IS THERE A CARIBBEAN SCLEROSIS?

Stagnating Economic Growth in the Caribbean

Inder Ruprah, Karl Melgarejo, Ricardo Sierra

IDB Country Department Caribbean

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Inter-American Development Bank

Second Revision

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Acknowledgments

Foreword

T he Caribbean's post-colonial period has been decorated by brilliant and brave leadership. Living standards surged and a difficult evolution away from primary agricultural products to service-based economies was achieved. Even hurricanes and floods were not able to derail the steady advance. The region showed the same resolve when macroeconomic shocks hit—it was resilient and unafraid to make deep changes. The Caribbean was a front runner.

Times have changed.

In May of 2007, just before the world economy went into a tailspin, Norman Girvan wrote:

"In the decades since the theory of Plantation Economy was presented there has been marked divergence in the trajectories of Caribbean economies. On the whole the smaller, service-based economies and energy-rich Trinidad and Tobago have progressed rapidly; while the larger, resource based economies have suffered reversals or stagnated. Tourism and international financial services have grown, traditional agricultural exports have declined, migration has intensified, the informal economy has mushroomed, and remittances from the Caribbean Diaspora and narco-trafficking have become significant foreign currency earners.....The economies that have done well in recent years are those favourably endowed for expansion into new export staples; those that have not, remain mired in the production of older staples. Thus, when natural resources are depleted or foreign demand shifts, the economy is in a position to switch capital and labour to new activities. Their current booms cannot last forever. A similar challenge confronts the stagnant economies. In this sense, all Caribbean economies are in the same boat."

The success of the service-based economies faltered when the world economic downturn brought about the shift in foreign demand predicted by Girvan. However, the economies did not shift in response, as investors and policy-makers seemed to have adopted a strategy of waiting out the downturn. The problem is that this approach increased vulnerability, as prolonged anemic growth and persistent unemployment fed the build-up of destabilising debt. Today, living standards are threatened and hope is elusive.

What is stopping the region from displaying the dynamism and willingness to change that it has showed in the past? This report seeks to shed light on that question and even propose some policy proposals.

The basic premise is that passive policy will not do the trick, but neither will simple fiscal compression. The region has to grow out of this challenge—old business arrangements need renewal and new arrangements need to be forged. Even if the international economy recovers, it will not be sufficient to restore the level of growth needed in the Caribbean.

The region is looking for a new paradigm. As Girvan concluded, both the larger resource-based economies and the smaller service-based economies face the same challenge. This time there is no silver bullet. This time, new products and trading partners will have to be cultivated. This calls for a willingness to embrace change.

Many battles have been fought over this unique region. The Caribbean has shown it can overcome powerful challenges, and we are confident it will do so again. The work presented in this report is a sincere and useful contribution to finding a solution and reflects the commitment of the Inter-American Development Bank to support that process.

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Introduction:
Is There a Caribbean Sclerosis?

" Euro sclerosis" was a term coined in the 1970s to describe stagnant integration, high unemployment, and slow job creation in Europe relative to the United States. Since then, the term has been used more generally to refer to overall economic stagnation.

The term and that which it encompasses can be applied as well to a certain extent to the Caribbean countries. However, because these economies are small, the comparator to measure "Caribbean sclerosis" would be some of the rest of small economies (ROSE) of the world. This group consists of about 50 countries each with a population of less than 3 million.

This report addresses several critical questions regarding these nations.[1] Does size matter for economic growth and volatility? To what degree has Caribbean economic growth been inferior to that of ROSE? What could account for the Caribbean growth gap and what economic policies might decision-makers adopt to promote higher and sustainable growth? The answers to these questions will support the overarching hypothesis that the Caribbean suffers sclerosis.

The almost-exclusive focus on economic growth in this report does not imply that it should be the sole criterion to judge economic performance. Nevertheless, economic growth is the central concern of Caribbean policymakers, who recognise that it is critical to improve broad economic development, and hence to improve the welfare of Caribbean citizens.

The central focus here is on six countries in the region, which will be referred to as the C6: The Bahamas, Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago. However, the analysis will sometimes include, most often in the aggregate, the countries of the Organisation of Eastern Caribbean States (OECS). The six members of the OECS used in this report are Antigua and Barbuda, the Commonwealth of Dominica, Grenada, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines.

Economic performance is judged both over time and with respect to ROSE. However, the Caribbean countries can be categorised as dependent on either tourism or commodities, so wherever possible we compare commodity (tourism) Caribbean countries with commodity (tourism) countries among ROSE.

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[1] Some of the sections of this report have been published previously as policy briefs.

It should be noted that both the analysis and the policy discussion in this report are constrained by the lack of adequate data. Researchers have identified about 145 different variables that effect growth (Durlauf, Johnson, and Temple 2005), but information for Caribbean countries is only available for a small number of variables, and even less in panel form. Similarly, of the variables used in the Organisation for Economic Cooperation and Development's (OECD) growth benchmarking exercises, only a fraction are available. The information gap is particularly acute in the area of micro data, where even basic data on households and firms are largely absent from the public domain. This limits the hypotheses that can be entertained and the methodologies that can be adopted to parametrically analyse economic growth, and hence to simulate the temporal effects of policy options. The lack or unavailability of data for third parties is a policy decision that is consistent across the Caribbean and is incongruent with evidence-based policy discussions and policymaking.

Chapters 2 and 3 of this report consider the argument that size matters for economic performance and examine whether the Caribbean is an outlier among small economies. The analysis finds that while size does indeed matter—the smaller the country, the lower the growth rate—it is not a binding constraint. The analysis also finds that the Caribbean does poorly in comparison with ROSE—so it is not size that is the problem.

Chapters 4 to 6 explore different hypotheses that stem from the overarching hypothesis of sclerosis that could explain the growth gap between the Caribbean and ROSE. They consider such problems as lower factor inputs and total factor productivity, inferior competitiveness, worse institutional quality, a weak private sector, greater macroeconomic instability, a tougher economic and geographical neighbourhood, and a frustrated regional integration agenda. The Caribbean performs worse than ROSE in practically all of these dimensions. There appears to be a generalised sclerotic effect on institutions and policy.

Chapters 7 and 8 consider the possible policy options in the context of the world economic outlook. For heuristic purposes we specify two main options: "let it be," that is, wait for world economic recovery to pull up Caribbean economic growth; or "crossing the Rubicon," that is, engage in a process of stabilisation and structural reform directed toward higher and more sustainable economic growth.

Chapter 9 concludes that indeed the overarching hypothesis of sclerosis can explain the Caribbean economic growth performance gap, particularly for tourism-based countries. This conclusion has troublesome implications: policy inaction may be due to the powerful few (who may lose out) to the detriment of the many (who may gain), that is, a politically powerful alliance against growth.

2

Being Small Is Tough

Countries come in all shapes and sizes, but it is often asserted that what matters most for economic growth and development is a country's size. This chapter revisits the issue of size by considering what makes small economies distinct from larger ones.

There appears to be a consensus that small economies face particular burdens that larger economies do not (Alesina and Spolaore 2005). Agnostics, however, argue that size by itself is not a sufficient factor to explain economic performance. Read (2001) notes that the "literature tends to adopt a fatalistic tone." Armstrong and Read (1995) go further and draw attention to the potential advantages of being small. Easterly and Kraay (2000) find that small states—which they define as countries with populations smaller than 1 million people—actually grow faster than larger ones once location is controlled for.

Thus, it is important to flesh out, at the cost of repeating well-known arguments, the implications of size for economic growth. Specifically, this chapter explores the answers to the following questions:

- When is a country small?
- What are the peculiarities of small economies?
- Does size matter for economic growth and volatility?

2.1 When Is a Country Small?

Categorising a country as small is inherently arbitrary. To do so one must define the measures to be used and then determine a cut-off point between small and non-small.

The typical measures to define smallness are population, land area, and GDP, either individually or all three together as an index (Downes 1988; Alouini and Hubert 2010). Figure 2.1 illustrates the relation among these three absolute measures. They appear to be correlated positively, suggesting that any one measure can be used.

This report uses population to define smallness. With the objective of categorising all Caribbean countries as being small, we define a small economy as one with a population of less than 3 million people. As a result, 50 countries worldwide can be classified as small (see Annex 1 for details about these countries). This definition contrasts with Kuznets (1960), who uses the

FIGURE 2.1. Population, GDP, and Land Mass
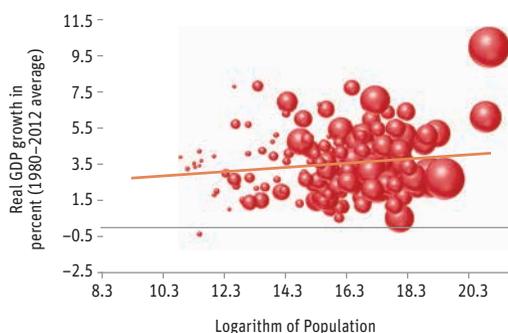
Source: International Monetary Fund, *World Economic Outlook*, October 2013.
Note: Bubble size indicates the square root of the land area in square kilometres).

population threshold of 10 million, and with the Commonwealth Advisory Group (1997) and the World Bank, both of which use 1.5 million but then add some countries with larger populations.

Although a one-dimensional measure is used to differentiate countries, it is important to keep in mind that the "small" category contains a diverse set of countries. In terms of population, small economies range in size from "micro-states" like the Cook Islands, Palau, and St. Kitts and Nevis (with fewer than 50,000 people each) to Mauritius and Trinidad and Tobago (with more than 1 million people each), and Jamaica and Mongolia (with approximately 2.8 million people each).

The economies differ in being island and non-island states, a distinction often emphasised in arguments that small islands tend to have problems over and above just size (McKee and Tisdell 1990). The world's small economies include 28 small islands: 10 located in the Caribbean and 18 in the South Pacific, Atlantic and Indian Oceans, the Mediterranean Sea, and the Persian Gulf.

The economic base of the world's small economies in terms of exports differs particularly with regard to whether their main export is commodities or services (tourism). About 44 percent of small economies are tourism-based, drawn from the Caribbean and the Indian Ocean (Maldives, Mauritius, and Seychelles). The rest are classified as commodity-based economies that include fuel-exporting countries (Bahrain, Brunei, Darussalam, Equatorial Guinea, and Trinidad and Tobago).

A common feature of small economies is the higher ratio of emigrants to population, resulting in a greater dependence on remittances as a source of foreign exchange—in some cases remittances may be a larger source of foreign exchange than the country's main export.

Small economies also differ in terms of geographical location. Most fall into four main regional groups: East Asia and the Pacific, Europe and Central Asia, Latin America and the Caribbean, and Sub-Saharan Africa. Location matters—together with the ex-imperial power with which the small economy was or is associated, location often determines economic partners. Thus, for the Caribbean, economic partners are the United States, Canada, and the United Kingdom, while for the Pacific Islands they are Australia, New Zealand and, increasingly, China.

As shown in Figure 2.2, the relationship between GDP per capita and human development shows positive but decreasing returns to increased GDP per capita and no systematic effect of island versus non-island status. Small economies vary considerably in terms of GDP per capita and the UN's Human Development Index (HDI), which is based on life expectancy, mean years of schooling, and expected years of schooling plus gross national income.

Fourteen small economies belong to the high-income category (mean income of US$35,964 and an HDI of 0.81); 17 are upper-middle-income countries (US$10,484 and 0.73); 16 are lower-middle-income countries (US$4,193 and 0.60); and three are lower-income countries (US$981 and 0.41) (Table 2.1)

2.2 What Makes Small Economies Distinctive?

Small economies have common intrinsic characteristics that may hinder their economic development. This can be traced to the combination of diseconomies of scale, indivisible fixed costs, and what can be described as "living in bad neighbourhoods."

Diseconomies of scale in the provision of public goods and services can lead simultaneously to higher average costs for the public sector and the under-provision of public goods. The latter refers to the quality of regulatory and macroeconomic policy formation as well as the provision of traditional public goods such as education, security, and infrastructure. Lower-quality public services often originate with government officials being responsible for a wider set of tasks but without the support services that their peers in larger economies have.

Smallness is also associated with unfavourable access to global financial markets. The fixed costs for international lenders to analyse and monitor repayment capacity of small transactions leads to higher spreads, less competition among international lenders, and inadequate differentiation

FIGURE 2.2. Small Economies: GDP Per Capita, Human Development Index, and Island Status in Small Economies
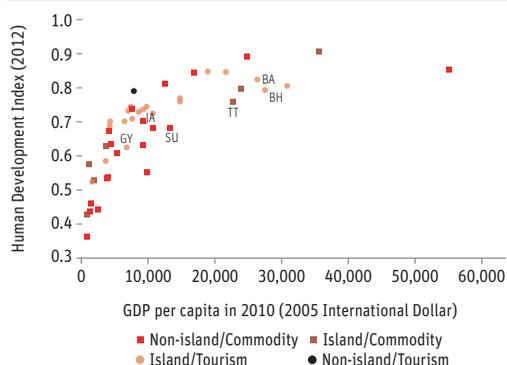
Source: Penn World Table 7.1 (Heston, Summers, and Aten 2012); and United Nations Development Program.
Note: In the index, the value closer to 1 implies better performance.

TABLE 2.1. Heterogeneity of Small Economies

Income Group	Average HDI	Average GDP per capita	Number of small countries that are islands	Number of tourist small countries	Total number of small countries
High Income	0.81	35,964	8	6	14
Upper middle income	0.73	10,484	10	10	17
Lower middle income	0.60	4,193	9	6	16
Low income	0.41	981	1	0	3

Sources: World Bank; Penn World Table 7.1 (Heston, Summers, and Aten 2012); and United Nations Development Program.
Note: HDI = Human Development Index.

FIGURE 2.3. Ratio of Government Expenditure to GDP and Size
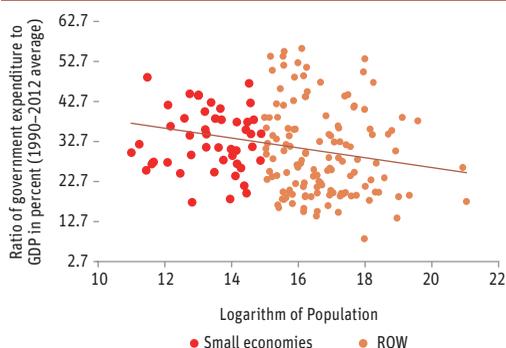
Source: International Monetary Fund, *World Economic Outlook*, October 2013.
Note: ROW = rest of the world.

FIGURE 2.4. Trust and Unproductive Rent-Seeking Indicators (relative ratios)
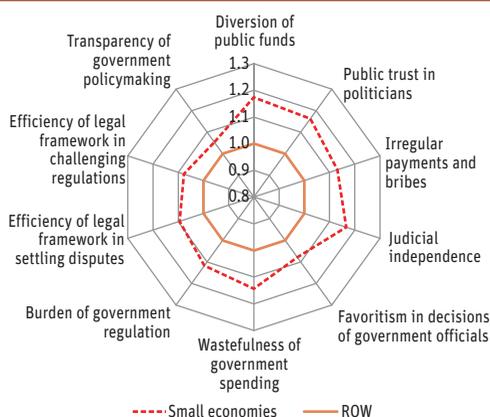
Source: World Economic Forum, *Global Competitiveness Report* 2013–2014.
Note: Values greater than unity indicate a better performance; ROW = rest of the world.

between different small states. This translates into smaller borrowers essentially paying a "small economy premium."

Figure 2.3 shows how small economies tend to have a larger public sector (as proxied by the public-expenditure-to-GDP ratio) relative to non-small economies. However, government quality indicators are not necessarily worse for smaller economies as compared to larger ones. In fact, in terms of the World Economic Forum's trust and rent-seeking indicators, small economies perform better than larger economies (Figure 2.4).

High fixed costs adversely affect private sector activity in small economies. Higher fixed costs imply cost disadvantages and domestic market structures with elevated concentration and inferior competition. High concentration and low domestic competition are often exacerbated by policy-driven costs, for example through selective tax expenditures. Foreign trade by itself does not overcome this problem because fixed costs imply higher trade costs exacerbated by inadequate trade-related infrastructure and weak connectivity.

Weak connectivity is important because it hinders foreign trade, as documented by Winters and Martins (2004). Two measures of such connectivity are air and shipping. Small economies tend to be less connected than their larger peers in terms of both of these measures. For example, Figure 2.5 shows a positive relationship between the Air Connectivity Index (ACI) and population. The ACI is constructed using a gravity-based model for 211 countries and territories (nodes) (Arvis and Shepherd 2012).

The same relationship—that is, diminishing connectivity with declining size—holds for global liner shipping networks (Figure 2.6). However, infrastructure indicators do not reveal a worse status of smaller economies as compared to larger ones (Figure 2.7).

Size matters less if a small economy is located in a "good" neighbourhood. However, small economies are generally located in more difficult neighbourhoods both in a geographical

and economic sense. Small economies are subject to more damaging natural disasters and external economic shocks that together result in higher growth volatility. In turn, higher growth volatility may underlie lower mean economic growth.

As shown in Figure 2.8, smaller economies experience larger external shocks than do larger economies. An index of external shocks that measures the combined effects of contemporaneous shocks to trade, remittances, foreign direct investment, and service exports shows that the median size of external shocks for smaller economies is −0.14, while for larger economies it is 0.46, that is, the median shock for small economies is negative while for large economies it is positive.

Geographical location also matters because natural disasters are another source of external shocks. As shown in Figure 2.9, the relationship between the number of natural disasters per square kilometre and the log of the population of the country is negative. The average relationship for the world is one event per square kilometre, while for small economies it is threefold, that is, three events per square kilometre. For the Caribbean it is 5.1 events per square kilometre.

The direct economic cost of natural disasters is also higher for smaller economies (Figure 2.10). For larger economies, the cost of such disasters in terms of GDP directly lost is US$59.5 per square kilometre, while for small economies it is more than double, that is, US$179 per square kilometre. For the Caribbean it is even higher at US$312 per square kilometre.

FIGURE 2.5. Air Connectivity Index and Size
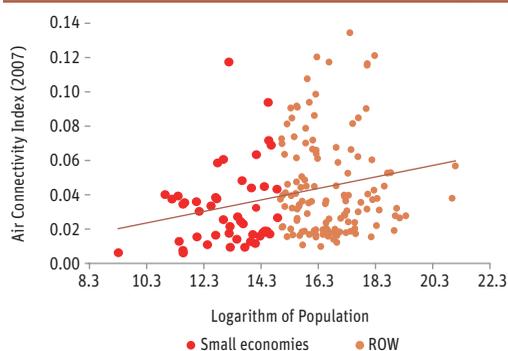
Source: United Nations Conference on Trade and Development.
Note: ROW = rest of the world.

FIGURE 2.6. Shipping Connectivity Index and Size
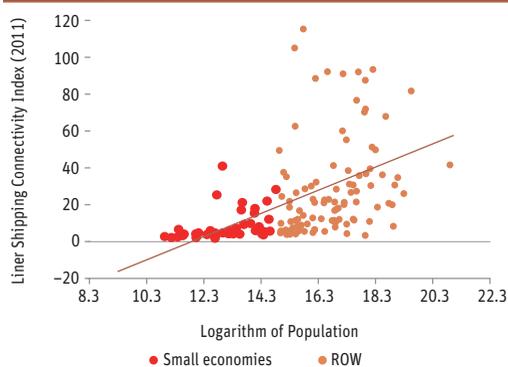
Source: United Nations Conference on Trade and Development.
Note: ROW = rest of the world.

FIGURE 2.7. Infrastructure in Smaller versus Larger Economies
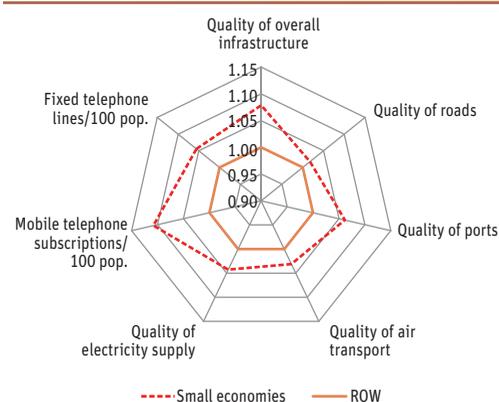
Source: World Economic Forum, *Global Competitiveness Report* 2013–2014.
Note: ROW = rest of the world.

FIGURE 2.8. External Shocks
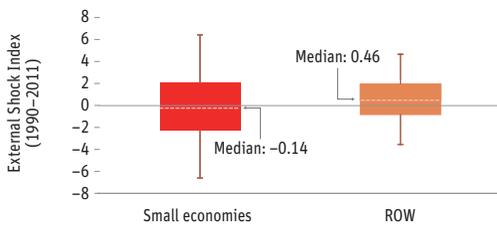
Sources: International Monetary Fund, *World Economic Outlook*, October 2013; and International Financial Statistics.
Note: ROW = rest of the world.

FIGURE 2.9. Number of Natural Disasters
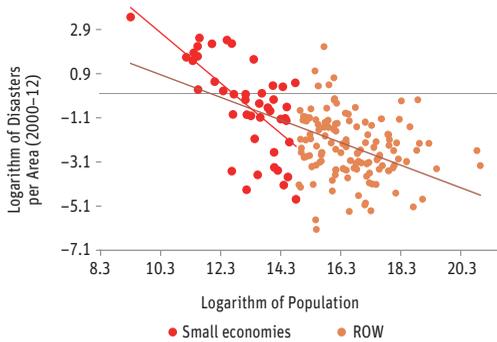
Sources: The International Disaster Database; and International Monetary Fund, *World Economic Outlook*, October 2013.
Note: ROW = rest of the world.

FIGURE 2.10. Direct Costs of Natural Disasters (measured in U.S. dollars)
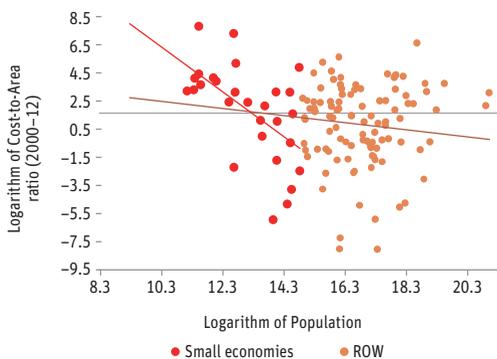
Sources: The International Disaster Database; and International Monetary Fund, *World Economic Outlook*, October 2013.
Note: ROW = rest of the world.

There is also growing evidence that natural disasters have indirect costs, as they negatively affect not only short-term but also long-term economic growth. Examples in the literature that support this claim include Khan (2005) and Kellenberg and Mobarak (2008), who study the relationship between economic development and vulnerability to natural disasters. Heger, Julca and Paddison (2008) and Auret (2003) emphasise the role of country size as a major determinant of vulnerability. Raddatz (2007) studies the short-term impact of various external and exogenous shocks, including natural disasters, in explaining output fluctuations. He concludes that natural disasters have an adverse short-run impact on output dynamics. Noy (2009) finds a similar negative impact and also describes some of the structural and institutional factors that make the negative effect worse. Raddatz (2009) concludes that smaller and poorer states are more vulnerable, especially to climatic events, and that most of the output cost occurs during the year of the disaster. Hochrainer (2009) extrapolates pre-disaster trends in GDP and constructs counterfactuals of the medium-term evolution of GDP without disasters.[1] He compares the counterfactuals with observed GDP and finds that natural disasters on average lead to negative consequences, although the effects are significant only in the case of large shocks.

There is less consensus in terms of the long-run effects of natural disasters. Skidmore and Hideki (2002) and Noy and Nualsri (2008) reach diametrically opposed

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[1] Medium term in this case means up to five years after the disaster event.

conclusions, with the former identifying expansionary effects and the latter contractionary effects of natural disasters in the long run. Jaramillo (2009) supports the Noy and Nualsri (2008) conclusion, as does Raddatz (2009), who concludes that, in the long run, per capita GDP is lower as a result of climatic events.

Thus, economic volatility, be it from exogenous economic shocks or natural disasters, may itself be a factor that contributes to lower economic growth of small economies.

2.3 Does Size Matter for Economic Prosperity?

There is an inverse relationship between average growth rates and country size (Figure 2.11). It appears that the smaller the country, the smaller its economic growth rate.

However, the greater concern here is the extent to which size is a binding constraint to growth. If size is a binding constraint, then small countries should have growth rates that are tightly distributed around a low mean, because size is a sufficient condition for slow growth. Larger countries should have growth rates that are more widely distributed around a higher mean.

A wider dispersion in performance across non-small economies would be driven by variation in other growth determinants that are not a factor in smaller economies.

As shown in Figure 2.12, although the median growth for smaller economies is lower than that for larger ones, the dispersion is higher, contrary to expectations. Median growth over 1980–2012 is 3.6 percent for smaller economies and 3.8 percent for larger ones. For the C6, median growth over the same period is 2 percent, while that for OECS economies is 3.3 percent.

As shown in the figures, size has thus not been a binding constraint for economic growth for some countries. In other words, countries can escape the size constraint. For example, Alesina, Spolaore and Wacziarg (2005) find that although a ten-fold increase in population is associated with a 0.33 percent point increase in average growth rates, countries can overcome size-related disadvantages through greater openness, education, and financial development.

