviating some of the immediate foreign exchange needs stemming from the spillover effects of the global economic downturn and financial turmoil (IMF, 2009a).

## Enhancing resilience

In order to enhance economic resilience, authorities need to focus on fiscal sustainability as a means to allow for the better absorption of external shocks. This in turn should be conducive to macro-economic stability. According to the IMF (2010a), given current policies, the public debt of St Lucia is on an unsustainable path. As a result, there is the need for renewed emphasis on a credible commitment to medium-term fiscal consolidation. However, it is important to stress that the timing of fiscal withdrawal needs to be planned in a cautious manner so as to ensure that the exit strategy minimises the impact in the short run while adequately aiming for flexibility and growth enhancing activity in the long run. In addition, economic resilience also calls for efficiency in government spending such that spending is earmarked towards activities which render a rate of return to the economy.

Micro-economic market efficiency, another pillar of economic resilience, focuses on flexibility in the labour market particularly in terms of matching income to productivity gains as a means to enhance the competitiveness of St Lucia. Efforts have also been directed towards eliminating price controls (Gwartney et al, 2010).

In addition, given the recent financial sector difficulties in the Caribbean, resilience also calls for appropriate financial sector regulation and supervision. In particular, there is the need for strengthening the supervision of the domestic non-bank and offshore sectors. While abiding by enhanced national and international regulation and supervision may be costly, especially for a small state already severely constrained in terms of administrative capacity, this requirement is considered an important source of economic resilience.

## Seychelles

On the basis of its performance in the wake of the recent global economic crisis, the economy of Seychelles may be cited as a prime example of how a vulnerable economy may rapidly and effectively recover from a deep adverse shock thanks to adequate resilience-

building policies. This is also attested by the results of an assessment of recent economic performance conducted by the International Monetary Fund (IMF, 2010b, 2010c).

As a small, open and vulnerable economy, Seychelles came practically to a standstill in 2009 as a result of the global economic and financial crisis. This was the result of a significant downturn in external demand which mirrored the unprecedented decline in global trade. For 2010, however, the economy is projected to be recovering from this recession. The IMF expects real GDP to grow by 4 percent in 2010, reflecting in good part a significant recovery in tourism activity. Inflation, which was negative during 2009 on account of the decline in domestic demand and in global prices, as well as a prudent monetary stance in spite of the economic debacle, is expected at around 1 per cent for 2010.

The IMF views this recovery towards positive performance to be the result of strong progress which is being made by the Seychelles authorities in their reform program, which is aimed at stabilising the economy in terms of its macro-economic performance and contains an ambitious array of structural reforms.

Macro-economic policies are building resilience mainly by improving fiscal and debt sustainability. The primary fiscal surplus reached 13.4 per cent of GDP over the first nine months of 2009, on account of strong revenue performance and effective expenditure control, in spite of the decline in economic activity. Many countries all over the world have attempted to counter the decline in economic activity through a strong fiscal expansion, which is now leaving them with the problem of planning a retreat strategy for fiscal policy that would not cause another recession. Seychelles is largely free of this problem, as it actually persisted with fiscal consolidation in spite of the decline in aggregate demand. This policy is now paying off, facilitating the implementation of key projects, notably in the area of public infrastructure.

Other important contributors to macro-economic stability included the liberalisation of the exchange regime and prudent monetary policies. As a sign of the ongoing economic improvement, the exchange rate has appreciated steadily since early 2009. Short-term interest rates on government securities declined sharply from about 30 per cent in January to below 5 per cent, reflecting the strong deflation and fiscal tightening.

A number of structural reforms are also being implemented, including important steps toward the introduction of a simple, fair and equitable tax system; the strengthening of public financial management; and the modernisation of central bank operations. The ongoing efforts to modernise the financial sector and improve the governance and performance of public enterprises will be crucial to sustain private sector growth.

In particular, the three targets for structural reform set for 2009 were met. These included better public financial management, the development and adoption of foreign reserve management guidelines; and the implementation of effective management and control systems of public enterprise through the introduction of a specific legislative act. In terms of the latter, external financial audits of the seven largest public enterprises were completed and management audits of major public entities have also been carried forward. Based on the results of these audits, the management of the public utilities company was replaced

by foreign expertise. The authorities have also adopted a public sector action plan for expenditure reforms in health and education.

The country's success at resilience-building is also conducive to facilitate the disbursement of assistance on the part of the Fund (IMF, 2010b, 2010c).

There remains further progress to be achieved in the building of economic resilience in Seychelles. According to the Gwartney et al (2010), Seychelles needs to further improve its entrepreneurial environment and particularly its regulatory framework and access to financing. As already argued with regard to St Lucia, abiding by enhanced national and international regulation and supervision is costly especially for a small state with limited administrative capacity, but this requirement is of major importance for economic resilience building. Efficiency levels in the public sector, as well as its relatively large size in the economy, deserve further attention. Recent reforms aimed at enhancing market flexibility in trade and monetary activities need to be intensified.

## **Vanuatu**

Vanuatu remains one of the best economically-governed small states in the Pacific region. Since 2003, it has adopted a policy of fiscal prudence and a regulated monetary environment and these have paid dividends in terms of economic growth and inflationary tendencies.

