

A Study of Alternative Special and Differential Arrangements for Small Economies

INTERIM REPORT

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EXECUTIVE SUMMARY

1. Small States (SS) face particular problems in integrating into the world economy. These stem from diseconomies of scale and scope but are often exacerbated by isolation and high transport costs. However, their efforts to obtain Special and Differential Treatment (SDT), analogous to but not necessarily identical to that received by the Least Developed Countries (LDCs), have been resisted by both developed and developing countries.

2. Within the WTO Agreements the concept of smallness crops up in regard to several issues. The scale of budgetary contributions to the organisation is based on a country's share in total WTO members' trade with a threshold setting the minimum share of the total budget (currently 0.015 per cent of overall WTO trade). The Subsidies Agreement limits the period of grace given to developing countries for eliminating subsidies when exports of the product in question reach 3.25 per cent of world trade for two consecutive years. The Agreement on Antidumping exempts small producers from antidumping action while the Agreement on Clothing and Textiles also makes special provision for small producers. For some years the Commonwealth Secretariat and the World Bank have wrestled with the definition of a Small Vulnerable Economy.

3. This report considers an alternative which sidesteps the conceptually difficult and politically fraught process of defining a small state. It is based on the very smallness of the SS and the implication that granting them certain SDT may not lead to significant distortions in the patterns of world trade (and thus the interests of other producers) or tariff revenue losses to importing countries, but would still be of major help to the SS in their participation in world trade. It looks at the possibilities of SDT based on de minimis threshold shares in world trade, both in terms of preferential market access - the presumption in the paper is tariff and quota-free access to developed country markets - and in terms of derogations from WTO disciplines. The de minimis thresholds could be set at different levels of trade for different purposes - overall, sectoral or tariff line by tariff line at the 4 or 6 digit level.

4. The obvious starting point is a country's share in overall world trade. The appropriate share below which a country would qualify for SDT would depend on the nature of that SDT and, in particular, the characteristics of the countries included and excluded. For example, there may be few objections to granting tariff preferences to a small but middle income developing country with minimal merchandise exports but there might be serious objections to giving that country derogations from certain WTO disciplines on, say, services. Nevertheless it is of interest that the cut-off point of 0.02 per cent of world trade would exclude only four countries on the Commonwealth Secretariat-World Bank's list of 42 small states - Trinidad, Botswana, Mauritius and Gabon - and include only four countries not on that list - Lesotho, Nicaragua, Panama and the Lebanon.

5. This raises the question of whether the addition of a number of other 'objective' trade-related variables might not refine the criteria and lead to a broadly acceptable taxonomy of Small States. Both cluster analysis and discriminant analysis were used with, as independent variables, the share in world trade, the volatility of export earnings, the concentration of exports (two measures) and the share of trade (exports plus imports) in GDP. On the basis of these variables, the discriminant analysis showed that the SS constituted a clearly identifiable group and was able to split off the Commonwealth-World Bank list from all other countries (including industrialised

and countries in transition) with only one exception, Trinidad. The cluster analysis on the other hand consistently grouped the SS with the LDCs since they were not distinguishable on the basis of four out of the five of the variables. Unlike the cluster analysis which presumes an equal weighting for all variables, the discriminant analysis was able to home in on the fifth variable - trade as a share of GDP – for which the SS and the LDC scores differed substantially. More work needs to be done but, in the end, one may doubt whether such statistical manipulations, while useful as background analysis, would ever be acceptable as themselves determining which countries qualified for a particular form of SDT.

6. The report goes on to examine the countries with the highest share of exports covered by de minimis criteria at different levels of trade from 2-digit to 6-digit. These typically include a large number of SS, LDCs and several Asian countries in transition. Inevitably some of the covered imports already enter the EU or the US tariff-free through the GSP (or, in the case of the EU, ACP trading arrangements), so that extending tariff-free access to other countries will mean increased competition for those currently with preferential access. However the existing GSP schemes are concessional on the part of the importing countries, while those under successive Lomé Conventions will be renegotiated within the next few years. The application of the de minimis principle, particularly if that were done through a WTO agreement, would not threaten the future of preferential access for existing beneficiaries but would extend it to others.