FIGURE 2.11. Size and Economic Growth
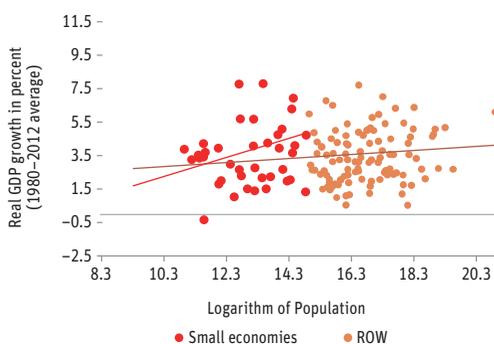
Source: International Monetary Fund, *World Economic Outlook*, October 2013.
Note: ROW = rest of the world.

FIGURE 2.12. Is Size a Binding Constraint to Economic Growth ?
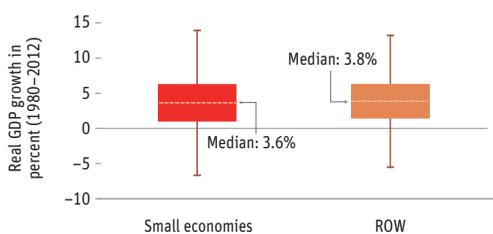
Source: International Monetary Fund, *World Economic Outlook*, October 2013.
Note: ROW = rest of the world.

FIGURE 2.13. GDP Volatility
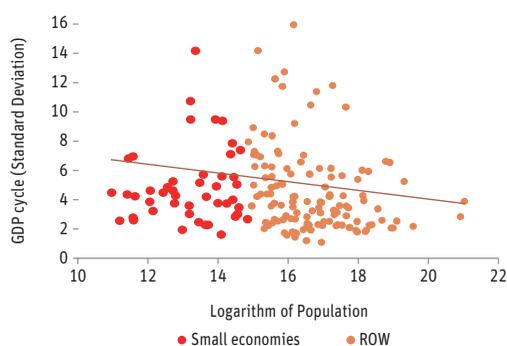
Source: International Monetary Fund, *World Economic Outlook*, October 2013.
Note: GDP cycle estimated with the HP filter; ROW = rest of the world.

FIGURE 2.14. Growth Inertia
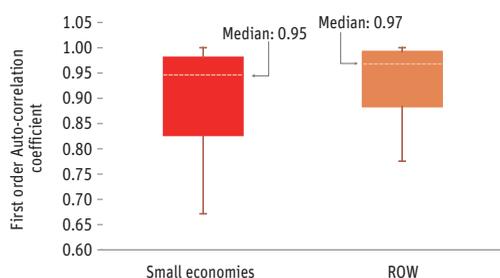
Source: International Monetary Fund, *World Economic Outlook*, October 2013.
Note: Auto-correlation coefficient estimated by using a simple AR(1) process; ROW = rest of the world.

Economic volatility is greater in smaller countries. Figure 2.13 shows the relationship between the standard deviation of the GDP cycle and population for small and non-small economies. This measure shows that the growth volatility of small economies is higher: the median for small economies is 4.5 standard deviations compared to 4.0 standard deviations for larger economies.

There is an inverse relationship between country size and growth volatility that stems from the fact that the larger the country, the more inertia in the growth rates. Figure 2.14 shows the coefficient that captures the relationship between real GDP growth with the previous year's growth inertia, and country size. It shows that the median coefficient for small economies is 0.95 and for larger countries it is higher at 0.97, with a distribution for small economies biased towards lower inertia figures for small economies relative to larger ones. A factor in this inertia is the larger number of sectors in large economies compared to small one (Imbs 2007). More specialisation in sectors and external markets and more openness of smaller economies imply greater sensitivity to external shocks. Openness, measured by the sum of exports and imports of goods and services to GDP, is 112 percent for small economies and 87 percent for large ones.

With respect to commodity and sector specialisation and volatility, Malik and Temple (2006) found a positive relationship between product concentration of exports and countries' terms of trade volatility, which in turn was a significant determinant of income volatility. Koren and Tenreyro (2007) estimate that the sectorial composition of an economy that specialises in fewer and more volatile sectors explains roughly 50 percent of the differences in volatility.

Since the study by Ramey and Ramey (1995), a consensus has developed that there is an inverse relationship between volatility and mean growth. Ramey and Ramey estimated that an increase of one standard deviation in volatility was associated with a half percentage point decline in per capita GDP growth. A more recent study by Dabušinskas, Kulikov, and Randvee (2012), which uses more up-to-date data and a larger sample of countries, estimates that a 50 percent increase in volatility translates into 0.4 percentage-points lower annual per capita growth. Schumpeterian

creative destruction, which implies a positive relationship between volatility and mean growth, does not appear to hold. The Dabušinskas et al. (2012) study further implies that the welfare loss due to volatility is greater.

In conclusion, as evidenced in this chapter, the size of a country matters but does not have to be a binding constraint. Nonetheless, the performance of small economies is, on average, worse than non-small economies. Thus, a priori, the performance of Caribbean countries may very well be less than rosy.

Is the Caribbean an Outlier?

Economic growth in the small countries of the Caribbean has been losing ground continuously in comparison with the rest of small economies (ROSE), leading to a real per capita GDP gap. As a point of departure, discussions about this gap almost invariably invoke the phrase "small and vulnerable" in reference to the Caribbean, echoing the fatalistic tone about small economies in general or some insurmountable problem facing the Caribbean in particular. An early statement of the downsides of the small economies of the Caribbean was made by the Caribbean economist Demas (1965). More recently, there have been warnings about falling into the trap of inappropriate analytical frameworks, such as this statement by Worrell (2011):

> "At the moment our research looks pretty much like any other. We used to argue that Caribbean circumstances were different, that small open economies…were different, and that resource rich and resource poor countries were different. Nowadays we use the same models, the same specifications, similar data and the same tests. If you use these methods and you get the same result for Barbados, with an economy the size of a small county in an obscure US state, as you get for the entire US, shouldn't you be skeptical?"

However, in the same vein as the agnostics of the relevance of size, Pantin (1994) argues that in the past too much emphasis was placed on the disadvantages of small states in the Caribbean.

3.1 Heterogeneity within the Caribbean

The thrust of this report compares the average values of the Caribbean with averages of ROSE. However, before considering the Caribbean growth gap, it is important to note the commonality and differences between the countries in the region. This report, for example, distinguishes between tourism-based and commodity-based economies. Tourism-based economies are The Bahamas, Barbados, Jamaica, and the countries of the Organisation of Eastern Caribbean States (OECS). Figure 3.1 shows the direct and indirect contribution of tourism and travel to GDP as a percent of total GDP. The range of the contribution of tourism and travel goes from 22 percent in Grenada to 75 percent in Antigua and Barbuda.

FIGURE 3.1 Tourism Dependency (percent)

■ Direct contribution to GDP (left axis)
● Total contribution to GDP (right axis)
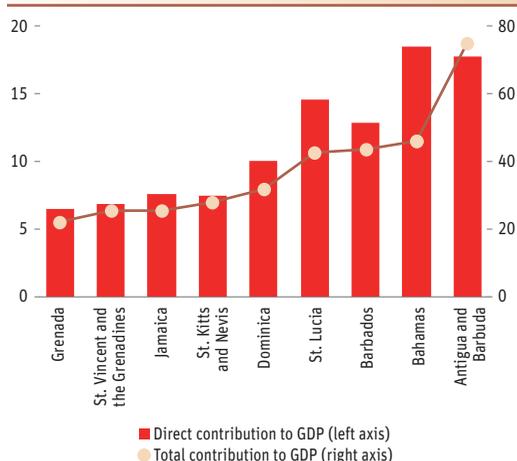
Source: World Travel & Tourism Council.

Caribbean countries that rely on commodity-based revenues are Guyana, Suriname, and Trinidad and Tobago. The top two commodity exports in Guyana and Trinidad and Tobago represent 55 percent of their total exports of goods and services, while Suriname's exports of gold and aluminum oxide represent 49 percent of total exports (Table 3.1).

3.2 Gaps in Economic Growth

One way at looking at the relative decline of economic growth in the Caribbean is by considering steady-state growth and its volatility. Estimating steady-state growth is fraught with problems. A proxy is modeling economic growth as a function of its lagged value and a constant plus an innovation term (Blanchard and Simon 2001; IMF 2012), from which we can obtain measures of steady-state growth and its variability.

An increase in steady-state growth and a fall in volatility imply longer expansions and faster recoveries, that is, an increase in resilience. For emerging markets and developing countries, steady-state growth has risen and volatility has fallen, implying an ability to sustain longer and stronger expansions, shorter and shallower downturns, and more rapid recoveries. In advanced economies, steady-state growth has fallen, as has volatility. These are countervailing forces, as lower steady-state growth implies shorter booms, and lower volatility implies larger expansions.

Figure 3.2 shows Caribbean (commodity- and tourism-based) steady-state growth and its volatility relative to (commodity- and tourism-based) ROSE. It reveals that steady-state growth

TABLE 3.1. Commodity Exporters

Country	Commodity	Percentage of total exports of goods and services
Guyana	Gold (including put plated, unwrought and semi-manufactured forms or powder)	38.9
	Rice	16.2
Suriname	Gold (including put plated, unwrought and semi-manufactured forms or powder)	29.1
	Aluminum oxide (including artificial corundum), aluminium hydroxide	19.7
Trinidad and Tobago	Petroleum gases & other gaseous hydrocarbons	36.7
	Oil (not crude) from petrol & bitum mineral etc.	18.1

Source: Hausmann et al. (2011).

FIGURE 3.2. Relative Steady-State Growth and Volatility Gaps, 1980–2010
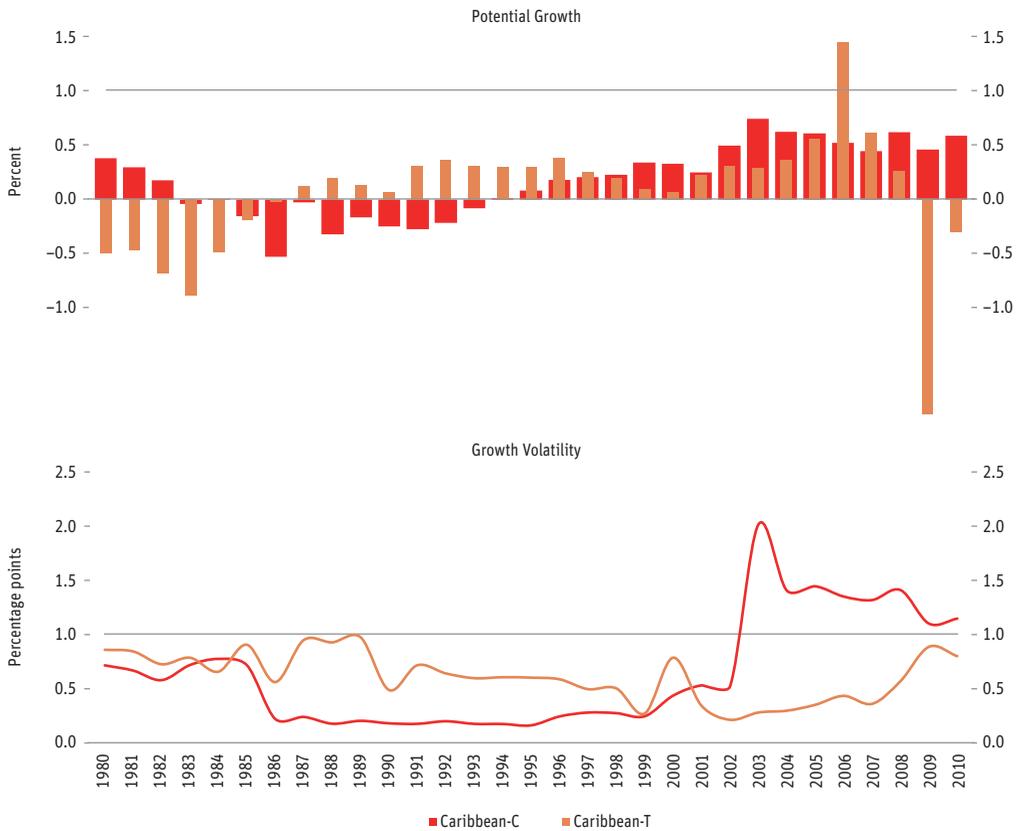
Source: Authors' calculations.
Note: Caribbean-C = commodity-based economies; Caribbean-T = tourism-based economies.

has remained below the average for ROSE, although recently with a reduced gap. Volatility in the Caribbean was lower but has recently become greater than the average for ROSE, driven mainly by commodity-based economies.

There is clearly a different pattern between commodity-based and tourism-based economies in the Caribbean. For commodity countries, relative volatility has risen above that for ROSE and economic growth has begun to closely approach the ROSE average. The net result is a growing real per capita GDP gap between Caribbean countries and ROSE (Figure 3.3).

The same generally holds for both tourism-based economies (The Bahamas, Barbados, Jamaica, and the OECS countries) and commodity exporters (Guyana, Suriname, and Trinidad and Tobago). However, commodity countries appear to be leaving the pack—since the 2000s, they have begun to close the real GDP per capita gap.

Another worrisome feature is the deteriorating ability of the Caribbean to generate employment or reduce unemployment for a given growth rate. Figure 3.4 shows the relationship between the unemployment rate and real GDP growth. It shows that the Caribbean had an advantage up

FIGURE 3.3. Relative GDP Per Capita Gap, 1971–2009 (percent)
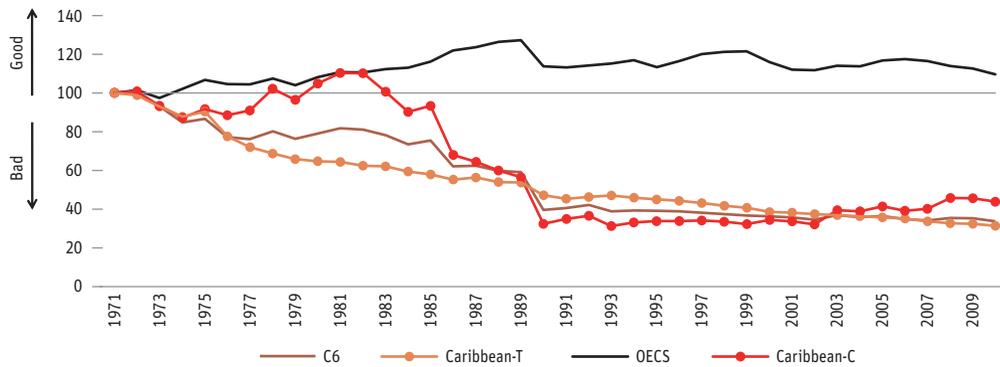
Source: Penn World Table 7.1 (Heston, Summers and Aten 2012); and International Monetary Fund, *World Economic Outlook*, October 2013.
Note: C-6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago; Caribbean-C = commodity-based economies; Caribbean-T = tourism-based economies; OECS = Organisation of Eastern Caribbean States.

FIGURE 3.4. Capacity to Reduce Unemployment, 1984–2007
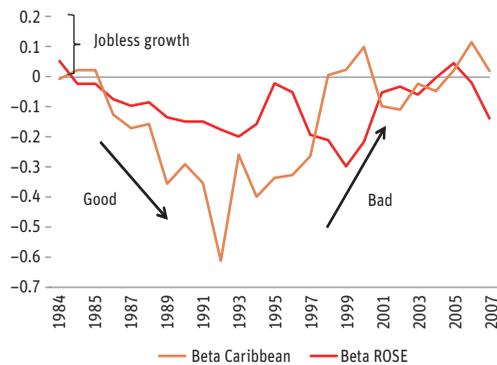
Source: Authors' calculations.
Note: Caribbean = C6 + St. Lucia; five year rolling Okun coefficients.

until the late 1990s. For the same level of economic growth, the unemployment rate was reduced more for the Caribbean than for ROSE. That advantage was lost after the late 1990s, and more recently it appears that the Caribbean has entered into a period of jobless growth. To reduce unemployment to zero, the region would have to grow by 12.3 percent annually for the next five years.

As evidenced by the growth gap and higher volatility relative to ROSE, the Caribbean has more challenges than just those derived from size alone. The next four chapters tackle the specific problems in the Caribbean that could account for the growth gap and the higher volatility of real GDP.

Lower Productivity and Competitiveness?

Economic growth can be due to increases in productivity, which in turn are driven by competitiveness. Without competition there are inadequate incentives for enterprises to invest in innovation to increase their productivity. Without innovation and productivity growth, economic growth stagnates. Thus, a hypothesis of what underlies the Caribbean growth gap is that the region has a lower level of productivity and an inferior level of competitiveness.

4.1 Productivity

One way to promote economic growth is to increase the amount and types of labour and capital used in production and improve the efficiency of how these factors of production are used together—that is, improve productivity. Productivity growth comes from more efficient use of inputs through improvements in the management of production processes, organisational changes, and innovation.

Thus, there are three main direct growth factors that could account for the Caribbean's relative decline. The first is a decrease in the number of people working relative to the total population. The second is the lower use of capital per unit of labour. The third is inferior technological progress as measured by changes in total factor productivity (TFP).

Growth decomposition quantifies the contribution of each factor to economic growth, and hence can be used to discern the roles of inputs (labour and capital) and TFP in explaining the growth differential between the Caribbean and the rest of small economies (ROSE).

Labour input, as shown in Figure 4.1, shows lower growth in the labour force in the Caribbean among the economically active population, which is used because employment figures are generally not available for the region. Lower population figures for the Caribbean, as shown in Figure 4.2, are partly due to high net emigration rates. According to Mishra (2006), the Caribbean countries have lost more than 70 percent of their labour force with more than 12 years of schooling through emigration (Table 4.1). This is worrisome because one of the few noncontroversial stylised facts in economic growth literature is the positive contribution of

FIGURE 4.1. Labour Force Growth Relative to Population Growth, 1992–2011 (percentage points)
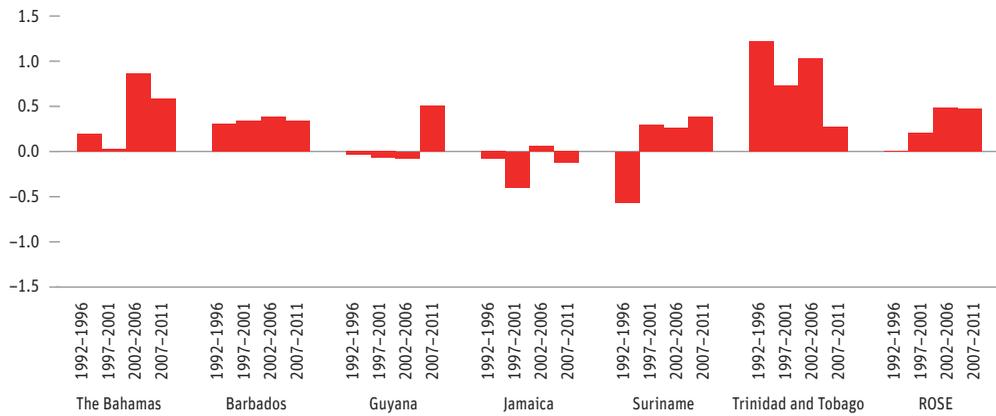
Source: World Bank.
Note: ROSE = rest of small economies.

FIGURE 4.2 Population Growth, 1980–2010 (relative ratios)
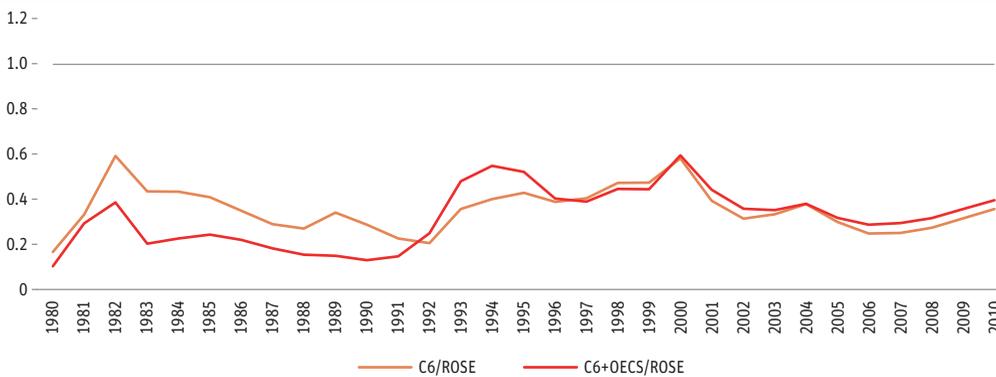
Source: Penn World Table 7.1 (Heston, Summers, and Aten 2012).
Note: C-6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago; OECS = Organisation of Eastern Caribbean States; ROSE = rest of small economies.

education to economic growth.[1] Thus, migration affects the Caribbean countries' ability to generate economic growth and jobs. This migration, however, does have an upside in terms of high remittances. Remittance flows are the largest source of external funding for the Caribbean; since the 1990s, remittances have been greater than foreign direct investment and official development flows (the latter has actually declined). Thus remittances ease the external constraint on growth.

However, according to Mishra (2006) the monetary value of the sum of emigration losses plus education expenditure costs is larger than the monetary value of remittances. Thus, migration

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[1] For a review of the literature, see Stevens and Weale (2003).

TABLE 4.1. Migration and Remittances

	Percent of labour force that has migrated to OECD member countries, by education level		Emigration loss plus estimated education expenditure (percent of GDP)	Remittances (percent of GDP, average 1980–2012)
	Secondary	Tertiary		
The Bahamas	10	61	4.4	–
Barbados	28	63	18.5	2.3
Guyana	43	89	9.5	1.9
Jamaica	35	85	20.4	7.4
Suriname	74	48	7.8	0.5
Trinidad and Tobago	22	79	16.8	0.3
OECS	50	75	10	7
C6	35	71	13	2
Average	43	73	11	4

Source: Mishra (2006).
Note: C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname and Trinidad and Tobago; OECS = Organisation of Eastern Caribbean States.

represents a net negative shock to the Caribbean, in addition to the social cost of high unemployment and the political implications of lots of well educated unemployed people.

Another input for economic growth is capital. Figure 4.3 shows the evolution of gross capital formation as a proportion of GDP in the Caribbean relative to that of ROSE. Investment was historically lower in the Caribbean prior to 1992, became relatively larger for a while, and then fell back to the same level as ROSE by 2010.

However, the rise in Caribbean gross capital formation was mainly due to an increase in public investment that was accompanied by an increase in the debt-to-GDP ratio relative to the ratio for ROSE. Private investment as a proportion of GDP fell below that of ROSE after 2000, as shown in Figure 4.4.

FIGURE 4.3. Gross Capital Formation Ratio, 1980–2010

Legend: C6/ROSE; C6+OECS/ROSE; Caribbean-C/ROSE-C; Caribbean-T/ROSE-T
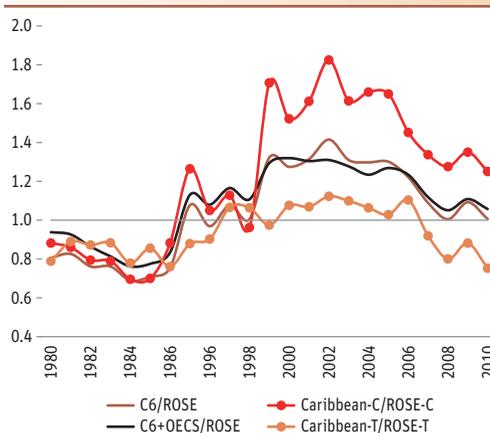
Source: Penn World Table 7.1 (Heston, Summers, and Aten 2012).
Note: Caribbean-C/ROSE-C = commodity-based economies; Caribbean-T/ROSE-T = tourism-based economies; OECS = Organisation of Eastern Caribbean States; ROSE = rest of small economies.

FIGURE 4.4 **Public-to-Private Investment Ratio, 1990–2010**
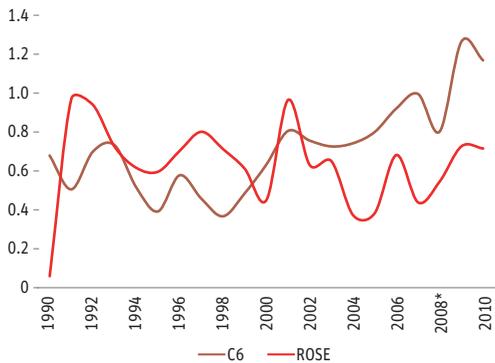
Source: International Monetary Fund, *World Economic Outlook*, October 2013.
Note: Regional average growth rate after 2008 excludes Trinidad and Tobago; C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname, Trinidad and Tobago; ROSE = rest of small economies.

Further, as gross capital increased relative to ROSE, simultaneously TFP fell below that of ROSE and has continued falling. Figure 4.5 shows that since the late 1990s Caribbean TFP has declined more and more below that of ROSE. There is, however, a different pattern between tourism- and commodity-based countries. Tourism-based economies have a continuous decline while commodity-based have begun to close the gap.

Identity decomposition shows the relative contribution of capital and TFP to the GDP gap in per capita terms (Figure 4.6).