Economic growth in terms of real GDP, which averaged around 6 per cent per annum between 2005 and 2008, slowed down to 3.3 per cent in 2009 but is likely to recover and, according to International Monetary Fund (IMF, 2010d), is expected reach 4.2 per cent by 2011. The main contributor to such growth was and remains the services industry, particularly tourism, transportation and communication. The services sector has continued to improve as a result of enhanced competition and progress in the regulatory frameworks. Privatisation, such as that of Air Vanuatu, has helped to reduce inefficiency in the sector.

Government finances have continued to be managed well, with VAT making an important contribution to government revenues. Fiscal surpluses were registered at 2.2 per cent of GDP in 2008, with an estimated balanced budget in 2009. As import taxes will continue to fall as a result of trade liberalisation, the government will have consider additional sources to make up for the tax-revenue shortfall.

Inflation, measured by changes in the consumer price index, was just under 5 per cent in 2008, showing a tendency to increase over the previous four years, but it is likely to go back to 3 per cent by 2011.

The current account deficit was 2.2 per cent of GDP in 2009, down from 5.9 in 2008, but it is likely to widen again in 2010 and 2011.

Like other small states, Vanuatu was adversely affected by the international financial turmoil, not directly in its financial sector, given that its banks did not indulge in overly risky business, and the ensuing global recession could have had a large negative impact on demand had it not been for the successes registered in tourism.

There is, of course, room for improvement in the economic governance of Vanuatu. According to Gwartney et al (2010), there is still too much state interference in the economy, and the incidence of inefficient state-owned enterprises tend to crowd out private-sector investment. In addition, starting a business is still a rather lengthy process. There is also room for improvement in the workings of product and labour markets, due to the excessive government intervention in agricultural prices.

Overall, however, Vanuatu may be considered as a small state that is assigning due importance to economic resilience building, but stability in future years will depend on what happens in the global economy, given the high degree of openness of this small island state.

## **Conclusion**

The three small states that were profiled have one important characteristic in common, namely that the three of them are very open economies, and rely heavily on a narrow range of exports. They are, therefore, very economically vulnerable due to their high exposure to economic forces outside their control. It is important to note that the fact that Vanuatu still registered positive growth rates in 2009 and Seychelles and St Lucia are likely to return to positive growth rates in 2011, does not negate their economic vulnerability. They will remain very open to external shocks. For this reason, economic resilience building remains of major importance for these states, much more so than in larger states. Resilience-building policies in these small states should be aimed mainly at promoting economic stability and competitiveness, principally by improving the functioning of the product and labour markets, encouraging private sector development and adopting prudent approaches in public finances.

# Country analysis by international organisations and regional development banks<sup>1</sup>

## Introduction

The purpose of this annex is to provide readers with an overview of the country analysis undertaken by international and regional organisations. It should assist readers in identifying the strengths and weaknesses of the various analyses and conduct a compare these analyses with the vulnerability and resilience profiling being proposed by the Commonwealth Secretariat. One of the strengths of the Commonwealth Secretariat's profiling exercise is that it is a framework focused on a particular category of countries – small states, and has therefore been tailored to the special challenges faced by these countries – moving away from the one-size-fits-all assessments conducted by other organisations.

The annex presents the work being undertaken by selected international organisations and regional development banks to assess the economic and social situation in countries. The focus is on:

- the IMF's vulnerability indicators, Article IV and Financial Sector Assessment Program (FSAP),
- the World Bank's reports such as the Country Economic Memorandum (CEM), Country Assistance Strategy (CAS) and Poverty Reduction Strategy Paper (PRSP),
- the UN's Common Country Assessment (CCA), UNCTAD's vulnerability profiles and its Economic Vulnerability Index (EVI),
- the WTO's Trade Policy Review Mechanism,
- the EC's Country Strategy Paper,
- regional development banks, including the AfDB's Country Strategy Paper, as well as the IADB's Prevalent Vulnerability Index (PVI), country strategy and Country Program Evaluation (CPE).

The annex outlines the purposes of the various country assessments that are prepared, the methodologies used to write these reports and the variables assessed. Most organisations focus on the economy, using widely available macro-economic data to assess how well an economy is doing. The general unavailability of environmental data means that only few environmental factors are considered and a small number of the organisations mainly the Commonwealth Secretariat, the World Bank and the UN consider environmental data in their assessment. Social data such as education and health indicators are considered by some organisations in their country assessment reports. However, the level of detail varies from organisation to organisation.

## The International Monetary Fund

The IMF aims to play a key role in safeguarding the stability of the global economy and has a particular interest in monitoring and assessing the economic vulnerability and resilience of its 185 member states.

The IMF's mandate is to promote international monetary co-operation, facilitate the growth of world trade, promote exchange rate stability, and help to establish a multilateral system of payments. In order to comply with this role, the IMF undertakes continuous surveillance of the global economy and keeps a close watch at the status of member countries' economies.

The focus of the IMF is mainly on countries' macro-economic and financial vulnerability/resilience issues. These are monitored through a group of vulnerability indicators as well as two series of reports: the Article IV and the Financial Sector Assessment Program (FSAP).

