

**Committee on Trade and Development  
Dedicated Session**

**SMALL ECONOMIES: A LITERATURE REVIEW**

Note by the Secretariat

Paragraph 35 of the Doha Ministerial Declaration states that:

"We agree to a work programme, under the auspices of the General Council, to examine issues relating to the trade of small economies. The objective of this work is to frame responses to the trade-related issues identified for the fuller integration of small, vulnerable economies into the multilateral trading system, and not to create a sub-category of WTO Members. The General Council shall review the work programme and make recommendations for action to the Fifth Session of the Ministerial Conference."

The General Council, at its meeting of 1 March 2002, instructed the CTD to establish a programme of work on small economies, to be conducted in Dedicated Sessions<sup>1</sup>. The General Council also instructed the WTO Secretariat to provide relevant information and factual analysis, *inter alia*, on the constraints faced by small economies as well as their shortfalls in institutional and administrative capacities, including in the area of human resources and the effects of trade liberalization on small economies. This note, which has been prepared under the Secretariat's own responsibility, and which is without prejudice to the positions of Members or to their rights and obligations under the WTO, aims to respond to aspects of those requests, as well as to give an overview of how the issue of smallness has been dealt with in the economic literature.

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<sup>1</sup> Document WT/L/447.

## SMALL ECONOMIES: A LITERATURE REVIEW

### I. INTRODUCTION

1. Small country issues have been analysed in the literature for more than four decades now (de Vries, 1973, Kuznets, 1960, Scitovsky, 1960) are among the first works on the topic), but there is still no general agreement on what "small" means. Several different measures of size and thresholds have been proposed. An appropriate definition of smallness should take into account a variety of factors including population, per capita income and income distribution (Srinivasan, 1986). Indeed, a very poor country can have a large population but still be a small market because of its limited demand potential.

2. In spite of this, the proxy that has been most widely used in the literature as a measure of country size is population. Some have proposed 1.5 million people as a threshold (Commonwealth Secretariat – World Bank Joint Task Force, 2000), others 5 million or even more (Streeten, 1993, Collier and Dollar, 1999, Brautigam and Woolcock, 2001), and still others something in between (Armstrong *et al*, 1998).

3. Of the 207 countries listed in the World Bank's 2002, World Development Indicators, 63 have a population of less than 1.5 million and 97 of less than or equal to 5 million. Thirty-six of these are island states and nine landlocked countries. Table A1 in the appendix lists countries with populations of less than 5 million. Of the 49 countries classified by the United Nations as least-developed (LDCs) in 2001, 13 have a population below 1.5 million people, 19 below 5 million and 11 are either landlocked or island countries (small or very small). However, small countries are not necessarily poor countries. If we take the list of small countries proposed by the Commonwealth Secretariat and World Bank Joint Task Force on small states (April 2000)<sup>2</sup>, only seven countries out of 45 have a per capita GNP below US\$760 (the threshold for a country to be considered low income according to the World Bank Atlas method) and only 14 are also classified as LDCs (Table A2).

4. Davenport (2001) proposes an alternative definition of smallness which has to do with trade flows. Small states, despite their high degree of openness, usually represent a very small share of world trade. In the author's view, instead of considering plain demographic criteria or building up vulnerability indexes to select small states, one could simply set a threshold share of world trade and consider as small all the countries that have an export share lower than the cut-off level.<sup>3</sup> The *de minimis* principle can be applied either on aggregate trade flows or on a sectoral basis to take into account countries that have a small aggregate trade share but are particularly relevant producers of a specific good. Others (Encontre, 1999) have proposed restricting attention to small island states. These countries, being small and remote, share similar characteristics and needs.

5. Whatever the criteria used to define small states, any list would include countries that are heterogeneous in some respects and can be easily criticized, since the analysis of common characteristics turns out to be difficult. Due to the considerable diversity among small states, it is hard to find that "one" aspect of smallness that is essential in the characterisation of small economies and

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<sup>2</sup> The Commonwealth Secretariat, World Bank Joint Task Force report considers countries eligible for official aid, including one transition economy (Estonia) and developing countries, as listed in the *List of Aid Recipients Used for 1997 and 1998 Flows* issued by the OECD Development Assistance Committee, with a population of less than 1.5 million. A few larger states (Jamaica, Lesotho, Namibia and Papua New Guinea) are also included because they share many of the characteristics of small states.

<sup>3</sup> One possibility considered by Davenport is to set the limit share at 0.03 percent of world trade, which was the former threshold used by the WTO to set the minimum level of WTO budgetary contributions. According to the author, selecting the countries by this criterion would also imply that granting special and differential treatment would have negligible trade diversion and trade creation effects. One third of the 59 WTO Members with a population of less than 5 million people have been requested to pay the current minimum contribution rate of 0.015 percent to the WTO 2002 budget.

in distinguishing them from large states. In these circumstances, it is not surprising that a unified view on small states is still missing.

6. In 1998 a Commonwealth Secretariat and World Bank Joint Task Force (Joint Task Force) on small states was created with the aim of addressing the request for special treatment advanced by the Commonwealth small states. In addition, the Joint Task Force was also meant to deal with the transitional problems deriving from changes in the international trading system due to the implementation of the Uruguay Round Agreements and to the expiration of the European Union's Lomé IV Convention. In April 2000, the Joint Task Force issued a report that provides "a unified framework and a continuing agenda for action and analysis by the states themselves, and by the international and other organisations that provide external support and influence their development."

7. The reason for the attention devoted to small states is to be found in the general belief that, due to some particular characteristics, small countries are particularly vulnerable and that, because of their inherent weakness, they can be more easily hurt succumb in the process of globalisation. Yet there is no unanimity of opinion among researchers on this point. Some have argued that being small in a "macro" world is a drawback. Small states cannot enjoy economies of scale both in production and in public administration. They are not competitive internationally and in most cases they cannot pursue an import substitution policy. They are particularly vulnerable both to natural disasters and economic shocks. According to other studies, smallness is an asset in a changing and dynamic world. Small countries can respond quickly and easily to the adjustments required by a changing international economy. The decision-making process can be faster and more flexible when the population is less heterogeneous. For many small states, social and educational indicators are good, and GDP growth exceed that of large states.

8. The following sections summarize how small state issues have been analysed in the literature. Section 2 examines the importance of economies of scale both in the public and in the private sector. The impact on small economies of external shocks, both economic and natural, is the topic of section 3. The consequences of being remote and isolated countries are examined in section 4. Section 5 is devoted to a discussion of indices used to measure vulnerability. Section 6 addresses the issue of small states in the international environment and section 7 reports on some empirical studies.

## **II. SMALLNESS AND ECONOMIES OF SCALE**

9. In the presence of economies of scale, production of both private and public goods can be realised at a lower cost if output is sufficiently large. Small countries are unlikely to reap scale economies.