FIGURE 4.5. **Relative Total Factor Productivity Cumulative Growth, 1982–2010**
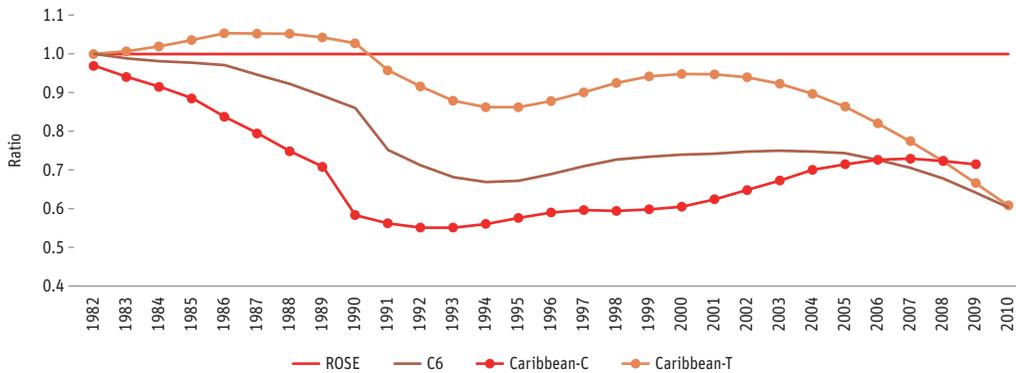
Source: Authors' calculations.
Note: C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago; Caribbean-C = commodity-based economies; Caribbean-T = tourism-based economies; ROSE = rest of small economies.

Thus, part of the answer of why there is a growth gap is because of lower inputs in production and a lower level of TFP in the Caribbean. Lower inputs and TFP, in turn, could be due to a number of factors. A competitiveness gap is often considered to be the reason behind an economic growth differential.

4.2 Lower Competitiveness?

The wide and widening competitiveness gap of the Caribbean countries could be a candidate to account for the region's productivity growth shortfall. The word "competitiveness," however,

can mean many things and be measured in many ways. The most common measure of a country's competitiveness is the real exchange rate, often complemented by specific costs such as unit labour costs or energy costs. Two often-used indirect measures are world market shares of exports and the current account of the balance of payments. Increasingly, synthetic measures are also used, such as the World Economic Forum's *Global Competitiveness Report* and the World Bank's Doing Business Index. Both combine opinions with data.

The real exchange rate can be measured in different ways. The most commonly used measure is the purchasing power parity (PPP) definition of the real exchange rate (Taylor and Taylor 2004), which is used as a comprehensive measure of a country's price and cost competitiveness. According to that measure, the Caribbean does not appear to have a major real exchange rate problem. Figure 4.7 shows the PPP real exchange rates (a proxy for tradable to non-tradable prices) and real GDP per capita in 2010. A positive relation between the real exchange rate and GDP per capita is expected, given the Balassa-Samuelson effect—i.e., the prices of non-tradable goods and services relative to the prices of tradable goods tend to be higher in high-income countries than in low-income countries. Taking into account GDP per capita, the Caribbean countries all appear to be within the equilibrium range.

An indirect measure of competitiveness is the world market shares of exports of goods and services in general and tourism in particular. This corresponds to the OECD's definition of competitiveness as "…a measure of a country's advantage or disadvantage in selling its products in international markets."[2] Figure 4.8 shows the Caribbean export share as a ratio

FIGURE 4.6. Decomposition of GDP Gap with Respect to ROSE, 1983–2010 (percentage points)
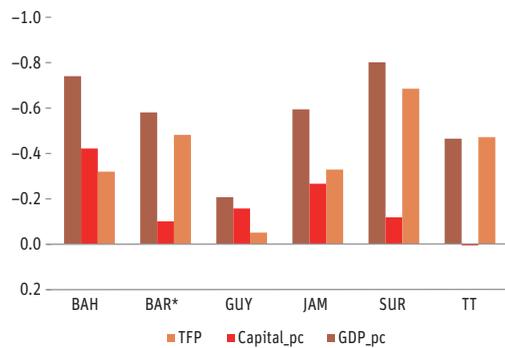
Source: Authors' elaboration.
Note: TFP = total factor productivity; pc = per capita; *estimation for Barbados corresponds to the period from 1983–2009.

FIGURE 4.7. Competitiveness: Real Exchange Rates, 2010
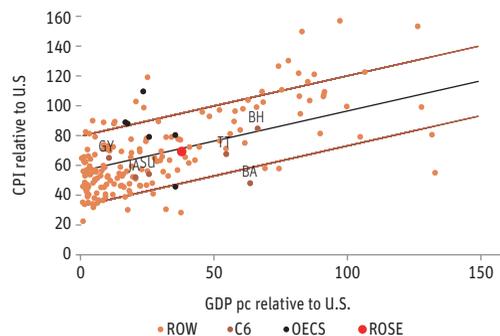
Source: Penn World Table 7.1 (Heston, Summers, and Aten 2012).
Note: CPI = consumer price index; OECS = Organisation of Eastern Caribbean States; BH = The Bahamas; BA = Barbados; GY = Guyana; JA = Jamaica; SU = Suriname; TT = Trinidad and Tobago; ROW = rest of the world; ROSE = rest of small economies.

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[2] As defined in the Organisation for Economic Cooperation and Development's *Glossary of Statistical Terms*.

FIGURE 4.8. Competitiveness: Relative World Market Export Shares, 2000–2011
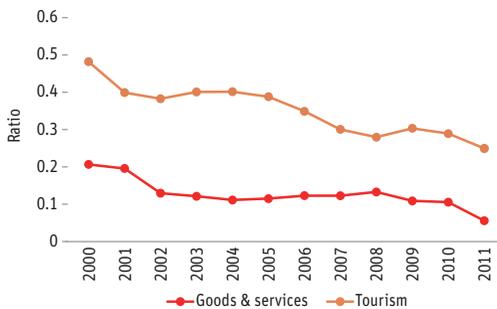
Source: UN Conference on Trade and Development, UNCTADstat.

FIGURE 4.9. Competitiveness: Current Account of the Balance of Payments, 1990–2010
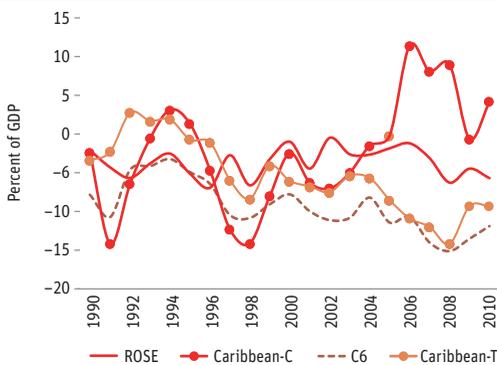
Source: International Monetary Fund, *World Economic Outlook*, October 2013.
Note: C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago; Caribbean-C = commodity-based economies; Caribbean-T = tourism-based economies; ROSE = rest of small economies.

FIGURE 4.10. Current Account plus Foreign Direct Investment, 1990–2010 (percent of GDP)
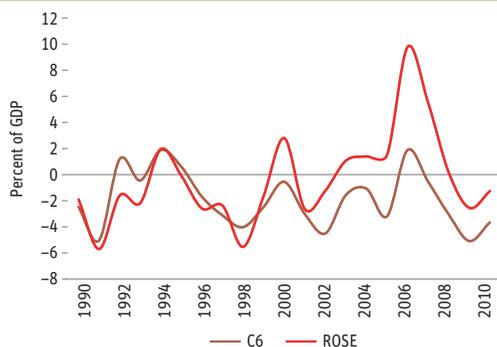
Source: International Monetary Fund, *World Economic Outlook*, October 2013.
Note: C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago; ROSE = rest of small economies.

of that of ROSE. It reveals a continuous decline, which amounts to a decrease in Caribbean competitiveness. The advantage of using shares over real exchange rates is that market shares embody both price and non-price factors (Benkovskis and Worz 2013).

Another indirect measure of competitiveness is the current account of the balance of payments. A current account deficit holds when a country's imports exceed its exports; domestic consumption and investment exceed its production; and domestic aggregate savings are below domestic aggregate investment. Figure 4.9 shows an increasing deficit in the Caribbean current account balance, while for ROSE there appears to be a trend improvement prior to the onset of the 2008 financial crisis. Again, this amounts to lower Caribbean competitiveness.

A country running a current account deficit spends more than it produces, and thus has to borrow through private-sector foreign direct investment (FDI), portfolio investment, and/or sovereign borrowing. If the current account is financed through FDI, the existence of a current account deficit is considered less troublesome. Investments will increase production and GDP in the future. However, the relative situation is worse if FDI is taken into account. The current account plus FDI has, with fluctuations, become a surplus for ROSE, but not for the Caribbean (Figure 4.10).

Related to the current account measure of "competitiveness" is the real exchange rate. This is consistent with closing the gap between the actual

current account deficit and the current account norm that approximates external sustainability. The external sustainability measure calculates the difference between the actual current account and that which would stabilise the net financial position at a given benchmark. The difference is used to estimate the real exchange rate that will bring the current account to that stabilising level (IMF 2006). Within this perspective, and in contrast to the PPP definition, the Caribbean does have a real exchange rate problem. As Figure 4.11 shows, the Caribbean generally has an overvalued exchange rate.

Often, in addition to the real exchange rate, other specific prices such as labour unit costs and energy prices are used to gauge competitiveness. Data on unit labour costs are generally not available for the Caribbean. Energy costs and their variability, as well as the reliability of supply, are key factors contributing to macroeconomic instability in the Caribbean States that are highly dependent on fossil fuels. The impact is increased instability of the fiscal and balance of payments accounts. In addition, high and variable energy prices hinder private sector activities and contribute to decreased competitiveness that in turn reduces potential economic growth.

FIGURE 4.11. Exchange Rate and Current Account
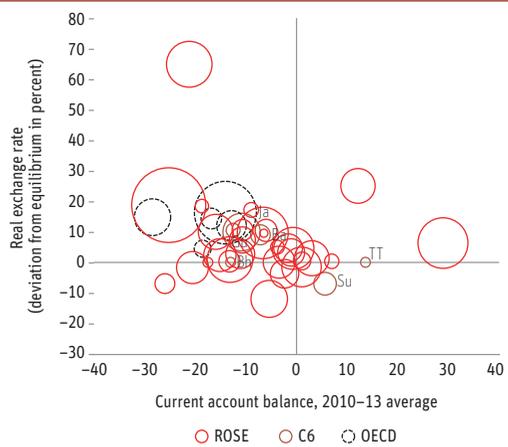
Source: Recent International Monetary Fund Article IV documents.
Note: The size of the bubbles indicates the size range of estimations due to different benchmarks, including long-run economic growth assumptions. ROSE = rest of small economies; C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname and Trinidad and Tobago; OECD = Organisation for Economic Cooperation and Development.

FIGURE 4.12. Global Competitiveness Index

Source: World Economic Forum, *Global Competitiveness Report 2013–14*.
Note: Caribbean-C = commodity-based economies; Caribbean-T = tourism-based economies.

A synthetic measure of competitiveness is the Global Competitiveness Index developed by the World Economic Forum (Figure 4.12). It reveals that the values for the Caribbean are systematically worse than for ROSE. The Caribbean does worse in the sub-indices for basic requirements (institutions, infrastructure, macroeconomic environment, and health and primary education), efficiency enhancers (higher education and training, goods and labour market efficiency, financial market development, technological readiness, and market size), and innovation and sophistication factors (business sophistication and innovation).

FIGURE 4.13. Goods Market Efficiency
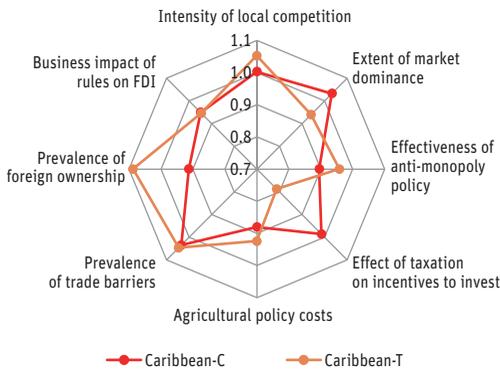
Source: World Economic Forum, *Global Competitiveness Report 2013–14.*
Note: Caribbean-C = commodity-based economies; Caribbean-T = tourism-based economies; FDI = foreign direct investment.

FIGURE 4.14. Labour Market Efficiency
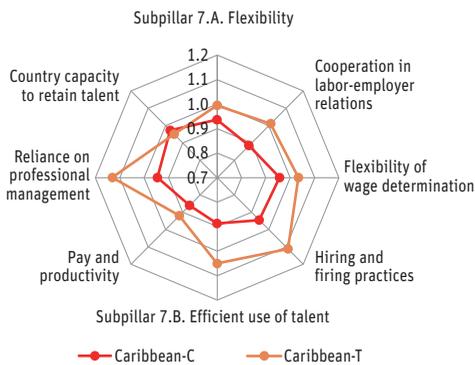
Source: World Economic Forum, *Global Competitiveness Report 2013–14.*
Note: Caribbean-C = commodity-based economies; Caribbean-T = tourism-based economies.

A comparison of efficiency enhancers between the Caribbean and ROSE suggests that Caribbean businesses have less competitive labour and product markets. Views of efficiency enhancers in goods markets are shown in Figure 4.13,[3] which reports that Caribbean businesspersons think that corporate activity is dominated by a few business groups rather than being spread among many; that the region has ineffective anti-monopoly policies rather than policies that effectively promote competition; that the tax structure is closer to one that creates a disincentive to work and invest; and that the rules discourage FDI rather than promote it, and hence foreign ownership is low. Caribbean businesspersons characterise the goods market as relatively noncompetitive, as compared to the views of ROSE businesspersons about product markets in their countries.

Views of indicators of labour markets show that Caribbean businesspersons think that the Caribbean labour market is relatively less competitive than what businesspersons from ROSE think of the labour markets in their countries (Figure 4.14). They consider that pay is not related to productivity, and cooperation in labour-employer relations is closer to confrontational than cooperative. Although the region is seen as being able to attract talent, businesspersons view it as having less efficiency in the use of talent and hence a lower capacity to retain that talent.

Thus, there are both productivity and competitiveness gaps in the Caribbean. The economic growth gap is due to inferior TFP. In addition, the different indicators to gauge competitiveness almost all appear to point toward a lower level of competitiveness as a reason behind the Caribbean productivity growth gap.

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[3] In the figure, Caribbean commodity exporters are compared to ROSE commodity exporters and tourism-based economies in the Caribbean are compared with their counterparts in ROSE.

Weak Institutions and Private Sector

One hypothesis that could account for the economic growth gap is that the Caribbean has weaker institutions and as a corollary a weaker private sector. If the sclerosis hypothesis is valid, then weak public institutions and a non-dynamic, non-innovative private sector are to be expected.

5.1 Institutions

Institutions matter for economic growth, as discussed in North (1989) and Acemoglu, Johnson and Robinson (2005). The latter argue that economic and political institutions define both the incentives and the constraints for the economic actors, and hence shape outcomes such as economic growth. Economic actors with greater value typically also have greater political power.

Effective economic institutions—that is, those that encourage economic growth—are successful when political institutions resist allocating power to, and create effective constraints on power brokers, thus ensuring that relatively few rents are captured by those brokers. The hypothesis here is that in the Caribbean the opposite situation holds relative to the rest of small economies (ROSE), and that this situation contributes to the economic growth gap.

Relative to ROSE, the Caribbean countries do worse in practically all dimensions of institutional capacity as measured by the World Economic Forum. Figure 5.1 shows that there is a lower level of public trust of politicians, more unproductive rent-seeking, and a greater degree of wastefulness in

FIGURE 5.1. Institutional Quality
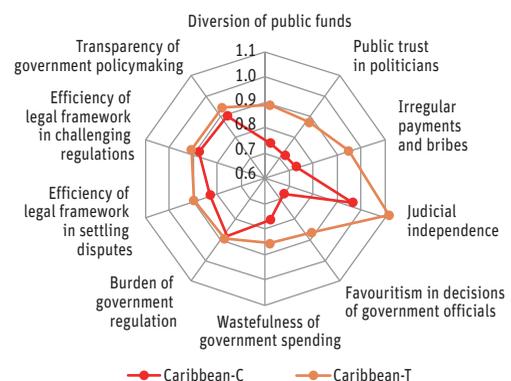
Source: World Economic Forum, *Global Competitiveness Report 2013–14*.
Note: Figures that are lower than unity indicate a worse performance. Caribbean-C = Caribbean commodity-based economies as compared to other small economies that are commodity-based; Caribbean-T = Caribbean tourism-based economies as compared to other small economies that are tourism-based.

government spending. Government officials engage in more diversion of public funds, show greater favouritism, and Caribbean businesspersons make more irregular payments and bribes. The only area where Caribbean tourism-based countries are at the same level as their ROSE counterparts is judicial independence.

Low trust (Beugelsdijk 2006) and more unproductive rent-seeking (Rama 1993; Tornell and Velasco 1993) are associated with lower economic growth, and hence could account for the Caribbean growth gap. The effects of trust on economic growth are both direct and indirect. The direct effect is the influence on the overall efficiency of economic activities. The indirect effect is the reduction of transaction costs and uncertainty. Higher trust thus encourages the accumulation of physical and human capital and the diffusion of technologies, which in turn increases total factor productivity. In addition, trust matters for the efficient functioning and performance of the government. Higher trust is associated with higher growth. For example, Knack and Keefer (1997) find that a one standard deviation increase in trust raises growth by 1.15 percent and investment by 2.04 percent.

Indicators of institutional capacity also relate to Olson's (1982) concept of ''institutional sclerosis,'' which hypothesises that special interest groups accumulate over time in stable societies and eventually reduce a country's economic efficiency.

Paraphrasing Heckelman (2007), Olson argued that incentives work against the formation of pro-growth groups. Groups that advocate excludable redistribution obtain large benefits for themselves while imposing costs on the broader society—that is, a redistribution akin to a negative externality. Consequently, groups that encourage redistribution are more likely to successfully form than groups that advocate growth. Further, since it takes time for even small groups to overcome their collective action problems, over time more special interest groups are expected to form and engage in redistributive activities. As these groups form, their impact diverts scarce economic resources away from technological advances and other growth-enhancing activities that are non-excludable and towards redistributive activities. Thus, Olson (1982) predicts that economic growth will naturally decline over time in stable societies as redistributive groups continue to flourish. The extent of the sclerotic effects of this free-riding behaviour would be a function of group size. Small groups would be more likely to form than large groups because free riding is easier to monitor in a smaller group. Hence, Olson's arguments are more pertinent to small-population countries.

Thus, the very feature that the Caribbean is proud of—political stability—may have created the conditions for and sustained an alliance against growth. As Figure 5.2 shows, the Caribbean has a much

FIGURE 5.2. **Relative Political Stability (index)**
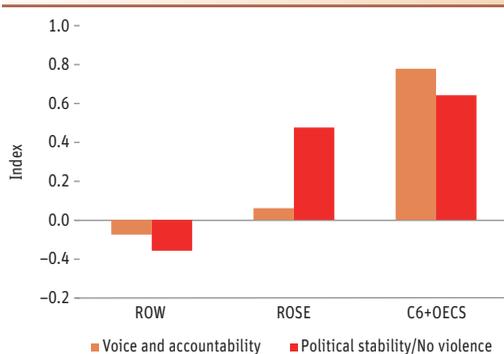
Source: World Bank, Governance Indicators.
Note: C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago; OECS = Organisation of Eastern Caribbean States; ROW = rest of world; ROSE = rest of small economies.

better performance in terms of voice and accountability (that is, the extent to which a country's citizens select their governments and have freedom of expression, association and free media) and political stability than ROSE, which in turn do better than the rest of the world (ROW).

It is thus no surprise that Dookeran (2012) raises the issue of an "anti-growth alliance" as a major factor hindering higher economic growth in the Caribbean. In other words, Caribbean states are good for (some) businesspersons but not necessarily good for business. Thus, the difference in growth between Caribbean countries and other small economies could be due to Caribbean governments not being as good for business.

FIGURE 5.3. Time-Costs of Doing Business
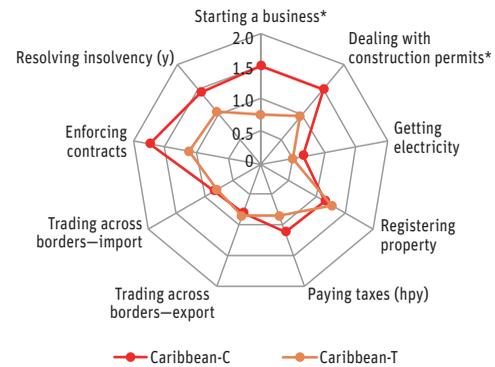
Source: World Bank, *Doing Business 2014 Report*.
Note: hpy = hours per year; y = years; Caribbean-C = commodity-based economies; Caribbean-T = tourism-based economies.
* Values exceeded 1.5.

Figure 5.3 shows the time-costs incurred by businesses in the Caribbean relative to time-costs in ROSE. Caribbean businesses face higher time-costs in terms of starting a business, dealing with construction permits, enforcing contracts, and resolving insolvency. It is difficult at this level of generality to determine which problem underlies these gaps, lower institutional capacity or a system geared toward rent-seeking. Nonetheless, suffice it to say that Caribbean governments could to a better job of supporting business development.

Selecting high-performing countries from ROSE and comparing them to the Caribbean countries reinforces evidence of the gap. The Caribbean is not making an effort to get ahead. Figure 5.4 shows the movement from 2009 to 2014 towards the World Bank's Doing Business frontier, which represents the highest performance observed for each of the indicators. An economy's distance to

FIGURE 5.4. Distance to the Frontier of Doing Business, 2009 and 2014
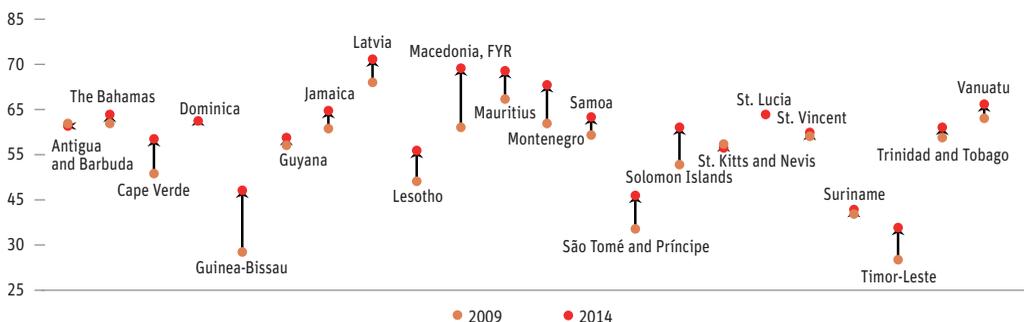
Source: World Bank, *Doing Business 2014 Report*.
Note: An economy's distance to the frontier is indicated on a scale from 0 to 100, where zero represents the lowest performance and 100 represents the frontier.

FIGURE 5.5. Obstacles to Business Operations
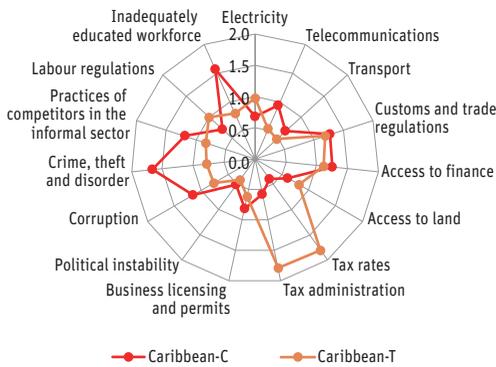
Source: World Bank, Enterprise Surveys.
Note: Caribbean-C = commodity-based economies; Caribbean-T = tourism-based economies.

the frontier is indicated on a scale from 0 to 100, where zero represents the lowest performance and 100 represents the frontier.

A complementary method of considering the relative business friendliness of governments—this time from the viewpoint of the business sector—is to compare what businesses consider to be the major obstacles they face, as captured by the World Bank's Enterprise Surveys. These surveys collect subjective (perception-based) data on the severity of different potential constraints faced by firms, along with objective data on performance. Although there has been some debate about the usefulness of perception-based data for assessing such constraints, Gelb et al. (2007) show that firms do not complain indiscriminately, and response patterns are correlated with several other country-level indicators related to the business environment.

Figure 5.5, which uses Enterprise Survey data, shows that, similar to the World Economic Forum indicators, Caribbean businesspersons identify the following obstacles to doing business: corruption, getting business licences and permits, and customs and trade regulations. These obstacles reinforce the assertion that unproductive rent-seeking is part and parcel of doing business in the Caribbean. In addition, businesspersons identify limited access to finance and land, problems of crime, theft and disorder, and the practices of competitors in the informal sector.

Two other problems cited as obstacles—tax administration and the provision of infrastructure—are typical essential public goods. It is conventional wisdom that competition and entry should promote efficiency and prosperity, so a positive effect of competition on firm performance and a negative effect of excessive regulations are usually expected. Carlin, Schaffer and Seabright (2006) found that anti-competitive practices (tax rates, tax administration, and others) were the most important business constraints within a 60-country data set. Gelb et al. (2007) focused on tax administration and labour regulations and found that tax administration was primarily a problem in middle-income countries.

In addition, an important function of government is to ensure adequate infrastructure. As shown in Figure 5.6, the overall quality of infrastructure for Caribbean tourism-based economies is at the average level of ROSE tourism-based countries but lower for the Caribbean's commodity-based economies.

Thus, in general, Caribbean governments could be better for business if they were to put in place a level playing field for different actors.

5.2 A Weak Private Sector

The other side of the Caribbean's relatively weak public institutions is the poor performance of the region's business sector.

However, analysis of the business sector is subject to severe constraints. There is little data on the performance of the private sector and the functioning of the product and service sectors. Nonetheless, something can be gleaned from the information in the World Bank's Enterprise Surveys.

The private sector has been recognised as a major driver of economic growth in developing economies. It is estimated that the private sector provides 90 percent of the jobs in these economies (World Bank 2005). Furthermore, firms play a key role in the development process by making investments, increasing productivity, and providing a wide range of goods and services needed to improve living standards.

