

Caribbean Small States—Growth Diagnostics

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Introduction

1. The Caribbean is the world's largest group of small states. In this report, we focus on twelve countries that have populations less than 1.5 million.¹ Apart from their very small size, these countries share a number of similarities. They are richly endowed with natural resources, such as good weather most of the year, attractive white sandy beaches in most smaller islands, bauxite in some larger states, gold in others, and oil and natural gas in Trinidad and Tobago. They enjoy the geographical proximity to the rich markets of North America, and have substantial trade and travel connections with those of Europe. Much of their exports are to the US and the EU under preferential trade arrangements. Most of them maintain a fixed exchange rate with the US dollar.

2. Despite their similar size and other commonalities, they differ to a large degree in their levels of economic development. The Bahamas, Antigua and Barbuda, and Barbados, with per capita income of around \$14,000, are high-income countries; Suriname and Guyana, with per capita income of less than \$4000, are low-income countries.² The long run growth rates in these countries have also differed widely, from 5 percent in St. Kitts and Nevis between 1978 and 2004 to less than 1 percent in Guyana.

3. This paper reviews the growth performance of the Caribbean small states in the past two and a half decades and considers key constraints to their improving productivity and competitiveness. Competitiveness is defined here as a set of factors, policies, and institutions which determine the level of productivity of a country.³ The paper is organized as follows. Section 1 reviews the basic facts of growth in these countries and their main sources of growth. It finds as one of the key stylized facts that these countries have had a marked growth slowdown in the 1990s. Section 2 investigates the reasons for the growth slowdown. It finds that the countries' own policies in the 1980s, rather than limitations of size or adverse external environments in the 1990s, held them back. Section 3 analyzes productivity growth in these countries and considers its determinants, applying the framework of the Global Competitiveness Report undertaken by the World Economic Forum. It finds that, in addition to the lack of fiscal discipline and large external public debts, the basic ingredients for private sector led growth have been lacking in these countries. Section 4 concludes by highlighting the key elements in the strategy for improving competitiveness in the region and some examples of country- and regional-level initiatives that merit attention in the case study.

Section 1. Description of Economic Trends in the Caribbean, 1978-2004

Pattern of Growth

¹ The twelve Caribbean countries considered in this paper are: Antigua and Barbuda, the Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname and Trinidad and Tobago.

² Figures are in GDP per capita, PPP (constant 2000 international \$).

³ World Economic Forum's Global Competitiveness Report (GCR) 2005.

4. The long-run growth of the Caribbean small states has been strong by most standards (Figure 1). Between 1978 and 2004, the average growth in real per capita income was about 3 percent a year. This compares favorably to growth in Latin America (1.3 percent), East Asian small states (0 percent), and other small states in the world (1.6 percent) over the same period.

5. The volatility of growth is high but comparable to that of other regions. Measured by the standard deviation of GDP growth rate, the volatility was higher in the Caribbean than in Latin America, but it was similar to that of other small states in the Pacific and elsewhere in the world (Table 1). Moreover, it has declined in the Caribbean from 5.8 percentage points in the late 1970s to 2.8 percentage points in 1990s.⁴

6. Growth has been uneven across countries. The three countries that grew fastest in the past 25 years (St. Kitts and Nevis, Antigua and Barbuda, and Grenada) had average per capita growth of 4 percent a year. The three countries that grew slowest (Bahamas, Guyana, and Suriname) had average per capita growth of less than 1 percent a year.⁵ Just how unequal the growth performance was within the region becomes clear when compared to neighboring Latin America: the distribution of growth rates was much more spread out in the Caribbean—with poorer countries tending to grow slower in the long-run (Figure 2).

7. Growth has slowed in the 1990s. The sharpest slowdowns were in Antigua and Barbuda, Dominica, St. Lucia, and St. Vincent and the Grenadines. Exceptions to the trend of slowing growth are Guyana, Suriname, Trinidad and Tobago, which were recovering from slower growth in the 1980s (Figure 3). The growth slowdown over the 1990s, which was seen for other small states in the world, will be a key subject of this paper.

Sources of Growth

8. The services sector was the main driver of growth in the Caribbean (Table 2). Between 1978 and 2004, it has grown on average at around 5 percent a year and expanded its share in GDP from 61 to 68 percent.

9. The expansion of services came at the expense of agriculture. It has growth at less than one percent a year on average and its share in GDP has declined from 15 percent to 11 percent. Because the growth of agriculture has been much lower than that of services, the sectoral shift has tended to increase total growth.

10. The industry sector grew about as fast as the service sector. However, due to the industry's much smaller share in GDP (around 22 percent of GDP), its contribution to growth has been limited to about a third of that of the services sector.

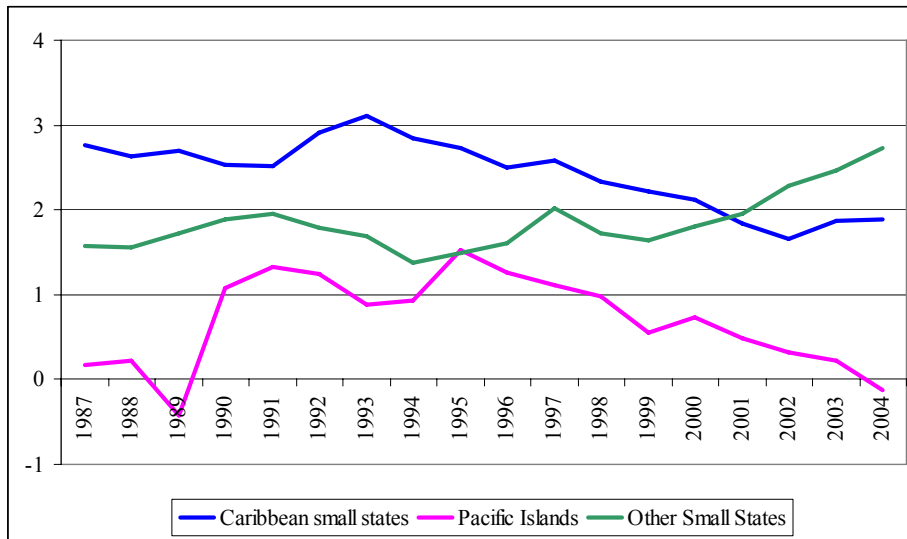
11. There were some exceptions to the region-wide trends. In Guyana, agriculture became more important, and services less important. In Suriname, both agriculture and services became more important, at the expense of industry. Finally, in Trinidad and Tobago, industry remained the most prominent sector because of the country's unique endowment of oil and natural gas.⁶

⁴ The observation is supported by other measures of volatility that are not sensitive to changes in trend growth rates.

⁵ We'd expect a slower growth rate in the Bahamas than other countries in the region since it is the most mature economy in the region.

⁶ Notice that these countries are the same three countries that did not fit the regional pattern of growth (slowdown) in the 1990s.

Figure 1. GDP per capita Growth Rates, 1978-2004



Source: WDI. Note. Average GDP per capita growth rates, ten-year moving averages, 12 countries in the Caribbean Small States, 11 countries in Pacific Islands, and 26 countries in Other Small States.

Table 1. Volatility of GDP Growth Rate, 1978–2004

	1970s ^{a/}		1980s		1990s		2001-04	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
<i>Regional Medians</i>								
Caribbean small states	6.2	3.8	5.2	4.7	2.9	3.1	1.3	1.9
Latin America	5.1	2.8	1.6	4.6	3.5	2.9	2.5	1.9
Pacific Islands	2.4	9.6	1.8	6.0	2.4	5.1	1.5	2.5
All Small States ^{b/}	4.0	7.2	2.9	3.6	2.9	3.9	2.4	1.5

Source: WDI. Note: a/ 1978–2004. b/ Excludes Caribbean small states. Volatility is measured in terms of standard deviations of GDP growth rate, and not per capita growth rate, following the standard definition of the literature.

Figure 2. Distribution of per capita Growth Rate, average 1978-2004

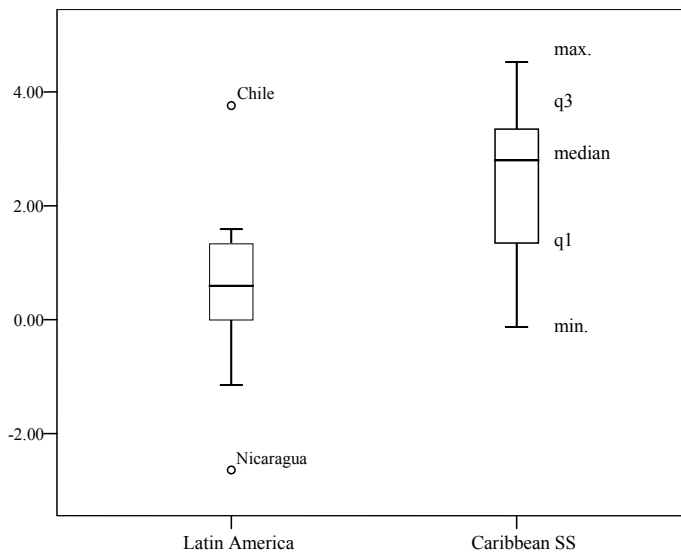
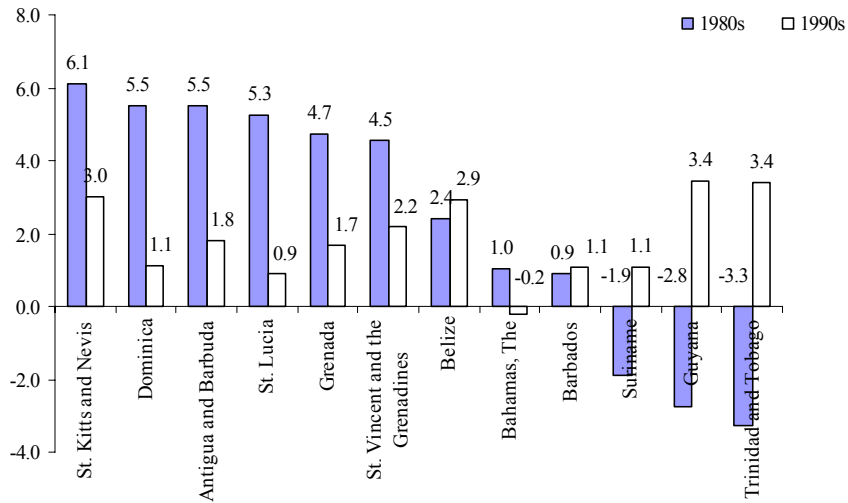


Figure 3. Change in Average per capita Growth Rate between 1980s and 1990s
 (median values of multiple estimates)^{a/}



Source: WDI. Note: a/ Estimates used are average, median, and Hodrik-Prescott filter.

Section 2. Reasons for Growth Slowdown—Diagnostics

12. Why did growth slow in the 1990s? To answer this question, we begin by reviewing the sources of growth in the 1980s. We focus on the countries that had a marked slowdown in the 1990s (Antigua and Barbuda, the Bahamas, Dominica, Grenada, St. Kitts and Nevis, St. Lucia, and St. Vincent and Grenadines). Then we examine whether the countries that did not experience a slowdown (Barbados, Belize, Guyana, Suriname, and Trinidad and Tobago) can be distinguished in terms of their sources of growth and the policies they pursued.

Sources of Growth in the 1980s

13. The countries that suffered a slowdown in the 1990s—call them slowdown states—grew faster in the 1980s in all the main economic sectors. Services and industry grew at over 6 percent a year in the 1980s, contributing most to overall growth. Agriculture also grew positively, at an average rate of 3.2 percent a year, reversing a negative trend in the late 1970s (Table 3).

14. The strong growth in services mainly reflected the rapid expansion of tourism. The number of tourists coming to the region doubled between 1980 and 1989, from 6.9 million to 12.4 million a year. Tourist arrivals increased in both established destinations such as Antigua and Barbuda, Bahamas, and Grenada and emerging destinations such as St. Kitts and Nevis, St. Lucia, and St. Vincent and Grenadines.

15. To compete with the neighboring countries in attracting more tourists and foreign investment, these countries began investing heavily in infrastructure such as airports, ports, cruise facilities, hotels, and tourist attractions (national parks, boardwalks, urban shopping centers, etc.). The resulting construction boom was a big factor in the growth of the industry sector in most countries.

16. The faster growth in agriculture reflected the strong performance of three countries: Dominica, St. Lucia, and St. Vincent and the Grenadines. Others had zero or negative growth in agriculture for the decade. The three countries are the main banana exporters in the region, and their good performance in the 1980s likely results from positive terms of trade shocks. Between 1980 and 1988, these countries benefited from a windfall in the export price of bananas, which was mainly the result of the depreciation of the US dollar against the major currencies of Europe where Caribbean bananas have preferential access. (The world price of bananas was actually falling in real terms over the 1981–88.⁷ See Figure 4).

17. Looking on the demand-side, we find that the slowdown states enjoyed faster growth in both investments and exports over the 1980s (Table 4). Investment growth—averaging over 8 percent a year—was driven mostly by fixed investment. Export growth—averaging around 9 percent a year—was driven mostly by rapid growth in service exports. Although goods exports played a much-subdued role on average, growing at 4 percent a year, in the banana states the average growth rate of these exports was more than 10 percent a year. The evidences on the demand side are thus consistent with the observations made above that growth in the 1980s was associated with the rapid expansion of tourism, large investments in infrastructure, and in some countries the positive term of trade shock in agricultural exports.