### Vulnerability indicators

In response to the currency crises that took place in the 1990s, the IMF has developed a series of vulnerability indicators to assess emerging markets' exposure to financial crises. However, due to the current ongoing global financial turmoil that originated in the developed world, the IMF is working to expand the coverage of the vulnerability indicators to developed countries as well. The IMF's vulnerability indicators focus mainly on the financial and macro-aggregate side of the economy, and can be grouped into four broad categories:

- Debt indicators (foreign and domestic);
- Reserves adequacy indicators;
- Financial soundness indicators; and
- Corporate sector indicators.

The *indicators of external and domestic debt* monitor mainly trends in debt and repayment capacity. Some basic indicators are: repayment schedules, interest rates, debt maturity profiles, the ratio of external debt to exports and GDP, currency composition, public sector borrowing, and debt over tax revenues.

The *indicators of reserves adequacy* measure the amount of reserves available to a country, and are given by the ratio of reserves to short-term debt. This ratio provides an indication of the degree of vulnerability of countries with significant access to capital markets. Indeed, a higher amount of reserves means a country's higher ability to offset the negative effects of financial crises.

*Financial soundness indicators* are used to assess strengths and weaknesses of the financial sector of a certain country. These indicators focus on capital adequacy of financial institutions, assets and off-balance sheet positions, credit growth, profitability and liquidity, market risk, etc.

*The corporate sector indicators* assess the vulnerability at the corporate level within a given

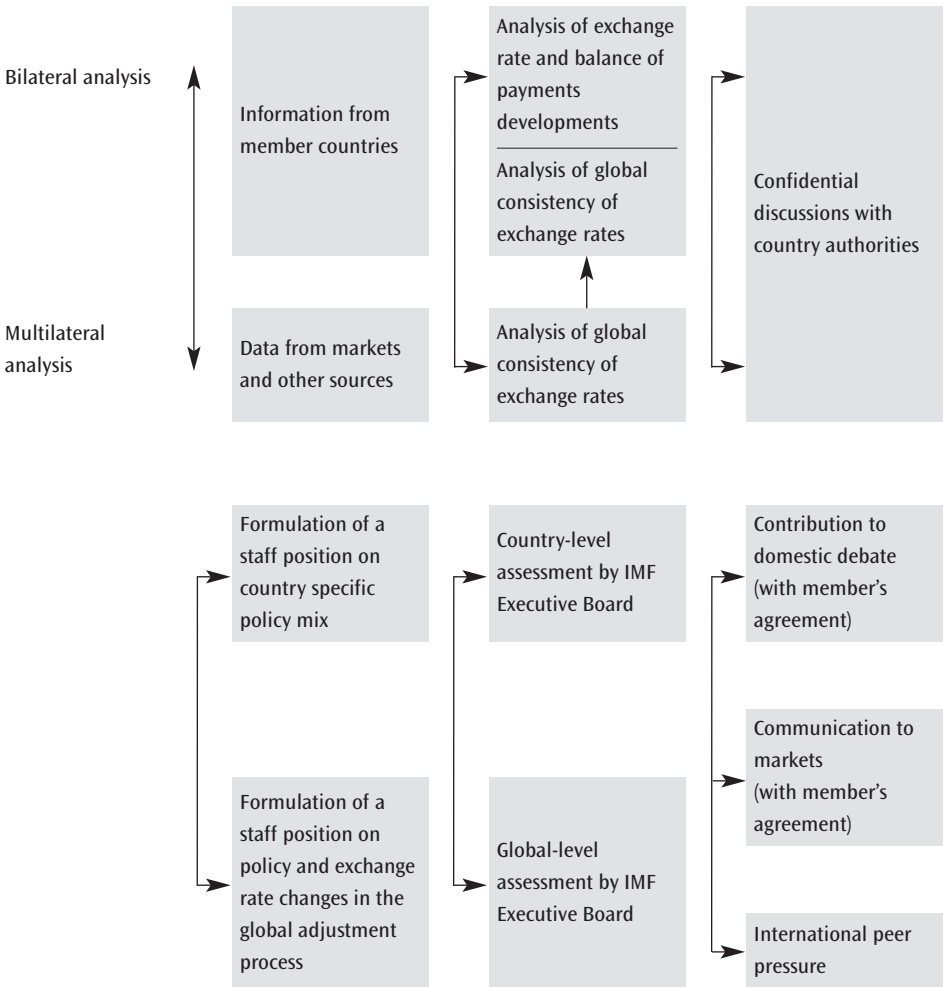
country. They measure corporate profitability, cash flows, leverage, and financial structure, and analyse corporate vulnerability to shifts in exchange rates and interest rates.

These indicators provide essential inputs for the Article IV and the Financial Sector Assessment Program.

## Article IV

The Article IV is part of the IMF’s economic surveillance process, and in particular it refers to the so-called IMF’s country (or bilateral) surveillance, as opposed to multilateral surveillance. The IMF’s surveillance process is summarised in Figure A1.