7. Another approach is to base the de minimis rule on shares in sectoral trade. The report looks particularly at the agricultural sector where SDT in the form of preferential market access or exoneration from WTO disciplines, for example on the use of subsidies, could be granted on the basis of the share of world agricultural trade or trade in a particular agricultural sector. It also shows that, if tariff rate quotas were given by the EU to all suppliers providing less than 3 per cent of EU imports at the 8 digit tariff line level, only 1.5 per cent of EU imports of agricultural goods would be affected.

8. The sectoral level might also be most appropriate for the granting of certain SDT regarding contingent protection, in particular freedom from the threat of countervailing or antidumping actions for those suppliers with below a certain share in world trade in a 2 digit product group.

9. The use of a de minimis rule as the criterion for preferential market access on a line by line basis - either at the 4 or 6 digit level - would further limit the opportunities for trade diversion from existing suppliers. A 3 per cent of world trade rule at the 4 digit level would mean that an average of 74 per cent of SS exports would be covered which equates to 64 per cent of world imports from these countries. (The 'world' in this exercise is the total of the EU and the US). Some three-quarters of the trade covered by the rule consists of only 19 tariff lines. When those with zero MFN tariff rates are excluded, effectively only eight tariff lines remain, six of which are in clothing and footwear. The report also examines those countries that are excluded by the de minimis rule and are likely to be most affected by increased competition. The tariff loss for the EU from applying the 3 per cent rule at the 4 digit level is estimated at some 4 per cent of total tariff revenues on average in 1998/99.

10. The de minimis principle could also play a role in offsetting trade diversion from small third-party suppliers as a result of the widening or deepening of existing preferential trading arrangements such as the EU's EBA or the extension of the US GSP scheme for LDCs or the arrangements envisaged by the US African Growth and Opportunity Act.

Introduction

1. The difficulties faced by the small states (SS) in fully integrating into the world trading system are well documented. They include the problems created by transport costs together with the other costs associated with isolation and/or insularity and the absence of economies of scale and of scope associated with a small domestic market.¹ However suggestions that the SS should receive a certain Special and Differential Treatment (SDT), analogous to, though not necessarily identical to, that enjoyed by the Least Developed Countries (LDCs), has not been broadly accepted, despite the obvious fact that, almost by definition, the SS are of little importance in world trade. *Ex ante* one would not anticipate a major distortion of trading patterns, for example through trade diversion, by giving producers, whose overall contribution to world trade overall is measured in hundredths of one percentage point, special treatment as regards market access or as regards compliance with WTO disciplines. Nor would the loss in tariff revenue appear, *ex ante*, to be large. This paper looks at the possibilities of SDT based on de minimis thresholds, both in terms of preferential market access and WTO disciplines, though clearly more can be said of a quantitative nature as regards the first of these. As regards the former it will look at the threats of trade diversion to the LDCs and other developing countries, and losses in tariff revenue that would be implied by extending preferential treatment to the SS.

Background

2. The WTO at present formally recognises the group of Least Developed Countries (LDCs) defined by the UN Economic and Social Committee. This means that those small states which fall within the LDC list are eligible for Special and Differential Treatment (SDT). Of the UN Committee on Sustainable Development list of 44 Small States, only 7 countries are on the LDC list (see Appendix 1). The Commonwealth Secretariat-World Bank Joint Task Force list of Small Vulnerable States (SVSs) also included Jamaica, Lesotho, Namibia and Papua New Guinea, of which only the second is an LDC. The non-LDC small states generally receive the much more limited standard SDT than that available to the LDCs, whether in the form of preferential tariff regimes or derogations from WTO disciplines. One of the reasons for the restricted nature of the SDT for 'other' developing countries may be partly that access to this group is through self-selection.