⁷ Because the world banana market is fragmented by the divergent import policies of consuming countries such as the EU banana regime, it is not possible to speak of “the world price of bananas” as such. However, noting that the US banana market is free of tariffs and quantitative restrictions, we could consider the evolution of banana prices in the US as a useful approximation of the world price of banana (UNCTAD 2003).

Table 2. Sectoral Growth Shares and Growth Rates, 1978-2004

	Agriculture	Industry	Services	Total
GDP shares				
1970s	15.8	24.6	58.6	100.0
1980s	14.8	24.3	60.6	100.0
1990s	9.6	21.4	62.1	100.0
2001-04	7.7	21.6	67.5	100.0
Sectoral Growth				
1970s	0.1	7.6	6.2	6.0
1980s	0.7	5.2	5.3	5.4
1990s	1.2	4.3	3.3	3.2
2001-04	0.5	0.7	1.5	1.5
Contribution to GDP growth				
1970s	0.0	2.0	3.6	6.0
1980s	0.1	1.1	2.8	5.4
1990s	0.1	0.8	2.4	3.2
2001-04	0.0	0.2	1.1	1.5

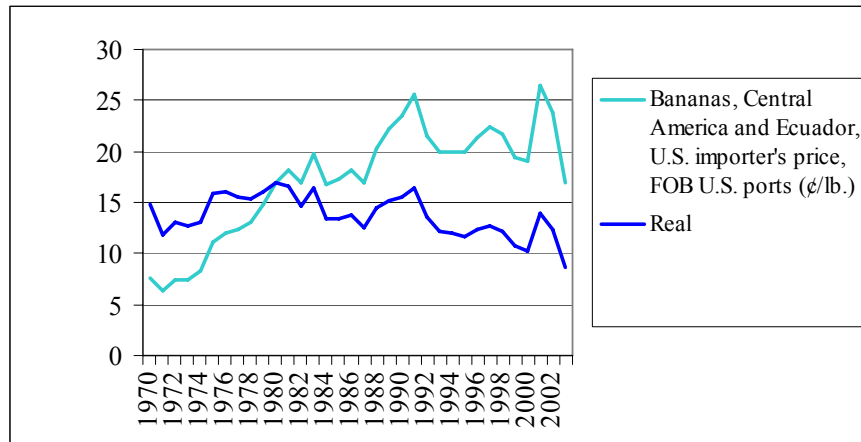
Source: WDI. Note: Figures for the 1970s are based on data between 1978 and 80. All figures are medians for the Caribbean small states.

Table 3. Slowdown States: Sectoral Shares and Growth Rates, 1978-2004

	Agriculture	Industry	Services	Total
GDP shares				
1970s	19.1	19.9	60.9	100.0
1980s	15.9	20.4	63.8	100.0
1990s	10.3	21.8	67.8	100.0
2001-04	8.8	23.1	68.8	100.0
Sectoral Growth				
1970s	-2.9	11.3	6.6	5.4
1980s	3.2	6.5	6.1	6.0
1990s	-0.4	4.5	3.7	3.0
2001-04	-1.7	0.3	4.1	0.9
Contribution to GDP growth				
1970s	-0.6	2.1	3.9	5.4
1980s	0.6	1.3	3.9	6.0
1990s	-0.1	1.0	2.5	3.0
2001-04	-0.2	0.1	2.7	0.9

Source: WDI. Note: Figures for the 1970s are based on data between 1978 and 80. All figures are averages for those countries that had a clear slowdown in growth.

Figure 4. Banana Terms of Trade, 1970–2003
(constant US\$1980=100)



Source: UNCTAD. Note: International banana price as estimated by the Central American and Ecuador, F.O.B. US ports (US\$ cents per lb). See footnote in the text for detail.

Table 4. Slowdown States: Key National Account Aggregates, 1981-2004

	Shares of GDP (%)			Growth Rates (%)		
	1980s	1990s	2001-04	1980s	1990s	2001-04
GDP	100.0	100.0	100.0	5.7	3.1	0.3
GDP per capita	..	..	..	5.5	2.1	0.1
Private Consumption	0.7	0.6	0.6	2.8	4.0	-0.1
Government Consumption	0.2	0.2	0.2	4.5	3.8	3.3
Investment	0.3	0.3	0.3	8.4	2.4	0.8
Fixed Investment	0.3	0.3	0.3	8.1	2.6	0.8
Exports	0.6	0.6	0.5	9.0	3.0	-5.5
Imports	0.8	0.7	0.7	4.5	2.8	-2.8

Source: WDI.

Table 5. Slowdown States: Service Sub-Sector Growth, 1980-2000

Sub-Sector	Growth rates (%)		Shares of GDP (%)		Weighted growth rates (%)	
	1981-1990	1991-2000	1981-1990	1991-2000	1981-1990	1991-2000
Transportation	7.8	3.4	18	19	1.4	0.6
Trade ^{a/}	6.2	3.7	18	19	1.1	0.7
Banking	8.2	6.4	12	15	1.0	1.0
Public Administration	4.5	1.8	31	24	1.4	0.4
Other services ^{b/}	10.6	7.2	20	26	2.1	1.9
Total Services	6.1	3.7	100	100	6.1	3.7

Source: WDI.

Role of Government

18. Government represents a large share of the economy in the Caribbean. State ownerships quite extensive in all of these countries, including in utilities (e.g., electricity, water, and telecommunications), in agriculture and agro-industries (e.g., marketing boards, crop growers associations, and processing factories), and in services (e.g., development banks, commercial banks, and hotels). The government and public enterprises employ around 40 to 60 percent of the labor force.⁸ It is important, therefore, to account for the role the government played in the growth of these economies in the 1980s.

19. The development policies in the 1980s in these countries were explicitly private-sector led growth, but the evidences suggest that quite the opposite had happened. First, to begin with, the government had played a huge role in direct investments. According to the national accounts data, the share of government investment in total investment averaged about 45 percent in the 1980s. Since the national accounts' definition of public investment usually does not include investment by state-owned enterprises, the true share of public sector in total investment is even larger. The Public Sector Investment Program data, available from various World Bank country reports, include investments by both the government and the main public enterprises. According to these data, the share of public in total investment is around 50 percent, and ranges from 32 percent in St. Kitts and Nevis to 80 percent in Grenada. Moreover, the Public Sector Investment Program as a share of GDP expanded in these countries from 44 to 60 percent between 1980 and 1987, when GDP was expanding at an average rate of 5 percent a year. In some countries, governments entered into tourism directly by owning hotels (e.g., Antigua and Barbuda, St. Kitts and Nevis, and St. Lucia), but systematic information is not available for all countries studied in this report.

20. Second, the government was the largest contributor to the growth in the service sector (Table 5). A breakdown of the service sector by sub-sector shows that public administration and defense represented the largest share of the sector's value-added—more than that of trade and transport. In the 1980s, public sector value-added in services grew at 5 percent a year, and was the largest contributor to the growth in the services, along with the transport sub-sector.

21. Third, various indicators of “government burden” have shown increasing trend. Tax burdens were relatively high at the beginning of the decade and increased in most countries during the decade. Wages and salaries, which typically amounted to around 50 percent of government current expenditure in the early 1980s, also increased to about 55 percent by the late 1980s. Subsidies accounted for another 15–20 percent and their share remained roughly the same over the decade despite the strong growth in all sectors.⁹

22. Fourth, fiscal deficits as share of GDP increased despite the strong economic growth. Large capital expenditures were mainly responsible for the increases in budget deficits, which were mostly financed by external borrowing on concessional terms.

23. Fifth, and finally, the external public debt as a share of GDP roughly doubled in all countries between 1980 and 1988. In Dominica, St. Lucia, and St. Kitts and Nevis and St. Vincent and the Grenadines, the increases were around 170 percent. But the largest increases in debt were in Grenada (270 percent) and Antigua and Barbuda (220 percent), which relied more heavily on

⁸ World Bank (1997).

⁹ As we will discuss later, subsidies to the public enterprises tend to increase during the economic downturn.

commercial loans. By the end of the decade, they had difficulty servicing their debt and began to accumulate arrears.

24. All in all, the review of the sources of growth in the 1980s suggests that the growth may not be sustainable in a long-run. Growth was driven mainly by three booms: in services, especially tourism; in tourism-related construction; and in commodity exports. Governments played a major role in the investment boom and in the rapid growth of services. The costs associated with the expansive role played by the governments appear when we look at the various indicators of “government burden”—the tax ratio, wages and salary bills, and the cost of subsidies in these economies. Persistent fiscal deficits and accumulation of external public debt in all the countries raise further concerns for the sustainability of observed growth rates in the 1980s.

Sources of slowdown in the 1990s

25. These countries experienced an across-the-board slowdown in all three sectors. Agriculture and services had the sharpest slowdown, of around 2–3 percentage points. Since the services sector accounted for more than 70 percent of GDP on average, it accounted for roughly half the overall slowdown in growth. Within services, the main decline was in public administration, followed by transportation and trade (Table 3). In Dominica, St. Lucia, and St. Vincent and the Grenadines, the biggest source of slowdown was in agriculture, likely reflecting the end of banana boom.

26. On the demand side, a marked deceleration in growth is found in both investment and exports (Table 4). Growth in investment, which mirrors growth in fixed investment in these countries, declined from 8 percent in the 1980s to 2 percent in the 1990s. According to the Public Sector Investment Program data and the World Bank country reports at the time, the slowdown in government fixed investment reflected in part the completion of major infrastructure projects, and in part increasing difficulties finding external sources of finance. To avoid a sharp rise in unemployment, the governments faced considerable pressure to continue with large public investments. Countries such as Antigua and Barbuda and Grenada maintained high public capital expenditures by turning to domestic sources of finance.

27. Growth in exports declined from the average rate of 9 percent a year in the 1980s to 3 percent a year in the 1990s, initially driven by the decline in merchandise exports (Table 6). Many explanations have been offered for this decline: the appreciation of the real effective exchange rate, the falling international prices of commodities (especially bananas), uncertainty about the European Union’s preference regime, and increasingly frequent extreme weather and natural disasters.

Table 6. Slowdown States: Export Shares and Growth Rates of Significant Products

	Share in Exports GNFS (%)			Growth Rates (%)		
	1980s	1990s	2001-04	1980s	1990s	2001-04
Exports of GNFS	100	100	100	9.0	3.0	-3.6
Merchandise	49	27	20	4.0	2.2	-1.9
Commercial Services Exports	50	69	71	11.7	5.2	-4.7
o/w Travel	41	51	49	10.3	3.6	-2.5
o/w Transport	5	6	7	21.2	6.9	-0.2

Source: WDI. Note: Excludes Bahamas and St. Lucia for lack of price deflator data to calculate real growth rates.

28. A slowdown in service exports did not come about until the second half of the 1990s despite the appreciation of the real effective exchange rates from the late 1980s. The slowdown states continued to have strong growth in their service exports—10 to 20 percent a year—until the mid 1990s. In some countries such as Dominica and St. Vincent and the Grenadines, the strong growth in their service exports helped cushion the effects of decline in their commodity exports. The appreciation of the real exchange rate cannot, therefore, fully explain the declining trend in the service exports in the late 1990s.¹⁰

29. The literature offers two other explanations for the slowdown in service exports besides the real appreciation of exchange rates. The first is increased competition in the tourism markets. A number of new tourist destinations emerged within the region, including Dominica and St. Vincent and the Grenadines in the Caribbean and Cancun, Cozumel, and Cuba in Latin America. There was also increased competition from other parts of the world. Tourist arrivals grew more slowly in the greater Caribbean (including the above-mentioned Latin American destinations) than in the rest of the world.

30. The second explanation is the high and rising level of wages in the Caribbean small states. Since all of them have fixed exchange rates, an appreciation must be offset by flexible prices and wages. Monetary policy in these countries is set by the Eastern Caribbean Central Bank, and its commitment to maintaining the fixed exchange rate with the US dollar prevents each country from devaluing as a way of lowering costs. Wages are high, and on average, they grew faster than per capita GDP “implying that wages were outpacing productivity growth”¹¹

What did others do differently?

31. Barbados and Belize did not experience a marked slowdown in growth in the 1990s, although their growth was not much higher than in the 1980s. Both countries are not unlike the OECS countries in their economic characteristics. They depend on tourism and some agricultural commodities for exports. Their main commodity exports—sugar in Barbados, and sugar and bananas in Belize—are subject to preferential access to the EU and the US markets. Both countries have maintained a fixed exchange rate with the US dollar. Both have big governments. The difference between their growth performance and that of the OECS countries seems mainly to reflect, on one hand, the difference in the timing of commodity-boom cycles, and on the other, less severe public finance problems. Consequently, they had better investment performances in the 1990s, especially with respect to private foreign investment.

32. Guyana, Suriname, and Trinidad and Tobago are larger and more heterogeneous in their economic structures compared with the other two groups of countries. Commodity exports—oil for Trinidad and Tobago, and bauxite for Guyana and for Suriname—are much more important and, consequently, tourism much less important, for their export earnings. All of them had negative growth in the 1980s. According to the World Bank reports at the time, in all cases it was due to “mineral commodity boom-bust cycles” and “inappropriate domestic economic policies.” Between 1982 and 1990, oil prices were depressed, and between 1980 and 1985, international demand and prices for bauxite and bauxite derivatives was weak or declining. During the 1980s, public sector finances deteriorated quite markedly in these countries. The basic fiscal challenge was similar in each country and not unlike that faced by the slowdown states in the 1990s. In response to higher prices of their commodities in the 1970s, these countries had greatly expanded

¹⁰ See Appendix Figure A1, A2.1–A2.12 for the evolution of real effective exchange rates and growth rates of goods and services exports.