**Figure A1. IMF’s surveillance process**



Source: IMF

Country surveillance consists of regular (usually annual) comprehensive consultations with individual member states. In other words, the representatives of the IMF go on a

regular basis on mission to each of the 185 member countries in order to collect information on countries' economic and financial situations and to discuss with policy-makers and central bank staff on countries' policies. The reports of the missions are then submitted to the IMF's Executive Board, whose views are afterwards transmitted to the member states. In order to enhance transparency, the results of these consultation processes are finally summarised in Public Information Notices.

The aim of the Article IV is twofold. On the one hand, it provides an appraisal of the economic situation and policies of each member state, highlighting possible risks to stability and growth. On the other hand, it also offers advice on policies that need to be launched in order to improve the economic resilience of member states.

According to the new policy framework introduced in June 2007, country surveillance should focus on a specific group of vulnerability and resilience indicators. The *vulnerability indicators* taken into account are those previously described:

- Indicators of external and domestic debt;
- Indicators of reserves adequacy;
- Financial soundness indicators; and
- Corporate sector indicators.

A country's *economic resilience* is assessed by looking at:

- Policies on exchange rates;
- Monetary policies;
- Fiscal policies; and
- Financial policies.

## Financial Sector Assessment Program (FSAP)

The Financial Sector Assessment Program was launched in 1999 by the IMF jointly with the International Bank of Reconstruction and Development (IBRD) of the World Bank Group, with the objective of fostering the soundness of financial systems in member states, which is essential for sustained economic growth and poverty reduction. Participation in this program is voluntary, and about three-quarters of the member states have completed or requested an initial assessment, including developed countries, developing countries, small states and small island developing states. Priority for the FSAP is given, first, to countries systemically important and, second, to countries characterised by '[...] (i) external sector weakness or financial vulnerability; (ii) upcoming likelihood of major reform programs (as reflected, for example, in the Bank's Country Assistance Strategy (CAS)) that would suggest a benefit from a comprehensive financial sector assessment; and (iii) features of the exchange rate and monetary policy regime that make the financial system more vulnerable, such as inconsistency with other macro-economic policies'<sup>2</sup>.

The FSAP provides an assessment of potential financial vulnerabilities as well as an analysis of development priorities in the financial sectors of member countries, through four different steps:

- Identification of strengths and vulnerabilities of a country's financial system by

means of financial soundness indicators (for banking, insurance, securities markets, and market-based), stress tests<sup>3</sup>, and methodologies for assessing the observance of the 12 internationally recognised standards and codes<sup>4</sup>;

- Analysis of the management of key sources of risk (systemic liquidity arrangements, governance and transparency framework, financial safety nets, insolvency regimes);
- Identification of a sector's developmental and technical assistance needs; and
- Prioritisation of policy responses.

Some would suggest including IMF's stand-by arrangements (SBAs), but we decided not to include it. The IMF's SBAs are not designed to assess or measure countries' vulnerability and resilience in the same way as the other assessments described in the paper. Of course, the SBA like many other facilities/programmes (e.g. the IMF's emergency assistance, the UN's Capacity 2015 SIDS, and others) may well be interpreted as a way through which international organisations may help countries to promote or enhance resilience building.

## **The World Bank**

In contrast to the IMF, the World Bank's mandate is broader in range and scope. As part of its mission, the World Bank helps countries to reach the Millennium Development Goals (MDGs) by working with other partners to alleviate poverty. It provides loans and grants for a wide array of purposes that include investment in education, health, infrastructure, agriculture, as well as environmental and natural resources management.

Although the World Bank does not produce specific economic vulnerability/resilience profiles, it develops a series of country assessments that range from general to specific and provide, indirectly, information on economic, social as well as environmental vulnerability and resilience issues. For our purposes, these assessments can be classified into four main areas: (i) economic assessments; (ii) energy-environmental assessments; (iii) social assessments; and (iv) governance.

## **General economic assessments**

*Country Economic Memorandum (CEM)*. The CEM analyses a country's economic development looking at a number of variables such as its growth, trade, fiscal sector, labour markets, financial sector, etc. It also identifies policy frameworks to promote development.

*Country Assistance Strategy (CAS)*. The CAS objective is to highlight the areas in which the World Bank should focus its efforts in providing country assistance to promote development and poverty reduction. This report stems from the collaboration between the World Bank and the country's government, on the basis of a number of consultations with stakeholders including civil society and development partners. The CAS comprises of four different sections: (i) a description of the country's development; (ii) an analysis of its development challenges; (iii) an analysis of development issues on which the Bank could intervene; and (iv) a proposal on Bank lending and non-lending activities.

*Country Policy and Institutional Assessment (CPIA)*. The CPIA is produced every year with respect to all the World Bank's borrowing countries. For each of these countries, it provides

a country assessment looking at 16 criteria that may be grouped into four categories: (i) economic management; (ii) structural policies; (iii) policies for social inclusion and equity; and (iv) public sector management and institutions.

*Poverty Reduction Strategy Paper (PRSP)*. This report is produced every three years, and aims at proposing a number of macro-economic, structural and social policies and programmes directed to promote growth and reduce poverty. It further highlights the necessary external financing to implement these policies. Until now, the PRSP has been produced for about 66 countries.