3. Even were the SVSs to seek limited recognition – perhaps only to reduce the cost of WTO membership or the disputes settlement procedures – there is a clear need for an unambiguous definition of a small vulnerable state.^{*2} For market access, however, a different, arguably less contentious, approach is possible. Both the standard and the special Generalised System of Preferences (GSP) schemes remain an important component - perhaps still the most important component despite the erosion of tariff preferences through successive trade rounds - of the SDT accorded to the developing countries. Another approach to the special GSP issue appears possible which would obviate the need for contentious lists of deserving beneficiaries. This would be through the extension of de minimis provisions, already well-established in the WTO

* For example, the presence on the UN list of a number of developed or, at least, high-income small states - Bahrain, Cyprus, Estonia and Malta - may mitigate against the chances of the group as a whole being recognised as meriting some SDT.

trade agreements, to preferential market access so that countries with exports below a certain share of world trade, presumably determined on the basis of an average over a past period, would be allowed tariff-free access to all markets and derogation from most or all non-tariff restrictions such as quotas. The basic reasoning is that preferential access

- would be of help to small states who experience major difficulties in participating in the trading system. In particular it would be of benefit in terms of overcoming the disadvantage of the diseconomies of scale;
- below a certain percentage level of world trade, depending on the number of beneficiaries involved, there may be little or no threat to the interests of other producers. Once the trade flow rose above the threshold and gave cause for concern about trade diversion, the preference would automatically be rescinded;
- and, similarly depending on the number of beneficiaries, it might imply little loss in tariff revenue for the importing countries.

4. But SDT based on de minimis criteria need not be limited to market access issues. Already the LDCs receive SDT as regards a number of WTO disciplines. This paper will examine the extent that the SS might also receive special treatment as regards WTO rules on the basis of the size of their shares in trade measured in the aggregate or with respect to particular categories of product.

5. The de minimis rules would cover all developing country (non-OECD) exporters, but it is likely that the small states would benefit disproportionately because of the small size of their export flows, even typically of their principle export products. Whether such an approach is practicable on the basis of aggregate trade flows - in which case share in world trade might become the basis for a definition of small states - or trade flows at some narrower customs classification can only be determined through an examination of the data.

The UN and the Commonwealth Secretariat/World Bank initiative

6. In April 1994 the Global Conference on the Sustainable Development of Small Island Developing States was convened in Barbados. The resulting Programme of Action was later endorsed by the General Assembly by Resolution 49/122 of 1994. Among other initiatives this called for the development of a *vulnerability index*.³ The UN Commission on Sustainable Development has a list of 41 small island developing states (SIDS), including four that are not self-governing, which is used by the Department of Economic and Social Affairs in its monitoring progress in the implementation of the Barbados Programme of Action.

7. Whether the goal is to define a new group of small states for which a particular range of SDT instruments are warranted, or whether the small states were to demand the same SDT as that enjoyed by the LDCs, the definition of small states is both conceptually difficult and politically fraught. Self-election is unlikely to be an approach acceptable as the basis for a new range of SDT instruments or inclusion within the SDT currently available to the LDCs. The Commonwealth Secretariat initially adopted a purely demographic criterion with a population cut-off of one million, later increased to 1.5 million and then stretched to include some countries with considerably larger populations but other characteristics similar to small countries.⁴ However, a definition based solely or largely on non-economic criteria would be difficult to

defend as appropriate for SDT in a WTO context, particularly if small but high income countries such as Liechtenstein and Singapore were to qualify.

8. Disagreements about SDT for small states in various multilateral fora helped to trigger a study by a group jointly established by the Commonwealth Secretariat and the World Bank. Small states were defined as countries with a population of 1.5 million or less. In addition, three somewhat larger states - Jamaica, Lesotho and Papua New Guinea – were included in the small state category on the grounds that they share many of the physical and economic characteristics of small states. An Index of Output Volatility was used as the basis for establishing a composite vulnerability index. First, using a sample of small states and other developing countries, regression analysis was used to explain output volatility in terms of specified economic and environmental causes of vulnerability. The variables which were found significant were a country's openness, as measured by export dependence (the average exports of goods and non-factor services as a percentage of GDP); its lack of diversification, as measured by the UNCTAD diversification index; and its susceptibility to natural disasters, as measured by the proportion of the population affected by such events as estimated over a relatively long period of time. Second, the model so developed was used to predict individual vulnerability scores for all countries for which data are available. These vulnerability scores form the Composite Vulnerability Index.