### **1. Public sector**

10. Country size is characterised by an obvious trade-off between economies of scale of large jurisdictions and the costs due to the heterogeneity of large populations. Many public services and government functions are indivisible (the government functions, the judicial system, the provision of health, education and social services, tax and security administration, etc.) and consequently their per capita cost is lower when it can be spread over many taxpayers. On the other hand a large population also implies congestion and a greater diversity that the government has to deal with.

11. Using a model in which individual preferences and geographical location are related and people cannot move across borders, Alesina and Spolaore (1997) find that when this trade-off is explicitly considered, a democratisation process leads to a sub-optimally large number of countries. Especially in many insular countries, the administration of public services is worsened by the fact that territories are widely dispersed and the provision of health, education and social services can become very expensive. Due to a lack of resources, small countries often have to rely on education abroad for more advanced or specialist training, running the risk that trained personnel decide not to go back to the home country. Again because of resource scarcity, administrators are often required to deal with different issues and ministers and senior officials are usually responsible for more diffused and

complex tasks than in larger countries where financial and personnel resources allow to greater separation of administrative and professional roles (Farrugia, 1993). On the other hand, the fact that administrators act on the basis of a broad vision of the system represents a clear advantage. To compensate for the more varied tasks falling to public servants in small states, wages in the public sector are generally higher in proportion to GDP than is the case in larger developing countries (31 against the 21 percent; Joint Task Force report, 2000).

## **2. Private sector**

12. Almost by definition small economies may find it difficult to take advantage of economies of scale in production and distribution (Armstrong *et al.*, 1993). This translates to high unit costs and possibly to a reduced degree of competition, since, due to its limited size, the domestic market cannot support many firms producing in the same sector. As a consequence, small economies are expected to have higher prices both of intermediates and final goods. However, as Srinivasan (1986) notes, population is not necessarily a good measure of market size and even large countries might have a limited domestic market and suffer from the impossibility of exploiting economies of scale.

13. Besides, the optimal size of a country does not depend only on the presence of economies of scale, but also on the degree of economic integration. Suppose a country is completely closed to international trade. In the presence of economies of scale its size will matter a lot since market size will determine the productivity level of the economy. On the other hand, if the country is completely open its size becomes irrelevant since the size of the market is determined by foreign partners as well. Being a large country is then not so crucial anymore (Alesina and Spolaore, 1997). Of course, non-traded goods and services, particularly infrastructures, are not subject to this rule and should they represent an important share of inputs in traded good production, small state competitiveness in international markets might be affected (Srinivasan, 1986). Research and development activities are characterised by large economies of scale as well, and smallness therefore has consequences on the development of local technology. Hence small states have to rely on technologies produced abroad. The actual ability to import technological improvements can be affected both by the size of the country and by its geographical remoteness (Milner and Westaway, 1993).

14. Differences in economic structures between small and large states has implications for the taxation system. Having selected 12 small countries according to three criteria (population of less than 1.5 million, land area below 31000 Km<sup>2</sup> and GDP less than US\$1.5 billion) and 11 maxi-states (population above 25 million, land area more than 700000 Km<sup>2</sup> and GDP at least of US\$30 billion), Codrington (1989) finds that on average large countries impose more taxes on income, employment and property. Small countries prefer foreign trade and miscellaneous taxes; indeed, at the time of the research, a few small countries did not even have taxes on individual and corporate income, the same being true for taxation of net wealth. While tax income in the large countries come from a variety of activities, in small ones 84 percent of tax revenue was raised from international trade and income. From this evidence the author concludes that differences in size determine differences in the economic structure and social and administrative organisation, which in turn has implications for the fiscal structure. In particular, for several reasons small states are usually more open than large ones. Hence, there are more possibilities of taxing exports and imports, which are also easier to tax than income, than in large countries.

## **III. VULNERABILITY**

15. The Joint Task Force (2000) reports that the standard deviation of annual real per capita growth is about 25 percent higher in small states than in large ones. This higher volatility can be attributed to different factors, some related to natural peculiarities of many small states, others to the specific characteristics of their economy.

## 1. Natural shocks

16. Natural disasters hit big and small countries, especially those located in some critical areas of the world. However, the impact in terms of per capita costs and per unit of area damage of strong hurricanes and disruptive earthquakes are much more severe in smaller countries.

17. The World Bank supports a disaster management programme in the Caribbean. The aim of this programme is to improve the regulatory framework for disaster mitigation, help involve private insurance in sharing risks, support the improvement of building techniques and land-use planning, strengthen the performance of national emergency management agencies and support the training of local communities and investment in protection of infrastructures and facilities. In early 2000, several agencies active in disaster management and mitigation, including the World Bank itself, have been put together to create a ProVention Consortium with the goal of assisting local governments in reducing disaster related risks and improving their ability to anticipate and respond to disasters when they occur.

18. Countries can protect themselves against natural disasters, for example, by holding an appropriate amount of foreign reserves that could be used to buy imports in bad periods. Clearly, any form of insurance costs something to the economy. Other more traditional forms of insurance can turn out to be particularly expensive because insurance suppliers need to be compensated for the high uncertainty peculiar to the occurrence of natural disasters.

## 2. Economic shocks

19. Due to their limited size, domestic markets of small economies cannot support the location of large-scale industries or the production of goods subject to economies of scale at competitive prices. Natural resource endowments and labour supply are in most cases constrained. For all these reasons, the range of products produced in small countries is often limited or products are not prices competitively. Hence, small states often show a very high dependence on imports and exports (see Briguglio, 1995) and, consequently, on foreign market conditions. Trade to GDP ratios in small economies are usually much larger than the average (Easterly and Kraay, 2000, Joint Task Force report, 2000) and exports generally rely on a very narrow range of goods and services and are concentrated on the markets of a few countries. These conditions may be associated with high economic instability.

20. The Joint Task Force report (2000) shows that the trade to GDP ratio is above 110 percent for small countries (120 percent for the Caribbean and Latin American ones), compared to 38 percent in all low income countries and 45 percent in all middle income countries. Tourism is the biggest source of exports for Caribbean and some Pacific island countries. In 1996 earnings from tourism were 76 percent of total exports in Saint Lucia, 61 percent in Antigua and Barbuda, 55 percent in Barbados, 51 percent in Samoa and 42 percent in Vanuatu (Joint Task Force report, 2000).<sup>4</sup> Exports are concentrated on a limited number of goods and services. Micronesia, for example, exports mainly fish (40 percent of total exports), Kiribati copra (34 percent) and Papua New Guinea gold (28 percent). In his analysis of small island states (SIDS), Encontre (1999) finds that between 1990 and 1996, six out of twenty countries experienced a decline in the combined share in total exports of the two major exported commodities and six an increase. Dominica, Kiribati, Saint Lucia and Saint Vincent and Grenadine are in the first group, Samoa, Solomon Islands and Tonga in the second. Overall SIDS are highly specialised; more than three quarters of 46 small island states are either service exporters (tourism, offshore investment services) or dependent on external rental income (aid, remittances, trust funds income, etc.). See Encontre (1999) for details.