The role of the private sector is particularly important in the Caribbean context of fiscal entrenchment. Most Caribbean countries are facing high fiscal deficits and unsustainable public debt, and governments therefore do not have the capacity to be engines of growth, which instead must be led by the private sector and exports.

FIGURE 5.6. Infrastructure Gap
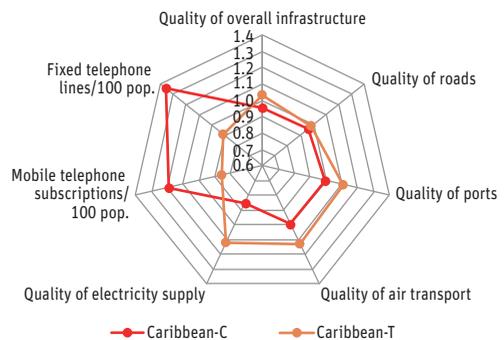
Source: World Economic Forum, *Global Competitiveness Report 2013–14*.
Note: Caribbean-C = commodity-based economies; Caribbean-T = tourism-based economies.

FIGURE 5.7. Performance of Private Firms
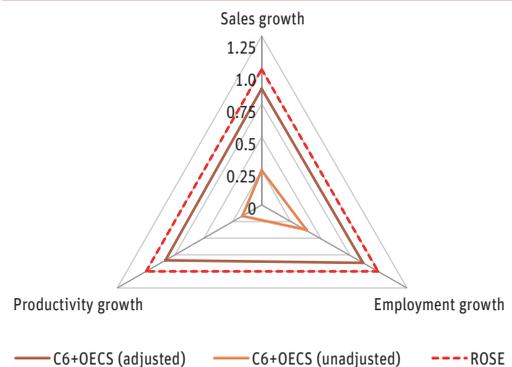
Source: World Bank, Enterprise Surveys.
Note: Growth rates are calculated by using fiscal years t-3. C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago; OECS = Organisation of Eastern Caribbean States; ROSE = rest of small economies.

The degree that the private sector is up to the challenge can be gauged from past performance. As shown in Figure 5.7, the Caribbean private sector's performance has been poor compared with that of ROSE. Data from the Enterprise Surveys covering the period from 2007–2010 show that sales growth of Caribbean firms has been only 26 percent, employment growth 37 percent, and productivity (sales to employment) 19 percent of the average for ROSE firms.[1] This relatively poor performance could be due to lower economic growth during the three survey years in the Caribbean relative to ROSE. However, adjusting the performance for differential growth rates between the Caribbean and ROSE, Caribbean firms still perform relatively poorly, although with a reduced gap.

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[1] One limit of the data is that the Enterprise Surveys only cover formal businesses.

FIGURE 5.8. Private Sector Profile
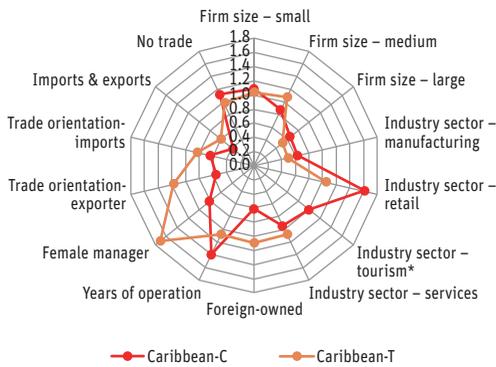
Source: World Bank, Enterprise Surveys.
Note: Caribbean-C = commodity-based economies; Caribbean-T = tourism-based economies; *Figure for tourism-dependent country comparison is 3.4.

The relatively poor performance of Caribbean enterprises could also be due to differences in the private sector's profile. Figure 5.8 shows the degree to which the profile of Caribbean firms differs from firms located in ROSE countries. The average Caribbean firm is smaller (less than 20 permanent full-time employees), older (20 years of operation), and less open to foreign trade than its ROSE counterpart. Caribbean firms are highly concentrated in the tourism and retail sectors in medium-sized localities, and ownership is predominantly local.

These specific characteristics of the private sector affect performance in different ways. For example, almost three-quarters of Caribbean firms are small compared to only two-thirds of ROSE firms. There is substantial evidence on the relationship between firm size and productivity, profitability, and survival rates. Considering that a growing amount of resources are being devoted to the promotion of small and medium-sized enterprises (SMEs), it is imperative to understand such relationships as well as the environment in which firms operate.

An important implication of firm size is whether it has an effect on financing costs and access to finance. There is considerable evidence that access to finance, in particular, is one of the most severe constraints faced by small enterprises. Figure 5.9 shows that 34 percent of Caribbean

FIGURE 5.9. Obstacles Faced by the Private Sector (percent)
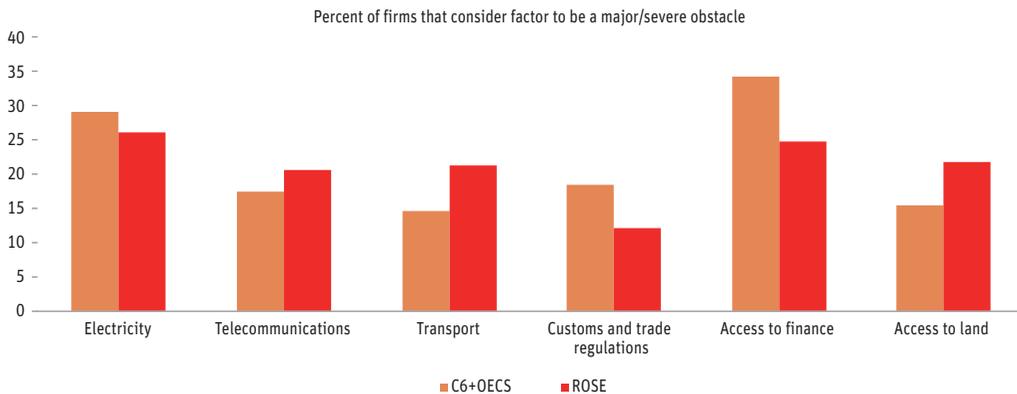
Source: World Bank, Enterprise Surveys.
Note: C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago; OECS = Organisation of Eastern Caribbean States; ROSE = rest of small economies.

entrepreneurs consider access to finance to be a major or severe obstacle to their firm's operations, compared to 24 percent in ROSE. The breakdown of these figures by firm size confirms that SMEs report greater financial constraints than larger firms in both the Caribbean and ROSE.

Within countries, firm size is a determinant for obtaining credit from banks. After controlling for the country's institutional development, small firms tend to report harsher financial constraints than large enterprises, as evidenced by a study by Beck, Demirgüç-Kunt, and Maksimovic (2005) using firm-level data from 54 countries. These findings are consistent with the World Bank's Enterprise Survey data analysed here. Figure 5.10 shows how the negative perception of access to finance declines with firm size in the Caribbean and ROSE, although Caribbean firms have a worse perception for all firm sizes.

Turning to another concern, Ayyagari, Demirgüç-Kunt and Maksimovic (2006) show that constraints related to finance, crime, and political instability are binding and directly affect a firm's growth rate. The financing constraint result is the most

FIGURE 5.10. Access to Finance and Firm Size (percent)
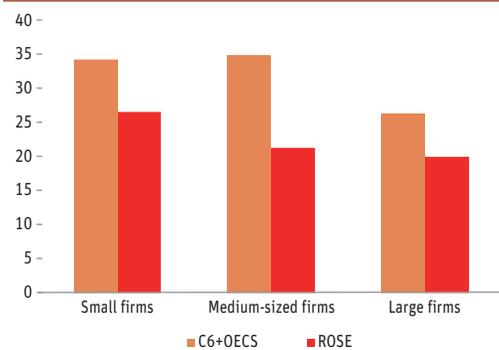
Source: World Bank, Enterprise Surveys.
Note: C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago; OECS = Organisation of Eastern Caribbean States; ROSE = rest of small economies.

FIGURE 5.11. Sales Growth and Bank Overdrafts (percent)

Source: World Bank, Enterprise Surveys.

robust. In a more recent work, Ayyagari, Demirgüç-Kunt and Maksimovic (2011) find that firms that have a loan or overdraft account are about 6 percent more productive, after controlling for country fixed-effects. Figure 5.11 shows that having an overdraft facility is associated with higher sales growth rates, regardless of firm size. The difference in sales growth ranges between 3.5 and 7 percent, and all differences are statistically significant.[2]

Infrastructure deficiencies also affect small firms disproportionately. Lee and Anas (1992) find that small firms depend more on public infrastructure and experience more power outages than larger firms because of the economies of scale in electricity provision. Figure 5.12 supports the findings of this analysis with firm-level data. The proportion of firms that own a

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[2] Two sample t-tests were performed for each of the firm size categories.

FIGURE 5.12. Power Generator Ownership and Firm Size (percent)
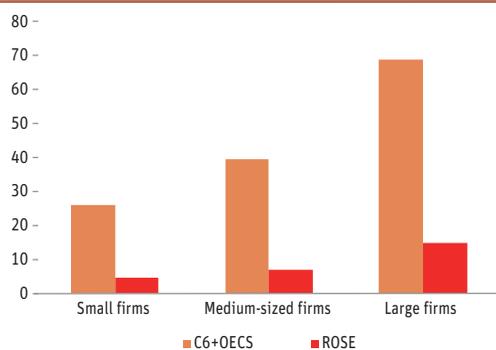
*Source:* World Bank, Enterprise Surveys.
Note: C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago; OECS = Organisation of Eastern Caribbean States; ROSE = rest of small economies.

power generator is significantly higher in the Caribbean than in ROSE, and ownership increases with firm size: it is relatively cheaper for larger firms to provide their own power. However, the large proportion of small Caribbean firms that own or lease a power generator is indicative of the higher costs they are willing to incur given the context of an unreliable power grid. Supporting evidence is found in Aterido, Hallward-Driemeier and Pagés (2007), who use firm-level data from 107 countries to assess the effects on job creation of access to finance, business regulations, corruption, and infrastructure bottlenecks. They found that small firms report electricity as a greater constraint than do larger firms.

There is a large body of theoretical and empirical literature based on international data that focuses on whether older firms outperform younger ones. Majumdar (1997) uses an extensive data set of Indian firms to analyse the effect of firm size and age on productivity and profitability. He concludes that older firms are more productive and less profitable. However, there is a stream of research showing that older firms tend to be less flexible and prone to inertia. Older firms are unable to make rapid adjustments in an evolving environment and are likely to be outperformed by younger, more agile firms.

More recently, Loderer and Waelchli (2010) find a highly significant negative relation between firm age and profitability. Their robust result stems from organisational rigidities. Consistent with this result, they find that older firms are less efficient compared to their industry peers, as manifested by higher costs, slower growth, increased overhead expenses, and reduced research & development and investment activities. Figure 5.13 provides evidence in support of Majumdar (1997). The longer firms have been operating, the higher their productivity (sales to employment). In contrast, sales growth decreases, on average, as firms age. Regarding trade orientation, empirical studies using micro-level data have revealed that importers have characteristics similar to those of exporters. Bernard et al. (2007) maintain that the top 10 percent of U.S. exporting firms (which represent only 4 percent of the total number of firms) account for 90 percent of total exports. Exporters (and importers) have been shown to be larger, more productive, and more skill- and capital-intensive than non-exporting firms, and they pay higher wages. Bernard et al. (2007) argue that such a productivity advantage can be thought of as self-selection: exporters are more productive not because of their exporting profile, but because only the most productive firms are able to cope with the associated cost of entering export markets.

FIGURE 5.13. Productivity and Sales Growth of Caribbean Firms (percent)
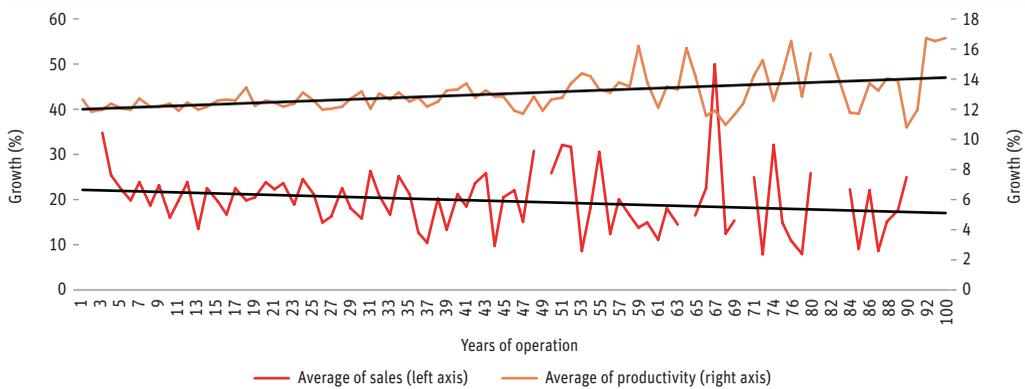
Source: World Bank, Enterprise Surveys.
Note: Linear Trends in black lines.

Muuls and Pisu (2009) and Vogel and Wagner (2008) show a positive relationship between labour productivity and importing status in European firms. Seker (2009) uses detailed firm-level data to show differences in the evolution of firms when they are classified as either two-way traders (importing and exporting firms), only exporters, only importers, and non-traders. This classification was used for the Caribbean and ROSE. Figure 5.14 summarises the share of exporters, importers, and two-way traders in the Caribbean and ROSE. Caribbean firms are less open to trade than ROSE firms, with only 11 percent of exporting firms, 8 percent of importers, and 2.3 percent of two-way traders defined as open to trade. Hence, 82.5 percent of Caribbean firms compete for the limited domestic market.

FIGURE 5.14. Trade-Orientation Classification (percent)


Source: World Bank, Enterprise Surveys.
Note: C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago; OECS = Organisation of Eastern Caribbean States; ROSE = rest of small economies.

This finding shows how the Caribbean private sector is missing out on the benefits of international trade. Evidence supporting the findings of Muuls and Pisu (2009) is provided in Figure 5.15. The distribution of sales from the previous fiscal year is clearly shifted to the right for firms that engage in exporting and importing activities. Firms not involved in international trade had the lowest average sales.

The resulting profile of the Caribbean private sector is not encouraging: it is made up of smaller, older, less-open firms that are predominantly locally owned and operate in small and medium-sized localities. Given the hypotheses discussed above, the relatively poor performance

FIGURE 5.15 Trade Orientation and Sales
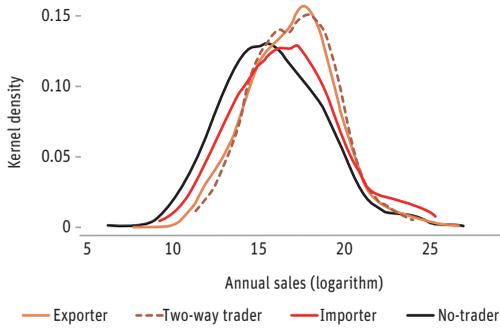
Source: World Bank, Enterprise Surveys.
Note: Sales in U.S. dollars.

of the Caribbean private sector is therefore no surprise. This does not bode well for a strategy that, ceteris paribus, assumes that private sector exports will be the future engine of growth, because the private sector relies on preferential treatment by public institutions to keep the unproductive grip on the economy, with no incentives to engage in competitive markets.

A Rough Macroeconomic Environment and a Rougher Neighbourhood

D iscussions of macroeconomic conditions and economic growth and the policies associated with each of them rarely interact. But adverse macroeconomic conditions, and inappropriate policy interacting with a harsh neighbourhood can contribute to inferior economic growth, and hence could account for the Caribbean growth gap.

In fact, there is a large macroeconomic environment gap in the Caribbean relative to the rest of the small economies (ROSE) in the world. According to the World Economic Forum's Competitiveness Index—a measure that combines the government budget balance, gross national saving, inflation, government debt, and credit ratings—the Caribbean's macroeconomic environment is not only worse than that of ROSE, it is worse for each component of the index (Figure 6.1).

6.1 Macroeconomic Environment

Debt

Policy discussions have concentrated on a key indicator of the macroeconomic environment: the level and rate of change of public debt. In terms of the Caribbean, low growth and high debt—dubbed the "silent debt crisis"—are often mentioned together.

Figure 6.2 shows that the average debt-to-GDP ratio for the Caribbean is higher than for ROSE, and that the difference has increased over time such that by 2012, Caribbean debt was 1.7 times the average for ROSE. When the figure is broken down, the same story applies for tourism-based economies and for countries in the Organisation of Eastern Caribbean States (OECS).

FIGURE 6.1. Macroeconomic Environment in the Caribbean Relative to ROSE
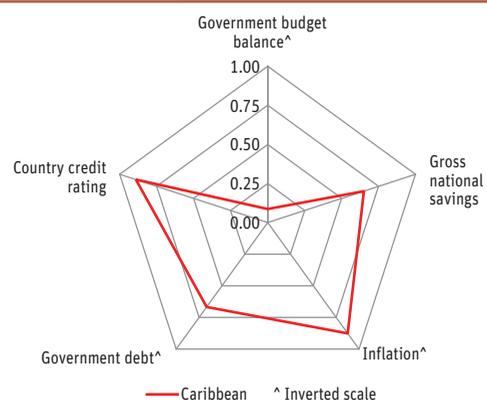
Source: World Economic Forum, *Global Competitiveness Report 2013–2014*.
Note: Caribbean = Barbados, Guyana, Jamaica, Suriname and Trinidad and Tobago; Barbados is not included; ROSE = rest of small economies.

FIGURE 6.2. Public Debt-to-GDP Ratios Relative to ROSE, 2000–2012
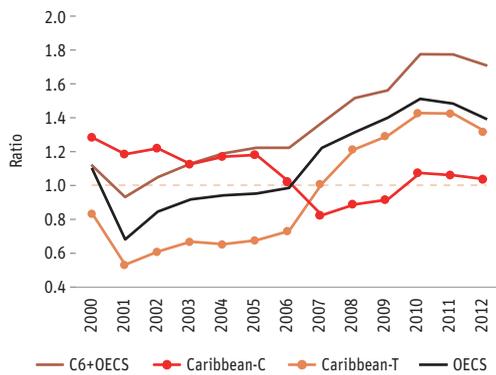
Source: International Monetary Fund, *World Economic Outlook*, October 2013.
Note: Relative ratios were calculated by using different other small economy benchmarks. C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname and Trinidad and Tobago; Caribbean-C = commodity-based economies; Caribbean-T = tourism-based economies. OECS = Organisation of Eastern Caribbean States.

However, higher debt or even a recent steep increase in debt does not, by itself, say much. The relation between the level of the debt-to-GDP ratio and economic growth is not a simple one. There is growing consensus that the relation is an inverted U curve: at certain low levels of the debt-to-GDP ratio an increase has a positive marginal and average effect (i.e., an increase in public debt increases economic growth). However, at a certain level (turning point on the inverted U curve), any further increase has a negative effect, and at a high level of yet-further increases, the impact (marginal and average) becomes negative.

Estimates for the Caribbean by Greenidge et al. (2012) indicate that when the debt-to-GDP ratio is below 30 percent, there is a positive marginal and average effect on growth. For debt-to-GDP ratios above 30 percent but below 56 percent, the average effect remains positive but the marginal effect becomes negative. Ratios greater than 56 percent imply a negative marginal and average effect on economic growth.

Figure 6.3 shows the ratios in 2012, when 19 small countries had debt-to-GDP ratios above 60 percent, with nine of those in the Caribbean: St. Vincent & Grenadines, St. Lucia, Dominica, Antigua and Barbuda, Barbados, Grenada, Guyana, Jamaica, and St Kitts and Nevis.

FIGURE 6.3. Debt-to-GDP Ratio and Economic Growth, 2012
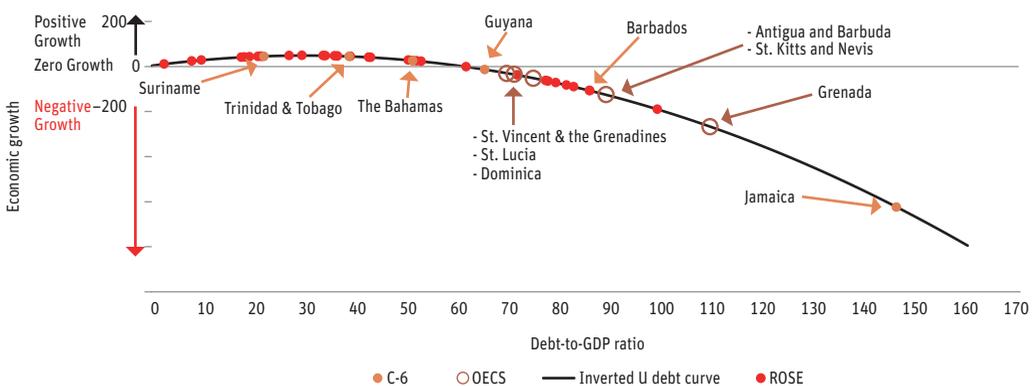
Source: Authors' calculations; and International Monetary Fund, *World Economic Outlook*, October 2013.
Note: C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago; OECS = Organisation of Eastern Caribbean States; ROSE = rest of small economies.

TABLE 6.1. Public Debt: Induced GDP Growth Loss

	Annual percentage point loss in real GDP growth	Cumulated loss since 1980 in percentage points of real GDP growth
Antigua and Barbuda	3.31	102.59
The Bahamas	n/a	n/a
Barbados	1.65	32.98
Dominica	1.12	23.38
Grenada	1.59	25.37
Guyana	16.76	519.70
Jamaica	5.22	161.97
St. Kitts and Nevis	5.46	76.46
St. Lucia	0.51	4.62
St. Vincent	0.37	5.50
Suriname	53.74	322.43
Trinidad and Tobago	0.42	6.26

Source: Greenidge et al. (2012).

Being on the dark side of the debt-to-growth relation—that is, having debt-to-GDP ratios above 56 percent—has meant a loss of economic growth. Table 6.1 estimates the annual and cumulative percentage point loss in real GDP growth from 1980 to 2010 taking into account the historical trajectories of the public-debt ratios of individual countries and the estimated curve, and assuming that the direction of causality goes exclusively from debt to economic growth. The largest percentage point cumulative loss has been for Guyana (519 points), followed by Suriname (322), and Jamaica (162).

How did the countries get to where they are today? Public debt rose for almost all of the C6 countries following the collapse of Lehman Brothers and the onset of the world financial crisis.[1]

An accounting exercise in Figure 6.4 shows the contribution of interest, primary fiscal balance, economic growth, inflation, exchange rate, and other factors (including residual due to asset-liability management operations).[2] The main factors underlying the increase in the debt-to-GDP ratio in all countries were higher interest payments, negative economic growth (except for Guyana and Suriname), primary fiscal deficits (except for Jamaica and Trinidad and Tobago), inflation, and exchange rate devaluation (in Jamaica).

The identity decomposition does not incorporate asset liability operations. The current debt-to-GDP figures reflect the fact that some countries have received debt relief and/or engaged in

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[1] The C6 are The Bahamas, Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago.

[2] See Escolano (2010) for the methodology.

FIGURE 6.4. Debt Decomposition, Cumulative Contributions, 2007–2012 (percentage points)
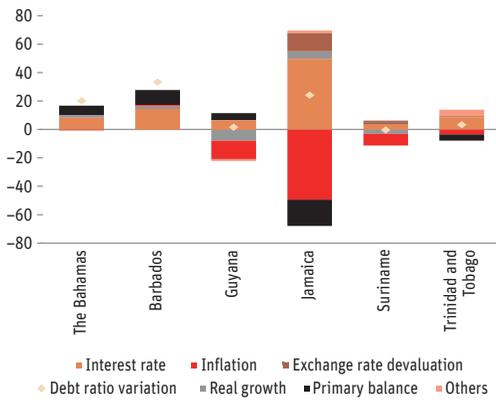
Interest rate ■ Inflation ■ Exchange rate devaluation
Debt ratio variation ■ Real growth ■ Primary balance ■ Others

Source: Authors' calculations; and International Monetary Fund, *World Economic Outlook*, October 2013.
Note: "Others" includes other idenfitied sources such as debt relief, privatization receipts, support from Trinidad's Colonial Life Insurance Company (CLICO), etc.

FIGURE 6.5. Ratios of Public Debt Interest Payments to Revenue Relative to ROSE, 2000–2012
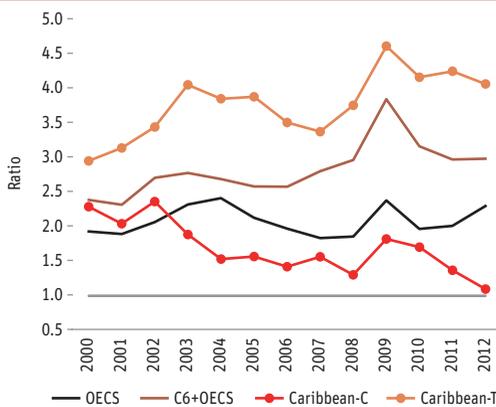
—— OECS —— C6+OECS —●— Caribbean-C —●— Caribbean-T

Source: International Monetary Fund, *World Economic Outlook*, October 2013.
Note: Relative ratios were calculated by using different benchmarks of small economies. C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname and Trinidad and Tobago; Caribbean-C = commodity-based economies; Caribbean-T = tourism-based economies. OECS = Organisation of Eastern Caribbean States.

debt restructuring or debt swaps. Guyana's debt more than halved between 1997 and 2011, aided by the Heavily Indebted Poor Countries (HIPC) Initiative and the Multilateral Debt Relief Initiative (MDRI). However, debt restructuring has been the typical form of debt relief. For example, Jamaica undertook domestic debt restructuring in early 2010. The Jamaican Debt Exchange covered domestic debt; there was participation close to 100 percent, which achieved a net present value reduction of 15 to 20 percent through lower coupon rates. Interest payments fell from 17 percent in 2009–2010 to 10 percent in 2011–2012. However, this temporary alleviation of the debt burden did not lead to the realisation of fiscal consolidation, and the IMF Stand-by program that started in February 2010 was abandoned in early 2011 after the third review. In 2013, Jamaica undertook further domestic debt restructuring and began a new EFF program.