9. Using a threshold share of world trade as a criterion for SDT, say 0.03 per cent, which used to set the minimal level of WTO budgetary contributions, is another approach. The form of the SDT being proposed would be relevant to the choice of the actual threshold. If preferential market access were to be included, the threshold would have to take into account

- the cost in terms of trade diversion to other producers
- loss of tariff revenue to the importing countries
- inclusivity, that is the coverage of SS who are experiencing the negative consequences of their size on their ability to integrate into the world trading system
- the coverage of other states who have already reached a relatively high degree of development.

10. If derogations from WTO disciplines were included in SDT, the nature of such derogations might imply other criteria. For example, granting a derogation on the rules on export subsidies would be broadly resisted if the benefiting countries were to include some who have already achieved high levels of export penetration relative to their GDP. The trade share criterion might be supplemented by other economic variables. This approach is examined statistically in the next section.

The EU, Lomé and Cotonou

11. Under the Lomé Convention the term 'island state' was used and the 'specific provisions and measures' created by the 'natural and geographic difficulties' faced by island states are recognized in Article 335. Under the Convention small states were often treated at par with the LDCs though the term 'special treatment' is reserved exclusively for LDCs, reflecting GATT/WTO practice.

12. In the Partnership Agreement signed in Cotonou in June 2000, ‘landlocked ACP states’ and ‘island ACP states’ are separately identified and the agreement foresees specific provisions and measures for both categories, rather than the ‘special treatment’ envisioned for the LDCs. The landlocked and the island ACP states are listed in Annex VI to the Agreement. Apart from the exclusion of non-ACP countries there are some differences in the coverage compared with that of the Commonwealth Secretariat/World Bank list of small states (see Appendix A).

13. Some of the Cotonou exclusions may be of limited concern since the countries are included among the LDCs, but there are still countries – including Belize, Gabon, Guyana, the Maldives, Namibia and Surinam – which were classified as vulnerable on grounds of their smallness in the Commonwealth Secretariat-World Bank (CS-WB) study but receive no special recognition by the EU – although all of these but the Maldives are ACP states. Among the countries recognized as island states by the EU but excluded from the CS-WB list are the Dominican Republic, Haiti, Madagascar and Tuvalu. Most of the landlocked ACP states included by the EU were excluded from the CS-WB list: Burkina Faso, Burundi, the Central African Republic, Chad, Ethiopia, Malawi, Mali, Niger, Rwanda, Swaziland, Uganda, Zambia and Zimbabwe. Clearly the CS-WB study paid less attention to issues of land-locked countries. The emphasis in that study was on the economic disadvantages of smallness, which clearly excludes most on the EU list of landlocked ACP states.

The GATT and WTO

14. Under the GATT the notion that developing countries should enjoy special and differential treatment (SDT) was an outcome of the Tokyo Round and became enshrined in the Enabling Clause of the GATT in 1979. The scope of SDT became both more extensive and more complex in the Uruguay Round. Appendix B summarises the use of SDT in the UR Agreements.

15. In only one of the Agreements, that on Subsidies, is either the term ‘developing country’ or ‘least developed country’ defined. In that case the least developed are either included on the list prepared by the UN or within a group of 20 additional developing countries with per capita incomes of under \$1000 per annum. Otherwise developing countries are self-elected in the WTO, while the least developed are as defined by the UN Economic and Social Committee (ECOSOC). It could be argued that the failure to unambiguously define criteria for membership of the developing country group undermines confidence in the principle of SDT since countries such as Singapore, Israel and South Korea have availed themselves of that status.

16. The WTO does recognise the issue of smallness. For example in the Agreement on Antidumping de minimis provisions specifically exempt small producers from antidumping action. The Agreement on Clothing and Textiles also makes special provision for small producers. In terms of fees for WTO membership smallness is also recognized, as already mentioned, since a new member must pay a minimum fee based on 0.015 per cent of WTO member trade (which represents a considerable burden for certain Pacific island states).*

17. The Subsidies Agreement implicitly defines a small share of world trade at the HS sector level. It limits the period of grace given to developing countries (excluding the least developed

* The minimum equivalent for UN membership is 0.003 per cent of GDP.

and those with per capita incomes of less than \$1000) for eliminating subsidies when exports of that product reach 3.25 per cent of world trade for two consecutive years. When this threshold is reached the relevant export subsidies must be phased out over two years. This does not apply to agricultural sector in which most SS exports are concentrated.⁵