¹¹ OECS (2005), p.7.

their public sector and, when the booms ended, the public sector did not contract. Transfers to public enterprises had to rise when the commodity exports were down. A rise in unemployment created pressures for the government to provide more jobs in the public services and through public works. Rapid fiscal expansions during the economic slowdown led to growing government deficits, which were initially financed by foreign borrowing, but later, the government turned to domestic sources, raising interest rates and crowding out domestic private investment. When the balance of payments problems became intractable, all three countries undertook large fiscal adjustments, including devaluations and large-scale privatizations. The adjustment programs, however, have not always generated sustained improvements in public finance.

Section 3. Improving Competitiveness in the Caribbean—What are the constraints?

33. Having reviewed the sources of growth in the 1980s and 1990s, we can consider the constraints the countries faced and still face in improving their competitiveness.

34. Market shares, real exchange rates, and wages remain the standard measure of competitiveness. Loss of competitiveness in the Caribbean small states is often discussed in their terms. However, these standard measures are likely to be somewhat limited in informing policies, according to the latest thinking in this field.¹² The World Economic Forum (WEF)'s Global Competitiveness Report (GCR) in 2005 defines competitiveness as a set of "factors, policies, and institutions which determine the level of productivity of a country," and argues that in order to understand competitiveness we must begin by studying the productivity.¹³

35. We therefore examine the evolution of the countries' productivity using growth-accounting estimates of total factor productivity (TFP). Table 7 reports the estimates for 1981–2000. Because estimation of TFP is highly sensitive to statistical procedures and the quality of data, we provide three estimates. The first is the standard Solow residual. The second is the regression estimate of a production function on a country-by-country basis. The third is like the second, but adjusts for the pro-cyclicality of standard TFP estimates to explore the underlying trends in productivity growth.¹⁴

36. Table 7 reveals several noteworthy points. First, productivity growth in the Caribbean in the 1980s seems respectable. Based on the Solow residuals and standard regression estimates, the median country in the Caribbean had average TFP growth in 1981–1990 of 2.1–2.6 percent. These estimates imply that TFP growth accounted for over a half of total output growth.

37. Second, the estimates of TFP are fragile. Based on the method that adjusts for short-run fluctuations, the median country had average TFP growth of only 1 percent a year in the 1980s and –0.4 percent a year in the 1990s. These estimates imply that TFP growth accounted for less

¹² Porter (2005), in this year's Global Competitiveness Report published by the World Economic Forum, argues that the definition of competitiveness as a country's share of world markets "makes competitiveness a zero-sum game", and because one country's gain comes at the expense of others, "this view of competitiveness has been used to justify policies that provide subsidies, hold down local wages and devalue the nation's currency" while "the need to hold down local wages and devalue nation's currency... reveal a lack of competitiveness" (p.44).

¹³ GCR (2005), Chapter 1.1, p.3 and Chapter 1.2, p.44.

¹⁴ Note that these alternative estimates are not strictly comparable, because of the differences in methodology used. Each estimate should be considered in terms of what it implies about the importance of productivity growth as a source of output growth and not in terms of the absolute point estimate.

than a third of total output growth in both the 1980s and 1990s. They also imply that increases in capital per worker, not improvements in productivity, were the main drivers of growth in the Caribbean in the last two decades.

38. Third, despite their differences, all three measures of TFP imply a significant decline in productivity growth in the 1990s, and all three imply that the magnitude of the decline in TFP growth explains the decline in total output growth.

Table 7. Total Factor Productivity Growth Rates, 1980-2000

Country	Estimates	1980s	1990s	Change	Country	Estimates	1980s	1990s	Change
Antigua and Barbuda	GDP	6.1	3.4		Guyana	GDP	-3.3	5.0	
	TFP1	4.6	1.6	-3.0		TFP1	-6.3	2.7	9.1
	TFP2	5.8	2.6	-3.2		TFP2	-3.7	7.0	10.7
	TFP3	6.2	2.6	-3.6		TFP3	-6.2	0.8	6.9
Bahamas, The	GDP	3.1	1.9		St. Kitts and Nevis	GDP	5.5	4.4	
	TFP1	..	..			TFP1	0.4	2.6	2.2
	TFP2	..	..			TFP2	-5.3	-0.7	4.6
	TFP3	..	..			TFP3	-3.9	-1.8	2.0
Barbados	GDP	1.3	1.6		St. Lucia	GDP	7.6	2.7	
	TFP1	..	0.7			TFP1	5.0	-0.3	-5.3
	TFP2	..	-0.8			TFP2	3.6	-2.1	-5.7
	TFP3	..	-1.2			TFP3	4.2	-2.1	-6.3
Belize	GDP	5.1	6.0		St. Vincent and the Grenadines	GDP	6.1	2.1	
	TFP1	2.1	1.0	-1.1		TFP1	4.4	0.5	-3.9
	TFP2	2.1	-1.9	-4.0		TFP2	2.7	-1.7	-4.5
	TFP3	2.3	-2.1	-4.4		TFP3	3.3	-1.5	-4.7
Dominica	GDP	5.4	1.8		Suriname	GDP	-0.1	0.7	
	TFP1	4.5	1.1	-3.4		TFP1	..	..	..
	TFP2	5.5	1.3	-4.2		TFP2	..	..	..
	TFP3	4.8	1.2	-3.6		TFP3	..	..	..
Grenada	GDP	5.6	3.7		Trinidad and Tobago	GDP	-2.2	3.2	
	TFP1	4.2	2.0	-2.2		TFP1	-3.1	1.1	4.2
	TFP2	2.6	-0.5	-3.1		TFP2	-3.1	1.0	4.0
	TFP3	4.5	1.7	-2.8		TFP3	-2.6	0.4	2.9
<i>Regional Median</i>	GDP	5.2	2.9	-1.1	<i>Regional Median</i>	GDP	5.2	2.9	-1.1
	TFP1	4.2	1.1	-2.2		TFP1	4.2	1.1	-2.2
	TFP2	2.6	-0.6	-3.2		TFP2	2.6	-0.6	-3.2
	TFP3	3.3	-0.4	-3.6		TFP3	3.3	-0.4	-3.6
Slowdown States	GDP	5.8	3.0	-3.1	Slowdown States	GDP	5.8	3.0	-3.1
	TFP1	4.5	1.4	-3.2		TFP1	4.5	1.4	-3.2
	TFP2	3.2	-0.6	-3.7		TFP2	3.2	-0.6	-3.7
	TFP3	4.3	-0.2	-3.6		TFP3	4.3	-0.2	-3.6

Source: Author's calculation. Note: Refer to text for the definitions of TFP 1-3.

39. What explains the decline in productivity in the 1990s? To address the question we apply the framework used in the Global Competitiveness Report, which identifies, among others, the following three main categories of determinants of productivity: macroeconomic environment, public institutions, and microeconomic efficiency.¹⁵

The Framework

40. Macroeconomic instability prevents economic agents from allocating resources efficiently. Firms and financial institutions, for example, cannot make efficient investment decisions if

¹⁵ In practice, there are a large variety of economic and other variables that can be used as determinants of productivity growth. Each year, the GCI's list of main areas of determinants expands (from three in initial years to nine in 2005). We focus on these three because they have been in the GCI's "main determinants" list since its first publication in 1996 and therefore we can use the GCI rankings over the late 1990s to assess the relative performance of the Caribbean.

persistent fiscal or external balances create major risks. The WEF's Global Competitiveness Index (GCI) includes five measures of macroeconomic stability.

Table 8. Macroeconomic Environment Indicators

Variable	Description	Source
Government deficit	Government balance for consolidated central government budget, % of GDP	WDI
Government debt	External debt, total public and publicly guaranteed, % GDP	WDI
Inflation	CPI, annual % change	WDI
Savings rate	National savings, rate, % GDP	WDI
Interest rate spread	Lending rate minus deposit rate, % points	WDI

41. A country's public institutions also play an essential role in determining the efficiency with which resources are allocated. Basic indicators of the quality of public institutions include the strength of property rights, the rule of law, and judicial independence, but the GCI goes beyond these indicators. Using executive opinion surveys, it includes measures of red tape, over-regulation, corruption, and government attitudes toward markets and freedoms. We use the quality of public institutions indicators presented in Table 9, taken from the World Bank's governance indicators, which cover similar dimensions, although in a more streamlined fashion.

Table 9. Public Institutions Indicators

Variable	Description	Source
Voice and accountability	covers civil liberties and freedom of the press	WB
Rule of Law	covers the protection of property rights, independence of the judiciary	WB
Control of Corruption	covers both petty and grand corruption, and state capture	WB
Regulatory Quality	covers the public service delivery and lack of regulatory burden	WB
Government Effectiveness	covers the quality of policy making and public service delivery	WB

42. The productivity of a country is ultimately determined by microeconomic efficiency—that is, by the productivity of its firms. An economy cannot be competitive unless the firms operating in it are competitive. The WEF's GCI includes indicators of microeconomic efficiency in the following three areas: distortions, market size, and competition. In all areas, most indicators require survey data collected by the WEF. We use the quantitative information where possible, and supplements with qualitative information gathered from the literature review to shed light on the microeconomic efficiency of the Caribbean small states.

Table 10. Microeconomic Efficiency—Selective Quantitative Indicators

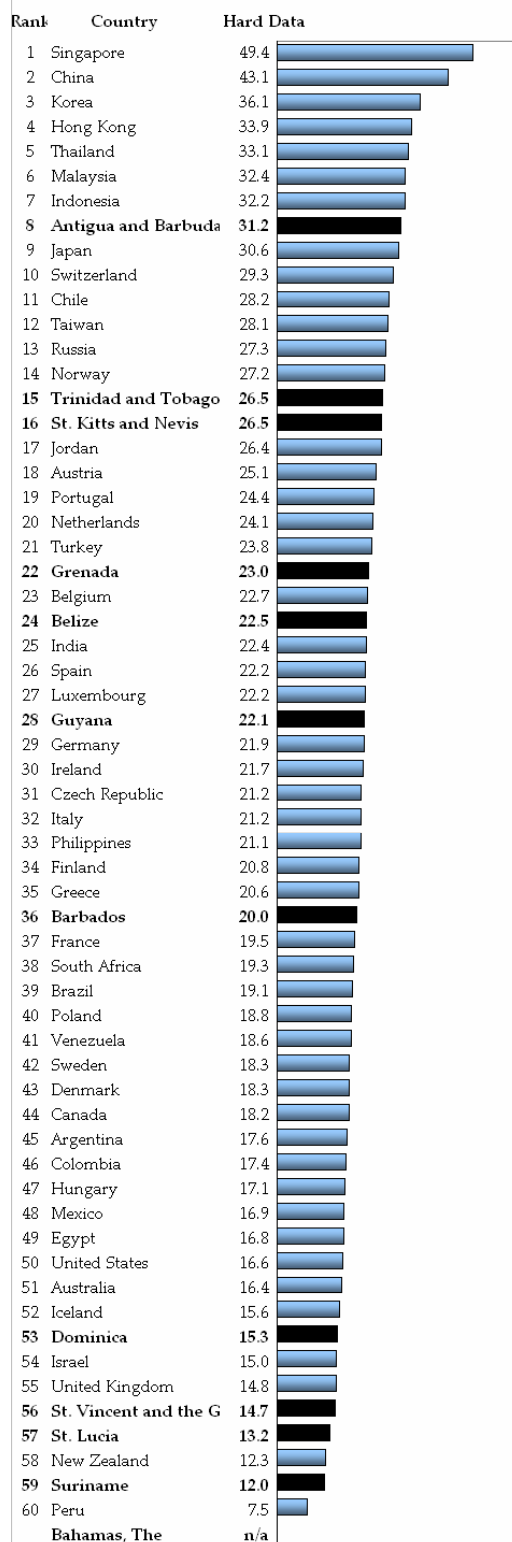
Variable	Description	Source
Extent of taxation	Distortion indicator,	WDI
Total trade to GDP	Size indicator, exports plus imports, % GDP	WDI
Trade Restrictiveness Index	Size/ Competition indicator, incorporates both tariff and non-tariff barriers	IMF
Average tariff rate	Size/ Competition indicator, mean of all tariff lines and includes other duties and charges	IMF

Sources of Low Competitiveness: Macroeconomic Environment

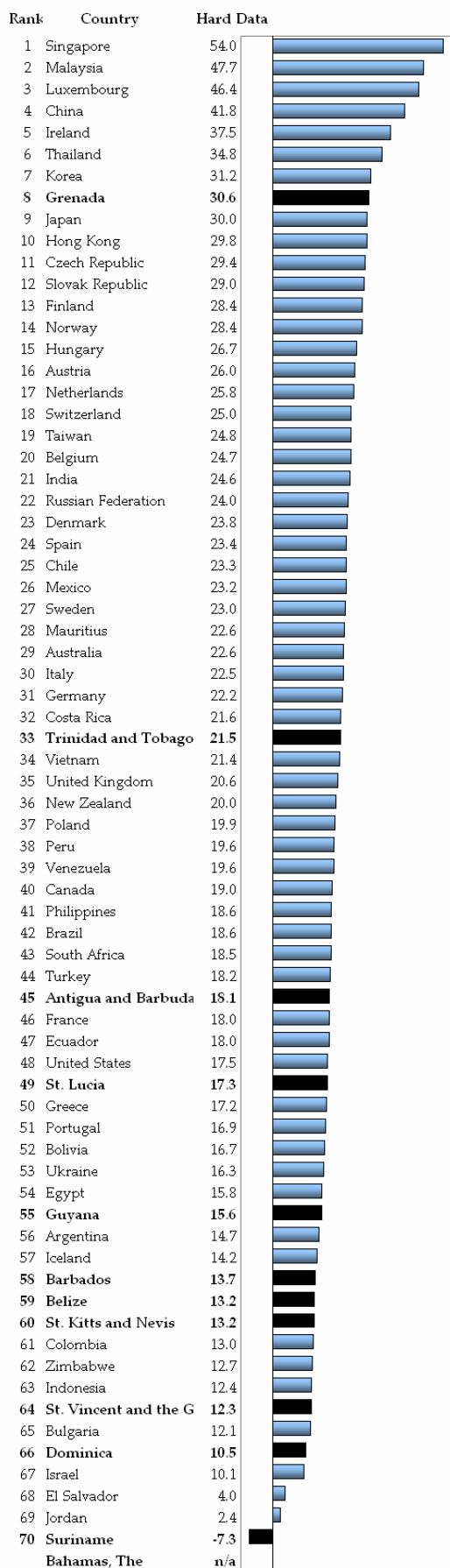
43. The Caribbean small states stand out for the weaknesses of their public finances (Figures 5.1–5.5). Many have been running budget deficits of some 10 percent of GDP for more than twenty years. A number of them undertook fiscal adjustment to bring budget deficit under control, but deficits have crept back again in the late 1990s. Public debt has also remained stubbornly high, especially in Antigua and Barbuda, Dominica, and Grenada.