21. As shown in section 5, Easterly and Kraay (2000) find that more than the lack of export diversification, it is the big trade to GDP ratios in income that are responsible for growth volatility in

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<sup>4</sup> The diffusion of tourism can have a huge impact on the domestic economy and ecosystem of small states. The consequences on the environment of non-indigenous product imports and of the construction of tourism related facilities can be large.

micro-states, namely of countries with a population of less than 1 million. Indeed, any volatility in import and export prices has a strong impact on small open economies. Hence, even small changes in the international price of commodities and services can have a big impact on the domestic economy. Besides the possible negative effects implicit in heavy dependence on international trade, the limited size of the domestic market at the same time thwarts import-substitution policies and strongly reduces the ability of the country to diversify its exports. Lastly, given the negligible volume of trade compared to the size of the world market, small states have no control on the prices of the products that are traded with foreign countries. In other words, small economies cannot affect their terms of trade.

22. While openness to international trade can be the source of negative effects on small countries' economies, benefits deriving from participation in international trade should not be ignored. Thanks to international trade consumers in small states have access to goods and services that would not be provided by the home market and they can enjoy lower prices. On the production side, domestic producers are given the opportunity to sell on the world market. This may allow them to specialize and reap the benefits of economies of scale.

### **3. Openness to capital flows and international aid**

23. One way to reduce the negative effects of exogenous economic and natural shocks affecting small states would be to share risks with foreign markets, for example by holding assets abroad. Foreign capital could be used to smooth consumption and reduce negative shocks. Of course this works well only if domestic shocks are not strongly correlated with those experienced by the rest of the world.<sup>5</sup> According to some authors (e.g., Rodrik, 1998), however, there is no evidence that countries particularly open to international financial flows grow faster. Openness to capital flows can also in itself be a source of additional volatility.

24. Small countries are often perceived as highly risky by foreign investors, especially those countries that are subject to severe and recurrent natural shocks. Such countries only have limited access to international financial borrowing. Official aid can play an important role in reassuring the private sector and have a crowding-in effect on private investments (Collier and Dollar, 1999). Apart from the high perceived risk, there are other possible reasons that prevent private lenders from investing their money in small countries. Costs to collect information about the capacity to repay a loan can be substantial, especially if the amount of the loan is not too high. The same holds for the cost of enforcing contracts that, due to different legal and administrative systems, can in the end be very high. The Joint Task Force report (2000) compares official per capita aid received by small countries in 1991-92 to the same variable in 1997-98 (table 5 page 14). With the exception of a few countries such as Marshall Island, Micronesia, Palau, Tonga, Antigua and Barbuda, Bahamas, Barbados, Dominica, Guyana, Suriname, Trinidad and Tobago, Estonia and Malta, there has been a marked reduction in aid-flows. Per capita FDI over the same period shows the opposite behaviour for all the countries considered, except Equatorial Guinea, Gabon, Swaziland, Kiribati, Marshall Island, Samoa, Vanuatu, Antigua and Barbuda, Saint Lucia, Saint Vincent and the Grenadines and Cyprus. In terms of allocation, almost 80 percent of FDI received by small states went to seven countries: Bahamas, Botswana, Estonia, Equatorial Guinea, Guyana, Malta and Trinidad and Tobago.

25. The World Bank has been rather active in supporting small Pacific and Caribbean island states. In particular, the Bank has financed lending programs in areas such as health, education, transport infrastructure and private sector development in the Pacific and supported plans for disaster mitigation, risk management and telecommunications sector improvements in the Caribbean. Also the European Union has undertaken many interventions in favour of the ACP countries, and other developing countries in Asia, Latin America and the Mediterranean.

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<sup>5</sup> Easterly and Kraay (2000) find that this is actually the case and that shocks experienced by small states are not particularly correlated with the world business cycle.

#### IV. DISADVANTAGES RELATED TO THE GEOGRAPHICAL LOCATION

26. Transportation costs for remote island or landlocked countries tend to be higher per unit of traded goods than for other countries. In the case of remote islands, for example, only air or sea transportation, which is usually more expensive than land transportation for small volume shipments, can be used. In addition, cargoes tend to be small, increasing the per-unit cost of traded goods. Furthermore, remote island or landlocked countries are often far away from the main transportation routes and have to rely on infrequent transportation services, which can lead to delays and uncertainties in delivery. Remoteness and high transport costs can have serious consequences for the production structure of countries. In particular, agricultural diversification may be discouraged and manufacturing activities may be uncompetitive when they depend on imported inputs. (Encontre, 1999)

27. One way to measure the incidence of transportation costs is by using the ratio of insurance and freight costs to import values.<sup>6</sup> As stated in the Joint Task Force 2000 final report, the median value of this ratio for all developing countries is 14 percent, while for small island and landlocked states it goes from 18 percent for Seychelles and Trinidad and Tobago, to 26 percent for Kiribati. All that being said, it must also be noted that transport costs, in particular for sea transport, have fallen steadily in the past decade and that their incidence on exported and imported goods has been reduced. Indeed, in the literature some doubts have been cast on the importance of transportation costs as a determinant of price level differentials. Armstrong *et al.* (1993) examine the price differences between the Isle of Man and Northwest England for some retail goods and energy supply. Even using a wide definition of transport costs, including extra port-handling costs, additional road haulage costs, packaging, insurance and damage in transit, they find that "additional freight costs cannot possibly be held responsible for the whole of the higher price levels prevailing on the Isle of Man" and that the causes of the price differential have to be found somewhere else. The same conclusion might not hold for very remote or landlocked countries.

28. Srinivasan (1986) discusses possible responses to high transportation costs. Switzerland, for example, transports high value and low weight products. In Cole's (1993) words, "any producer seeking world markets has to address the question of distance – the answer is efficiency and competitiveness". As a last point, Guillaumont (1999) argues that remoteness and landlockedness, even when representing a serious handicap to a country's growth, cannot strictly be considered as a source of vulnerability since these are not unforeseen events. As will be explained in the next section, the latter situation is a crucial characteristic of vulnerability.