*Joint Staff Advisory Note (JSAN)*. The JSAN is produced by the World Bank's International Development Association (IDA) in collaboration with the IMF in order to shed light on the priority areas in which poverty reduction strategies should be strengthened and implemented.

*Development Policy Review (DPR)*. This report reviews a country's policy agenda with the aim of reducing poverty and achieving sustainable economic growth.

*Country Financial Accountability Assessment (CFA)*. This report focuses on a country's public financial management system. In particular, the CFA concentrates on budgeting, auditing, general accounting and public finances.

*Country Procurement Assessment Review (CPA)*. This particular report provides a diagnosis of a country's procurement system.

*Poverty Assessment (POR)*. In the Poverty Assessment, the World Bank monitors the evolution of poor people over time. In order to do so, the report uses as indicators general sources of income, wage composition, households head literacy, household size, location and other relevant indicators capable of providing an insight on the causes and consequences of poverty. Moreover, the POR analyses how certain policies such as social protection programmes may help to alleviate poverty within a member country.

*Public Expenditure Review (PER)*. The PER is a report devoted to the analysis of a country's public spending. It analyses the efficiency, effectiveness and equity of government resource allocations looking at the country-specific macro-economic context and sector priorities, and highlights which reforms should be introduced in order to improve public spending.

## Specific energy and environmental assessments

*Country Environmental Analysis (CEA)*. In this document the World Bank evaluates environmental priorities and the implications of strategic macro and sector policies. It also assesses the institutional capacity of a country to address priority environmental issues.

*Energy-Environment Review (EER)*. The EER deals with the global and local cross-sectoral environmental impacts due to energy production and consumption.

*Mining/Oil and Gas (MOG)*. These reports provide a specific analysis and suggestions on special sector themes not covered by other documents.

*Strategic Environmental Assessment/Analysis (SEA)*. By producing this type of document,

the World Bank identifies the environmental consequences stemming from policies and programmes before their implementation, and proposes alternatives in collaboration with stakeholders.

## Specific social assessments

*Social Analysis (SAR)*. The focus of SAR is on the organisation of social groups and the way their relationships affect their access to services, security and general opportunities to participate in the overall development process.

*Women in Development and Gender Study (GDR)*. This report deals with the different women's participation topics related to development and progress.

*Risk and Vulnerability Assessment (SOP)*. It studies the effects of the social sector on living standards, income generation and mobility. Its main aim is to provide recommendations on public expenditure in order to ensure access of the poor to the basic social services, and to enhance the project effects on health, population and education indicators.

## Governance assessments

*Institutional and Governance Review (IGR)*. This review focuses on the functioning of key public institutions and analyses performance failures in policy management, and the feasibility of reform by assessing the political realities and constraints to reform.

*Legal and Judicial Sector Assessment (LJA)*. This is an assessment of a country's legal and judicial systems and institutions, which aims at identifying weaknesses and priority areas for action. It provides the basis for the development of reform frameworks taking into account the country's legal, economic, social, and political environment, as well as its resource and capacity constraints.

The above assessments are by no means exhaustive of all the reports produced by the World Bank. However, they are useful to provide an idea of the kind of work and structure that the Bank follows when assessing the soundness of a country's economy, as well as a means for measuring progress towards pre-established goals.

## The United Nations

The United Nations was one of the pioneer institutions to assess economic vulnerability by creating a specific index. Since 1994, as a result of the Global Conference on the Sustainable Development of Small Island Developing States (Barbados, April–May 1994), the United Nations Conference on Trade and Development (UNCTAD) became the focal point within the UN system for analysing and monitoring small islands developing states' vulnerability. In 2000, the Committee for Development Policy (CDP) implemented the so-called Economic Vulnerability Index (EVI), which substituted the old composite Economic Diversification Index (EDI) among the criteria to identify the Least Developed Countries (LDCs) and to decide which countries are to be graduated from the LDCs' list. There are three criteria for being a LDC:

*The income criterion.* This criterion uses the three-year average gross national income per capita (GNI) and compares it against a standard threshold settled each year.

*The human capital criterion.* This criterion uses the Human Assets Index (HAI) in order to gather information regarding the level of human capital within a country. It consists of an average of two indicators:

- Health (measured by the percentage of undernourished population and the mortality rates of children under 5 years);
- Education (measured by the gross secondary enrolment and adult literacy rate).

According to the 2006 review of LDCs, the HAI threshold for including a country in the group of LDCs was set at 58, while the threshold for graduation was set at an HAI value of 64.

*The economic vulnerability criterion.* This criterion tries to assess economic vulnerability due to natural shocks and trade fluctuations. The Economic Vulnerability Index (EVI) was developed for this purpose and it consists of seven main indicators. In what follows, we explain this index in detail. The existence of a sound methodology to identify LDCs and at the same time to highlight their structural problems is particularly relevant for the UN, since it provides a series of preferential treatments in the allocation of external assistance as well as trading concessions to these countries. Besides the vulnerability profiles and the economic vulnerability index, the United Nations also prepares a number of country-specific assessments which provide, indirectly, information on countries' vulnerability and resilience. Among these, it is worth mentioning the Common Country Assessments (CCAs).