18. There is no technical reason why SDT - including tariff preferences - could not be enhanced for other groups of economies, whether defined in terms of size, as islands or as land-locked or in terms of measures of vulnerability. In a proposal tabled at the ongoing negotiations in agriculture, a group of SIDS - comprising Dominica, Mauritius, St. Kitts and Nevis, St. Vincent and the Grenadines and Trinidad and Tobago - argue that SIDS-specific characteristics, including smallness and remoteness, result in diseconomies of scale and scope and high input and transport costs, and these have constrained their effective participation in international agricultural trade.⁶ *Inter alia*, they propose that the SIDS be provided with security of access for one or two commodities which they are able to produce on a commercial basis, that non-reciprocal preferential tariff rates be improved, that the 'substantially all trade' provision of GATT Article XXIV on customs unions should not apply in the case of SIDS, that SIDS be allocated increases in minimum access tariff rate quotas and that SIDS be exempted from further reduction commitments on support and protection.

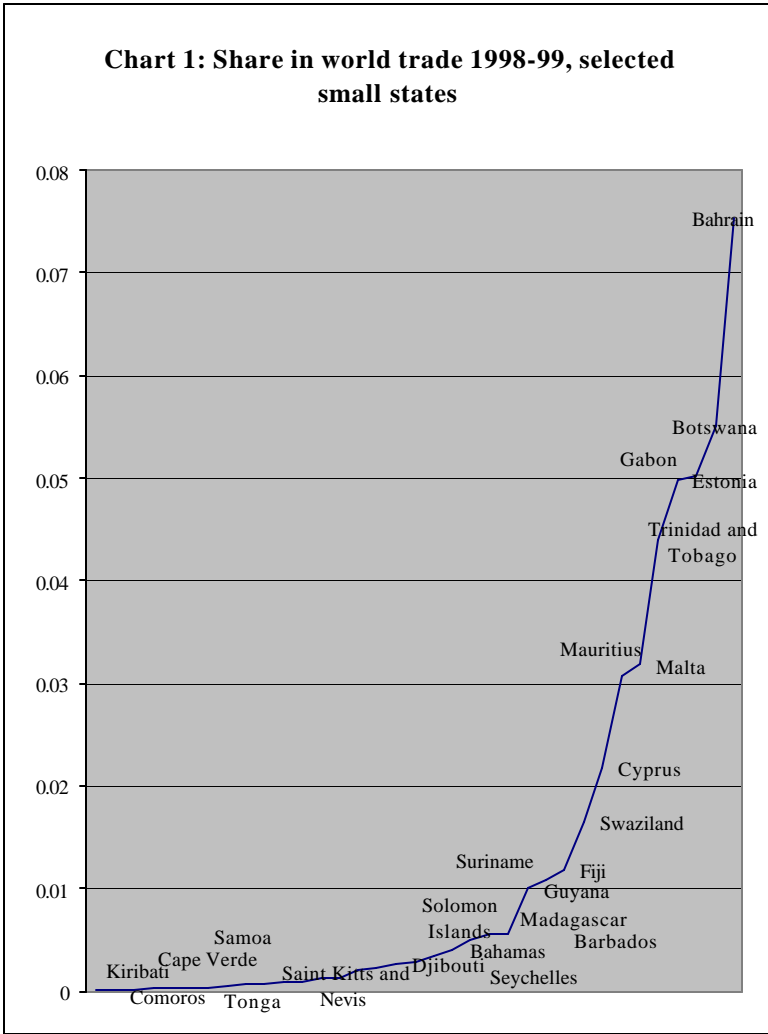
19. However, efforts by small states to have the WTO recognise them as a distinct group with specific SDT have foundered on resistance by other WTO members. Other developing countries, in particular the LDCs, could see recognition of the small states as a threat to their own SDT through the erosion of tariff preferences, through the increased difficulties of obtaining special treatment in the future when the beneficiaries are more numerous and through the dilution of the limited technical assistance budgets. The US has also been strongly opposed. Developed countries have tended to resist the proliferation of special interest groups on the grounds that preferential access can give rise to surges of imports and threats to their own producers. Also, among the developed countries, there has been resistance to the use of SDT on the grounds that it can lead the beneficiaries to avoid the hard economic choices necessary to assure the competitiveness of their exports and their own development. There has also been considerable debate about the value of preferential market access.