#### V. INDICES TO MEASURE VULNERABILITY

29. There have been several attempts to measure the degree of vulnerability deriving from the different sources described above. The ultimate aim is to see if small states are particularly vulnerable to external uncontrollable shocks and, hence, if they are more penalised than large developing countries because of their limited size. In Guillaumont's (1999) words, "vulnerability means the risk of being harmed, wounded (negatively affected) by *unforeseen* events, in general and in economics as well" (*italics added*). Several questions need to be addressed and clarified when it comes to measuring vulnerability. Should only the immediate negative effects of shocks be considered or also their impact on growth? In other words, should a static definition for vulnerability be adopted or a dynamic one? And what kind of shocks should be considered, only natural and economic ones or also those domestic shocks that are related to the political situation and that, as such, are more controllable by the country concerned? As Guillaumont (1999) stresses, the risk of a country being harmed by an external shock is not given just by the probability of the shock itself happening. It also depends on three different components: the size and the likelihood of the shock, the exposure to the shock and the ability of the country to react to it. Part of the vulnerability of countries derives from the economic policy choices made, and as such, is conjunctural. What a vulnerability index should measure is

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<sup>6</sup> This is the measure proposed in Atkins, J.P., S. Mazzi and C.D. Easter, 2000, and used also in other papers.

structural vulnerability, namely the vulnerability resulting from factors that are independent of the political will of decision makers.

30. The measurement of the different sources of vulnerability also represents a problem. Vulnerability to natural disasters is probably the most difficult to measure, both because of the lack of homogeneous data and because of the inherent difficulties in defining an appropriate proxy. Several measures have been proposed, but each of them seems to suffer from one weakness or another. Data on the number of natural disaster events, for example, are in general reliable and available for a long time-period, but they do not allow distinction between the different types of events and their impact. Besides, the crude number of disasters does not capture social factors and mitigation measures that obviously influence the impact of the natural disaster on the economy.

31. Another approach that has been proposed (Pantin, 1997) is to look at the impact of natural disasters on some macroeconomic indicators, such as GDP, exports and imports, the rate of inflation, the exchange rate, external debt and gross domestic investment. The idea is to average the rates of change in these indicators over three years before the event and compare this aggregate index to the same index calculated over the three years after the disaster. As Crowards (2000) notes, this approach suffers from a number of problems, the most important of which is the implicit assumption that the macroeconomic indicators used to build up the index are affected only by the catastrophic event.

32. An alternative index that has often been proposed (Guillaumont, 1999) measures instability in agricultural production, that is the fluctuations of agriculture output around the trend. The occurrence and the severity of natural shocks are likely to affect agriculture production and hence be captured by out-of-trend variations in output. On the other hand, it is also true that agriculture production can be affected by many other factors that have nothing to do with natural disasters. Besides, Crowards expresses some doubts on the appropriateness of this index to reflect wider economic impacts of catastrophic events; sectors in the economy might react in completely different ways. Lastly, positive events, such as increases in prices or technological improvements can increase variability of agricultural output and be wrongly interpreted as an increase in vulnerability.

33. The monetary value of damage caused by natural disasters (proposed, among others, by Briguglio, 1995) would be a good measure if it were not for the limited data available. For the most part, estimates of the cost of natural disasters are not available for a sufficiently long time span. Crowards (2000) proposes to combine the number of people affected by the natural disaster and the number of deaths. Both these indices are far from being perfect as a proxy for disaster vulnerability. In particular, the number of people affected is a relatively good measure of the social and economic consequences of a disaster, but data on this statistic are not accurate nor consistent. On the other hand, data on deaths suffered as a consequence of a natural disaster are more precise and reliable, but this is not necessarily a good measure of the impact of a disaster on human activities. It might well happen that a natural catastrophe is very severe and has serious economic consequences, but it does not result in many casualties.

34. According to Guillaumont (1999) an indicator of the structural economic vulnerability of countries should capture the two main shocks vulnerable countries face, namely natural shocks, proxied by agricultural production, and trade shocks, proxied by the instability of exports. The index should also include the exposure of the country to external shocks. One way to consider this is by weighting the basic indexes by the size of the population. This suggestion relies on the hypothesis that countries are more vulnerable the smaller they are. Lastly, the elementary component indexes should be aggregated either using the same weight or using weights reflecting the impact of that component on economic growth, as in Guillaumont and Chauvet (1999).

35. The vulnerability index proposed by the Commonwealth Secretariat<sup>7</sup> composed of three determinants of income volatility: the lack of export diversification (measured by the UNCTAD export diversification index), the extent of export dependence (measured by the export to GDP ratio)

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<sup>7</sup> The Commonwealth vulnerability index is based on Atkins, J.P., S. Mazzi and C.D. Easter, 2000.



and the impact of natural disasters (given by the share of total population affected by natural disasters). The final index is calculated by combining those three indexes and weighing them by GDP. Table 1 reports 111 countries ranked according to the Commonwealth vulnerability index. Interestingly, 26 out of 28 most vulnerable countries are small states.

36. Briguglio (1995) proposes an index of economic vulnerability based on three variables: the volume of trade to GDP ratio as a measure of exposure to foreign economic conditions, the transport and freight costs as a percentage of exports as a proxy for remoteness and insularity, and the share of money damage caused by natural disasters (political ones are excluded) in relation to GDP as an indicator of disaster proneness. This index does not include any variable directly measuring economic performance and its components are not correlated to GDP. Indeed, the index is meant to measure the degree of fragility of an economy and not its level of development. Out of 114 countries including both developed and developing ones, the small island states regularly show a very high vulnerability index.

**Table 1 - Country groups according to the Commonwealth vulnerability index**

| High Vulnerability   | Higher Medium Vulnerability | Lower Medium Vulnerability | Low Vulnerability |
|----------------------|-----------------------------|----------------------------|-------------------|
| Antigua & Barbuda*   | Angola                      | Bolivia                    | Algeria           |
| Bahamas*             | Bahrain*                    | Cameroon                   | Argentina         |
| Belize*              | Barbados*                   | Congo, Dem. Rep.           | Bangladesh        |
| Bhutan*              | Benin                       | Costa Rica                 | Brazil            |
| Cape Verde*          | Botswana*                   | Côte d'Ivoire              | Chile             |
| Comoros*             | Burkina Faso                | Cyprus*                    | China             |
| Djibouti*            | Burundi                     | Dominican Rep.             | Colombia          |
| Dominica*            | Central Afr. Rep.           | Ecuador                    | Egypt             |
| Equatorial Guinea*   | Chad                        | El Salvador                | Guatemala         |
| Fiji*                | Congo                       | Ethiopia                   | India             |
| Gambia*              | Gabon*                      | Ghana                      | Indonesia         |
| Grenada*             | Haiti                       | Guinea                     | Iran              |
| Guyana*              | Honduras                    | Jordan                     | Libya             |
| Kiribati*            | Jamaica                     | Kenya                      | Malaysia          |
| Lesotho              | Malawi                      | Madagascar                 | Mexico            |
| Maldives*            | Mali                        | Nepal                      | Morocco           |
| Mauritania           | Malta*                      | Oman                       | Myanmar           |
| Samoa*               | Mauritius*                  | Panama                     | Nigeria           |
| Sao Tomé & Príncipe* | Mozambique                  | Paraguay                   | Pakistan          |
| Seychelles*          | Namibia                     | Senegal                    | Peru              |
| Solomon Islands*     | Nicaragua                   | Sri Lanka                  | Philippines       |
| St. Kitts & Nevis*   | Niger                       | Sudan                      | Singapore         |
| St. Lucia*           | Papua New Guinea            | Trinidad & Tobago*         | South Africa      |
| St. Vincent & Gren.* | Rwanda                      | Tunisia                    | Syria             |
| Suriname*            | Sierra Leone                | Uganda                     | Thailand          |
| Swaziland*           | Tanzania                    | Yemen                      | Turkey            |
| Tonga*               | Togo                        | Zimbabwe                   | Uruguay           |
| Vanuatu*             | Zambia                      |                            | Venezuela         |