Fiscal Space

Excessively high public debt and associated interest payments could also imply reduced fiscal space, hence less capacity for countercyclical fiscal policy and a lower level of investment expenditure.

Figure 6.5 shows the relative ratios of public debt interest payments to revenue. For the Caribbean, the ratio has been higher than that of its benchmark (ROSE), which is to say that for the Caribbean revenue is increasingly used to pay interest on debt. By 2012, the percentages for the Caribbean had reached 13.5 percent compared to 4.5 percent for ROSE (that is, three times the average for ROSE). By subgroups, for Caribbean tourism-based countries and members of the OECS the ratios were 23.2 percent and 13.1 percent, respectively, compared to 5.7 percent for tourism-based ROSE. For

commodity-based Caribbean countries the ratio was 4.3 percent compared to 3.9 percent for commodity-based countries in ROSE.

Figure 6.6 lends itself to discussion of fiscal space and stable versus explosive debt dynamics, as the figure shows the estimation of the primary balance reaction curve and the growth-adjusted interest payment curve for C6 countries and ROSE as one group. If a country's debt-to-GDP ratio is so high that it lies to the right of *L* in the figure, it is on a path toward insolvency. From *L* onward, the primary balance curve is consistently below the interest payment curve, and there is a vicious debt-financing cycle. To avoid default, the government has to issue more debt to make up the gap in debt servicing, thereby increasing interest payments, and so on. Thus, this policy option only postpones the inevitable because it enlarges the difference between the required and actual primary balance.

Figure 6.7 illustrates how, in countries vulnerable to external shocks such as those in the Caribbean, fiscal space can disappear overnight. An increase in international risk aversion (and consequently higher interest rates) and/or an economic downturn push the interest rate curve upward. If the shock is big enough, the primary balance reaction curve might end up lying below it, with a debt ratio spiraling out of control.

FIGURE 6.6. Primary Balance Reaction Function
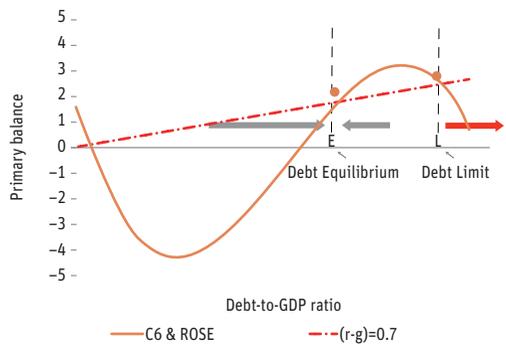
Source: Authors' calculations.
Note: C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname and Trinidad and Tobago. ROSE = rest of small economies.

FIGURE 6.7. Primary Balance Reaction Function Pre- and Post-Shock

Source: Authors' calculations.
Note: C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname and Trinidad and Tobago. ROSE = rest of small economies.

Macroeconomic Instability

The Caribbean's relatively lower growth could also be due to greater macroeconomic instability in the region.

Macroeconomic instability is harmful to economic growth, although traditionally that statement was treated as a *non sequitur* (Fischer 1993). The case study of two Caribbean islands by Henry and Miller (2009) illustrates this argument. A comprehensive recent study (Sirimaneetham and Temple 2009) divides countries into stable and unstable categories and finds that for the

FIGURE 6.8. Relative Macroeconomic Instability
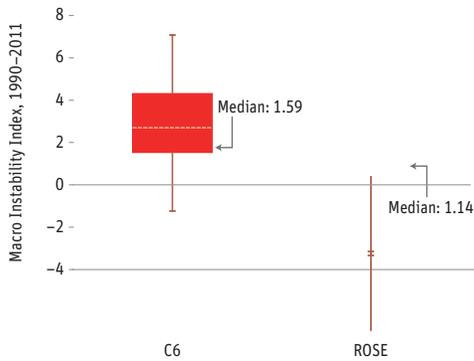
Sources: International Monetary Fund, *World Economic Outlook*, October 2013; and International Financial Statistics.
Note: C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname and Trinidad and Tobago; ROSE = rest of small economies.

FIGURE 6.9. Macroeconomic Instability and Population
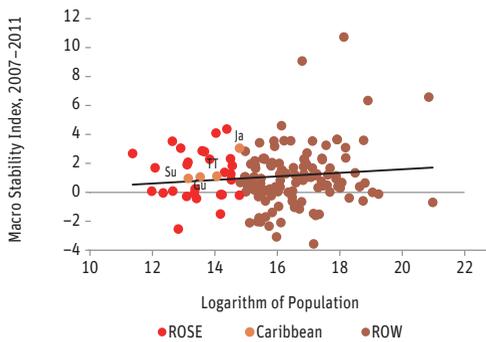
Sources: International Monetary Fund, *World Economic Outlook*, October 2013; and International Financial Statistics.
Note: ROSE = rest of Small Economies; ROW = rest of the world.

more stable group of countries, the output benefits of investment are greater, conditional convergence is faster, and measures of institutional quality have more explanatory power. This suggests that instability forms a binding constraint for the less-stable group.

However, the growth dividend from macroeconomic stability has been disappointing (Montiel and Serven 2006). A more nuanced relation has emerged that suggests a decreasing return to further stability after a certain level. However, zero growth returns from macroeconomic stability is far from where the Caribbean countries are. Another argument is that macroeconomic instability is a symptom of deeper institutional problems (Acemoglu, Johnson and Robinson 2003; Easterly et al. 1993; Easterly 2005a). Sirimaneetham and Temple (2009), however, find that good institutions are not strongly associated with growth unless macroeconomic stability is also in place.

A measure of relative macroeconomic instability is provided in Figure 6.8. The macroeconomic index contains the following variables: the consumer price index, exchange rate of local currency to the U.S. dollar, stock of international reserves, imports of goods and services, fiscal balance, and nominal GDP (see Jaramillo and Sancak 2009). It shows that macroeconomic instability is higher in Caribbean countries (1.59) than in ROSE (1.14).

That the problem is not due to size is confirmed in Figure 6.9, which shows that macroeconomic instability is negatively related to population. The Caribbean countries are the outliers.

Macroeconomic Policy Buffers

Typically, macroeconomic instability is attributed to large economic and natural disaster shocks. However, the negative effects of external shocks can be mitigated with macroeconomic policy buffers. Resilience to external shocks depends upon these policy buffers.

Policy buffers indicate the extent to which countries could afford to adopt countercyclical policy if the need were to arise. A global measure, a Policy Buffer Index, illustrates this difference

in preparedness (Figure 6.10). The index combines the primary fiscal balance, public debt, current account of the balance of payments, foreign reserves in months of imports, and the inflation rate.

The Caribbean's macroeconomic resilience to external shocks had been declining for years prior to the 2008 financial crisis, contrary to what was happening in ROSE. While policy buffers for both the Caribbean and ROSE had been on a downward trend since mid-1992, ROSE turned around in 2003 and began to build up their policy buffers. So did the commodity-based countries of the C6. However, the tourism-based countries went into a steep decline in terms of their policy buffers. Thus, prior to the outbreak of the financial crisis ROSE were better prepared for a negative external shock than was the Caribbean, particularly tourism-based countries.

To have adequate fiscal buffers, a country would need to simultaneously have a low debt ratio and a primary fiscal surplus. If a country were to have a low debt ratio but a high fiscal deficit, it would likely not be able to act counter-cyclically, as it may face difficulty in financing any increase.

FIGURE 6.10. Policy Buffer Index, 1995–2007
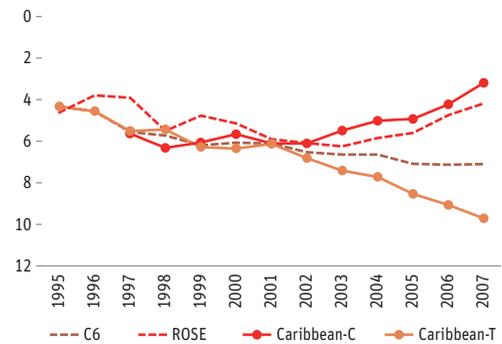
Sources: International Monetary Fund, *World Economic Outlook*, October 2013; and International Financial Statistics.
Note: C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago; Caribbean-C = commodity-based economies; Caribbean-T = tourism-based economies; ROSE = rest of small economies.

FIGURE 6.11. Fiscal Buffers, Average over 2004–2007

Sources: International Monetary Fund, *World Economic Outlook*, October 2013; and International Financial Statistics.

A high debt ratio with a primary fiscal surplus, on the other hand, would imply a limited scope for countercyclical policy because of slipping into potentially explosive debt dynamics. The fiscal buffers in the Caribbean prior to the world crisis were low relative to ROSE.

Within the C6 (Figure 6.11), Jamaica, Guyana, and Barbados already had high public debt ratios and primary fiscal deficits. The Bahamas had a low debt ratio but also a primary fiscal deficit. Trinidad and Tobago, on the other hand, not only had some fiscal space (a low debt ratio and a fiscal surplus) but could also draw upon its saving and stabilisation reserve fund (the Heritage Fund).

Thus, Trinidad and Tobago notwithstanding, most Caribbean countries were already facing the need to build up their fiscal buffers prior to the worldwide recession. Strong external buffers would have held if a country had a low current account deficit and large foreign

FIGURE 6.12. External Buffers, 2005–2007
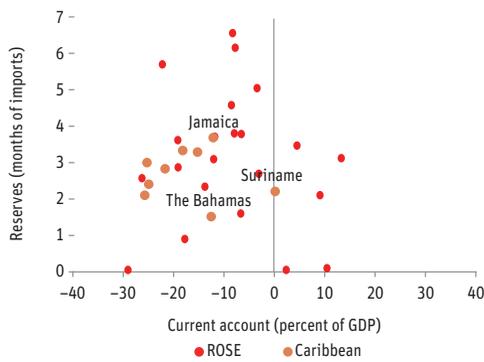
Source: International Monetary Fund, *World Economic Outlook*, October 2013; and International Financial Statistics.
Note: ROSE = rest of small economies.

reserves. The Caribbean countries' external buffers were relatively weak prior to the global crisis; the current account deficit as a percentage of GDP in the Caribbean was 12 percent of GDP on average during 2005–2007, while it was just 2.3 percent in ROSE (Figure 6.12). Regarding international reserves, the Caribbean held an equivalent of 2.7 months of imports while ROSE countries had the equivalent of 2.9 months on average.

Thus, the Caribbean generally was ill-prepared for the downside risks. The consequences of inadequate buffers can be illustrated by the events that unfolded during the worldwide recession that followed the collapse of Lehman Brothers in 2008. Although authorities attempted to cushion the full impact on economic growth, the Caribbean was hit hard by the recession. Fiscal primary balances deteriorated on average by 1.7 percentage points and the public-debt-to-GDP ratio rose 13.2 percentage points on average. ROSE suffered similarly, but with a larger deterioration of the fiscal balance and a much smaller increase in public debt (Figure 6.13).

It should be noted, however, that it is a mistake to interpret an increase in the fiscal deficit as an expansionary stance. An increase in the primary fiscal balance does not necessarily mean that fiscal policy was expansionary. The changes in the primary fiscal balance were the combined effects of automatic stabilisers and discretionary policy. Thus, a better indicator of the fiscal response is the cyclically-adjusted budget balance. This is the budget

FIGURE 6.13. Changes in Fiscal Variables, 2007–2012 (percentage points)
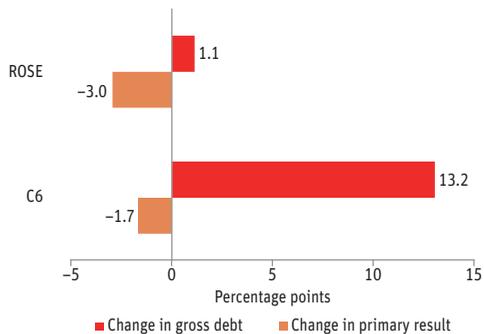
Source: International Monetary Fund, *World Economic Outlook*, October 2013.
Note: C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago; ROSE = rest of small economies.

balance that would be obtained when GDP is at potential. The cyclically-adjusted measure better captures the discretionary stance of fiscal policy, as it removes the endogenous components of spending and revenues. It is a closer measure of the fiscal authorities' intentional policy stance, and it better gauges fiscal consolidation or fiscal loosening, which stem from deliberate discretionary actions on the part of policymakers.

Figure 6.14 shows that among the C6, only Suriname and The Bahamas had an expansionary fiscal policy during 2008–2012,

while Guyana's stance was almost neutral and Barbados and Jamaica had fiscal policies that were restrictive rather than anti-cyclical.

The net result of external economic shocks and the lack of adequate policy buffers was pro-cyclical policy that in turn implied a large loss in GDP. The average cumulative GDP loss for the C6 as a percentage of 2007 GDP was –27.7. The GDP losses are calculated as the cumulative sum of the differences between actual GDP and what would have held if the countries had continued to grow at the rate implied by the growth trend of 2004–2007 (Figure 6.15).

FIGURE 6.14. **Fiscal Policy Stance Measured by the Cyclically-adjusted Primary Balance, 2008–2012 (percent)**

Source: Authors' calculations; and International Monetary Fund, *World Economic Outlook*, October 2013.

6.2 The Neighbourhood

Another factor that could account for the growth gap is that the Caribbean is in a harsher neighbourhood than many regions of the world. The Caribbean is subject to more damaging natural disasters, more closely linked to relatively stagnant countries, and is subject to greater economic shocks. Thus, being in a harsher neighbourhood both in a geographical and economic sense could underlie the Caribbean's relatively poor economic growth performance.

Small economies, particularly small island economies, are particularly vulnerable to natural disasters. The Caribbean countries stand out as the most disaster-prone in the world (Figure 6.16). The higher vulnerability of the Caribbean region is due not only to the greater frequency of natural disasters, but also to their greater intensity.

Costs of natural disasters can be divided into direct costs (mortality, morbidity, and loss of infrastructure) and consequent indirect costs (income). The latter can be due to either the direct damage to infrastructure or because reconstruction pulls resources away from production. These indirect costs can be expressed in the aggregate by the economy's

FIGURE 6.15 **Cumulative Loss of GDP, 2008–2012 (as a percentage of 2007 GDP)**
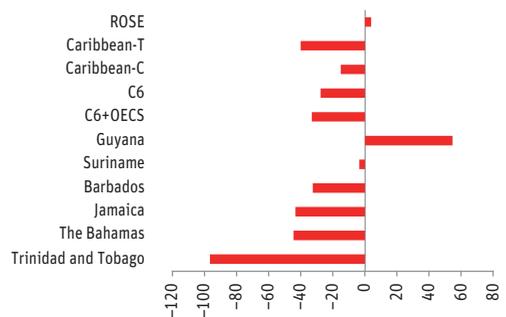
Source: Authors' calculations; and International Monetary Fund, *World Economic Outlook*, October 2013.
Note: C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago; Caribbean-T = tourism-based economies; Caribbean-C = commodity-based economies; ROSE = rest of small economies; OECS = Organisation of Eastern Caribbean States.

FIGURE 6.16. Cost of Natural Disasters
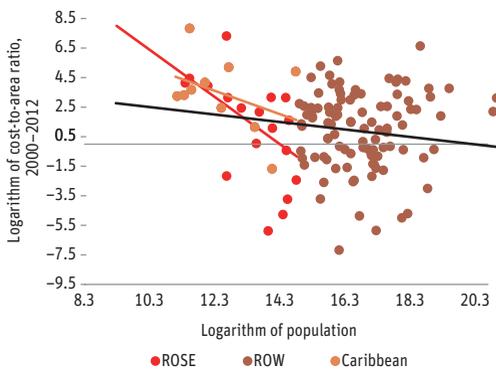
Source: The International Disaster Database; and International Monetary Fund, *World Economic Outlook*, October 2013.
Note: ROSE = rest of small economies; ROW = rest of the world.

**FIGURE 6.17. External Shocks (median and dispersion for selected country groups)**
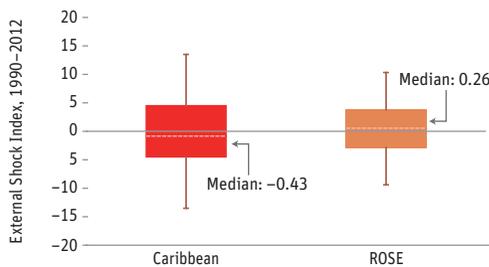
Sources: International Monetary Fund, *World Economic Outlook*, October 2013; and International Financial Statistics.
*Note:* Caribbean = Barbados, Guyana, Jamaica, Suriname, Trinidad and Tobago, Dominica, Grenada, St. Kitts and Nevis, St. Lucia and St. Vincent and the Grenadines; ROSE = rest of small economies.

overall performance (economic growth, poverty, fiscal accounts, public debt, balance of payments, etc.) both in the short and long run.

The cumulative evidence suggests that natural disasters in the Caribbean have deleterious effects on economic growth, worsen the balance of trade (exports fall and imports rise), harm the fiscal balance (taxes fall and expenditure rises), and increase public debt.[3]

In terms of its economic neighbourhood, the Caribbean is subject to more external shocks and linked to more stagnant countries than other regions in the world.[4] Using an External Shock Index, Figure 6.17 shows the size of external economic shocks in the Caribbean relative to ROSE. The index measures the combined effects of contemporaneous external shocks to trade remittances, foreign direct investment, and service exports. The median shock in the Caribbean is negative, while for ROSE it is almost zero. Furthermore, for the Caribbean, the distribution of the external shocks is skewed toward the negative zone, suggesting an adverse external environment for the Caribbean countries relative to ROSE between 1990 and 2012.

Figure 6.18 provides another way to view the pattern of external shocks (IMF 2010b). It shows that the average external shock is positive for Guyana, Suriname, and Trinidad and Tobago, but negative for The Bahamas, Barbados and Jamaica. Thus, there are important differences between commodity-based and tourism-based countries. Commodity-based countries not only have a higher dispersion and median, but they also are skewed toward the positive zone. This combination of features suggests that the external environment is not adverse but highly volatile. Tourism-based countries still show a higher dispersion (relative to ROSE), but

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[3] See Crowards (2000), Rasmusson (2004) and Heger, Julca and Paddison (2008).

[4] The combined effects of contemporaneous external shocks include shocks to trade, remittances, foreign direct investment, and service exports.

this time external shocks are more adverse than in the rest of the world (the median is smaller and negative). Thus, in this case we have both an adverse and volatile external environment.

An adverse external environment could be attributed to the sectorial specialisation of these economies, including export composition and concentrated export trading partners.

Trading partners can be considered economic neighbours. There have been few studies with respect to geographical concentration of trade, output level, and trade

FIGURE 6.18. External Shocks and Population
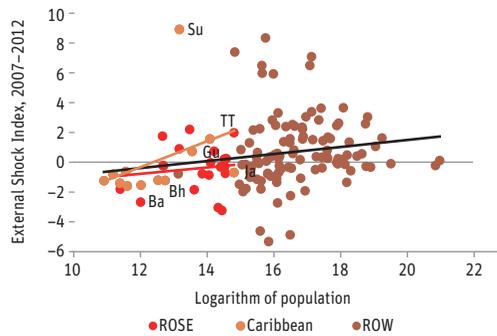
Source: International Monetary Fund, *World Economic Outlook*, October 2013, International Financial Statistics, Direction of Trade Statistics.
Note: For some countries such as Antigua and Barbuda and The Bahamas, the index constitutes only a trade shock; ROSE = rest of small economies; ROW = rest of the world.

volatility in partner countries as a potential determinant of domestic growth and its volatility. Most of the studies find that output volatility in partner countries and exposure to country-specific shocks indeed affect the volatility of a country's GDP (Ahmed 2003; Calderon, Loaiza and Schmidt-Hebbel 2005; Bacchetta et al. 2009; Lennon and Piermartini 2009). However, it is the degree to which the cycles of different trading partners are correlated that is more important in explaining exporters' GDP volatility relative to the volatility of demand in an individual export market.

As shown in Figure 6.19 the Caribbean's economic neighbours (defined as the two most important export destinations for each country) grow on average less and have greater relative volatility than ROSE. When dividing the Caribbean countries into two groups, it can be seen that the economic neighbours of Caribbean commodity-based countries grow even slower and with higher volatility than those of commodity-based ROSE countries. (The opposite holds for tourism-based

FIGURE 6.19. Economic Neighbour's Relative Average Growth Rate, 1980–2012
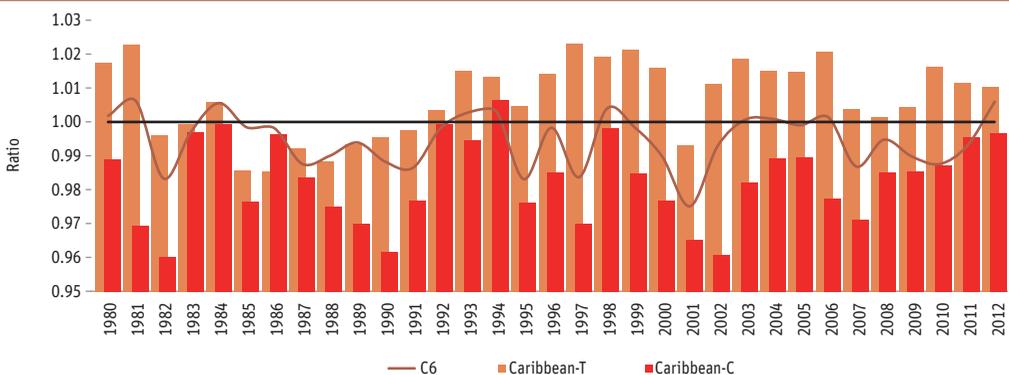
Sources: International Monetary Fund, *World Economic Outlook*, October 2013; and International Financial Statistics.
*Note:* C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago; Caribbean-C = commodity-based economies; Caribbean-T = tourism-based economies.

FIGURE 6.20. **Growth Rates for Tourism-based Economies, 1990–2010 (percent)**
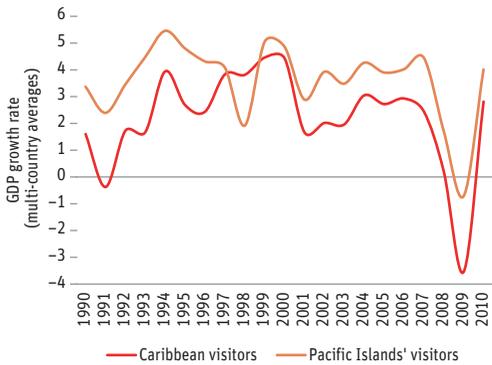
Source: The Caribbean Tourism Organisation; and International Monetary Fund, *World Economic Outlook*, October 2013.

FIGURE 6.21. **Tourist Arrivals by Country of Origin**

The Caribbean

United States 54%
Canada 15%
Europe 17%
Other 14%

Pacific Islands

Australia 47%
New Zealand 21%
Japan 8%
China 2%
Korea 8%
Other EAP 8%
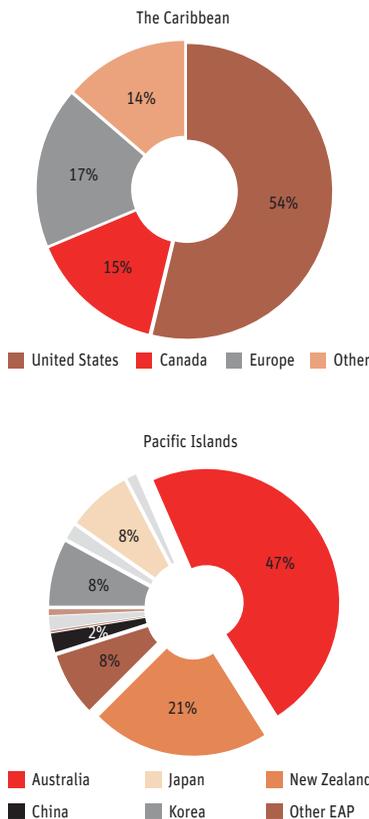
Sources: The Caribbean Tourism Organisation, and Yearbook of Tourism Statistics (12th ed.).
Note: EAP = East Asia Pacific.

countries, but in this case the export of goods is not as important as in the case of commodity exporters).

The same assertion can be made for tourism-based neighbours of Caribbean countries. As can be seen in Figure 6.20, the economic growth of tourism-based countries is greater for the Pacific islands (3.6 percent yearly average) than for the Caribbean (2.2 percent yearly average). This is due in part to the Pacific islands having "better" neighbours, in this case meaning a more diverse customer base. The Caribbean's neighbours are the United States, Canada, and Europe, which together originate 86 percent of arrivals. But those countries represent only 18 percent of tourists for the Pacific islands, which have a greater variety of source countries (Figure 6.21).

The figures for Figure 6.21 are based on the number of tourist arrivals, but a relative decline is also beginning to hold for dollar receipts per tourist. In 2001, a tourist arriving in the Caribbean spent 75 percent more than a tourist arriving in the Pacific islands, but by 2010 the differential had been almost eliminated, as shown in Figure 6.22. The Caribbean is working harder to earn relatively less.