National savings rate, GCI Ranking in 1995 and 2000

National savings rate as a percentage of GDP, 1995

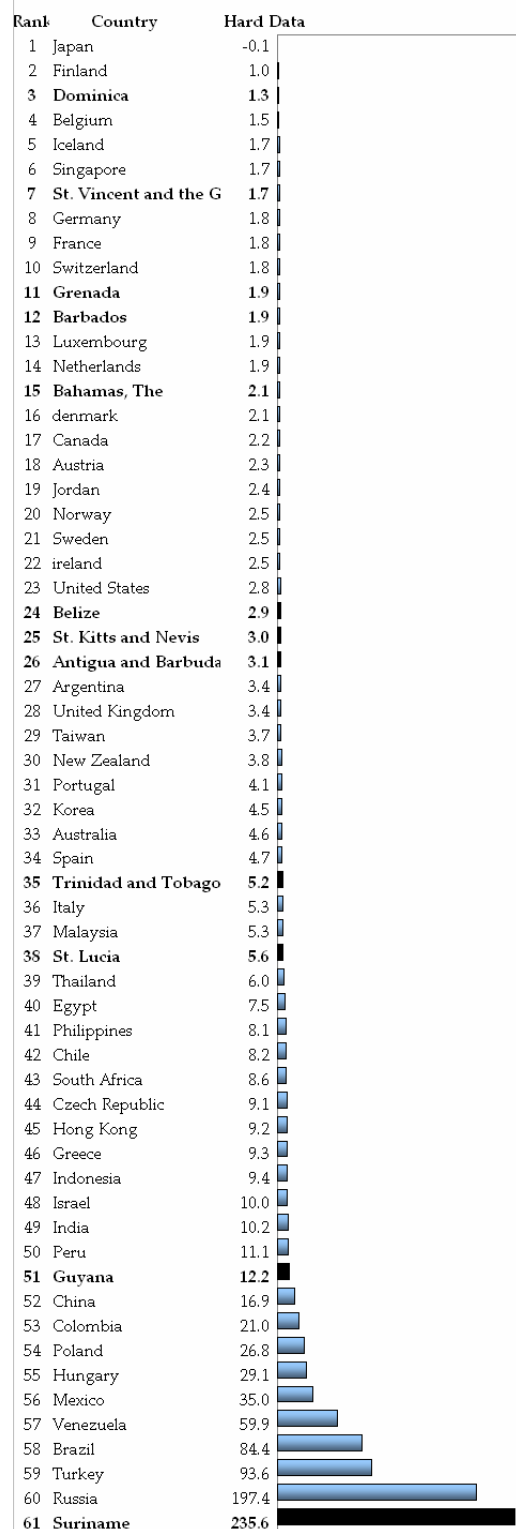


National savings rate as a percentage of GDP, 1999



Inflation, GCI Ranking in 1995 and 2000^{a/}

Percentage change in consumer price index, 1995



Percentage change in consumer price index, 1999

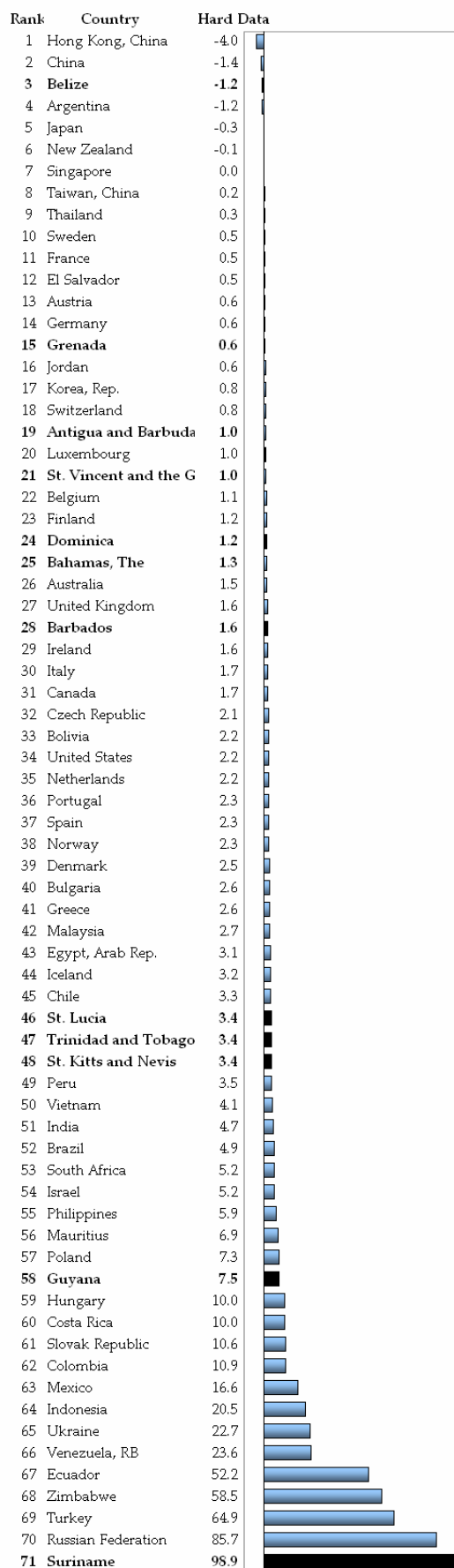
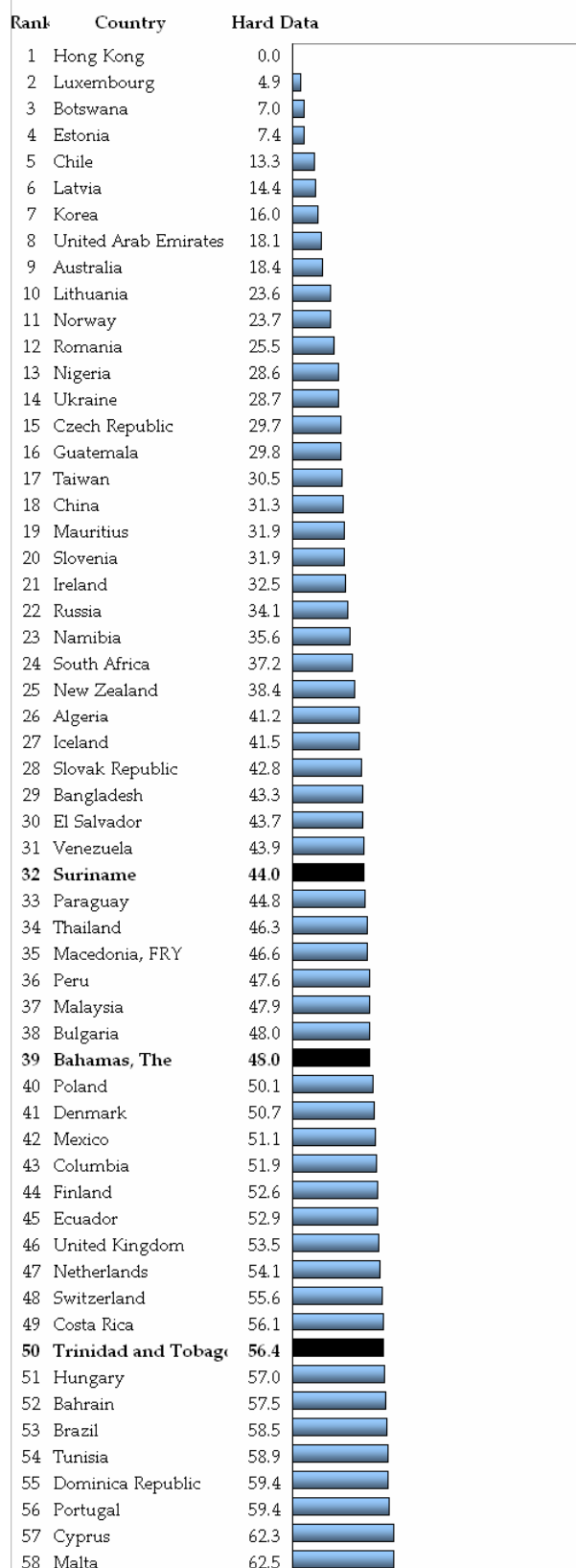


Figure 5.2 Macroeconomic Environment

Government debt, GCI Ranking in 2004-5^{a/}

Government debt as a percentage of GDP, 2003



Government debt as a percentage of GDP, 2003

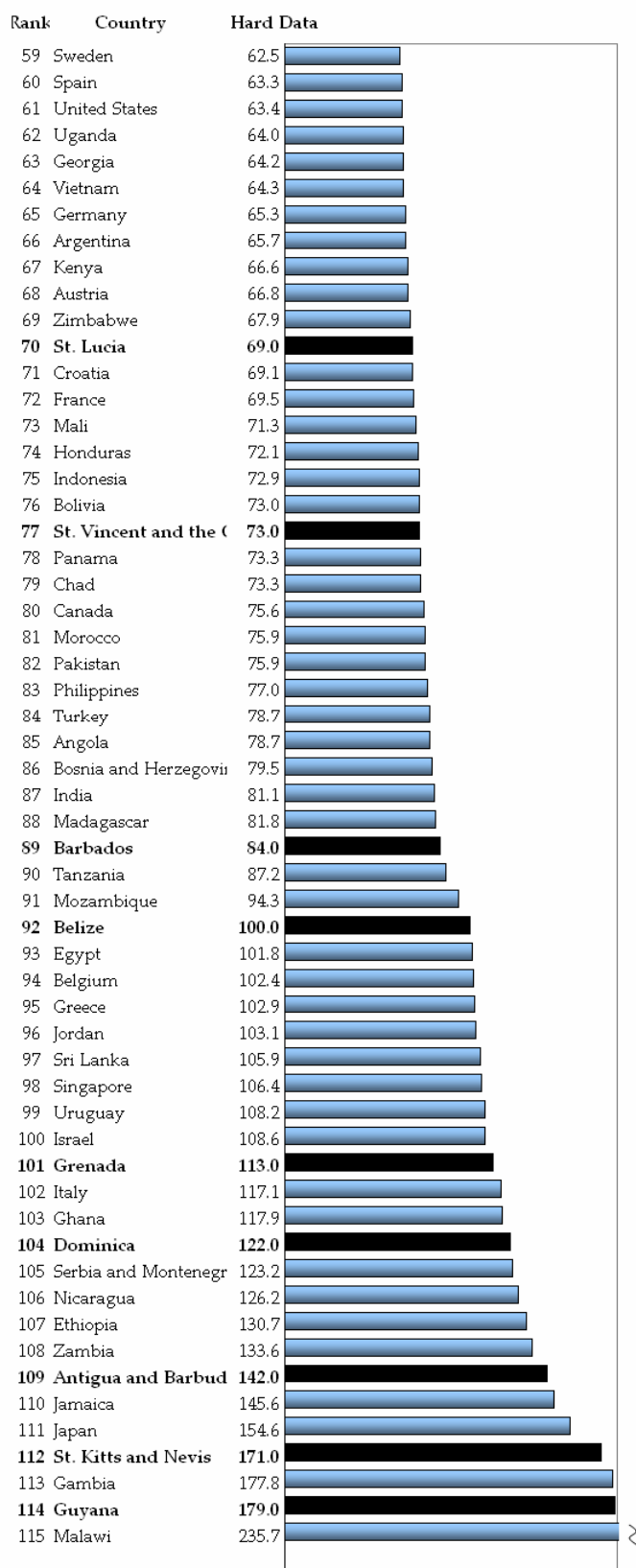
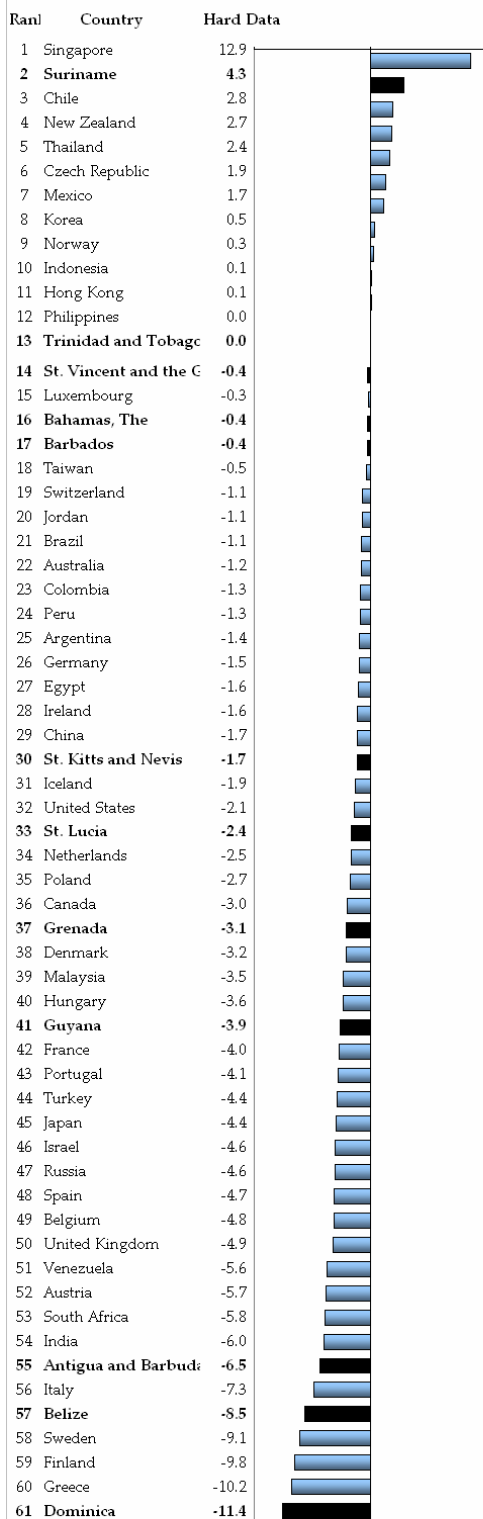