\* = small state

Source: Commonwealth Secretariat and World Bank (2000). Table 6, p. 22.

37. In a world in which economic activities are more and more integrated, small economies face pressure to specialize if they want to avoid the risk of remaining at the margin of the global economy. The technological improvements inherent in the globalisation process offer some opportunities for many small economies to overcome their weaknesses. However, there is a general fear that many small economies will not be able to develop their trading and production capacities and thus risk marginalization from the global economy. Trade liberalisation and free movement of capital and

people play an important role in this context. Several small states are part of different trade agreements and many of the products made in small economies and exported to developed countries are subject to special trading status. At the same time, with the reduction of tariffs on a most favoured nation basis, trade preferences granted to small economies are going to be eroded, representing a real challenge for small economies.

## **1. Globalisation**

38. Globalisation is a complex phenomenon that brings both opportunities and challenges for small economies. On one side, the changes imposed by rapid technological innovation and deepening economic integration may represent a problem for countries that are not rich in natural resources and have limited technological and production capabilities. On the other hand, these very same phenomena may create new opportunities for countries that see the importance of their remoteness and isolation reduced thanks to trade integration and improvements in communication technology. In order to profit fully from the opportunities offered by the process of globalisation, small countries have to provide the right environment. External support, both in terms of financial aid and technical advice, can be helpful.

39. The Joint Task Force report identifies two main areas offering opportunities for the integration of small countries into the new global system: the provision of financial services and information technology and e-commerce. As far as the first is concerned, there are two major concerns at the international level, one being the fight against money laundering, the other the negative effects of harmful forms of tax competition. Both topics are subject to discussion in the international arena, in particular at the OECD.<sup>8</sup>

40. On the production side, small state firms have to be ready to recognise rapidly the opportunities offered by the creation of new goods and services and flexible enough to adopt the necessary changes to respond to them. Corporate alliances can be particularly useful for small firms to overcome their weakness in size. Improvement of the workforce skills and of human capital quality is another crucial step to be undertaken if firms in small states want to be part of the global economy.

41. Small countries can implement two alternative models of activities to improve their competitiveness in an integrating world (Encontre, 1999). They can either re-specialise in activities that are "globally" competitive and to do so they typically need to attract foreign investments, or they can specialise in those goods or services that are particular to the country and look for a niche in the international market. Both these strategies may be difficult to pursue. The production of "globally" competitive goods and services has often had a strong environmental impact, and niches have not always been easy to identify. Encontre concludes that both approaches have some merit and can be used at the same time in order to increase small countries' integration into the global economy.

## **2. Trade agreements**

42. As mentioned above, several small economies are involved in regional multilateral integration agreements. The most important among these are the arrangements between the European Communities and the African, Caribbean and Pacific (ACP) countries, the CARIBICAN, between Canada and the Commonwealth Caribbean countries, the South Pacific Regional Trade and Economic Cooperation Agreement (SPARTECA), between Australia, New Zealand and Pacific islands, the Caribbean Community and Common Market (CARICOM). (See Schiff, 2001, for a complete list of regional integration agreements involving small countries). A recent paper by Schiff (2001) examines closely the advantages and disadvantages for small states of being involved in these groups. The author recognises three types of regional agreements: South-South Regional Integration Agreements

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<sup>8</sup> The OECD Forum on Harmful Tax Competition and the Financial Stability Forum deal with these issues.

(RIAs), South-South Regional Cooperation (on public goods and international negotiations) and North-South Regional Integration Agreements.

43. As far as South-South RIAs are concerned, it is widely recognised that when trade policy with respect to the rest of the world remains unchanged, members of the agreement may actually experience a welfare reduction due to trade diversion phenomena (see also Schiff 1996). Under these circumstances, it will most likely be smaller and poorer countries that lose out to larger ones within regional groupings. Unless some sort of compensatory mechanism is put in place or the common external tariff is reduced, these intra-bloc transfers are likely to create tension in the group and eventually cause the agreement to break down (this was the case for the East African Community and for the Central American Common Market – see Schiff, 2001, for details). Regional cooperation on public goods (water, infrastructure, environment and energy sources, for example) or on international negotiations, on the contrary, cannot be but beneficial for small countries. At the international level, the creation of a regional grouping of countries sharing the same needs increases the bargaining power of states that would otherwise be weak, if taken individually, and helps in reducing the fixed costs of negotiations that for individual small countries might be unaffordable.<sup>9</sup>

44. Small countries are also involved in many North-South regional agreements. The most important of these is probably the one between the European Communities and 71 African, Caribbean and Pacific (ACP) countries, which has taken the form of successive Conventions. The first Convention was signed in 1975 and was subsequently renewed on a regular basis until the most recent renewal in 1995 (Lomé IV). Based on this agreement, extensive duty-free market access was granted to ACP countries in the EC market. The lapse of the Lomé IV Convention in 2000 and the coming into force of post-Lomé agreements (the Cotonou Agreement) between the European Communities and the ACP countries represents a real challenge for small states. Lastly, an increasing number of small countries are becoming members of the WTO. Of the 45 countries in the Joint Task Force list, 27 are WTO Members and eight are observers (Table A2).

45. The JTF report (2000) identifies several types of external support that could be particularly helpful for small countries to meet the challenge of integrating into the world trading system. Giving support for the improvement of human capital and assisting in the reallocation of resources from sectors that have become unprofitable in the new international context to new, more productive sectors, are among the most important ones. The Joint Task Force advocates the adoption of special treatment for small states in the WTO. In their words, "... the special characteristics and vulnerability of many small states should be recognised as justifying special consideration by the international system to deal with those issues that are crucial to the transformation of their economies, such as length of transition periods". The report also argues for enhanced financial and technical assistance.