Of course, the word "neighbour" is more typically used in the sense of geographically close countries. Since independence, the Caribbean countries have followed a policy path of integration with their neighbours. In the last throes of colonial rule there was a consensus that Caribbean countries, given their small size and hence limited administrative capacity,

could only survive and thrive under some form of federation.

However, the West Indian Federation, created in 1958, collapsed in 1962 when Jamaica and Trinidad and Tobago withdrew. In that same year, Morgan (1962, p. 127) forecasted that the integration agenda was doomed to fail:

> "Trade of the West Indian Islands with one another, although increasing is compared with total trade small….The reason is principally that of similarity of products, for the islands are essentially primary producers and their trade with one another is largely in foodstuffs, raw material and petroleum products. The removal of tariffs within the federal area would not result in any striking change."

FIGURE 6.22. Tourist Expenditure Per Capita, 1995–2010 (relative to ROSE)

Source: World Bank, World Development Indicators.
Note: ROSE = rest of small economies.

The region has nonetheless continued on the path of attempting to increase integration, and, unfortunately, the results have corresponded to Morgan's predictions. In 1965, a Caribbean Free Trade Organisation (CARIFTA) was formed and replaced five years later by the Caribbean Community (CARICOM). The treaty supporting CARICOM was revised in 2001, and the CARICOM Single Market and Economy was formally established in 2006 and adopted by the member countries.

Intraregional trade, excluding oil products that were and are not subject to restrictions, does not appear to have been significantly boosted by these initiatives (Mendoza and Moreira 2007). Intraregional trade remains small—a peak in 1975 was surpassed in 1997 and has glacially increased since then such that today the share of intraregional non-oil trade remains approximately the same as the modest levels of the 1970s (5.6 percent). Extraregional trade has not done much better—despite a positive trend, no major shifts can be discerned even following major integration policy initiatives.

However, trade is an intermediate objective. The final aim of regional integration is convergence (Sala-i-Martin 1991), which can be measured by two indicators: beta and sigma. Beta convergence is when poorer countries' GDP per capita grows at a faster rate than that of richer countries (when the partial correlation between growth in per capita income over time and its initial level is negative). Sigma convergence is when there is a reduction in the dispersion of per capita income between countries over time.

Table 6.2 shows the estimates of beta convergence from a neoclassical growth model as proposed by Barro and Sala-i-Martin (1992). The estimation suggests the presence of
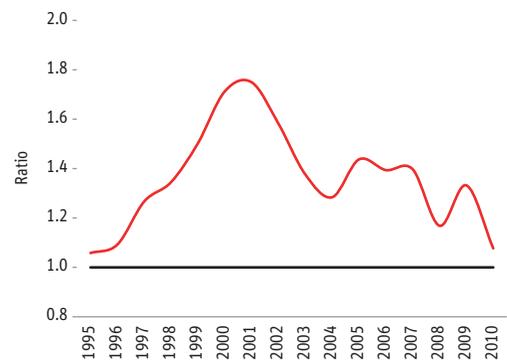
TABLE 6.2. **Beta Convergence**

Group	Number of countries	Beta coefficient	P-value	Convergence rate
CARICOM	14	−0.035	0.000	0.038

Source: Authors' estimations.
Note: The beta coefficient was estimated by the generalized method of moments. The convergence rate was calculated as follows: $c = 1-(1+T\beta)(1/T)$; where T = 5 (years).

FIGURE 6.23. **CARICOM Countries' Growth Rates, 1983–2012 (percent)**
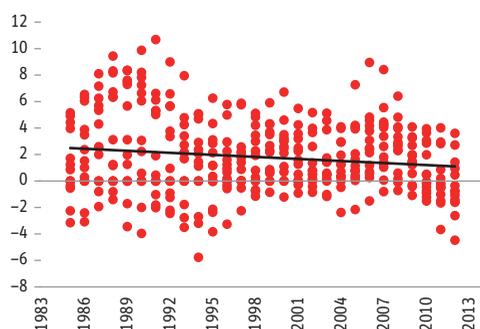
Source: International Monetary Fund, *World Economic Outlook*, October 2013.
Note: Linear trend in black.

FIGURE 6.24. **CARICOM: Cross-country Dispersion of Real Per Capita GDP Growth, 1985–2011 (coefficient of variation)**

Source: International Monetary Fund, *World Economic Outlook*, October 2013.

beta convergence in per capita GDP within CARICOM over the past 33 years. In other words, poorer countries are indeed growing faster than the richer ones. And it is important to mention that the convergence ratio of 3.8 percent is high given the average 2 percent found in the literature.

Another important feature to note is that the beta convergence process is taking place not only at slower levels of per capita growth (Figure 6.23), but also with a decline in the dispersion of per capita growth (Figure 6.24). Therefore, CARICOM is also converging toward lower levels of growth.

For its part, sigma convergence, as suggested by Quah (1993) and Friedman (1992), is also of great interest because it shows whether the distribution of income across economies is becoming more equitable. However, the coefficient of variation (Figure 6.25) shows that the distribution of per capita income is more dispersed than 28 years ago, which can also be verified in Figure 6.26, leading to the conclusion that there is no sigma convergence within CARICOM.

So how is it that there is beta convergence but no sigma convergence? First, beta convergence is a necessary but not sufficient condition for sigma convergence (Young, Higgins and Levy 2007). Second, some have suggested that interpreting measures of dispersion may not be straightforward if the distributions are not unimodal. Quah (1995) found that convergence clubs (with different convergence dynamics) can appear endogenously, with the possibility of

generating a polarisation effect: the rich becoming richer, the poor becoming poorer, and the middle-class vanishes.

Figure 6.27 supports the presence of this anomaly. From 1985 to 2012, the shape of income distribution is bimodal, with smaller variance and a higher mode for each income club.

The Economic Commission for Latin America and the Caribbean (ECLAC 2003, p. 3) concludes that the pattern of intraregional trade is "classical evidence of failure." Indeed, increasingly shrill criticism directed at CARICOM calls for institutional reform, including the rules governing it. For example Bravo (2005, p. 202) writes:

"…the weakness of an institutional framework that serves to handicap smooth decision-making, the ability of Member States to opt out of binding Community decisions—together with a flawed dispute resolution mechanism—and the long delay in implementing the CCJ Agreement and in transposing Community obligations into national legislation paint a bleak picture of lack of resolve and an inability to carry forward the fundamental integration to which both the 1973 Treaty and the Revised Treaty appear to aspire."

However, the criticism and solution offered may be misplaced. Perhaps the economics of integration are not in place for CARICOM. First, members of CARICOM in general have similar technology and factor endowments, so one country's array of

FIGURE 6.25. **CARICOM: Cross-country Dispersion of Per Capita GDP, 1985–2012 (coefficient of variation)**
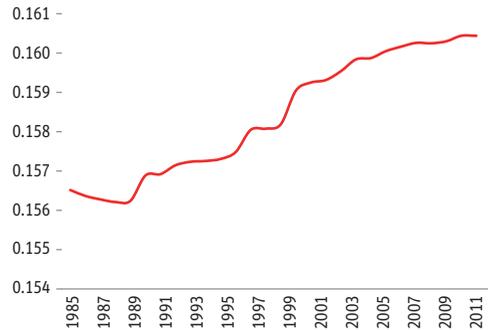
Source: International Monetary Fund, *World Economic Outlook*, October 2013.

FIGURE 6.26. **Per Capita GDP in CARICOM Countries, 1983–2013 (logarithms)**
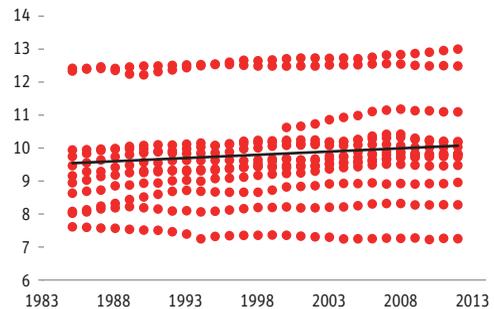
Source: International Monetary Fund, *World Economic Outlook*, October 2013.
Note: Linear trend in black.

FIGURE 6.27. **CARICOM: Distribution of Per Capita Income Across Time, 1985–2012**

Source: Authors' calculations.

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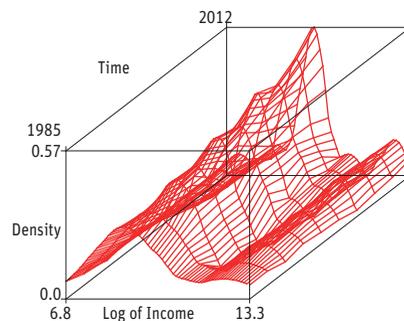
comparative advantages overlaps with that of others. Second, fears that the agglomeration of activities in larger countries with smaller ones will lead to specializing in constant returns and low-productivity activities has led to the adoption of exemptions from obligations to free zone cum custom unions that are counterproductive to encouraging integration. Third, even adding up all the countries, the market is small, with a total Caribbean population of 41.6 million (with Haiti representing 23.7 percent of the total)—a size that belies a large consumer market to exploit economies of scale.

Thus, factors reviewed in this chapter that could account for the growth gap are the Caribbean's relatively weak macroeconomic environment, particularly excessive public debt; macroeconomic volatility without adequate policy buffers; a harsh geographical and economic neighbourhood; and a frustrated if not misplaced pursuit of regional integration. Comparing these factors (and the policies that produced them) for the Caribbean with those of ROSE reveals that the Caribbean does worse. Hence, these factors are contributing to the Caribbean's economic growth gap.

Let It Be or Do Something?

I n terms of policy challenges, the Caribbean today is back to addressing some of the same issues as in the 1970s and 1980s. At that time the Caribbean faced structural shifts in production caused by the dismantling of trade preferences, declining aid flows, and serial external shocks, all of which led countries to rethink their development strategies. Many countries switched from agriculture to tourism and financial services, thereby setting the stage for high economic growth. However, this development model now appears to have run its course and is no longer delivering the growth that it once did.

The poor economic performance documented in previous chapters clearly suggests that something has to be done. The stabilisation measures and structural reforms required, at least in general non-country-specific terms, may seem equally clear and have been obvious to many observers for some time. Yet there has not been a major rethinking or reform of the develop-ment models pursued by the Caribbean nations since the 1980s. This to some extent is to be expected. The Caribbean would not be an exception in preferring this option. History is littered with the "let it be" option. It is often the preferred option by policymakers (see Drazen, 2000, for the theoretical arguments and Alesina and Drazen, 1991, for the empirical evidence) and one that has characterised Caribbean policy during the last decade or so. Accumulated world-wide evidence suggests stabilisation and structural reform are more likely to occur in periods of crisis, the longer there has been a period of instability, in presidential rather than parliamentary politi-cal systems, at the beginning of a government's term of office, and where the executive faces fewer constraints. Such constraints are often relaxed by having a large majority in parliament. Multilaterals including the IMF appear to have little effect on timing. If the sclerosis hypothesis is added, the entrenched rent-seeking groups that would lose out from such reforms represent an additional factor against the reform agenda.

An alternative policy option to a pro-active approach, and one that would probably be less painful up front politically and economically, would be to wait it out—that is, wait for a world recovery and hope that it will pull the countries out of the doldrums. Indeed, the region's long wait for world economic recovery may ultimately pay off. In November 2013 the IMF forecasted moderate world economic growth. Importantly, average growth for the Caribbean's main economic partners, the United States and the European Union, is expected to average 3.2 and 1.4 percent, respectively, over 2014–2018.

FIGURE 7.1. Expected Impact on Balance of Trade of Commodity Movements (percent of 2009 GDP)

Source: International Monetary Fund, *World Economic Outlook*, October 2013.
Note: ROSE = rest of small economies; OECS = Organisation of Eastern Caribbean States.

More good news comes in the form of the expected decline in oil prices. Falling crude oil prices reflect anticipated increases in non-OPEC production, declining demand in industrial countries, and the shake-up stemming from the liquid natural gas market. Regarding commodities, the news is mixed. Commodity prices are expected to decline across all of the main sectors. Metal prices are the exception, as they are expected to trend upward in 2013, but precious metals like gold are expected to decline. Figure 7.1 shows the estimated first-round impact of expected declines in energy and metal prices on the balance of trade accounts of the Caribbean countries. Finally, there is the IMF's positive forecast that the probability of a future recession has decreased since the October 2012 forecast (see Figure 7.2).

Unlike many regions in the world, the Caribbean has not fully recovered from the global recession, but recovery elsewhere is expected to pull up economic growth in the Caribbean. The C6 are expected to increase average yearly growth from 1.2 percent over 2009–2013 to 2.5 percent over 2014–2018. Average growth for tourism-based countries is expected to range from −0.3 to 1.5 percent, with Barbados further contracting (Table 7.1). Public debt is expected to continue to rise (other than for Jamaica, which is under an IMF program), and this rise comes after steep increases during the recession (other than for Guyana and Trinidad and Tobago). The current account balance to GDP is generally expected to improve.

These positive signs notwithstanding, just as in 2007, there are also some risks to growth on the horizon. There could again be problems emanating from the United States with the wind-down of quantitative easing. That could induce a greater tightening of world financial conditions than is currently expected, which in turn would reduce expected world growth and could even exacerbate already-weak investment and growth in the euro area.

A possible Caribbean-specific shock is the drawing down of PetroCaribe, which provides oil on cheap terms to some of the Caribbean countries. Such a disruption,

FIGURE 7.2. Probability of a Future Recession (percent)

■ Current ■ October 2012 WEO: 2012:Q2–2013:Q1

Source: International Monetary Fund, *World Economic Outlook*, October 2013.

TABLE 7.1. Balance and Forecasts

	GDP (percent change)		Debt-to-GDP			Current Account Balance-to-GDP	
	Average 2009–2013	Projected Average 2014–2018	2009	2013	2018	Average 2009–2013	Projected Average 2014–2018
The Bahamas	0.44	2.38	37.89	56.07	59.94	−13.38	−10.66
Barbados	−0.77	−0.01	61.41	92.00	112.15	−6.81	−4.46
Jamaica	−0.70	2.03	141.41	142.73	108.11	−11.44	−6.66
Guyana	4.65	4.42	64.81	58.24	60.16	−13.38	−14.45
Suriname	4.26	4.44	15.55	37.08	40.16	2.63	−2.21
Trinidad and Tobago	−0.99	2.01	30.59	33.37	44.52	12.00	6.73
Tourism-based economies	−0.3	1.5	80.2	96.9	93.4	−10.5	−7.3
Commodity-based economies	2.6	3.6	37.0	42.9	48.3	0.4	−3.3

Source: International Monetary Fund, *World Economic Outlook*, October 2013.

which Venezuela denies will occur, would have a significant and immediate impact. The direct impact would be a financing gap in both external and fiscal accounts as countries would be forced to turn to the more expensive oil spot market.

Downside risks would matter less if the countries had strong macroeconomic resilience to external shocks. However, as noted earlier, in contrast to what has been happening in the rest of small economies (ROSE), the resilience of Caribbean countries to external shocks had been declining for years, even before the world crisis. The situation today has not improved, but rather worsened, with the fiscal buffers in the Caribbean remaining in the danger zone (Figure 7.3). Strong external buffers would hold if there were a current account of the balance of payments and a high level of foreign reserves (in months of imports), but this is not the case in the Caribbean economies (Figure 7.4). Thus, the Caribbean is generally ill-prepared for downside risks.

One extreme possibility is that a shock of similar magnitude to the 2007–2008 global recession will materialise in 2014. A second global recessionary shock or "double dip" would provide a convenient stress test, but at present it seems unlikely that it will happen. Further, it is important to recall that the extent and depth of the 2007–2008

FIGURE 7.3. Comparative Fiscal Buffers
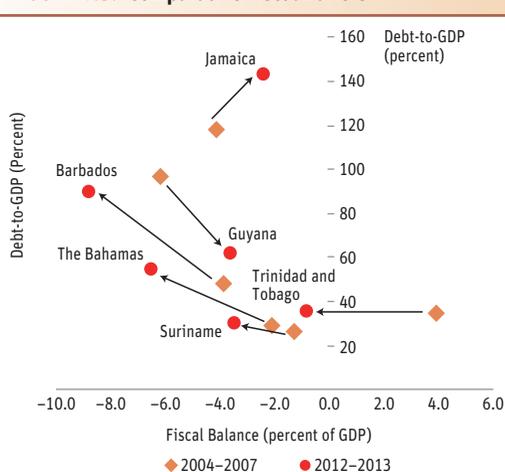
Source: International Monetary Fund, *World Economic Outlook*, October 2013.

FIGURE 7.4. Comparative External Buffers

Source: International Monetary Fund, *World Economic Outlook*, October 2013.

recession on advanced economies was unexpected. While at the beginning of 2008 there were some signs of weaknesses in U.S. and U.K. property markets, among others, as well as over-leveraged banks, few were able to predict the meltdown in the aftermath of the fall of Lehman Brothers in September 2008.

What would happen if the crisis were repeated? To simulate such a scenario, we use estimations of the long-term relationship impulse-response functions to project what could happen to real output if the values of the exogenous variables (trading-partner GDPs and commodity prices) were to change over the 2013–2017 period by the same amount they did in 2008–2012. This is compared to the baseline projection. What could happen to the Caribbean countries? The cumulative growth rate that would be lost in a double-dip scenario is shown in Figure 7.5 for tourism-based economies and in Figure 7.6 for commodity-based economies. As expected, all countries experience a worse outcome (lower growth) relative to the baseline projection, particularly Barbados and Trinidad and Tobago, which would have a cumulative loss of 12 and 6 percentage points, respectively. Countries would also experience lower terms of trade due to lower oil prices. Output in Suriname and Guyana would be lower both under the baseline and the double-dip scenarios because gold prices are projected to come down from recent highs. As expected, the real GDP growth rate would decrease even more under the stressed case, with a 5 percentage point cumulative loss in both countries. For their part, tourism-based economies would be affected by a deterioration in the terms of trade due to higher oil prices. The Bahamas would accumulate a loss of 3.6 percentage points and Jamaica 4.6 percent.

It is important to note, however, that downside risks are not the only risks facing the Caribbean countries. There is also the danger that the relative improvements in near-term prospects of the Caribbean's trading partners may diminish the sense of urgency in the region itself for stabilisation and reform. The "let it be" option implies economic recovery without upfront economic and political costs. However, as forecasted by the IMF (Figure 7.7), this "benign neglect" also implies the continuation of a relative decline. Thus the four-times-higher GDP per capita of the Caribbean with respect to ROSE in 1970 that had fallen to 0.94 by 2012 will, by 2018, have fallen further to 0.89.

FIGURE 7.5. Double Dip in Tourism-based Countries, 2011–2018

Bahamas
Annual Growth Rate (%)

Barbados
Annual Growth Rate (%)

Jamaica
Annual Growth Rate (%)

GDP lost — Double dip — Base line

Source: Authors' calculations using data from International Monetary Fund, *World Economic Outlook*, October 2013.
Note: The panels above show the annual growth rates' spreads between the baseline and the double-dip scenario.

FIGURE 7.6. Double Dip in Commodity-based Countries, 2011–2018

Trinidad and Tobago
Annual Growth Rate (%)

Guyana
Annual Growth Rate (%)

Suriname
Annual Growth Rate (%)

GDP lost — Double dip — Base line

Source: Authors' calculations using data from International Monetary Fund, *World Economic Outlook*, October 2013.
Note: The panels above show the annual growth rates' spreads between the baseline and the double-dip scenario.

FIGURE 7.7. Relative GDP Per Capita Gap, 1971-2017
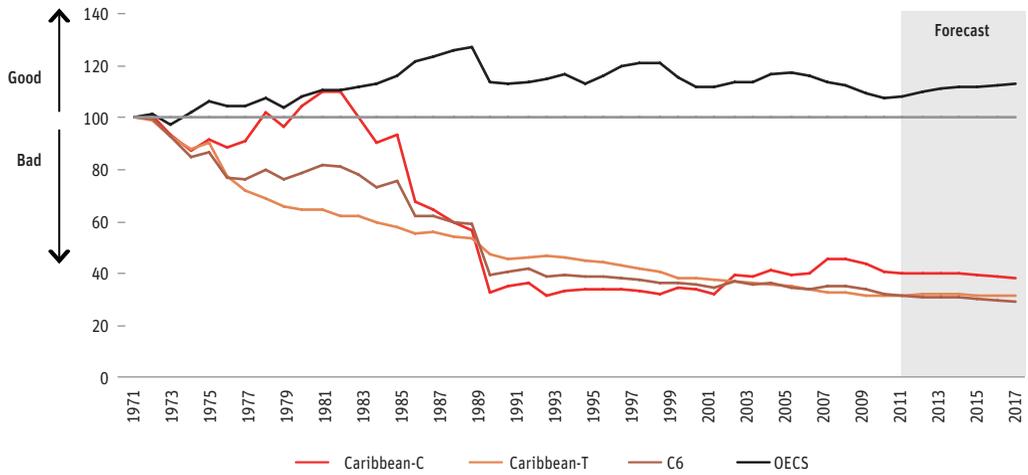
Source: Penn World Table 7.1 (Heston, Summers and Aten 2012); and International Monetary Fund, *World Economic Outlook,* October 2013

Note: C6 = The Bahamas, Barbados, Guyana, Jamaica, Suriname and Trinidad and Tobago; Caribbean-C = commodity-based economies; Caribbean-T = tourism-based economies. OECS = Organisation of Eastern Caribbean States.

What to Do?

I f "letting it be" as discussed in Chapter 7 is not a desirable option, then what should be done? Caribbean economies face a number of challenges in trying to create jobs and promote domestic economic activities that generate higher economic growth, not only in the wake of the 2008–2013 recession but also due to an inadequate steady-state economic growth rate.

As seen in the previous chapters, low productivity and a lack of competitiveness in Caribbean countries have hindered steady-state economic growth and have both macro- and micro-economic sector dimensions. Hence policy changes in both dimensions are required to promote economic growth. For heuristic reasons, this chapter discusses policy around three pillars: get the macro right, get business going, and get new neighbours. However, a qualification is needed. Even though many problems are common across countries, a discussion of the policy options for each pillar needs to delve further into country-specific details. Such a discussion requires data and information that are often missing in Caribbean countries, so generating and disseminating data represents a critical part of country-specific design. Such data simulations would provide valuable information about the intended and unintended effects of policy reform and facilitate macroeconomic stabilisation, structural reform, and the search for new neighbours that are sketched out in this chapter.

8.1 Get the Macro Right

A key factor that appears to be constraining economic growth in the Caribbean is macroeconomic instability. The macroeconomic policy options boil down to discussions on the required fiscal-debt and exchange rate adjustment.

For the countries with a debt-to-GDP ratio of above 56 percent (Jamaica, and Barbados) or with a recent steep increase in the debt-to-GDP ratio (The Bahamas, Trinidad and Tobago, and Guyana), the typical policy recommendation includes fiscal adjustment—accompanied by debt restructuring for those countries beyond the pale—to build up policy buffers and increase the country's steady-state growth.

However, it is not so simple. If nothing is done, the debt ratio may continue to increase, and policymakers will face a number of trade-offs. The trade-offs can be illustrated by a consolidated mythical Caribbean country with characteristics based on averages in 2011 for the three

FIGURE 8.1. Baseline Debt Trajectory, 2013–2033
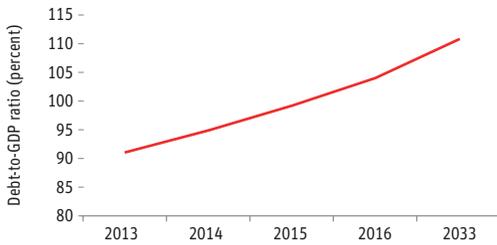
Source: Authors' calculations.

FIGURE 8.2. Basic Trade-off Debt Reduction Target and Time Frame
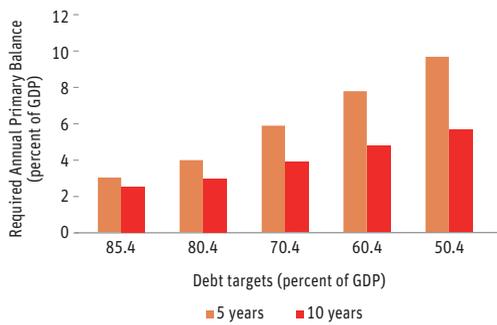
Source: Authors' calculations.

FIGURE 8.3. Relaxing the Trade-off through a Haircut
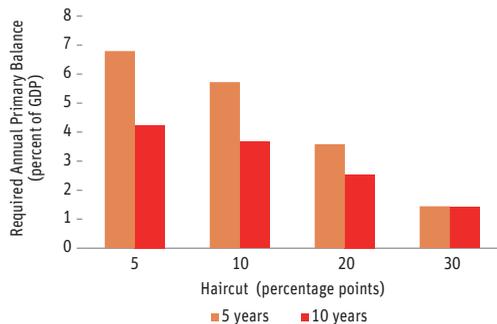
Source: Authors' calculations.

Caribbean tourism-dependent countries (The Bahamas, Barbados, and Jamaica) for the past 10 years. The characteristics would be GDP growth of 0.7 percent; deflator growth of 4.7 percent; a debt ratio of 90.4 percent; an interest rate of 7.9 percent; and a primary surplus of 1.4 percent. It is further assumed that the exchange rate is fixed and that there are no secondary effects—for example, fiscal adjustment to growth and vice versa.