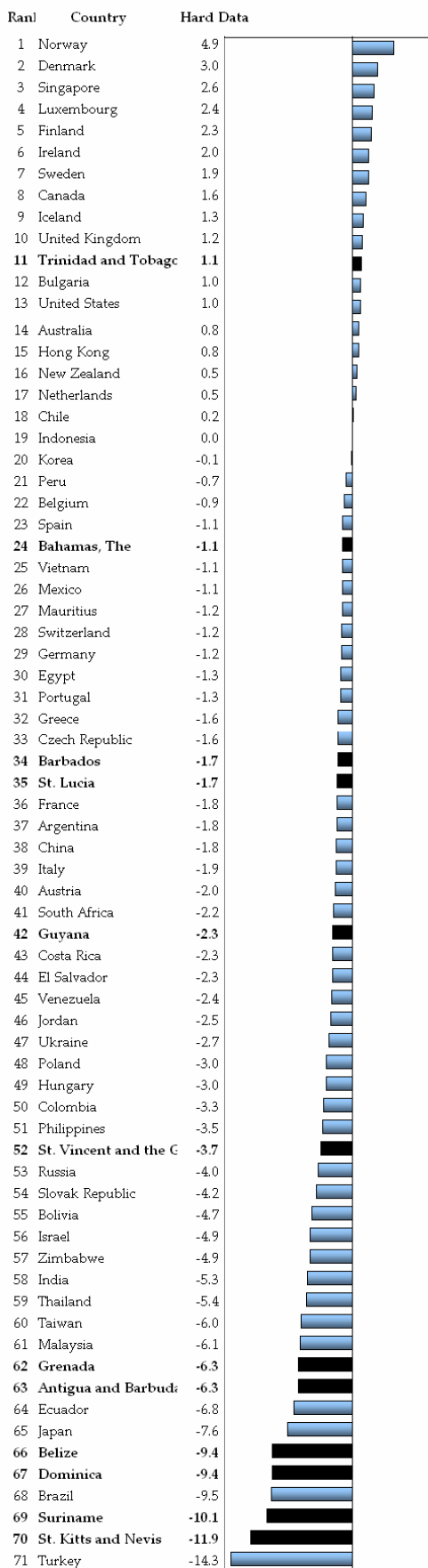
Figure 5.3 Macroeconomic Environment

Government surplus/ deficit, GCI Ranking in 1995 and 2000

Government fiscal surplus as a percentage of GDP, 1995

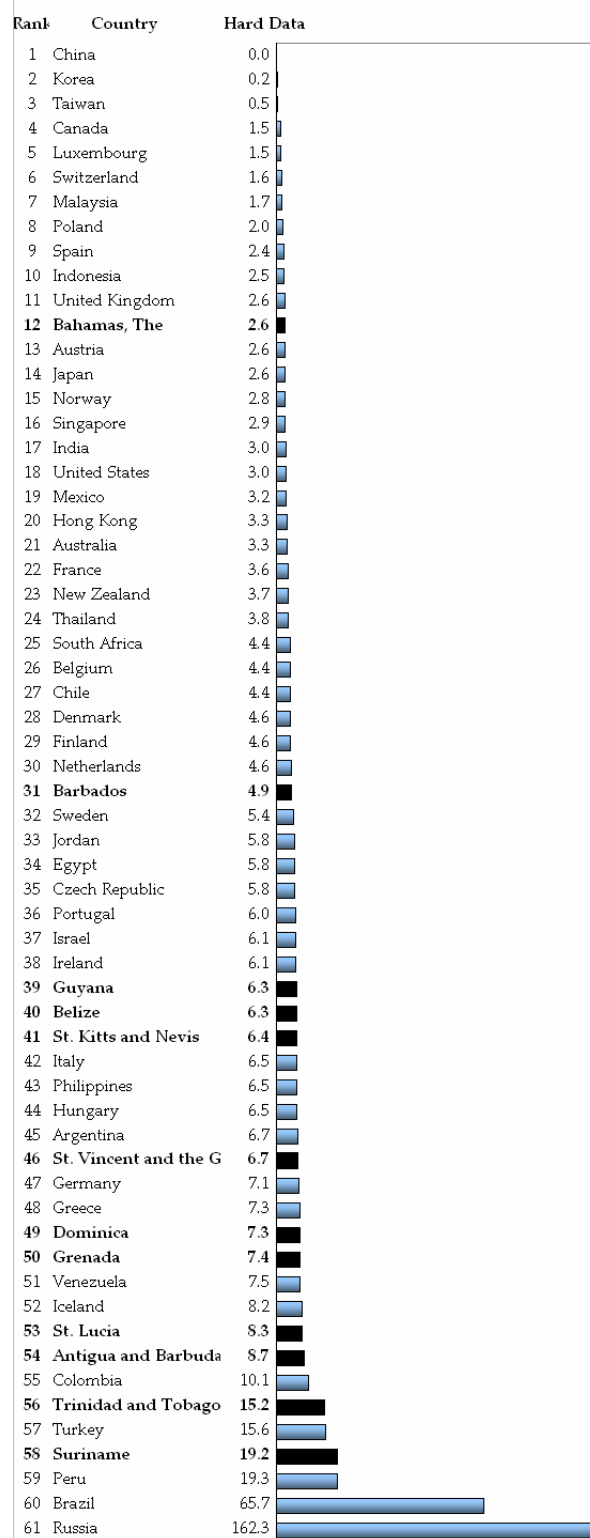


Government fiscal surplus as a percentage of GDP, 1999

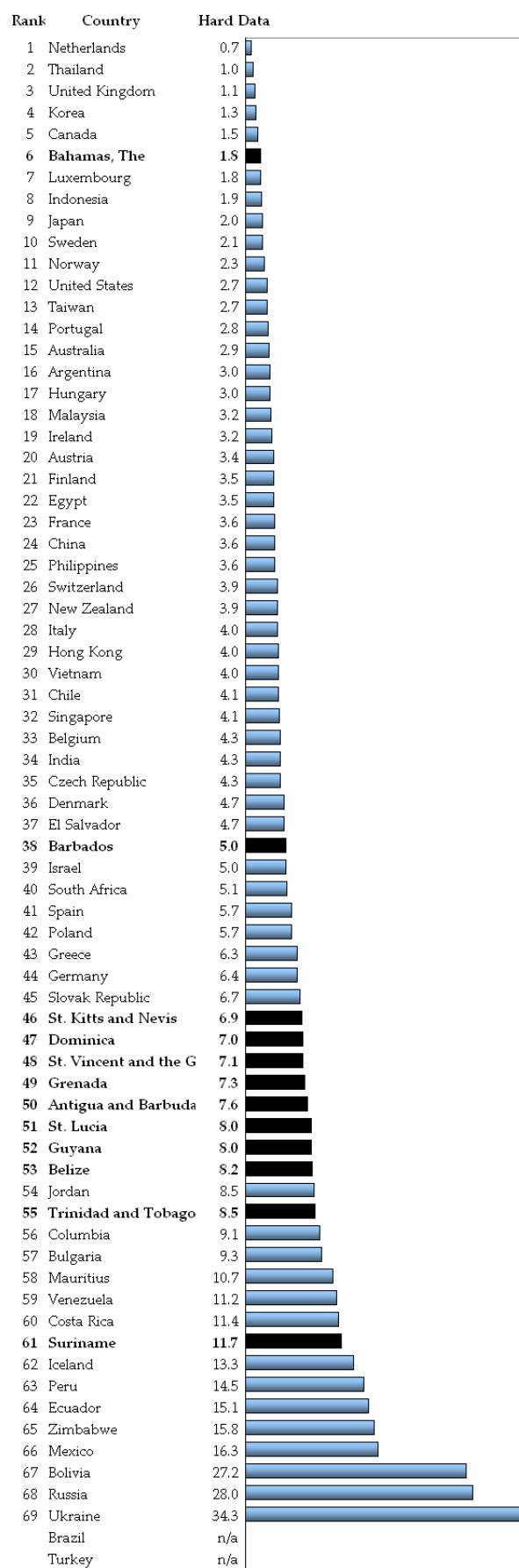


Interest rate spread, GCI Ranking in 1995 and 2000

Loan rate - deposit rate, 1995



Loan rate - deposit rate, 1999



Voice and Accountability, Ranking of Countries in GCI 1995 and 2000

World Bank Governance Indicator measuring political, civil and human rights, and the freedom of press. Scores range between -2.5 and 2.5, with higher scores corresponding to better outcomes.

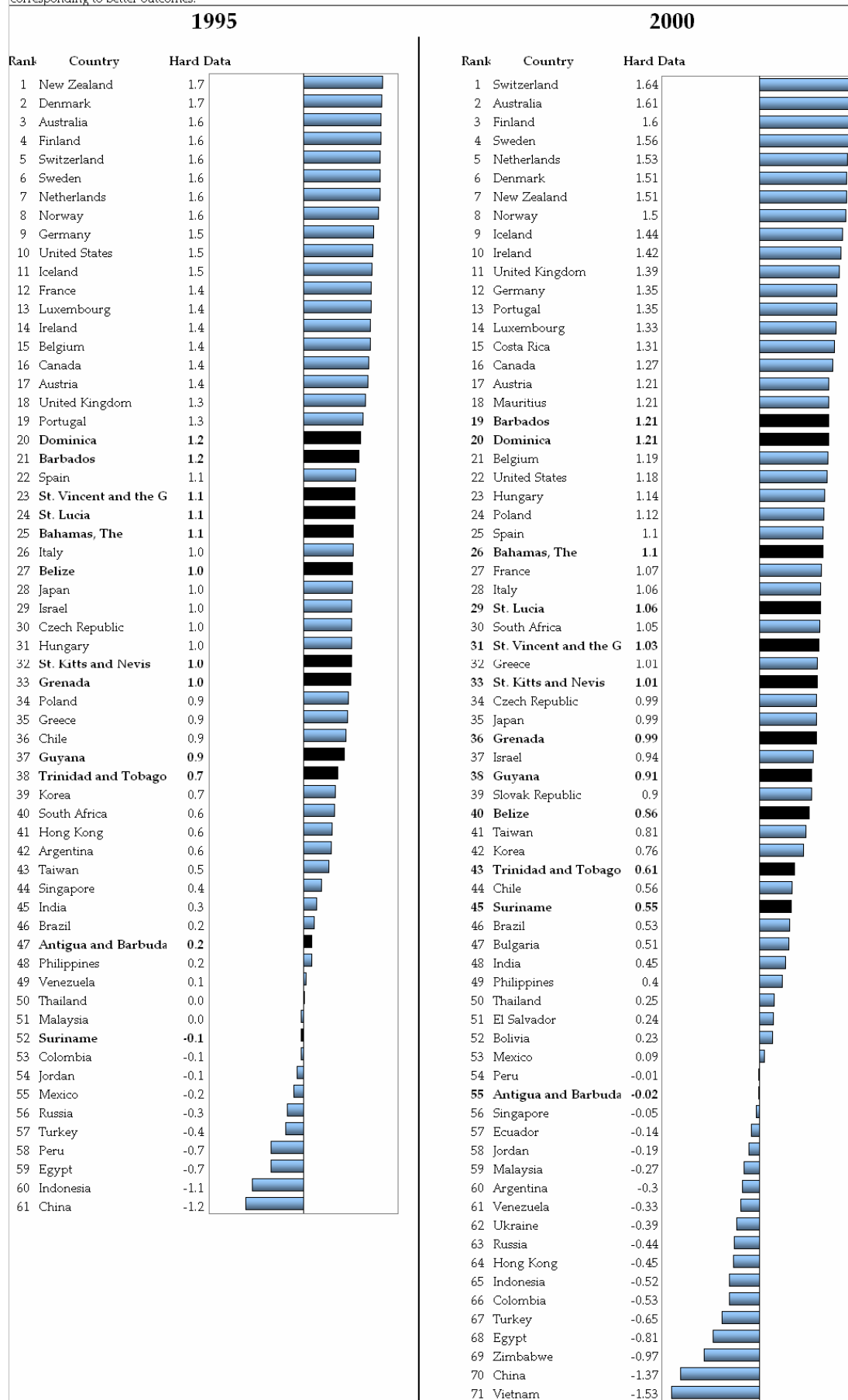


Figure 6.1 Public Institutions

Sources of Low Competitiveness: Public Institutions

44. The Caribbean countries rank relatively high on voice and accountability. However, they score below par on all other indicators—rule of law, control of corruption, government effectiveness, and regulatory quality (Figures 6.1–6.5).