The use of ‘objective’ variables

20. Arguments about the particular economic disadvantages of small states have been dismissed as special pleading and counter-examples, such as Singapore, Estonia and Liechtenstein, have been suggested. Secondly small states may have low shares in world trade – but in particular goods these shares can be relatively high, for example the Bahamas and Jamaica in rum and Mauritius, Fiji and Guyana in cane sugar. Thus a blanket argument that trade diversion away from other developing or developed countries would not result from granting the equivalent trade preferences as those given the LDCs may be hard to sustain.⁷ However the proposal that tariff preferences be given to any developing country on the basis of its low level of exports, relative to world trade or the importing country’s overall imports, uncomplicated by arguments about vulnerability or the low level of development of the exporter, is more difficult to resist. These tariff preferences could extend to all merchandise exports of the country in question or be confined to those exports in which the share (in world trade or in the importing country’s market) was below a particular threshold.⁸

21. This section examines the possibility of using ‘objective’ variables, i.e. those based solely on patterns of merchandise trade, as criteria for SDT. First consider the use of the share in world merchandise trade as a measure of a country’s trading significance: a very small share in world trade implies that granting that country SDT is likely to have a minimal impact on the importing country’s domestic producers and a minimal trade diversion effect on other exporters. As Chart 1 (and the more complete data given in Appendix C) show there is some overlap in the share of world trade between all five sets of countries and notably between small states (using the Commonwealth Secretariat-World Bank list but excluding Jamaica, Lesotho, Namibia and Papua New Guinea), the LDCs (the ECOSOC list excluding those classified as small states) and other developing countries. It is true that, if one were to take the same threshold as was used in calculations of membership dues to the WTO, that is 0.03 per cent of world trade, most of the small island states in the Caribbean and the Commonwealth would be included.* But Trinidad and Tobago, Botswana, Mauritius and Gabon would be excluded (see Chart 1). Among non-LDC developing countries, Lesotho, Nicaragua, Panama, the Lebanon, the Dominican Republic, Paraguay, Bolivia, El Salvador, Jamaica, Namibia, Honduras, the Congo (Kinshasa) and Cyprus would be included. If the criterion were changed to .02 per cent of world trade, only the first five these non-LDC developing countries would qualify and Cyprus would not. But the same small states would fail to qualify.

* The WTO minimum level of membership dues was based on 0.03 per cent of trade of WTO members. It is now based on 0.015 per cent. Our data refer to the UN estimates of world trade – including non-members of the WTO.



22. This raises the question of whether the addition of a number of other variables might refine the grouping of SS, and perhaps also the LDCs, 'other' developing countries and so on. The obvious statistical technique is cluster analysis. This technique is in keeping with the spirit of the study: the data should determine which countries should be grouped together, not prior considerations about vulnerability, underdevelopment or other sources of relative weakness.

23. The variables selected on which to examine the presence of clusters of like countries were constrained by data limitations. Eventually, in addition to the country's share in world trade, variables were chosen to measure export earnings volatility, the concentration of exports and the share of trade in GDP. Other variables could be suggested but, even among those listed above, there are major gaps especially among the small countries and notably among the new island states in the Pacific (see Appendix C).

Of the 184 countries in the total sample, a full set of data was available for only 95 countries. (Clearly if cluster analysis were to be used to actually group countries for determining SDT it would be necessary to fill in the missing data or select new variables; the purpose here is simply suggestive.)

24. Some interesting results did emerge. There was a tendency for the outliers, e.g. China for its size and Malaysia for its share of trade in GDP, to break off and form separate clusters of one or two states. There was no clear separation of the rich countries or the countries in transition. However, the SS and the LDCs consistently ended up in the same cluster. This is not surprising if the mean values of the variables used are compared (see Table 1). The averages for the share in world trade and for export volatility are the same for the SS and the LDCs. In terms of export concentration the SS show more concentration than the LDCs on the basis of the index but less on the basis of the number of products measure. Only in terms of trade as a share of GDP are they at opposite ends of the spectrum. More detailed results are given in Appendix C.