Before considering the trade-offs we first look at the "do-nothing" option, which for the mythical country implies an increasing debt-to-GDP ratio. For example, by 2015, the debt-to-GDP ratio will have increased from 90.4 to 99 percent (Figure 8.1).

The main trade-off is the choice in the size of the reduction in debt and the time to reach that target. Figure 8.2 shows the trade-off between the required primary fiscal surpluses for different debt-to-GDP targets over different time periods. The required annual primary surplus to reduce debt to 60 percent over 10 years is 4.8 percent; over five years, it is 7.8 percent.

The main trade-off can be relaxed by debt restructuring, i.e., haircuts. The required primary surplus to different values of the haircuts is given in Figure 8.3. For a debt target of 60 percent within 10 years with haircuts of 5, 10, 20, and 30 percentage points, the required primary fiscal surplus falls from 4.8 percent to 4.2, 3.7, 2.5, and

1.4 percent, respectively.

An oft-discussed option to relax the main trade-off is to accelerate economic growth, thereby reducing the required fiscal adjustment. The trade-off between economic growth and the required primary surplus is shown in Figure 8.4. For the same target and time period discussed in the previous paragraph, the required fiscal primary surplus falls from 4.8 percent to 3.6, 3.2, 2.2,

and 1.4 percent for economic growth rates of 2, 3, 4, and 5 percent, respectively. A zero balance is required at economic growth rates of 7.2 percent.

Another option, historically popular, is to inflate away the debt problem. The trade-off between the required primary balance and inflation is shown in Figure 8.5. For the recent average rate of inflation the target of 60 percent within 10 years requires a primary balance of 4.7 percent of GDP. Doubling the inflation rate, the required primary balance falls to 1.2 percent of GDP.

However, the trade-off calculations should not be taken literally—they are illustrative rather than firm numbers and thus do not give the full picture of the policy dilemmas facing policymakers. For example, the haircut-required primary surplus trade-off is relevant where public debt is so large that moving out of the dark side implies too large of a primary fiscal surplus in both political and economic terms. A haircut, part of sovereign debt restructuring, typically involves swapping old debt for new.

FIGURE 8.4. Relaxing the Trade-off through Economic Growth
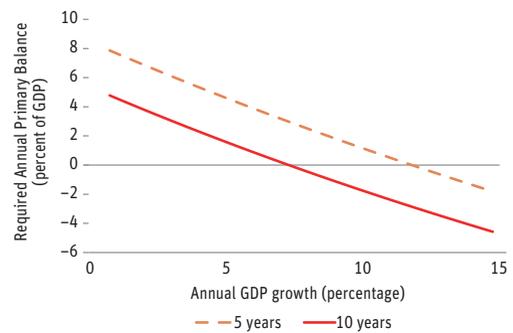
Source: Authors' calculations.

FIGURE 8.5. Relaxing the Trade-off through Inflation

Source: Authors' calculations.

It is usually measured as the difference between the present value of the new debt and the full face value amount of the old outstanding debt, although there are other definitions (Cruces and Trebesch 2012).

In such a restructuring, there are two possibly conflicting objectives. First, there is a sufficiency criterion—that is, the haircut has to be large enough so that the country is not forced back to restructuring after a few years. Second, there is a solvency criterion, that is, the haircut cannot be too large such that the soundness of the domestic banking system is endangered. This requires stress tests of the banking system that determine above what level of a haircut such soundness could be endangered. There may be a zero intersection set that satisfies both criteria.

The share of government debt held by domestic residents, typically commercial banks, is generally higher in the Caribbean than in emerging economies. Figure 8.6 shows the composition of public debt in the Caribbean countries. Given this situation, the consequence of a haircut may be a strain or a failure of a large part of the domestic banking system. Or, if the haircut is so small on the basis of stress tests that it avoids straining the domestic banking system, it might

FIGURE 8.6. Composition of Debt (percent of GDP)
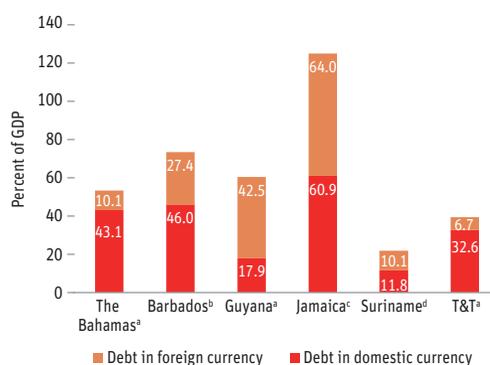
Source: Different International Monetary Fund Country Reports.
Notes: [a] Public sector; [b] General government; [c] Government debt (excluding guaranteed debt); [d] Central government.

not sufficiently reduce debt to bring about the required fiscal adjustment.

Concerns about banking systems may have put off sovereign debt restructuring. Current regulation of commercial banks does not require banks to hold capital against their government bond holdings. Therefore, a restructuring of government debt implying a haircut for creditors would create a capital shortfall in the banks. As banks leverage their capital, this would result—ceteris paribus—in a reduction in the amount of credit being available to the economy. Borensztein and Panizza (2008) and Gennaioli, Martin, and Rossi (2012) found that public debt defaults are followed by a large systematic fall in aggregate financial activity, and that such a post-default credit crunch is stronger in countries where banks hold more government debt.

Furthermore, the domestic political costs of a default may well be greater than those stemming from fiscal adjustment. World-wide experience suggests that the political costs include a 16 percent decrease in support of the ruling party in the first election after a default, a 50 percent increase in the probability of replacing the head of the executive branch of government, and a 33 percent increase in the probability of replacing the finance minister or the central bank governor (see Kamalodin 2011).

However, world-wide macroeconomic gains from debt restructuring are typically positive (IMF 2012). Restructuring periods are characterised by a significant drop in total public debt to GDP by 15 percent points; real growth of around 1.5 percent three years before the restructuring but consistently above 4 percent during the three years following the exchange (that is, an increase of 2.5 percent); a return to market access within one or two years after a crisis (Gelos, Sandleris, and Sahay 2011); and defaults that affect risk spreads only in the first and second year after restructuring (Borensztein and Panizza 2008), although Cruces and Trebesch (2011) showed that greater haircuts are coupled with much larger post-restructuring bond spreads, with the effect decreasing over time but still significant in the sixth year after the restructuring.

That the trade-offs should not be taken too literally can also be illustrated by the debt-target-required primary surplus trade-off. It assumes that fiscal adjustment has no effect on economic growth. This runs counter to a policy concern that the fiscal adjustment required to meet that debt target would push the economy into a recession, at least in the short run. This concern is often dismissed. Underlying such a dismissal is the idea of an expansionary effect of a fiscal contraction (Alesina and Perotti 1995; Broadbent and Daly 2010; Tsibouris et al. 2006; and Strauch and Von Hagen 2001). A key assertion of this viewpoint is that fiscal adjustments

tend to be expansionary, particularly when they rely primarily on spending cuts. There are four conditions (Johnson 2011) for fiscal contractions to have an expansionary effect. First, if there is high perceived sovereign default risk, then fiscal contraction could lower long-term interest rates. Second, spending cuts could directly boost confidence among households or firms so they could compensate for the fiscal contraction. Third, if monetary policy becomes more expansionary it can partially offset the negative short-run effects of spending cuts on the economy. Fourth, tighter fiscal policy with easier monetary policy can, with a devaluation of the currency, increase exports that could mitigate the fiscal contraction.

However, with a political commitment to a fixed exchange rate, a constrained monetary policy option combined with weak monetary transmission mechanisms, and high uncertainty of the sign of the confidence effect, these conditions probably do not hold for the Caribbean. Furthermore, empirical evidence suggests that the expansionary fiscal contraction is not supported in general. The IMF (2010a) found that fiscal consolidation equal to 1 percent of GDP typically reduces GDP by about 0.5 percent within two years and raises the unemployment rate by about a 0.3 percentage point. Domestic demand—consumption and investment—falls by about 1 percent. In addition, the IMF (2010a) found that fiscal consolidation hurt wage earners disproportionately more than profit earners and rent earners. Thus, the recessionary concern of Caribbean policymakers and unions is legitimate.

The fiscal multipliers in the Caribbean are generally positive in value (i.e., a fiscal retrenchment will be recessionary, although given that these values are less than one, the effect will be relatively small). This is based on an estimation of the multipliers (following the methodology of Ilzetzki and Vegh, 2008) for the Caribbean as shown in Table 8.1 taken from Melgarejo (2013). The fiscal multiplier in the Caribbean is positive in value (i.e., a fiscal retrenchment will be recessionary, although given that this value is less than one, the effect will be relatively small). These results show that there is no Keynesian effect of fiscal policy in the Caribbean region after controlling for cross-country heterogeneity (i.e., the multiplier is less than unity). Most importantly, Melgarejo also shows that the size of the fiscal multiplier in the Caribbean is influenced by the degree of openness, level of indebtedness and interaction with monetary policy—which is supportive of the current view that the size of fiscal multipliers depends on key country characteristics. On the other hand, the table also shows that fiscal policy (regarding government spending) is pro-cyclical (i.e., positively correlated with the business cycle), which means limited discretionary action in the Caribbean.

But what about growing out of or inflating away the debt problem? The arithmetic of debt suggests a high payoff in terms of reducing the required primary fiscal balance for a given debt target in a

TABLE 8.1. Fiscal Expenditure Multiplier

	Groups (number)	Obs. (number)	Fiscal Multiplier	Fiscal Stance
EC2SLS	6	81	0.63	0.12
			0.020	0.052
EC3SLS	6	81	0.65	0.12
			0.000	0.000

Source: Melgarejo (2013).
Note: P-values in italics. EC2SLS stands for Error Component Two-Stage Least Squares and EC3SLS stands for Error Component Three-Stage Least Squares.

given time frame with higher growth and/or inflation. However, historical evidence casts doubt on the feasibility of the pure growth option. Reinhart and Rogoff (2009) identified 53 debt reversals over 1970–2000. Debt-reversal episodes were those in which debt to GDP fell by 25 percentage points or more within a three-year period. They then classified the episodes into whether the decline was due to the numerator, denominator, or both. They found only one country, Swaziland (in 1985), where the fall was due exclusively to economic growth. In another three countries (Morocco, Panama, and the Philippines), economic growth was the principle factor, but in the context of debt default or restructuring.

The inflation option is "default" through debasement of that part of the debt denominated in the local currency. Although domestic debt obligations are still met, the value of goods and services that can be purchased by creditors is lower than expected when the loan was first extended to the government. If interest rates are negative or lower than the economic growth rate, the debt-to-GDP ratio falls. A variant of this option is financial repression, which refers to a situation in which governments force domestic lenders to borrow at negative real interest rates (approximately wherein inflation is higher than the nominal interest rate). Ceteris paribus, negative interest rates imply a falling debt-to-GDP ratio over time. That is a transfer from creditors to borrowers (in this case, the government). An example of such policies is when central governments force other public entities, including pension funds, to hold bonds paying negative real interest rates and/or impose capital controls to prevent capital outflows, thereby creating a domestic captive market for such bonds.

However, in small open economies such as those of the Caribbean, the unintended consequences of attempting to reduce debt through inflating away or financial repression probably outweigh the intended benefits of debt reduction. The downsides of accelerating inflation are well known—it has to be a surprise, otherwise investors will price in the risk of accelerating inflation through higher interest rates, which will raise government borrowing costs. Once started, such acceleration in inflation may be difficult to tame. It will erode savings, overvalue the real exchange rate, and so forth. Financial repression reduces government borrowing costs. It also deprives savers and pensioners of interest income and prevents capital formation. By preventing capital formation, financial repression short-circuits the engine of new business creation and employment creation.

Past attempts at fiscal adjustment caution against optimism. Amo-Yartey et al. (2012) reviewed experiences in the Caribbean from 1980 to 2011. They defined the fiscal consolidation year or episode as one in which the cyclically-adjusted primary-surplus-to-potential-GDP ratio (CAPS) improves by 1 percentage point in one or two years, and the end of an episode as when changes in CAPS becomes zero or negative. Their analysis shows the low level of success and the frequency of required fiscal action even after "success." The average success rate is 52 percent for the Caribbean-6. This average ranges from low success for Barbados (20 percent) and The Bahamas (25 percent) to middle success for Jamaica (56 percent) and Trinidad and Tobago (57 percent) and high success for Guyana (67 percent) and Suriname (86 percent).

This suggests a policy option for countries to adopt some kind of fiscal rule as they engage in fiscal adjustment (Schaechter et al. 2012). The central aim of fiscal rules is to provide a credible medium-term anchor to fiscal policy by making the policy framework apolitical (Kopits 2001). That is, it is a tool to counter the myopic priorities of politicians and voters by binding the hands of government.

A fiscal rule is a legislated numerical limit on budgetary aggregates of expenditures, revenues, or deficits and debt. The rule may include limits on disaggregated components such as tax expenditures. To avoid governments being constrained from responding to extraordinary events such as natural disasters or external shocks, aggregate limits may have escape clauses and/or include stabilisation funds with their own explicit saving and spending rules. Although not a panacea, a fiscal rule adopted at the same time as an adjustment may reduce the need to return to fiscal adjustment.

Macroeconomic policy and competitiveness are intertwined. A key indicator of lack of competitiveness is a sustained current account deficit of the balance of payments. If we define a situation of inadequate competitiveness as a sustained current account, then devaluation is called for. We discuss three devaluation policy options: an external devaluation, an internal devaluation, and a fiscal devaluation. These options aim to increase exports relative to imports and thus stimulate economic growth and reduce the current account deficit of the balance of payments.

Often, a typical policy recommendation to obtain competitiveness is to devalue the exchange rate (i.e., an external devaluation). A devaluation of the exchange rate is considered a key part of the policy response when the external position is unsustainable and competitiveness is low. Proponents of this policy argue that when it accompanies fiscal adjustments, the improvement in competitiveness can help mitigate adverse growth-reducing effects of the fiscal retrenchment by the switching effect of real exchange rate devaluation.

The traditional argument is that an external devaluation is expansionary. An external devaluation will lower the real exchange rate (i.e., the price of non-tradable goods relative to the domestic price of tradable goods), and both domestic demand for non-tradable goods and production of tradable goods will increase. With unused capacity, aggregate output will rise. The deficit in the current account of the balance of payments will be reduced and economic growth will increase.

However, opponents of an external devaluation (Worrel 1986) argue that expenditure cannot be switched from tradable to non-tradable goods in countries such as those in the Caribbean. There is no switching effect of devaluation either in expenditure or production. Therefore, a real exchange rate devaluation only depresses real income (Krugman and Taylor 1978). Worse, devaluation could result in stagflation, that is, reduce economic growth and increase inflation. There is a high pass-through effect of a nominal devaluation on domestic inflation. The pass-through effect is higher the greater the proportion of imported goods in the consumer price index and the larger the share of imported inputs in production of goods and services and the more accommodative is monetary policy. In addition, an unexpected external devaluation adversely affects a balance sheet if debts are denominated in dollars while firms' revenue is in local currency (Allen, et al. 2002;

Amo-Yartey et al. 2012). This deterioration in balance sheets of firms has two consequences: it limits the firm's ability to borrow, and borrowing becomes more expensive as the risk premium increases. Thus, the balance sheet effect has a dampening effect on economic growth. Another downside of an external devaluation is that if an external devaluation is perceived as a sign of economic weakness, the creditworthiness of the country might be jeopardised. Thus, devaluation might reduce investor confidence and, hence, the country's ability to secure foreign investment and roll over public debt without worsening terms.

What do the data tell us regarding economic growth and the current account after an external devaluation? Considering only small economies, and an external nominal devaluation of 50 percent or more (and hence ignoring mini-devaluations and the real devaluation obtained), Figures 8.7 and 8.8 show the average growth rates and the current account of the balance of payments for four years before and after the nominal devaluation year. On average, economic growth falls for the first two years and starts to accelerate thereafter. The current account as a percentage of GDP improves almost immediately and continues to do so during the four years.
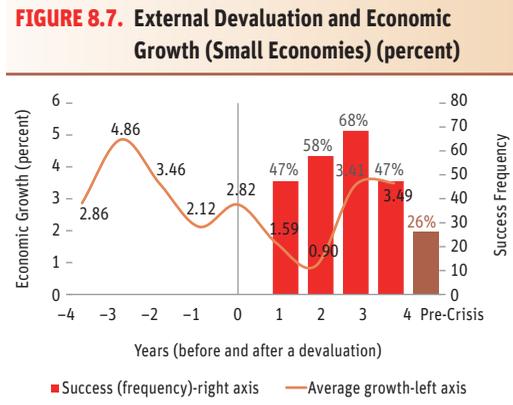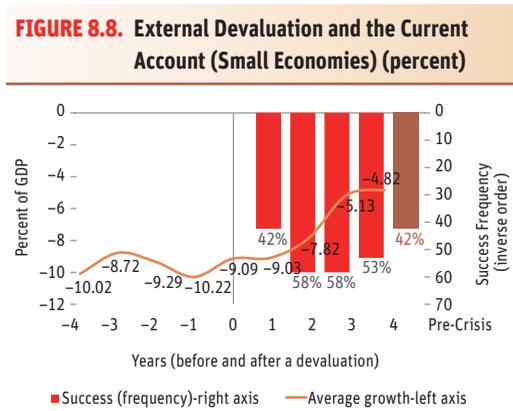
However, the columns in the figures tell a more cautionary tale. The bars in red show the percentage of countries where there was an improvement with respect to the previous year. The brown bars show the percentage of countries that ended up, in the fourth year, better off than the best year (highest economic growth or smallest current account balance) in the four years prior to the devaluation. Only 26 percent achieve higher economic growth and only 42 percent an improvement in the current account balance. The very low success rates for external devaluations in small economies reveals that there is not even an even chance of improving competitiveness through external devaluations.

If an external devaluation is not part of the policy menu (i.e., if policymakers have determined that the benefits of a fixed exchange rate anchor outweigh its costs), then an alternative policy is an internal devaluation. An internal devaluation aims to reduce production costs—particularly

FIGURE 8.7. External Devaluation and Economic Growth (Small Economies) (percent)

Source: Authors' calculations based on International Monetary Fund, *World Economic Outlook*, October 2013.

FIGURE 8.8. External Devaluation and the Current Account (Small Economies) (percent)

Source: Authors' calculations based on International Monetary Fund, *World Economic Outlook*, October 2013..

labour unit costs—through deflation. Because governments have no direct influence on overall prices, the internal devaluation approach is essentially a substantial cut in public sector wages and their propagation to private sector salaries, in the context of reduction in the primary deficit, and eventually to producer prices. The direct effect of fiscal retrenchment is that a decrease in demand will reduce imports and thereby improve the current account. The indirect effect is that the decrease in aggregate domestic demand will lead to an increase in unemployment, which reduces wage inflation and thus price inflation. This will affect the current account through changes in competitiveness.

An example of an internal devaluation is Barbados in the early 1990s. Before 1991, Barbados' external position started to deteriorate rapidly (Worrell et al. 2003). No effective actions were taken until reserves were close to exhaustion. An external devaluation was unacceptable for policymakers. Instead, an internal devaluation program was implemented in late 1991. The fiscal deficit was reduced from 8 percent of GDP in 1991 to 2 percent by 1992. Capital expenditure was diminished by 50 percent, and civil service nominal wages were cut by 8 percent across the board. Output and imports fell, and the current account improved. However, as GDP recovered, the current account again deteriorated.

In general, country experiences with internal devaluations reveal that several factors are needed for them to work. Among these, the most important is an open economy with high factor mobility and a high degree of wage and price flexibility. However, in general, an increase in competitiveness has only been modest because of limited pass-through to prices. Private sector firms have reduced employment rather than fully adjusted wages. In addition, an inadequate shift from the non-tradable to the tradable sector, skill mismatches, and lack of increased investments in the tradable sector also hindered full-factor reallocation. Further, experience shows that balance sheet effects are not limited to external devaluations; they materialise more slowly in the case of an internal devaluation as incomes fall, but external debt service does not. Therefore, the current account adjustment has worked through import compression rather than an expansion of exports (i.e., not as a result of increased competitiveness).

The worst-case scenario is an internal devaluation that pushes a country into a downward spiral of falling GDP, rising unemployment, and an increasing debt ratio. Argentina's experience in 1998–2002 illustrates such an example. The country underwent a downward spiral in which adjustment through internal devaluation eventually proved impossible. Argentina's eventual recovery consisted of a debt default and an external devaluation. Greece might become a more recent example of a similar economic downturn. To get a sense of what an internal devaluation requires in terms of GDP loss to eliminate a current account deficit, Stockhammer and Sotiropoulos (2012) estimate an average of 42 percent for Greece, Ireland, Italy, Portugal, and Spain.

The third policy option is a fiscal devaluation (i.e., a fiscal reform in which there is a change in tax composition with the direct objective of reducing labour costs, rather than wages as in an internal devaluation, hence increasing competitiveness and economic growth). This option of mimicking an external devaluation was first discussed by Keynes in the context of the gold

standard, when countries could not devalue their currencies. Recently, a fiscal devaluation has been proposed for European Union economies that are members of the euro zone and do not have the option to devalue. A variant practiced by Caribbean tourism countries is tax expenditures and tax waivers, including on the value-added tax, expended to the tourism industry.

The modern version of this policy recommendation is to reduce payroll taxes and increase value-added taxes. The argument is straightforward. With nominal wages fixed in the short run and a fixed nominal exchange rate, the reduction in payroll taxes will reduce unit labour costs. Thus, assuming symmetric full pass-through of value-added taxes and payroll taxes into prices, the result is reduced producer and export prices. Because they bear not on exports but on domestic consumption, value-added taxes will dampen imports. Thus, this policy option would reduce the current account deficit as foreign demand for exports increases and domestic demand for imports falls as a result of increased competitiveness. Hence economic growth would increase. The effect of the tax switching on net exports will be larger to the extent that non-tradable goods are less labour-intensive than tradable goods. Further, if unemployment benefits are not adjusted to compensate for the price effect of the increased value-added taxes, and if payroll tax reductions are focused on the lower wage levels, there may be a fall in structural unemployment.

An increase in competitiveness, larger net exports, an enhancement of economic growth, and a reduction in unemployment—all without increasing the fiscal deficit—seem too good to be true. But not according to the IMF (2011), which states that "...from both theory and simulations that fiscal devaluation can have significant effects."

Thus, if one accepts that a sustained deficit of the current account of the balance of payments is a problem, then policymakers have to consider policy options for reducing the deficit. In general, three options are discussed: an internal, external, or fiscal devaluation. Which option would be better depends on the policy details and simulations of their effects. Such analysis needs to include, for comparison purposes, the current policy of tax expenditures and direct subsidies to the tourism sector (including to airlines). Whichever option is pursued, "letting it be" is not desirable.

8.2 Get Business Going

In periods of fiscal retrenchment economic growth can be pulled up by the private sector, particularly by firms that earn export revenues. Thus the second pillar to enhance competitiveness and hence productivity and economic growth is to enact policies that are pro-business and pro-exports. In this way, the private sector and its exports of goods and services become the motors of future economic growth.

In the Caribbean, the attention of policymakers typically is focused on the next big foreign direct investment project. This is understandable. For example, the Baha Mar mega-resort project in The Bahamas and the Amaila Falls hydroelectric project in Guyana have significant

macroeconomic as well as economic growth effects. The total investment in Baha Mar is estimated to be about US$3.5 million, and the hotels in the development are expected to increase the number of available hotel rooms by 2,000. However, being successful will require a substantial increase in the airlift to the island plus a policy of diversification of tourist source countries such that the Baha Mar represents additional tourism rather than a diversion from the existing hotel complex Atlantis.

Attracting foreign direct investment, however, is not without costs. An example is the discussion, in the Barbadian newspapers, of the proposed all-inclusive Sandals resort in Barbados, with tax breaks of 40 percent in addition to value-added tax exemptions, discounts on imports of vehicles, and special permissions for work permits. All are typical inducements for such projects, but the net effect on the fiscal balance or the economy may not necessarily be positive.

The previous chapters have already shown that the Caribbean's current development model is no longer delivering in terms of economic growth. However, policy discussions are more often than not trapped into answering the question: What new sector and what fiscal resources are needed? New sector discussions often focus on extending services to include call centres, back office activities, health tourism, agriculture, etc. However, in this era of intensifying globalisation, policies revolving around this type of concept of national sectors, industries, and services may be obsolete.

Instead, coordinated Caribbean policy responses are needed that consider the whole value chain, from infrastructure and raw materials to after-sales service. The promotion, creation, and growth of small and medium-sized enterprises (SMEs) has to be at the core of such policy. Moreover, policies targeting competitiveness and sustainability can muster the critical mass of change needed for success.

In practical terms, taking a page from the best practices of the European Union[1] and the Organisation for Economic Cooperation and Development, this requires a process of "competitiveness proofing"—that is, analysis of the impact on competitiveness of all existing and proposed policy. "Fitness checks" of existing legislation are aimed at reducing the cumulative effects of legislation so as to cut costs for businesses.

Underlying such competitiveness proofing is an indicative model for driving new and expanded job creation by enhancing competitiveness, attracting sustainable new investment, and promoting innovative technologies and business activities that are more conducive to long- term economic growth. Paraphrasing the Ministerial Statement of the Asia-Pacific Economic Cooperation[2] forum, this involves a number of activities, including the following:

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[1] See Impact assessment available at http://ec.europa.eu/enterprise/policies/smart-regulation/impact-assessment/competitiveness-proofing/index_en.htm.
[2] See Annex F of the 2013 APEC Ministerial Meeting available at http://www.apec.org/Meeting-Papers/Ministerial-Statements/Annual/2013/2013_amm/annexf.aspx.