## Vulnerability profiles

The vulnerability profiles are prepared for countries near the borderline of graduation from, or inclusion into, the list of LDCs, by the United Nations Conference on Trade and Development (UNCTAD)<sup>5</sup>. Such profiles are particularly important for small island developing states that have been found eligible for graduation for the first time. So far, these profiles have been developed for seven countries: Cape Verde, Equatorial Guinea, Kiribati, Maldives, Samoa, Tuvalu, and Vanuatu. The aim of the vulnerability profiles is to assess to what extent a country's overall economic performance and structure are exposed to external economic and natural shocks, in order to enable CDP to make well-founded recommendations for graduation or non-graduation.

The three building blocks of the vulnerability profiles are the following:

- 1 *External shocks*: natural and economic shocks, instability in the socio-economic performance;
- 2 *Exposure to external shocks*: degree of external dependence (openness), degree of economic concentration, changes in economic specialisation;
- 3 *Structural handicaps*: insularity and remoteness.

## Economic Vulnerability Index (EVI)<sup>6</sup>

The EVI is an index that assesses structural economic vulnerability. In other words, it focuses on inherent factors rather than policy-induced ones. The main goal of the EVI is to

allow the identification of those countries that are the most disadvantaged by structural handicaps to growth. In 2006, the Economic Vulnerability Index was calculated for 65 LDCs and other low-income countries.

The EVI is a composite index that in its most recent version includes seven indices, which reflect the primary channels through which structural vulnerability affects a country's growth potential. These indices can be sub-divided into three shocks indices and four exposure indices.

### **Shocks indices**

*Instability of agricultural production.* Although agricultural production depends to a certain extent on local policies, it is also exposed to natural climatic fluctuations. This explains the decision to use the trend values in agricultural production as proxies for quantifying the effects of adverse natural climatic events.

*Homeless population as a result of natural disasters.* Natural shocks are a source of concern and vulnerability for many developing countries. Earthquakes, floods, and hurricanes, for example, represent a threat for many of them. The EVI index captures these factors by looking at the average proportion of the population affected or displaced by these types of events.

*Instability of exports of goods and services.* This indicator attempts to capture external fluctuations in world prices, demand or any other foreign or domestic event (independent from local policies) able to disrupt trade flows.

### **Exposure indices**

*Primary activities as a percentage of GDP.* This index measures the degree of diversification of the economy and its exposure to trade and natural shocks.

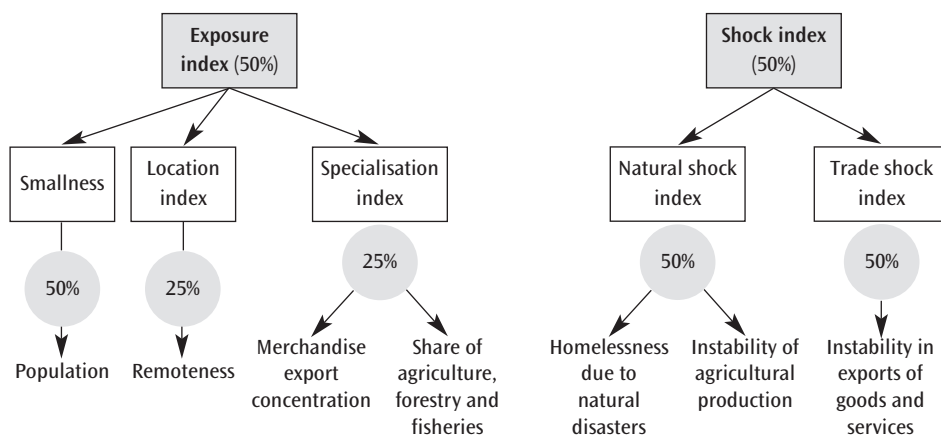
*Merchandise export concentration.* This indicator refers to the exports concentration coefficient. The less varied and more concentrated a country's exports, the bigger the exposure against sudden shifts in external demand or global markets.

*Economic smallness.* It measures the population size of a given country. The smaller a country's size, the higher its potential exposure to shocks.

*Economic remoteness.* This index captures the distance from the world markets.

Once each index is computed, they are aggregated into the two main sub-components (exposure and shocks) with equal weights. Within the shocks category, equal weight is given to natural (homelessness due to natural disasters and instability of agricultural production) and external (trade) shocks. On the other hand, within the exposure category, equal weight is given to the specialisation index (which is the simple average of indices 1) and 2) in the exposure indices) and the location index, while the weight of population size matches the sum of the previous two. Figure A2 clarifies the weighting process among indices.

**Figure A2. The Economic Vulnerability Index (EVI)**



Source: Guillaumont (2008)

Table A1 presents a ranking of the 20 most vulnerable LDCs and low-income countries according to the EVI. The scores come from the 2006 review of the list of LDCs, and were computed following the methodology described above. The degree of vulnerability is increasing the higher the score.