Sources of Low Competitiveness: Microeconomic Efficiency

45. The Caribbean countries appear weakest in terms of the micro efficiency indicators. On the distortion front, the Caribbean states have relatively high tax rates—even compared to other small states.¹⁶ To offset the high tax rates, the governments in these countries operate a complex system of tax incentives, which has resulted in uneven tax burdens across industries within a country, and inefficient tax competitions across countries. Large tax incentives are provided to foreign investors in order to attract investments in tourism. Sometimes, such incentives are given in order to offset underlying macroeconomic problems by providing large initial incentives to shorten the expected cost-recovery period.¹⁷

46. On the market size front, the countries have pursued highly protectionist trade policies that create a “self-inflicted” limitation on market size. Caribbean small states appear very open according to their export-to-GDP ratios, but according to the Trade Restrictiveness Index published by the IMF, their trade policies remain very closed (Figure 7.1–7.2). The most closed markets in the regions are in Antigua and Barbuda and the Bahamas. Judging by the rankings of GCI countries on this indicator, they are also most closed in the world following Egypt, India, and Zimbabwe. Trinidad and Tobago and Guyana are the most open in the region although relatively closed relative to others in the world.

47. On the competition front, the protectionist trade policies act as anti-competition policy in small states.¹⁸ The literature has shown that open trade policies have greater impact on domestic competition in small economies than entry regulation or anti-trust measures do.¹⁹ In this light, the high trade and non-trade barriers maintained by the Caribbean states documented in the recent reports by OECS and the World Bank raise further concern.

48. All twelve small states in the Caribbean on which we focus are members of the Caribbean Community (CARICOM). Each member of the CARICOM has two layers of trade protection: one from outside CARICOM and another from other CARICOM members. The former is the Common External Tariff (CET). Since 1992, CARICOM members have implemented a phased reduction in the CET to reach the target rates of 0–20 percent by the end of the decade, except for agricultural tariffs, which remain at 40 percent. This has brought down the weighted average tariff in the member countries from 21 percent in 1996 to 14 percent in 2001. However, all countries have introduced other taxes on imports such as stamp duties, import surcharges, and customs-service taxes to offset the impact of falling tariffs on revenues. As a result, the overall tariff barriers remain high relative to others in the world (Figure 7.3).

¹⁶ World Bank (2005) reports that the average ratio of government revenue to GDP in the Caribbean, about 27 percent in 1998–2003, was higher than Mauritius’ 21 percent over the same period and Singapore’s 22 percent in the 1970s before its growth takeoff.

¹⁷ Another distortion that gets attention in the GCI is the burden of subsidies. The GCI uses the agricultural subsidy index based not on hard data but on the opinion surveys, which do not cover the small Caribbean states.

¹⁸ Evans and Hughes (2003) Competition Policy in Small Distant Open Economies: Some Lessons from the Economics Literature, *New Zealand Treasury Working Paper* 03/31.

¹⁹ Hoekman and Olarreaga (2001) “Entry Regulation and Trade: Does Country Size Matter?” in *World Development Report 2001 Institutions for Markets*.

Rule of Law, Ranking of Countries in GCI 1995 and 2000

World Bank Governance Indicator measuring quality of the policy and law enforcement, as well as the likelihood of crime and violence. Scores range between -2.5 and 2.5, with higher scores corresponding to better outcomes.

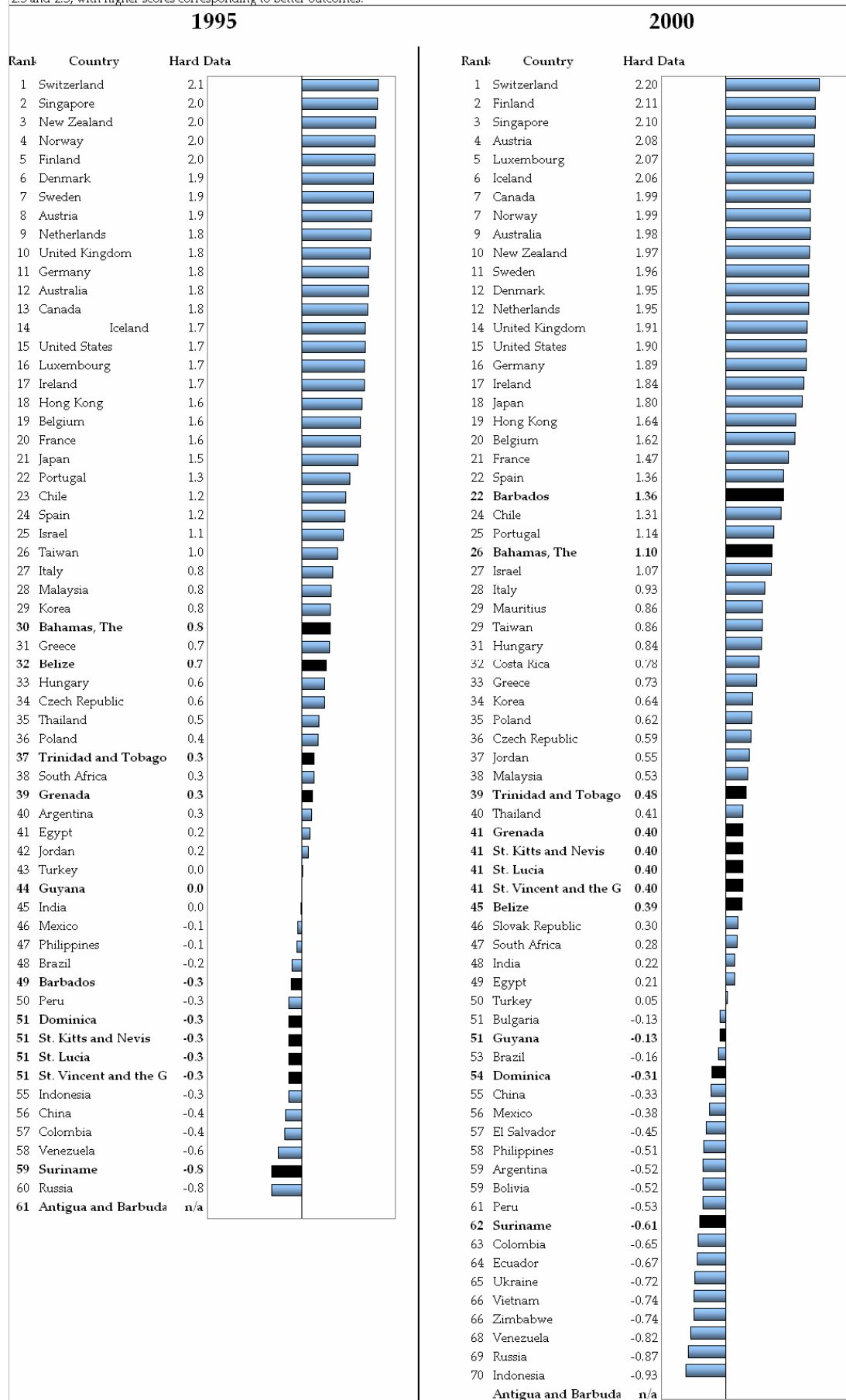


Figure 6.2 Public Institutions

Control of Corruption, Ranking of Countries in GCI 1995 and 2000

World Bank Governance Indicator measuring the control on public power for private gain, petty and grand corruption, and state capture. Scores range between -2.5 and 2.5, with higher scores corresponding to better outcomes.

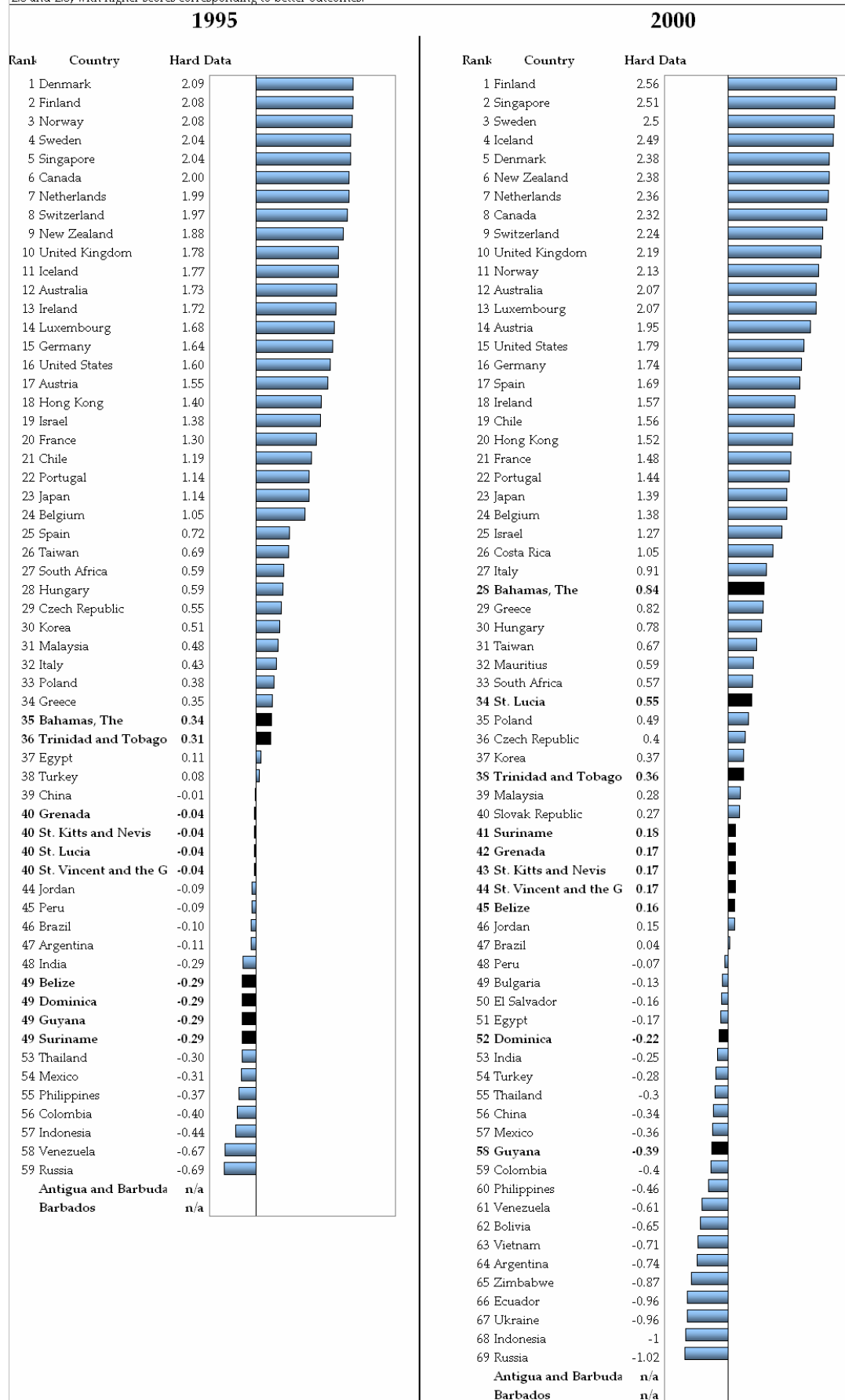


Figure 6.3 Public Institutions

Regulatory Quality, Ranking of Countries in GCI 1995 and 2000

World Bank Governance Indicator measuring the absence of red tape and market-unfriendly policies. Scores range between -2.5 and 2.5, with higher scores corresponding to better outcomes.