## VII. EMPIRICAL EVIDENCE

46. Because of all the drawbacks small states face, it has been suggested that they grow less rapidly and show lower development levels than larger countries. However, the empirical evidence does not always confirm this hypothesis, indicating that the advantages of being small that have been identified in theory (such as greater homogeneity and social cohesion, flexibility in the decision-making process and in the response to changes, greater openness to trade) might mitigate the disadvantages. As in theory there is no clear characterisation of what "small state" means, applied investigations suffer from the same difficulty, and studies adopt different definitions of smallness and focus on different groups of countries.<sup>10</sup>

47. Easterly and Kraay (2000), for example, examine the performance of 33 micro-states (countries with a population of 1 million or less), compared to the performance of small and large

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<sup>9</sup> A successful example of these kind of cooperations is the CARICOM, that has been involved in ACP-EU, GATT/WTO, UNCTAD and UNCLOS negotiations, just to cite some of them.

<sup>10</sup> Data availability is a serious problem in these kinds of studies. As several empirical papers underline, for many of the smallest states even data on per capita GDP are either not available or not comparable with other countries' data sets.

states. They find that "micro-states have on average higher income and productivity levels than small states, and grow no more slowly than large states". One might think that this result is triggered by the presence of western countries, such as Luxembourg and Iceland, or oil producers, such as Qatar and Bahrain. However, micro-states turn out to be 50 percent richer than other states even when controlling for location by continent and oil production. In addition, micro-states seem to perform better than other countries when it comes to quality of life indicators such as life expectancy (about four years higher) and infant mortality (lower by 22 per thousand). Moving from output levels to growth rates, data do not support the prediction of a scale effect and, even if they show a large output volatility, which definitely has a negative impact on growth performance, small states do not seem to have any growth disadvantage compared to other states. According to the authors this is due to the fact that output volatility is more than compensated by other advantages of smallness. In particular, micro-states are very open to trade and have high educational attainment levels. Even if openness to trade can be a source of output volatility in itself, the empirical evidence shows that the positive impact of trade openness offsets the negative influences. Going deeper in the analysis of the impact of trade openness on micro-states' economies, Easterly and Kraay also question the view that the high terms of trade volatility to which smaller states are subject is mainly due to their high specialisation in international trade. They argue that high volatility is most probably due to large trade to GDP ratios that amplify the effects of changes in import and export prices.

48. The fact that size is not a significant determinant of countries' growth performance has been found in other empirical studies. Armstrong, Kervenoael, Li and Read (1998) estimate a simple growth equation in which per capita GNP growth is a function of initial per capita GNP, agriculture and industry shares of total GDP, a series of regional influences, and population. Using data on 133 countries over the 1980-1993 period, they find that the country size variable is insignificant. This result has proved robust when applied to alternative data sets. Going further in the analysis, the authors find that small states (i.e. states with less than 3 millions of people in this case) do not constitute a homogeneous group. When compared to the average GDP level of the regions they belong to, some small states perform better than the average, others worse, indicating that they do not have some peculiar characteristics making them a distinct group as a whole and that, on the contrary, there is a lot of diversity among them. This is true also if micro-states are compared to the performance of adjacent countries. The next step is to try to explain the cause of the differences among small states. The hypothesis of Armstrong et al., confirmed by the data, is that sectoral specialisation plays a role. In particular states specialising in tourism and financial services or having an unusually large endowment of a valuable primary resource show higher per capita GNP. Other factors such as regional location and the agriculture to GDP ratio also seem to influence the GDP of small states. In particular, countries that are located in poor regions tend to be poor as do those that have a high agriculture to GDP ratio. Surprisingly, insularity and specialisation in manufacturing are not significant determinant of small country performance.

49. Collier and Dollar (1999) stress the importance of macroeconomic stability and good institutions for small states' economic performance. Using a sample of about 90 small (with a population of less than 5 millions) and large countries, they show that the effectiveness of financial aid in reducing poverty depends on the economic policies undertaken by the recipient, confirming the main conclusion in World Bank's policy research report "Assessing Aid" (1998).<sup>11</sup> In the context of a healthy political and macroeconomic environment, foreign aid also has a "crowding in" effect on private investments that would not otherwise be attracted by smaller states, which are in general perceived as riskier by the private sector. The evidence shows that small and large countries do not differ in terms of policy quality.<sup>12</sup> Hence, poor institutions and bad economic management are not peculiar to states according to size. What is statistically significant is the correlation between good policy and growth performance, both for small and large states. Nevertheless, it seems that the

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<sup>11</sup> This is a general result, valid also for large states, and is in line with the previous literature on the subject. See, e.g., Burnside and Dollar (1997) and Collier and Dollar (1998), Dollar and Svensson (1998).

<sup>12</sup> Policy quality is measured by the Country Policy and Institutional Assessment (CPIA) index of the World Bank. This is a composite index rating countries according to several aspects related to macroeconomic policy, structural measures, equity and safety net policies, public sector management and economic governance.

allocation of aid is correlated to country size; in 1990-1996 small countries received a share of aid to GDP on average 1% higher than the aid flowing into large states, independently of their policy performance.<sup>13</sup>

50. Brautigam and Woolcock (2001) also find that state capacity level and management of social conflicts are crucial for the success of small states. They underline the fact that, in a context of globalisation, smallness can be an asset and under certain conditions smaller states can adjust more rapidly to changing situations. The quality of institutions is crucial and is what really distinguishes between small countries that succeed and those that do not. A simple comparison between 102 small states and 105 large ones (5 million being the cut off point) shows that small countries are characterised by relatively higher trade volumes, foreign direct investment, economic inequality, levels of foreign aid, and growth volatility. When controlling for the quality of institutions and standard socio-economic variables, small states remain significantly different from large ones on two dimensions: growth volatility and aid share. When restricting the analysis to the small state sample, it is shown that superior state capacity is positively related to growth rates and that conflict management and state capacity are positively related to growth stability.

## **1. Concluding remarks**

51. Drawing a conclusion on what "small state" means is not easy. As shown in the previous sections, there is no unanimity on what the most relevant characteristics of small economies are, nor on which variables are the most appropriate to measure country size and what cut-off points should be used. Conclusions in the empirical literature tend to be somewhat contradictory and inconclusive in a number of important points.

52. Each small economy is unique. However, in general small states are characterised by higher GDP volatility, greater openness to trade, higher per capita international aid and more concentrated production and export structures. At the same time, small states do not perform badly in terms of GDP levels, growth rates, social, health and educational indicators, cohesion variables and greater flexibility in the decision-making process.

53. There is also ambiguity regarding what globalisation and integration in the international economy represent for small states. According to some analysts, globalisation means a real opportunity for countries that suffer from remoteness and isolation. New communication technologies and improvements in transportation means that remoteness and isolation become less stringent constraints and small states can avail themselves of new opportunities. Others argue that small economies are too weak and vulnerable to be able to survive if integrated now into the global economy. They fear that small economies would succumb if they have to face international competition without enjoying any form of protection. A number of these contrast in emphasis and conclusions can only be addressed by unbundling country groupings and focusing more closely on the specifics of realities facing individual economies.