**Table A1. The 20 most vulnerable countries according to the EVI<sup>7</sup>**

Rank	Country	EVI
1	Tuvalu	91,85
2	Kiribati	83,65
3	Equatorial Guinea	70,71
4	Somalia	68,40
5	Liberia	67,95
6	Guinea-Bissau	66,18
7	Samoa	64,65
8	Vanuatu	64,25
9	Eritrea	63,99
10	Sierra Leone	63,74
11	Comoros	63,60
12	Chad	62,83
13	Timor-Leste	60,84
14	Afghanistan	60,33
15	Djibuti	60,16
16	Burundi	59,88
17	Rwanda	59,33
18	Sao Tome and Principe	58,15
19	Cape Verde	57,92
20	Laos	57,87

Sources: Guillaumont (2008) and authors' calculations.

## Common Country Assessment (CCA)

The CCA is a country-specific report devoted to the analysis of the national development situation as well as to the identification of the key development issues.<sup>8</sup> This document is structured around four main building blocks:

- the identification of the development problems;
- the analysis of their causes (immediate, underlying and root causes);
- the identification of those people or groups who should take action and the capacities they need; and
- the prioritisation of the analysed problems.

The CCA covers issues related to human rights, food security, environmental sustainability, population, gender equality, poverty eradication, governance, HIV/AIDS, the promotion and protection of children's rights, the disabled, integrated rural development, urban regeneration, human resource development, social partnerships and safety nets. It stems from the collaboration between the United Nations system and a number of different actors (i.e. civil society, private sector, donor community and Bretton Woods institutions), and is used for the formulation of policy responses to development challenges as well as for the United Nations Development Assistance Framework (UNDAF). Already, by January 2003, the CCA had been completed for 44 LDCs, 31 landlocked developing countries (LLDCs) and 12 SIDS (e.g. Mauritius, Samoa, Guyana, and Barbados).

## The World Trade Organization

Surveillance of national trade policies is a fundamentally important activity running throughout the work of the World Trade Organization (WTO, 2010). At the centre of this work is the Trade Policy Review Mechanism (TPRM). All WTO members (150) are reviewed, the frequency of each country's review varying according to its share of world trade (between every two and six years). Seychelles and Vanuatu are observer governments (not full members) and no TPR is available for them.

The Trade Policy Review Mechanism was provisionally established in December 1988. The aims are (see WTO):

- to increase the transparency and understanding of countries' trade policies and practices, through regular monitoring;
- to improve the quality of public and intergovernmental debate on the issues; and
- to enable a multilateral assessment of the effects of policies on the world trading system.

The TPRs consist of detailed chapters examining the trade policies and practices of the member country and describes trade policy-making institutions and the macro-economic situation. They also take into account the countries' wider economic and developmental needs, their policies and objectives, and the external economic environment that they face. The 'peer reviews' by other WTO members encourage governments to follow more closely the WTO rules and disciplines, and to fulfil their commitments.

According to the WTO, in practice the reviews have two broad results: they enable outsiders to understand a country's policies and circumstances, and they provide feedback to the reviewed country on its performance in the system. The WTO Secretariat's report and the Member's policy statement are published after review. Variables included are trade in goods and services, balance of payments, basic social and economic variables, FDI, sectoral performance including services such as financial services and associated policies, trade policies and structural performance.

## **The European Commission**

Country Strategy Papers (CSPs) produced by the European Commission (EC) are an instrument for guiding, managing and reviewing EC assistance programmes. The purpose of CSPs is to provide a framework for EU assistance programmes based on EU/EC objectives, the Partner Country government policy agenda, an analysis of the partner country's situation, and the activities of other major partners. CSPs are drawn up for all ACP, MEDA (except Cyprus, Malta and Turkey) and ALA countries. This includes small states<sup>9</sup>.

The Council requests the Commission to apply this standard framework to aid programming for all developing countries receiving assistance from the European Development Fund. Typical CSPs consist of a country diagnosis which includes:

- Political and institutional situation (Principles of Constitutional Democracy, Electoral Process, Human Rights, Fundamental Freedoms, Political Governance and Rule of Law, Control of Corruption, Institutional Capacities, Internal and External Security);
- Economic and commercial situation (Economic Situation, Structure and Performance, Structure and Management of Public Finance, Trade Policy and External Environment, Assessment of the Reform Process);
- Social situation, including decent work and employment (Population, Gender, Children, Education, Human Resources and Employment, Health);
- Environmental situation (Environmental Conditions, Environmental Challenges, Environment Policies and Institutional Framework, Vulnerability and Preparedness to Natural Disasters); and
- International context.

This profile then gives rise to a national indicative programme which is the basis for country-level EC assistance.

## **Regional Development Banks**

### **African Development Bank**

The African Development Bank (AfDB) produces a Country Strategy Paper (CSP) for each of its member countries, including small states. This document is prepared every three years and updated yearly. Typical CSPs include a description of the political, social and economic context of a specific country, followed by an analysis of its weaknesses and challenges, as well as strengths and opportunities. A description of the developments in

aid co-ordination and AfDB positioning is also included. The last part of the reports is devoted to an analysis of the objectives and priority areas of the AfDB group strategy as well as of the risks which may undermine its implementation and effectiveness.