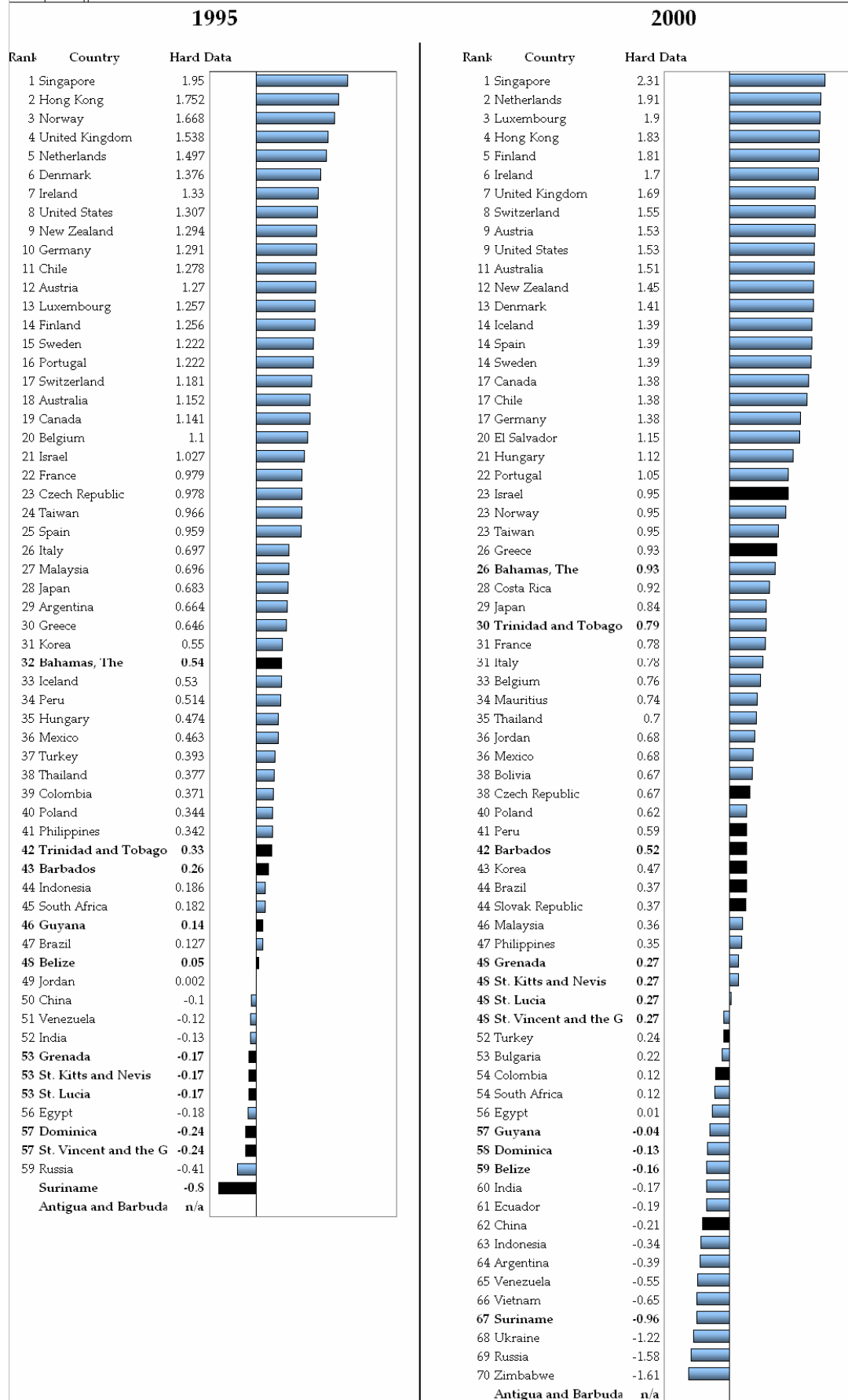


Figure 6.4 Public Institutions

Government Effectiveness, Ranking of Countries in GCI 1995 and 2000

World Bank Governance Indicator measuring the competence of the bureaucracy and the quality of public service delivery. Scores range between -2.5 and 2.5, with higher scores corresponding to better outcomes.

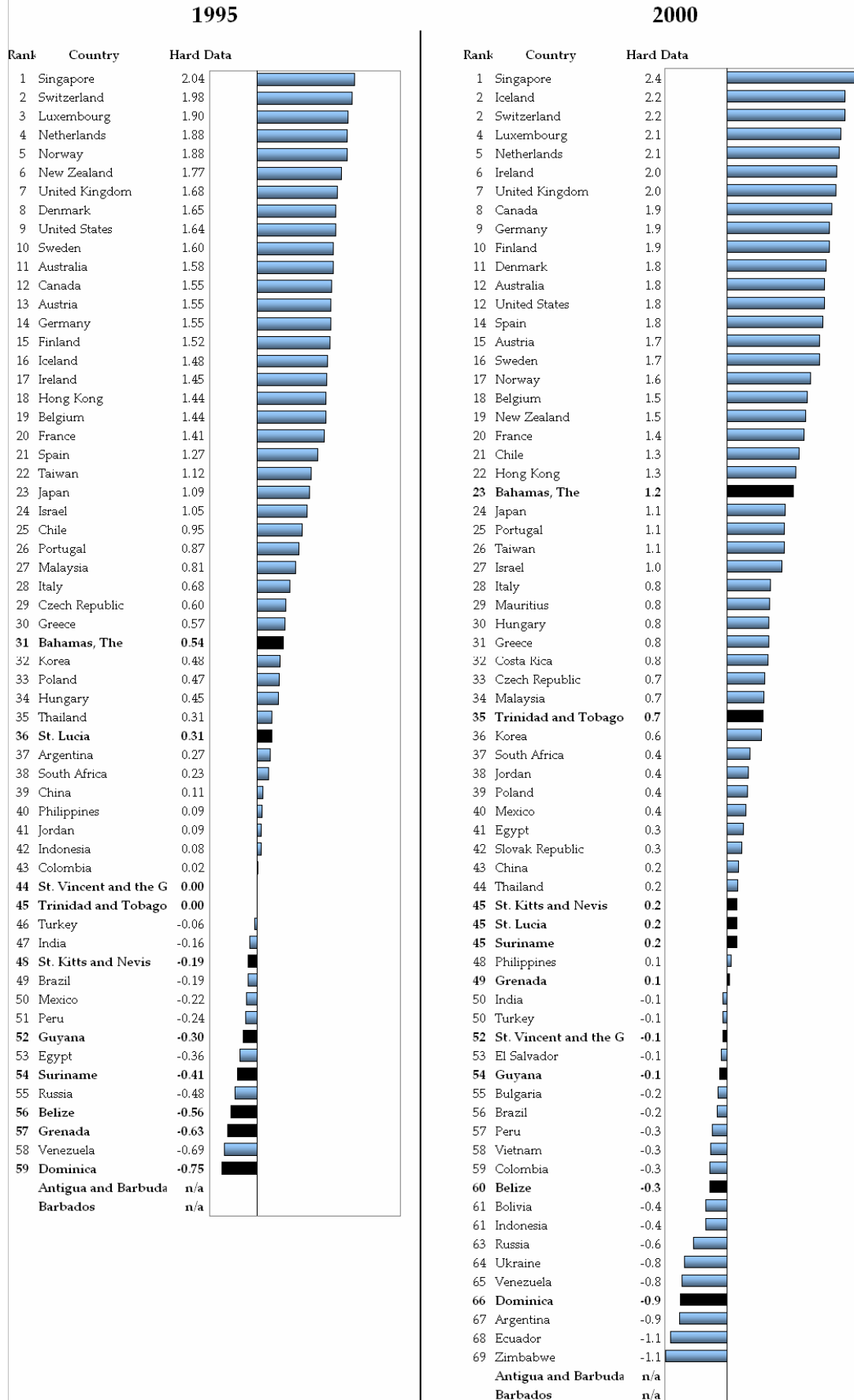
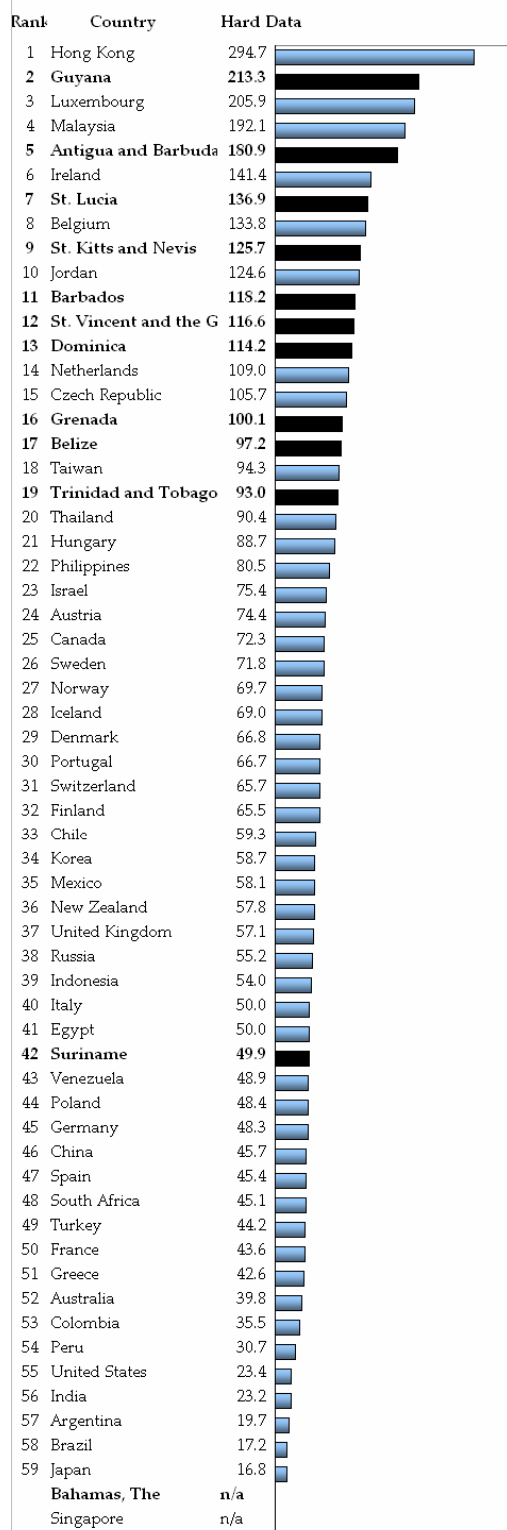


Figure 6.5 Public Institutions

Trade Openness, Ranking of GCI countries in 1995 and 2000

Export plus import as a percentage of GDP, 1995



Export plus import as a percentage of GDP, 2000

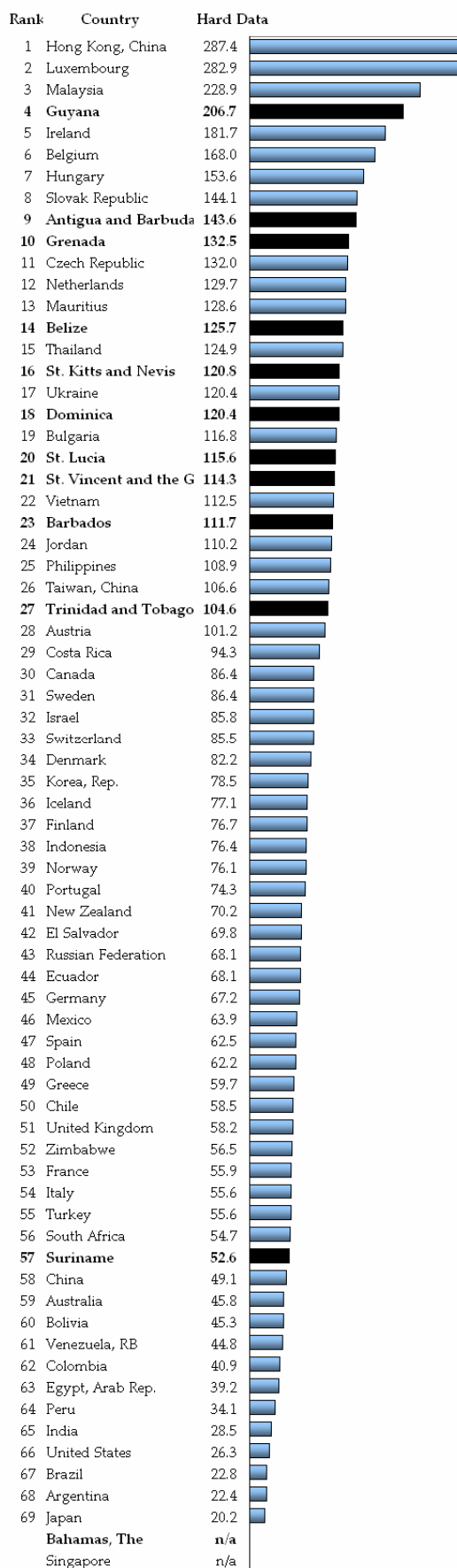
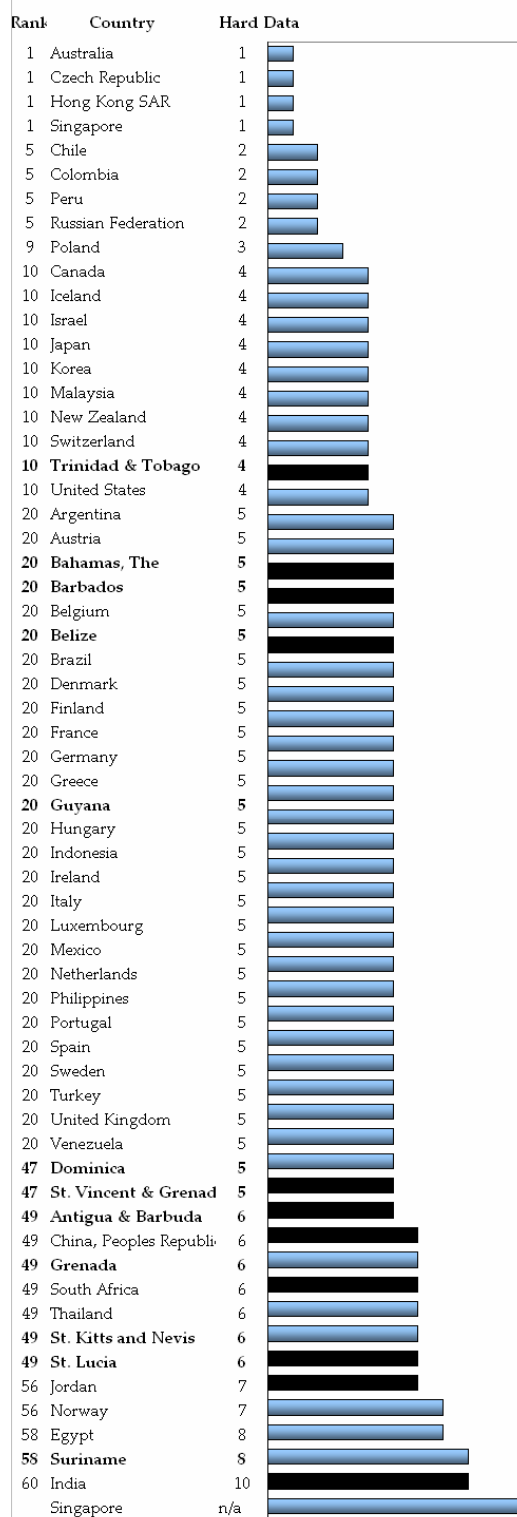