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<sup>13</sup> The fact that aid allocation does not depend upon the policy environment of the recipient is actually a general result and holds also for large countries (see Collier and Dollar, 1998 and Alesina and Dollar, 1998). Aid giving decisions often follow strategic and political considerations. That is why, for example a former colony typically receives higher financial aid than other countries with the same level of poverty and better political conditions, but without a past as a colony.

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## Appendix

**Table A1 - List of small states (less than 5 million people)**

| Country                  | Population<br>(Thousands)<br>(2000) | GNI per capita<br>in US dollars<br>(2000) | Landlocked | Island | LDC |
|--------------------------|-------------------------------------|---|------------|--------|-----|
| Albania                  | 3400                                | 1120                                      |            |        |     |
| American Samoa           | 65                                  | ..  |            | yes    |     |
| Andorra                  | 67                                  | ..  |            |        |     |
| Antigua and Barbuda      | 68                                  | 9440                                      |            | yes    |     |
| Armenia                  | 3800                                | 520                                       | yes        |        |     |
| Aruba                    | 101                                 | ..  |            | yes    |     |
| Bahamas, The             | 303                                 | 14960                                     |            | yes    |     |
| Bahrain                  | 691                                 | ..  |            | yes    |     |
| Barbados                 | 267                                 | 9250                                      |            | yes    |     |
| Belize                   | 240                                 | 3110                                      |            |        |     |
| Bermuda                  | 63                                  | ..  |            | yes    |     |
| Bhutan                   | 805                                 | 590                                       | yes        |        | yes |
| Bosnia and Herzegovina   | 4000                                | 1230                                      |            |        |     |
| Botswana                 | 900                                 | 3300                                      | yes        |        |     |
| Brunei                   | 338                                 | ..  |            |        |     |
| Cape Verde               | 441                                 | 1330                                      |            | yes    | yes |
| Cayman Islands           | 35                                  | ..  |            | yes    |     |
| Central African Republic | 3700                                | 280                                       | yes        |        | yes |
| Channel Islands          | 149                                 | ..  |            |        |     |
| Comoros                  | 558                                 | 380                                       |            | yes    | yes |
| Congo, Rep. of           | 3000                                | 570                                       |            |        |     |
| Costa Rica               | 3800                                | 3810                                      |            |        |     |
| Croatia                  | 4400                                | 4620                                      |            |        |     |
| Cyprus                   | 757                                 | 12370                                     |            | yes    |     |
| Djibouti                 | 632                                 | 880                                       |            |        | yes |
| Dominica                 | 73                                  | ..  |            | yes    |     |
| Equatorial Guinea        | 457                                 | 800                                       |            |        | yes |
| Eritrea                  | 4100                                | 170                                       |            |        | yes |
| Estonia                  | 1400                                | 3580                                      |            |        |     |
| Faeroe Islands           | 45                                  | ..  |            |        |     |
| Fiji                     | 812                                 | 1820                                      |            | yes    |     |
| French Polynesia         | 235                                 | 17290                                     |            |        |     |
| Gabon                    | 1200                                | 3190                                      |            |        |     |
| Gambia, The              | 1300                                | 340                                       |            |        | yes |
| Greenland                | 56                                  | ..  |            |        |     |
| Grenada                  | 98                                  | 3770                                      |            | yes    |     |
| Guam                     | 155                                 | ..  |            | yes    |     |
| Guinea-Bissau            | 1200                                | 180                                       |            |        | yes |
| Guyana                   | 761                                 | 860                                       |            |        |     |
| Iceland                  | 281                                 | 30390                                     |            |        |     |
| Ireland                  | 3800                                | 22960                                     |            |        |     |
| Isle of Man              | 75                                  | ..  |            |        |     |
| Jamaica                  | 2600                                | 2610                                      |            | yes    |     |
| Jordan                   | 4900                                | 1710                                      |            |        |     |
| Kiribati                 | 91                                  | 950                                       |            | yes    | yes |

| Country                           | Population<br>(Thousands)<br>(2000) | GNI per capita<br>in US dollars<br>(2000) | Landlocked | Island | LDC |
|-----------------------------------|-------------------------------------|---|------------|--------|-----|
| Kuwait                            | 2000                                | 18030                                     |            |        |     |
| Kyrgyz Republic                   | 4900                                | 270                                       | yes        |        |     |
| Latvia                            | 2400                                | 2920                                      |            |        |     |
| Lebanon                           | 4300                                | 4010                                      |            |        |     |
| Lesotho                           | 2000                                | 580                                       | yes        |        | yes |
| Liberia                           | 3100                                | ..  |            |        | yes |
| Liechtenstein                     | 32                                  | ..  |            |        |     |
| Lithuania                         | 3700                                | 2930                                      |            |        |     |
| Luxembourg                        | 438                                 | 42060                                     |            |        |     |
| Macao, China                      | 438                                 | 14580                                     |            |        |     |
| Macedonia, FYR                    | 2000                                | 1820                                      | yes        |        |     |
| Maldives                          | 276                                 | 1960                                      |            | yes    | yes |
| Malta                             | 390                                 | 9120                                      |            | yes    |     |
| Marshall Islands                  | 52                                  | 1970                                      |            | yes    |     |
| Mauritania                        | 2700                                | 370                                       |            |        | yes |
| Mauritius                         | 1200                                | 3750                                      |            | yes    |     |
| Mayotte                           | 145                                 | ..  |            |        |     |
| Micronesia, Fed. Sts.             | 118                                 | 2110                                      |            | yes    |     |
| Moldova                           | 4300                                | 400                                       |            |        |     |
| Monaco                            | 32                                  | ..  |            |        |     |
| Mongolia                          | 2400                                | 390                                       | yes        |        |     |
| Namibia                           | 1800                                | 2030                                      |            |        |     |
| Netherlands Antilles              | 215                                 | ..  |            | yes    |     |
| New Caledonia                     | 213                                 | 15060                                     |            |        |     |
| New Zealand                       | 3800                                | 12990                                     |            |        |     |
| Northern Mariana Islands          | 72                                  | ..  |            | yes    |     |
| Norway                            | 4500                                | 34530                                     |            |        |     |
| Oman                              | 2400                                | ..  |            |        |     |
| Palau                             | 19                                  | ..  |            | yes    |     |
| Panama                            | 2900                                | 3260                                      |            |        |     |
| Puerto Rico                       | 3900                                | ..  |            | yes    |     |
| Qatar                             | 585                                 | ..  |            |        |     |
| Samoa                             | 170                                 | 1450                                      |            | yes    | yes |
| San Marino                        | 27                                  | ..  |            |        |     |
| Sao Tome and Principe             | 148                                 | 290                                       |            | yes    | yes |
| Seychelles                        | 81                                  | 7050                                      |            | yes    |     |
| Singapore                         | 4000                                | 24740                                     |            |        |     |
| Slovenia                          | 2000                                | 10050                                     |            |        |     |
| Solomon Islands                   | 447                                 | 620                                       |            | yes    | yes |
| St. Kitts and Nevis               | 41                                  | 6570                                      |            | yes    |     |
| St. Lucia                         | 156                                 | 4120                                      |            | yes    |     |
| St. Vincent and<br>the Grenadines | 115                                 | 2720                                      |            | yes    |     |
| Suriname                          | 417                                 | 1890                                      |            |        |     |
| Swaziland                         | 1000                                | 1390                                      | yes        |        |     |
| Togo                              | 4500                                | 290                                       |            |        | yes |
| Tonga                             | 100                                 | 1660                                      |            | yes    |     |
| Trinidad and Tobago               | 1300                                | 4930                                      |            | yes    |     |
| United Arab Emirates              | 2900                                | ..  |            |        |     |