## Asian Development Bank

The Asian Development Bank (ADB) does not produce explicit vulnerability profiles for its member countries, which also include a number of small developing states such as islands in the Pacific. However, some information on countries' vulnerabilities is included in two types of documents published by the ADB: the Country Partnership Strategy (CPS) and the Country Economic Review (CER). The former is a document which has been introduced in 2006 as part of the reform to enhance Country Strategy and Programme (CSP) formulation, which provides the framework of co-operation between the ADB and member countries.

The CSP, produced every five years, reflects major country-specific development issues and constraints and it is based on an analysis of the country's development priorities and poverty reduction programmes. It specifies approaches towards removing constraints on country development. It is prepared with the member country's active participation through extensive in-country consultation and includes a midterm review report (after three years) focusing on the continued rationale and validity of the strategy.

The CER is not produced on a regular basis (for some countries, the latest available CER is ten years old). It describes the current economic situation in the country, assessing its economic performance and providing a detailed analysis of the secular macro-economic trends and of the management of structural change in the economy. It also analyses the country's short- and medium-term economic prospects.

## Inter-American Development Bank

The Inter-American Development Bank (IADB) has developed the Prevalent Vulnerability Index (PVI) to estimate countries' predominant vulnerability conditions. The PVI is part of a broader system of indicators which aims to describe a series of risk factors that a country should reduce through public policies and actions in order to reduce its vulnerability and maximise the resilience and coping capacity of its population. This system includes, besides the Prevalent Vulnerability Index, the Disaster Deficit Index (DDI), the Local Disaster Index (LDI), and the Risk Management Index (RMI)<sup>10</sup>.

The PVI is computed as an average of three composite indicators:

- indicators of exposure and susceptibility;
- indicators of socio-economic fragility;
- indicators of (lack of) social resilience.

The indicators of exposure and susceptibility (e.g. population growth and density, urban growth, imports and exports as a percent of GDP, gross domestic fixed investment as a percent of GDP, etc.) reflect a country's susceptibility to dangerous events, whatever their nature or severity. The indicators of socio-economic fragility, instead, refer to conditions

that may increase the vulnerability of a country in the face of adverse phenomena, such as poverty, lack of personal safety, dependency, illiteracy, income inequality, unemployment, inflation, debt and environmental deterioration. Finally, the indicators of (lack of) social resilience assess to what extent a country is able to recover from, or absorb the impact of an exogenous shock given the degree of human development, human capital, economic redistribution, governance, financial protection, community awareness, preparedness to face crisis situations, and environmental protection.

According to the PVI, small countries such as, for example, Jamaica, El Salvador, Trinidad and Tobago, and Costa Rica are characterised by a higher degree of vulnerability than other countries.

In addition to the Prevalent Vulnerability Index, the IADB prepares institutional documents such as the country strategy papers and the Country Program Evaluations (CPEs), which offer, although indirectly, an overview on vulnerability and resilience issues of its borrowing member countries. Indeed, these reports provide information on the macro-economic, micro-economic, social, governance and environmental situation and challenges of specific countries, as well as on the past achievements and future objectives of the Bank's strategy.

## Notes

- 1 This annex has been prepared by Isabella Massa, Dirk Willem te Velde and Massimiliano Cali from the Overseas Development Institute.
- 2 IMF and World Bank (2003), *Financial Sector Assessment Program – Review, Lessons, and Issues Going Forward*, 24 February 2003, Washington D.C.: International Monetary Fund and World Bank.
- 3 Stress tests analyse the impact of shocks to macro-economic variables on the soundness of the financial system.
- 4 The internationally recognised standards and codes are: accounting; auditing; anti-money laundering and countering the financing of terrorism (AML/CFT); banking supervision; corporate governance; data dissemination; fiscal transparency; insolvency and creditor rights; insurance supervision; monetary and financial policy transparency; payments systems; and securities regulation.
- 5 See [http://www.un.org/esa/policy/devplan/profile/vulnerability\\_profiles.html](http://www.un.org/esa/policy/devplan/profile/vulnerability_profiles.html)
- 6 We refer interested readers to Guillaumont (2008) for a detailed review on the CDP economic vulnerability index.
- 7 We refer the reader to Guillaumont (2008) for a full list of the EVI levels for the 65 LDCs and other low-income countries.
- 8 See UN (2009). *Common Country Assessment and United Nations Development Assistance Framework. Guidelines for UN Country Teams on Preparing a CCA or UNDAF*, February 2009.
- 9 See [http://ec.europa.eu/development/geographical/methodologies/strategypapers10\\_en.cfm](http://ec.europa.eu/development/geographical/methodologies/strategypapers10_en.cfm)
- 10 For a detailed description of these three indicators we refer the interested reader to <http://www.iadb.org/exr/disaster/index.cfm?language=en&parid=1>

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# Profiling Vulnerability and Resilience

## A Manual for Small States

*Profiling Vulnerability and Resilience: A Manual for Small States* provides a tool for assessing both how prone a country is to external economic shocks – its vulnerability – as well as its ability to bounce back from those shocks – its resilience.

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