Figure 7.1 Microeconomic Efficiency

Trade Restrictiveness, Ranking of GCI countries in 1995 and 2000

IMF Trade Restrictiveness Index (1=Open, 10=Closed), 1995



IMF Trade Restrictiveness Index (1=Open, 10=Closed), 2000

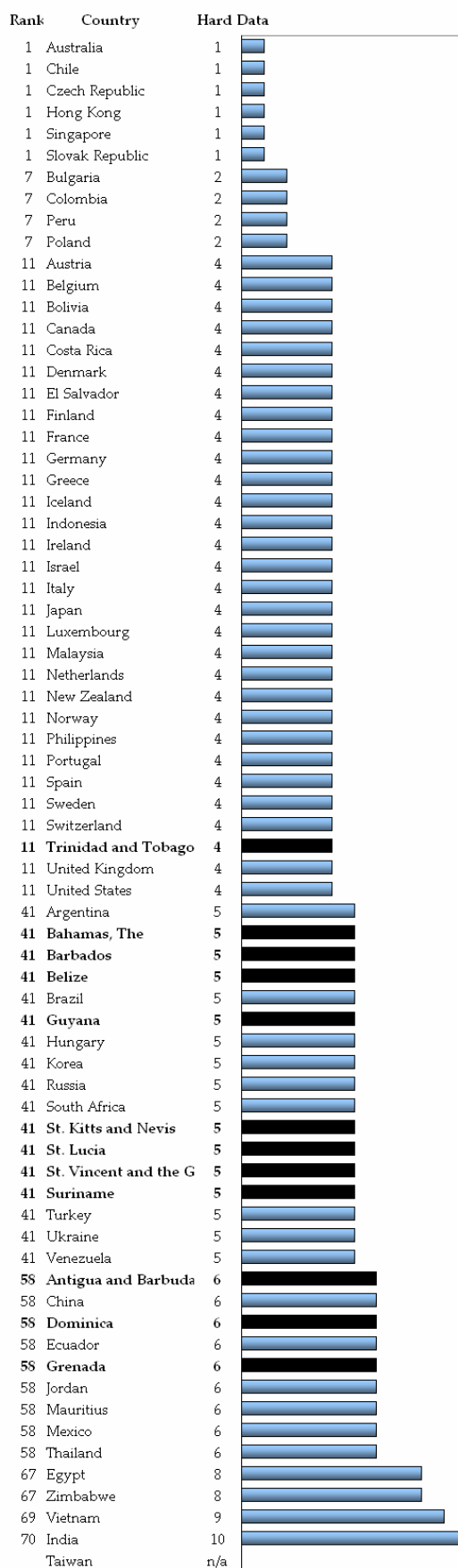
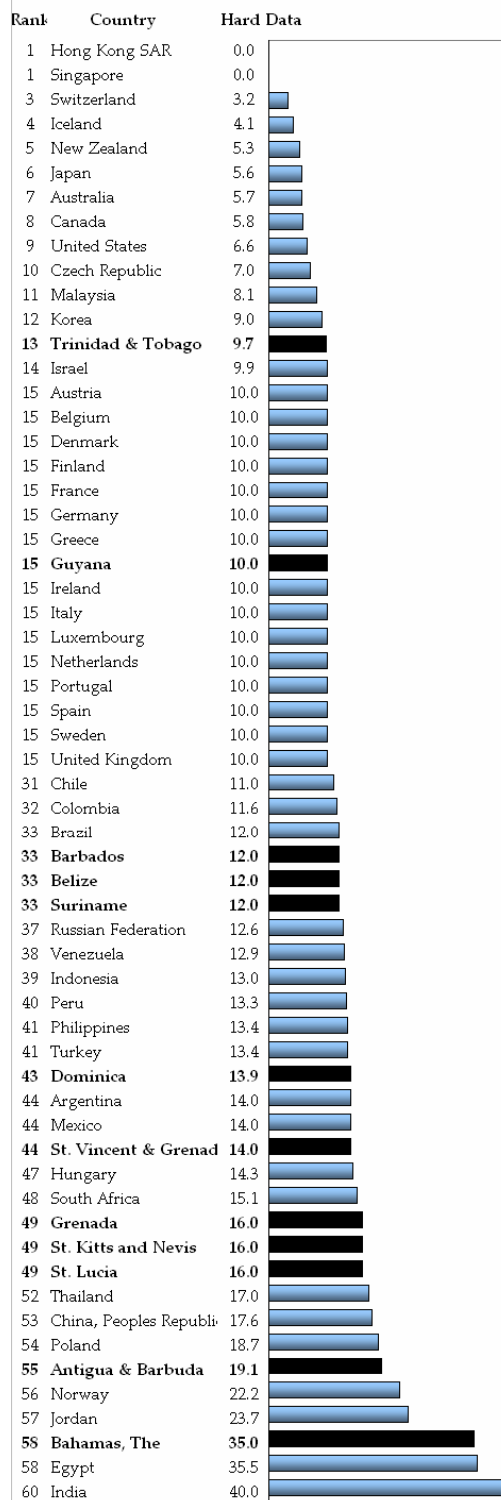


Figure 7.2 Microeconomic Efficiency

Average Tariff, Ranking of GCI countries in 1995 and 2000^{vi}

Mean of all tariff lines including duties and charges, 1997



Mean of all tariff lines including duties and charges, 2000

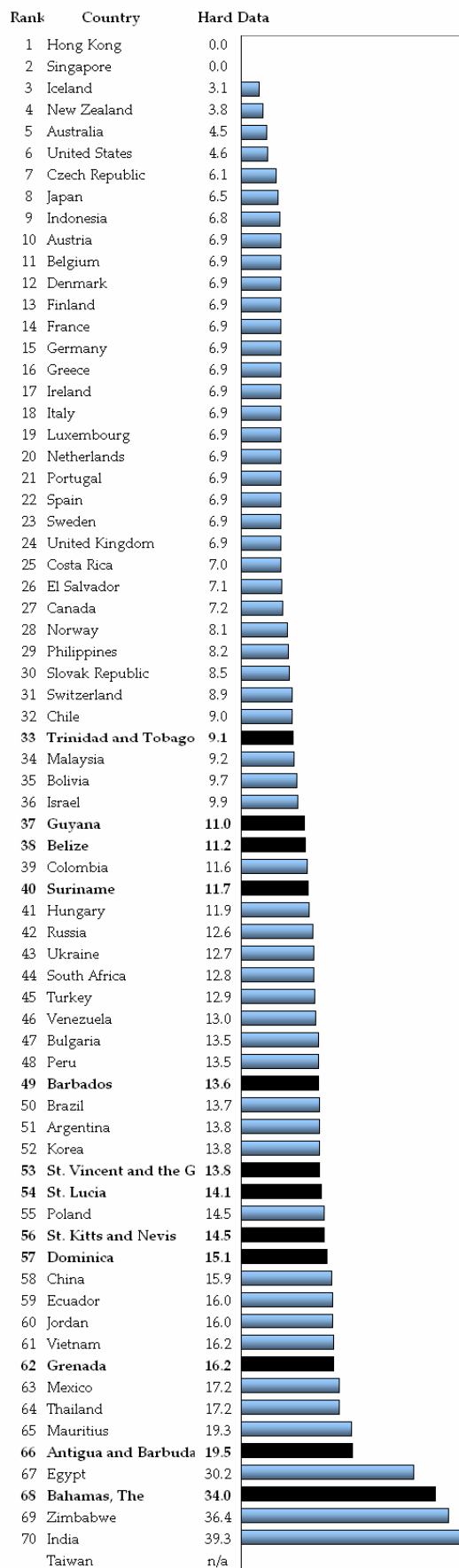


Figure 7.3 Microeconomic Efficiency

49. Within CARICOM, barriers to trade are also high. In 1989, the CARICOM members agreed to establish a single market beginning with free trade in goods and services. However, the continued use of tariff and non-tariff barriers, both authorized and unauthorized, against CARICOM imports have instead resulted in a fragmented and protected trading space within the region. Barriers are highest in food, beverages, and tobacco, with almost universal import licensing for beverages.²⁰ All members also operate state monopolies on the import of selected food items. As these are important inputs for tourism, the barriers reduce the competitiveness of the sectors. Some countries have been prompted by this consideration to issue duty exemptions to hotels, but not necessarily to local bars and restaurants that may also serve tourists. One consequence of the unfinished trade liberalization agenda is that, despite the small domestic market, the majority of firms continue to focus on the domestic market.²¹

Section 4. Conclusion: Strategies for Greater Integration to the Global Economy

50. The Caribbean needs a strategy to sustain growth. World economic history has shown that sustained growth demands sustained improvements in productivity. The analysis in this paper has shown that, in the Caribbean, productivity growth has declined and the underlying determinants of productivity have deteriorated. Efforts by individual countries in the region to bring their public finances under control, remove barriers to competition, and eliminate distortions can contribute to improving competitiveness. We have found, for example, evidence that some states in the region that were more careful in managing their public finances had better growth outcomes in the medium run. However, concerted efforts are likely to do more to lower barriers to the rest of the world, reduce business costs, and increase competition and efficiency in the region. This section highlights the policy areas where greater regional cooperation would lead to greater global integration—for the later case studies to consider in more detail.²²

Completing the Free Trade Area

51. The creation of the long-delayed Caribbean Single Market and Economy (CSME) would create a unified “domestic” market with a combined GDP of US\$28 billion and 15 million consumers. The potential efficiency gains include better allocation of resources, greater competition, lower costs of inputs, and economies of scale for firms operating in the region. The efficiency gains from these sources would put the region in a better position to compete in the global market—this was, at least, the key motivation behind the free trade area within the Caribbean.²³ As the analysis in this paper has shown, the countries have hindered the achievement of these objectives themselves through self-imposed trade barriers. One of the key impediments to progress is the effect of liberalization on tax revenue: trade taxes constitute a significant source of revenue for these governments, and given their continuing fiscal deficits and already high average tax rates, progress toward dismantling the remaining trade barriers would

²⁰ Annex Table 4.4 Tariff Revenue by SITC Category: Aggregate for all Caribbean Countries, World Bank (2005), p.233.

²¹ A recent Investment Climate Assessment of Grenadian firms found that two-thirds serve only the domestic market.

²² A more comprehensive review of various components of the regional strategy to improve competitiveness is found elsewhere. For example, see OECS (2005), World Bank (2005), IDB (2005).

²³ The Secretary-general of the Caribbean Community (CARICOM) has described the CSME as “the most effective means by which the economies of the region can successfully be integrated into the ... global economies.” Oxford Analytica, June 27, 2005.

likely be difficult without plans for alternative revenue sources. Another issue is the lack of a formal enforcement mechanism. As of end 2005, the Caribbean Court of Justice, one function of which is to resolve trade and other disputes arising from implementation of the CSME, is still not fully operational.

Promoting Efficient Competitions in Transport and Communication Services

52. Transportation and telecommunication are important for the region to lower isolation and to plug in better to the global economy. Inefficiencies in transport and communication services constitute a major constraint to both intra- and extra-regional trade in terms of costs, frequency, and reliability of services. Size is a constraint in these activities, which involve high fixed costs and significant scale economies. However—like so many other problems faced in the Caribbean—serious problems stem less from physical limitations than from inappropriate policy responses. Policies, not size, are causing the high-cost bottlenecks. State monopoly, inadequate regulatory standards, and inefficient intra-regional competitions characterize shipping, air transport, and telecommunication industries. By harmonizing standards and adopting regional approach to regulations, the countries could promote competition among service providers and significantly lower costs. In this respect, the following experiences in the region and elsewhere might be worth investigating as case study materials.

- *Promoting private competition in ports within a country.* Although many of the islands of the Caribbean are too small to support multiple ports, it is possible to achieve competition within a port. An example is found in Guyana, where competition among different private and public operators within the port was made possible by creating an independent port authority and separating the regulation and operation of the state-owned infrastructure.
- *Integrated regional airline system.* The experience of Central America, where TACA (Transportes Aereos Centro Americanos) has emerged to lead a competitive five carrier regional alliance, might serve as an example for the Caribbean.
- *Harmonized regulation in telecommunication.* The example of the Eastern Caribbean Telecommunications Authority set up by five Caribbean states (Dominica, Grenada, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines) might serve as an example for the rest of the Caribbean and other small states.

Reducing government burdens

53. Finally, an area that deserves further research is the whether greater regional cooperation among the small Caribbean states could reduce the fixed costs of running government services. According to the OECS, “Cooperation at the sub-regional level has already helped to reduce the fixed costs of some public services, and has significant potential to do so in many others” (Executive Summary, OECS, 2005). The sharing of the costs of telecommunications regulation just mentioned is one example, but others should be investigated as well.