| <b>Country</b>     | <b>Population<br/>(Thousands)<br/>(2000)</b> | <b>GNI per capita<br/>in US dollars<br/>(2000)</b> | <b>Landlocked</b> | <b>Island</b> | <b>LDC</b> |
|--------------------|--|--|-------------------|---------------|------------|
| Uruguay            | 3300   | 6000   |                   |               |            |
| Vanuatu            | 197  | 1150   |                   | yes           | yes        |
| Virgin Islands     | 121  | ..   |                   |               |            |
| West Bank and Gaza | 3000   | 1660   |                   |               |            |

*Source:* World Bank (2002), *World Development Indicators* and *World Bank Atlas*.

*Note:* .. not available

According to World Development Indicators 2002, the following countries' population recently increased to or above 5 millions: Nicaragua, Papua New Guinea, Sierra Leone, Turkmenistan.

**Table A2 - Population and per capita GNP of small states in 1998.**  
**List proposed by the Commonwealth Secretariat–World Bank Joint Task Force on Small States**  
**(April 2000 Report)**

| Country                                   | WTO  | Also LDC | Population<br>(thousands) | Per capita GNP<br>in US\$ |
|---|------|----------|---------------------------|---------------------------|
| <b>African Region</b>                     |      |          |                           |                           |
| Botswana *                                | Yes  |          | 1,562                     | 3,070                     |
| Cape Verde °                              | obs. | Yes      | 416                       | 1,200                     |
| Comoros °                                 |      | Yes      | 531                       | 370                       |
| Djibouti                                  | Yes  | Yes      | 636                       | c/                        |
| Equatorial Guinea                         |      | Yes      | 431                       | 1,110                     |
| Gabon                                     | Yes  |          | 1,180                     | 4,170                     |
| Gambia, The                               | Yes  | Yes      | 1,216                     | 340                       |
| Guinea-Bissau                             | Yes  | Yes      | 1,161                     | 160                       |
| Mauritius °                               | Yes  |          | 1,160                     | 3,730                     |
| São Tomé & Príncipe °                     | obs. | Yes      | 142                       | 270                       |
| Seychelles °                              | obs. |          | 79                        | 6,420                     |
| Swaziland *                               | Yes  |          | 989                       | 1,400                     |
| <b>East Asia and Pacific Region</b>       |      |          |                           |                           |
| Brunei                                    | Yes  |          | 315                       | a/                        |
| Cook Islands °                            |      |          | 20                        | 4,521                     |
| Fiji °                                    | Yes  |          | 790                       | 2,210                     |
| Kiribati °                                |      | Yes      | 86                        | 1,170                     |
| Marshall Islands °                        |      |          | 62                        | 1,540                     |
| Micronesia, Fed. Sts. °                   |      |          | 113                       | 1,800                     |
| Nauru °                                   |      |          | 11                        | b/                        |
| Niue °                                    |      |          | 2                         | ..                        |
| Palau °                                   |      |          | 19                        | b/                        |
| Samoa °                                   | obs. | Yes      | 169                       | 1,070                     |
| Solomon Islands °                         | Yes  | Yes      | 416                       | 760                       |
| Tonga °                                   | obs. |          | 99                        | 1,750                     |
| Tuvalu °                                  |      | Yes      | 11                        | 1,150                     |
| Vanuatu °                                 | obs. | Yes      | 183                       | 1,260                     |
| <b>Latin America and Caribbean Region</b> |      |          |                           |                           |
| Antigua and Barbuda °                     | Yes  |          | 67                        | 8,450                     |
| Bahamas, The °                            | obs. |          | 294                       | a/                        |
| Barbados °                                | Yes  |          | 266                       | b/                        |
| Belize                                    | Yes  |          | 239                       | 2,660                     |
| Dominica °                                | Yes  |          | 73                        | 3,150                     |
| Grenada °                                 | Yes  |          | 96                        | 3,250                     |
| Guyana                                    | Yes  |          | 849                       | 780                       |
| St. Kitts and Nevis °                     | Yes  |          | 41                        | 6,190                     |
| St. Lucia °                               | Yes  |          | 152                       | 3,660                     |
| St. Vincent and the<br>Grenadines °       | Yes  |          | 113                       | 2,560                     |
| Suriname                                  | Yes  |          | 412                       | 1,660                     |
| Trinidad and Tobago °                     | Yes  |          | 1,285                     | 4,520                     |

| Country              | WTO  | Also LDC | Population<br>(thousands) | Per capita GNP<br>in US\$ |
|----------------------|------|----------|---------------------------|---------------------------|
| <b>Other Regions</b> |      |          |                           |                           |
| Bahrain °            | Yes  |          | 643                       | 7,640                     |
| Bhutan *             | obs. | Yes      | 759                       | 470                       |
| Cyprus °             | Yes  |          | 753                       | 11,920                    |
| Estonia              | Yes  |          | 1,450                     | 3,360                     |
| Maldives °           | Yes  | Yes      | 263                       | 1,130                     |
| Malta °              | Yes  |          | 377                       | 10,100                    |
| Qatar                | Yes  |          | 742                       | a/                        |

*Source:* World Bank (2001) World Development Indicators and World Bank database. Classification according to 1998 GNP per capita (GDP for Cook Islands), calculated using the World Bank Atlas method:

a/ High income economy (per capita GNP \$9,631 or more).

b/ Upper middle income economy (per capita GNP \$3,031-\$9,630).

c/ Lower middle income economy (per capita GNP \$761-\$3,030).

d/ Low income economy (per capita GNP \$760 or less).

.. When not available.

\* Land-locked country.

° Island country.