- *Make economies cost-competitive by promoting an internationally attractive business environment.* With an improved environment for doing business, countries can become attractive for investment and manufacture by companies within their borders. Specifically, improving the ease of doing business requires making it easier to start a business, deal with permits, employ workers, register property, get credit, protect investors, pay taxes, trade across borders, enforce contracts, and close a business.

- *Support investment in infrastructure development.* The development of well-designed, sustainable, and resilient transportation systems and information and communications networks can attract potential investors and manufacturers. Such development reduces the costs of moving products and supplies to market. Economies can maximize the positive impact of infrastructure investment by selecting projects that result in system-wide benefits.

- *Spur innovation by supporting research and development and its commercialization.* Commercial innovations that drive economic progress often depend on breakthroughs in science and technology or their adoption and import (often via foreign direct investment). Increased support for research and development consistent with market-based principles drives competitiveness and hence economic growth.

- *Promote research collaboration by the country's actors (private sector, academia, and government) and foreign actors that encourages the accelerated adoption of innovations.* For foreign actors, countries need to provide effective protection and enforcement of intellectual property rights that encourages high-technology foreign direct investment in innovative SMEs.

- *Attract investment by improving the investment climate.* Investment drives productivity, supports jobs, raises incomes, strengthens trade flows, and spreads international best practices and technologies. In order to capitalize on these benefits, economies should employ sound strategies to improve their investment climates, including by ensuring that all investment applications are dealt with expeditiously, fairly, and equitably.

- *Invest in education and workforce training.* An educated workforce is vital to economic success. In order to attract investment, it is essential to ensure that potential employers can find skilled workers in an economy's labour market. Job training programs help workers develop the skills needed by employers. Training programs targeted at specific sectors and developed in cooperation with individual employers have proven to be most effective in preparing workers for jobs. Improving science, technology, engineering, and mathematics (STEM) education at all levels is necessary to develop the scientific and technical workforce necessary for economies to be competitive. Finally, economies can benefit substantially from promoting STEM education and occupations among those who are disproportionately underrepresented in this field, particularly women.

- *Strengthen manufacturing supply chains and improve logistics.* High-performing supply chains and efficient logistics systems attract investment and boost exports, particularly for small businesses. Economies should look to improve ports and intermodal connections to inland transport infrastructure, streamline customs procedures, and address unwarranted and inconsistent regulation as a way to promote domestic manufacturing and create jobs.

- *Promote access to the digital economy.* Nearly every modern business relies on the Internet, information flows, and information and communication technologies to operate. Overall, small businesses that make use of the Internet export twice as much as those that do not. Consequently, taking steps to improve access to the digital marketplace by investing in high-speed interconnected broadband networks, promoting digital literacy, and encouraging the use of innovative electronic payments methods can support economic development and job creation by drawing investment capital into the fast-growing technology sector. It also facilitates job growth in traditional industries that rely on technology and digital services.
- *Address market access barriers.* Increasing trade and investment is critical for economic growth and development. A central part of this effort is to address both tariff and non-tariff and investment barriers in order to expand market access for products and services.

SMEs are particularly important potential in a scenario of private-sector, export-led growth in the Caribbean. Therefore, the following initiatives are needed to directly target SMEs, which are integral to economic growth and development:

- *Increase export opportunities for SMEs, including start-up companies.* These firms are an important source of innovative and forward-thinking ideas, so efforts must be made to make it easier for them to export, including by helping them find sources of financing, increasing the transparency of customs information and business environments, streamlining customs procedures, increasing their access to information about specialized services (e.g., freight consolidation, trade shows, and certification programs), and improving their understanding of how to utilize regional free trade agreements.
- *Facilitate SMEs' access to supply chains.* SMEs participate in the global economy not only as direct exporters, but also indirectly as providers of inputs to exporters and via intermediaries. They can contribute a substantial portion of the intermediate inputs used by larger firms. Therefore, taking steps to enhance the ability of SMEs to participate in supply chains in order to indirectly export is important to job creation and economic growth.
- *Facilitate SMEs' access to capital and emerging technologies.* SMEs that develop and commercialize new technologies and innovations can be a source of economic growth. Countries can establish public-private partnerships to give SMEs access to the capital and innovative ideas they need to nurture innovative businesses. Collaboration among economies can assist in improving technology transfer and its commercialization.
- *Provide SMEs with information and tools to improve efficiency and profitability.* SMEs that accelerate innovation and acquire and improve their use of technology are far more successful and have greater opportunities to participate in global supply chains. Caribbean economies can support this progress by establishing programs and virtual networks to provide SMEs with resources to solve problems and identify opportunities for growth. Examples of specific functions these programs can perform include enhancing efficiency of "shop floor" manufacturing

processes and techniques; incentivising adoption of higher-tech plans and equipment; and creating training programs to increase productivity and the use of digital technologies.

8.3 Get New Neighbours

Previous chapters have noted that the Caribbean countries live in a rough neighbourhood. There are two possible policy options: change the neighbours or join a new club.

Currently, the Caribbean's economic neighbourhood is dominated by the United States and the European Union. As shown previously, Caribbean countries are too dependent on a few traditional developed-country trading partners with relatively lower growth prospects than some developing middle-income countries. A search for new and growing markets is needed as part of a new development strategy.

One possibility is to reorient trade in goods and services toward growing niches, that is, toward faster-growing countries with growing middle classes. An example is Brazil. To illustrate this possibility, but ignoring the upfront costs of diversifying trade partners, we simulate a hypothetical situation in which the traditional trading partners grew at the same rate as Brazil since 2007.[3] Figure 8.9 shows that the average growth rate would have been somewhat higher had Brazil been the trading partner instead of the United States, United Kingdom, or European Union during the Great Recession. Annual growth differences reach levels above 4.5 percentage points for The Bahamas, Barbados, and Suriname. In the medium term, the upside in the growth rate tends to decrease and stabilise as each of the trade partners approaches its long-term growth rate. Growth rates in the region would have been almost 3 percentage points higher under the hypothetical scenario of Brazil as the main Caribbean trade partner during 2008–2018.

By country, the average increase in annual growth during the Great Recession would have been 2.1 percent for The Bahamas, 4.6 percent for Barbados, 2.4 percent for Trinidad and Tobago, 2.9 percent for Suriname, and 2.4 percent for Jamaica. Over the next six years, the simulation exercise shows that the increase could reach 0.8 percent for The Bahamas, 5.2 percent for Barbados, 2.7 percent for Trinidad and Tobago, 3.8 percent for Suriname, and 1.5 percent for Jamaica (see Table 8.2).

Most importantly, Caribbean per capita income would have increased more than US$300 in 2012 and is projected to be US$600 higher in 2018 under the simulated scenario. By country, Barbados and Trinidad and Tobago show the highest increases of US$655 and US$586 in 2012 and US$1,252 and US$783 in 2018, respectively (see Table 8.3).

In terms of the "club," The formal organisation for the Caribbean countries is the Caribbean Community (CARICOM). Its roots can be traced to the 1950s, approximately the same time as the

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[3] The simulation and projection was constructed using the coefficients from the vector-error correction (VEC) model, where Brazil's GDP replaced the GDP of the main trading partner. Guyana is not included because the VEC did not find a strong co-integrating relationship with any single partner.

FIGURE 8.9. What if Brazil Were the Neighbour?

Tourism-based Economies

The Bahamas

Barbados

Trinidad and Tobago

Commodity-based Economies

Suriname

Jamaica

■ Increase in GDP growth with Brazil as trading partner   —— Baseline
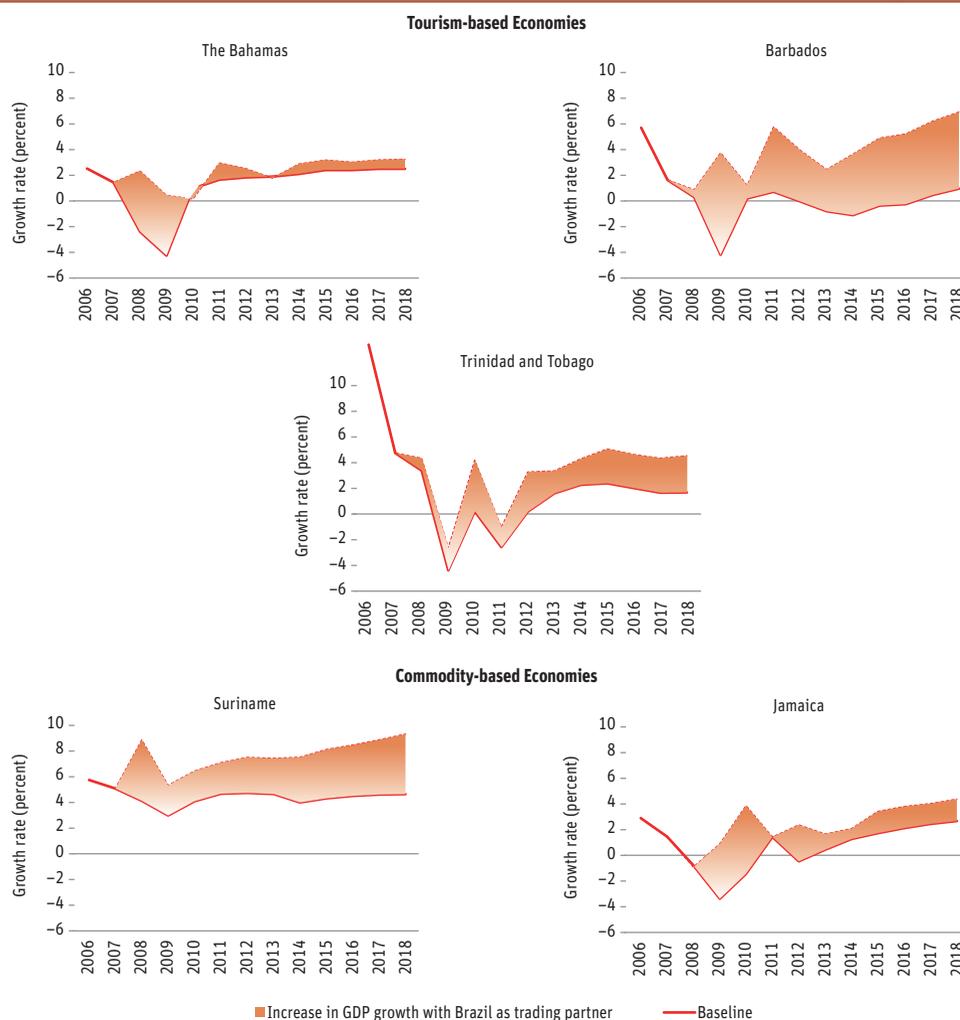
Source: Authors' calculations.

TABLE 8.2. Real GDP Growth Rates, 2008–2012 and 2013–2018 (percent)

	Average 2008–12		Average 2013–18	
	Baseline	**Brazil t.p**	**Baseline**	**Brazil t.p**
The Bahamas	−0.40	1.68	2.30	2.88
Barbados	−0.55	3.79	−0.14	4.89
Trinidad and Tobago	−0.64	1.63	1.95	4.38
Suriname	4.15	7.06	4.48	8.30
Jamaica	−0.94	1.51	1.76	3.20
Caribbean	0.32	3.14	2.07	4.73

Source: Authors' calculations.
Note: t.p = trading partner; Caribbean = The Bahamas, Barbados, Jamaica, Suriname and Trinidad and Tobago.

TABLE 8.3. Per Capita Income, 2012 and 2013 (in U.S. dollars)

	2012		2013	
	Baseline	Brazil t.p	Baseline	Brazil t.p
The Bahamas	22,668	22,823	27,724	27,924
Barbados	15,383	15,984	16,905	17,915
Trinidad and Tobago	19,105	19,703	26,112	26,802
Suriname	8,895	9,124	11,859	12,433
Jamaica	5,500	5,652	6,092	6,192
Caribbean (average)	14,310	14,657	17,738	18,253

Source: Authors' calculations.
Note: t.p = trading partner; Caribbean = The Bahamas, Barbados, Jamaica, Suriname and Trinidad and Tobago.

beginnings of the European Union. However, the contrast between the two in terms of progress in integration is stark. Progress in the Caribbean toward a single market, widening membership, and strengthening trade links with non-traditional partners (the three aims of the 1989 Grande Anse Declaration) has been glacially slow. Solutions to the key problem of small countries—namely, economies of scale in public institutions (central bank, parliament, common currency, etc.)—have not been a serious part of the agenda since the failed West Indian Federation. Much of the recent discussion to reignite integration has focused on changing CARICOM's rules from voluntary to mandatory decisions.

A sharp contrast can also be seen between CARICOM and the APEC forum, which has a 21-nation membership. As reported by the World Bank's *2013 Doing Business Report,* a key focus of APEC has been promoting regulatory reforms. It has launched a "Doing Business Action Plan" and set collective targets defined to measure progress. The aim has been to make it 25 percent cheaper, faster, and easier to do business in APEC nations by 2015. Between 2009 and 2012, APEC members improved their performance by 11.5 percent on average. APEC's role was to provide technical assistance and facilitate exchanges ranging from "champion economies" sharing information and experience to tailored diagnostic studies.

A country can of course belong to more than one club, it is not an "either or" choice. But for the Caribbean nations, which other club? Trinidadian politician and economist Winston Dookeran (2013) noted that "If we are to survive, there exists no alternative option to co-operative effort involving all the nations in the Latin America and Caribbean region."

Dookeran's vision of regional integration rests on three pillars: focus on the wider hemisphere; emphasise capacity-building through co-operation beyond just on trade and markets; and focus on production integration and competitiveness. Nearby, there are many organisations with large and economically dynamic members in Latin America. And from across the world, China has increasingly become a player in the Caribbean, particularly in those countries that diplomatically pursue the "One China" policy. The recently announced US$3 billion infrastructure project to be managed by CARICOM could mark a shift in the organisation's functions toward becoming a producers' club.

Thus, if the Caribbean accepts that a steady and sustainable macroeconomic environment is necessary for economic growth, then putting the fiscal house in order is an urgent policy task. If it accepts that a sustained deficit of the current account of the balance of payments is a problem, then policymakers have to consider policy options to reduce that deficit. In general, three policy options could be on the table: an internal, external, or fiscal devaluation. If the Caribbean accepts that future economic growth has to be led by private sector exports, then microeconomic and sector policy reform to obtain a dynamic, innovative, and exporting private sector is a critical component of the reform agenda. And finally, if the Caribbean accepts that the integration strategy it has followed has not delivered, then policymakers need to rethink the basic tenants of this strategy.

Conclusions

T he central question underlying this report is whether the poor economic performance of the Caribbean is due to the small size of its economies and, if not, whether it is then due to sclerosis.

Is size the problem? No. The Caribbean is a negative outlier among the world's other small economies and is in relative decline with respect to the others. Thus, while in the early 1970s real GDP in the Caribbean was four times that of the average for small economies, today it is 0.9 percent. Without denying that small economies indeed face problems that larger countries do not, the relative poor economic performance of the Caribbean countries is specific to the region.

Is the Caribbean problem one of sclerosis? It would appear to be so. The sclerosis hypothesis is that special interest groups devote their resources to unproductive rent-seeking to redistribute social wealth. By enlarging their slice of the pie (real GDP), these interest groups reduce the enlargement (economic growth) of the total pie, which in turn reduces total social gains. This happens by influencing policy. Small and politically stable societies like those in the Caribbean foster the development and institutionalisation of growth-retarding special interest groups, which are then better able to influence policy to redistribute resources in their favour. Large discretionary tax expenditure (taxes waived), often used under the banner of industrial policy, could be interpreted as returns to these groups.

The sclerosis hypothesis is supported by opinion surveys of Caribbean businesspersons (relative to businesspersons in other small economies). They think that corporate activity is dominated by a few business groups rather than spread among many; that anti-monopoly policies are ineffective; and that the existing rules discourage rather than promote foreign direct investment, and hence foreign ownership is low. They have a lower level of trust in politicians, and opine that there is a greater degree of unproductive rent-seeking, as government officials engage in more diversion of public funds and show greater favouritism. Caribbean businesspersons make more irregular payments and bribes than do businesspersons in other small economies. These are characterisations that describe labour and factor markets, policies, and policy institutions that stem from the sclerotic hypothesis.

Economic symptoms are also consistent with the sclerosis explanation. Economic growth and employment generation in the Caribbean are lower than in other small economies. Underlying

the lower economic growth rate are lower factor inputs (both labour and capital) and lower total factor productivity. The Caribbean is falling behind due to lower productivity.

Competitiveness is also lower in the Caribbean. The most common measure of a country's competitiveness is the real exchange rate, often complemented by specific costs such as energy costs. In the Caribbean, real exchange rates appear to be overvalued and energy prices are higher. In addition, the Caribbean does worse in two often-used indirect measures: world market share of exports of goods and services, which is falling, and the current account of the balance of payments net of foreign direct investment, which is negative.

The region's poor performance can also be seen in synthetic measures such as the World Economic Forum's *Global Competitiveness Report* and the World Bank's Doing Business Index. While other smaller economies are moving toward the frontier of best practices of doing business, the Caribbean remains stationary. In terms of competitiveness, the Caribbean is falling behind.

The Caribbean business sector is weaker than that of other small economies. The profile of the region's private sector is not encouraging: it is made up of smaller and older firms less engaged in international trade, and by firms that are predominantly locally owned and operate in small and medium-sized localities. Businesses have lower levels of connectivity, further hindering international trade. The Caribbean private sector's relatively poor performance in terms of growth in employment and sales—which is about a third that of other small economies—is therefore no surprise. The Caribbean business sector is falling behind because the policy environment hinders rather than promotes a dynamic and innovative private sector.

Macroeconomic performance is worse. There is a large macroeconomic environment gap in the Caribbean relative to other small economies. According to the World Economic Forum's Competitiveness Index—a measure that combines the government budget balance, gross national saving, inflation, government debt, and credit ratings—the Caribbean's macroeconomic environment is worse than that of other small economies for each component of the index. One major component of the macroeconomic environment is a high debt-to-GDP ratio combined with inadequate primary fiscal balances to reduce the stock of public debt. Some Caribbean countries have levels of debt that are a drag on their economic growth. In addition, the Caribbean also has more macroeconomic instability, further accentuating an adverse environment for economic growth. Macroeconomic policy hinders rather than promotes economic growth.

The Caribbean is in a harsher neighbourhood than other small economies and thus faces greater challenges. The region is subject to more damaging natural disasters, is more closely linked via trade in goods and services to relatively stagnant countries, and is subject to greater economic shocks (given product and export market concentration). Yet the region has fewer policy buffers (fiscal and external) to mitigate these shocks than do other small economies.

Attempts at regional integration have not paid off. There are no significant positive trends or positive ratchet effects, excluding oil, even after major agreements on intra-regional and extra-regional trade. Further, there does not appear to be convergence among the CARICOM countries. The integration strategy currently being pursued is simply not working.

The last few years have been harsh for the Caribbean. The world's Great Recession emanating from the United States hit the Caribbean particularly hard given its high dependence on that country and its lack of sufficient policy buffers. Average economic growth for 2008–2013 was 1.1 percent compared to 3.9 percent for 2004–2007. Cumulative GDP losses from 2008 to 2012 as a percent of 2007 GDP were 28 percent. Other than Guyana, countries have not recovered their pre-crisis growth rates. Clearly, when the United States sneezes the Caribbean gets pneumonia.

Under the assumption that there is no radical stabilisation cum reform about to be implemented (except for Jamaica, which is under an IMF program), the latest IMF forecasts suggest the pull-up impulse from the Caribbean's trading partners will increase the region's economic growth rates in the immediate future. Projected average growth for the next two years is 2.6 percent (1.6 percent for tourism-based economies and 4 percent for commodity-based economies). These figures, however, are still lower than the already-low historical rates. Thus, the recovery will imply a further falling behind.

There are also downside risks that could negatively affect the Caribbean's future. Of immediate and particular concern is what will happen if the United States again sneezes. In particular, the end of the U.S. government's quantitative easing program could induce a greater tightening of world financial conditions than is currently expected. If that happens, it could result in the global economy growing less (e.g., by 3 percent rather than 4 percent a year) over the medium term.

A Caribbean-specific shock could be the dismantling of PetroCaribe, which would worsen fiscal balances, the current account of the balance of payments, and, given automatic pass-through, lead to an increase in energy prices. This possible triple whammy—reduced world demand, increased interest rates, and being forced to go to the more expensive spot market for fuel—combined with the fact that Caribbean countries have inadequate policy buffers could send the region back into stagnating economic growth and worsening macroeconomic balances.

Thus, the "let it be" option does not solve the Caribbean's problem of inadequate economic growth to generate enough well-paid jobs for its people. It implies a continuation of relative decline, thereby endangering the gains in the quality of life so far achieved.

So what to do?

The problem in finding that answer is that there is no one magic bullet, and that any pertinent solution needs to be tailored to each country. Most of this report has discussed a mythical Caribbean country, although it has frequently noted the differences between commodity- and tourism-based economies. However, The Bahamas is not Jamaica, which is not Barbados. Guyana is not Trinidad and Tobago. Thus, although many problems are common across countries, serious policy design needs to delve further into country-specific details that require data and information that are often missing in Caribbean countries. Gathering and disseminating that information must be among the first steps toward finding a solution to the region's problems, followed by detailed analysis of macroeconomic stabilisation, structural reform, and the search for new neighbours. All of these points have been sketched out in this report.

The Caribbean has been here before. Back in the 1970s and 1980s, facing the dismantling of preferential trade agreements, declining aid, and serial exogenous shocks, the countries designed and adopted a new development model that was successful for a given period of time. That model has now run its course, and the region today again faces myriad challenges. The Caribbean has overcome such challenges before. It can do it again.

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Annex

TABLE A.1. Small Economies				
Country	GDP per capita	Human development index	2011 Population (millions)	Main activity	Island
Antigua and Barbuda	14,786	0.76	0.088	Tourism-based	Y
The Bahamas	27,542	0.794	0.348	Tourism-based	Y
Bahrain	23,893	0.796	1.129	Commodity-based	Y
Barbados	26,386	0.825	0.277	Tourism-based	Y
Belize	9,262	0.702	0.339	Commodity-based	N
Bhutan	3,955	0.538	0.701	Commodity-based	N
Botswana	9,266	0.634	1.853	Commodity-based	N
Brunei Darussalam	55,080	0.855	0.425	Commodity-based	N
Cape Verde	3,667	0.586	0.52	Tourism-based	Y
Comoros	868	0.429	0.68	Commodity-based	Y
Cyprus	18,958	0.848	0.816	Tourism-based	Y
Djibouti	2,493	0.445	0.845	Commodity-based	N
Dominica	7,390	0.745	0.071	Tourism-based	Y
Equatorial Guinea	9,886	0.554	1.351	Commodity-based	N
Estonia	16,968	0.846	1.34	Commodity-based	N
Fiji	4,321	0.702	0.894	Tourism-based	Y
Gabon	13,351	0.683	1.518	Commodity-based	N
The Gambia	1,271	0.439	1.799	Commodity-based	N
Grenada	14,806	0.77	0.104	Tourism-based	Y
Guinea-Bissau	805	0.364	1.683	Commodity-based	N
Guyana	4,503	0.636	0.775	Commodity-based	N
Iceland	35,628	0.906	0.326	Commodity-based	Y
Jamaica	8,602	0.73	2.741	Tourism-based	Y

(*continued on next page*)

TABLE A.1. **Small Economies** (*continued*)

Country	GDP per capita	Human development index	2011 Population (millions)	Main activity	Island
Kiribati	3,722	0.629	0.105	Commodity-based	Y
Latvia	12,591	0.814	2.23	Commodity-based	N
Lesotho	1,489	0.461	1.941	Commodity-based	N
Luxembourg	83,072	0.875	0.514	Tourism-based	N
FYR Macedonia	7,665	0.74	2.059	Commodity-based	N
Maldives	4,239	0.688	0.325	Tourism-based	Y
Malta	21,666	0.847	0.423	Tourism-based	Y
Mauritius	9,230	0.737	1.289	Tourism-based	Y
Mongolia	4,217	0.675	2.796	Commodity-based	N
Montenegro	7,865	0.791	0.62	Tourism-based	N
Namibia	5,386	0.608	2.138	Commodity-based	N
Qatar	127,090	0.834	1.768	Commodity-based	N
Samoa	6,493	0.702	0.183	Tourism-based	Y
São Tomé and Príncipe	1,617	0.525	0.169	Tourism-based	Y
Seychelles	30,863	0.806	0.091	Tourism-based	Y
Slovenia	24,844	0.892	2.021	Commodity-based	N
Solomon Islands	1,948	0.53	0.54	Commodity-based	Y
St. Kitts and Nevis	9,807	0.745	0.056	Tourism-based	Y
St. Lucia	10,719	0.725	0.167	Tourism-based	Y
St. Vincent and the Grenadines	7,033	0.733	0.11	Tourism-based	Y
Suriname	10,701	0.684	0.534	Commodity-based	N
Swaziland	3,830	0.536	1.176	Commodity-based	N
Democratic Republic of Timor-Leste	1,143	0.576	1.093	Commodity-based	Y
Tonga	7,631	0.71	n/a	Tourism-based	Y
Trinidad and Tobago	22,679	0.76	1.323	Commodity-based	Y
Tuvalu	3,740	n/a	n/a	Commodity-based	Y
Vanuatu	6,796	0.626	0.245	Tourism-based	Y

Note: n/a = not available; Y = yes; N = no.