25. Clearly more work is needed in the selection of variables, use of alternative clustering techniques and filling in missing data points.* This project did not stretch to a thorough examination of the use of cluster analysis, either as an academic exercise to explore how sets of countries show common patterns in terms of different variables, let alone as a practical exercise to justify SDT treatment for particular groups. The cluster analysis was only intended as indicating similarities and dissimilarities among groups of countries on the basis of a limited number of trade variables. However the analysis was pursued through a different approach, that of discriminant analysis. This starts from the opposite perspective. The same five independent variables are combined into weighted linear functions which best separate (or technically maximise the distance between) the SS, LDCs, 'other' developing countries, countries in transition and high income countries. Again detailed results are given in Appendix C.

* For example alternative measures of distance between clusters could be tried. Only squared Euclidean distance was used here.

Table 1: Selected export variables^a

	share of world trade, 1996	expt. volatility 1970-98	expt. concentration index, 1998	expt. concentration, no. of pdts., 1998	trade share in GDP, %
small states					
average	0.013	0.46	0.46	64	125.2
Minimum	0.000	0.10	0.09	6	42.3
Maximum	0.075	0.97	0.82	204	238.0
LDCs (excl. small states)					
average	0.013	0.44	0.34	49	54.3
Minimum	0.000	0.10	0.27	20	20.8
Maximum	0.076	1.70	0.45	78	134.9
Other developing countries					
average	0.369	0.37	0.31	162	72.0
Minimum	0.004	0.06	0.07	29	16.3
Maximum	3.173	0.85	0.79	232	183.0
countries in transition					
average	0.189	0.21	0.16	182	88.3
minimum	0.003	0.06	0.06	75	30.1
maximum	1.543	0.61	0.31	228	143.9
high income countries (excl. small states)					
average	2.707	0.17	0.17	216	73.7
minimum	0.035	0.02	0.05	86	19.4
maximum	12.239	0.48	0.66	236	284.6

Source : Authors calculations

Note: a; for definitions of the variables see Appendix C

26. In the first analysis 12 out of 13 small states were correctly classified, all the LDCs and 32 out of 36 other developing countries. The only misclassified small state was Trinidad and Tobago which was classified as 'other developing'. Of the other developing countries, Nicaragua and Jamaica were misclassified as small states and Malaysia and China as developed countries. Except for the case of China which is clearly *sui generis*, these errors are unsurprising. Only 11 out of 17 countries in transition and 13 out of 23 high income countries were correctly identified. The former set of errors is also understandable, given that countries in transition are as much politically as economically defined. As regards the high income countries, Iceland was classified as a small state, Greece, Kuwait, Portugal, Finland and Ireland as developing countries, and New Zealand, Israel, Norway and Denmark as countries in transition.

27. The results of both the cluster and the discriminant analysis are interesting when considered together. The discriminant analysis established that the SS were a separately identifiable group - with only one exception - on the basis of the five trade-related variables, *viz* share of world trade, volatility of merchandise export earnings, concentration of exports (two measures) and share of trade in GDP. The cluster analysis, on the other hand, strongly suggested that in terms of the same variables, the LDCs and the SS have a great deal in common. Indeed the

only variable in which they differ substantially is the share of trade in GDP – which did most of the work in distinguishing the two groups in the discriminant analysis. More work in this area is needed, though it is doubtful that such statistical manipulations will themselves yield a taxonomy acceptable for determining which countries qualify for any particular SDT. But further work might reinforce the conclusions of this section. In terms of objective variables, unrelated to controversial concepts, which are sometimes suspect of being self-serving, such as ‘vulnerability’ or ‘underdevelopment’ or, even, ‘disadvantage’, the SS are similar to the LDCs – they cluster together – though, when the variables are given different weights, they clearly constitute a separate and well-defined group.

28. However for practical considerations of SDT based on de minimis principle, the share in world trade may, for the time, being be the most politically down-to-earth solution. To recap a maximum share of 0.02 per cent of world trade (i.e. trade of WTO members) would, on the basis of 1996 data, exclude Trinidad, Botswana and Gabon among the SS. It would include Lesotho, Nicaragua, Panama and the Lebanon among ‘other’ developing countries. It might be argued that, given that the criterion for admission into this group is essentially the smallness of the country as regards its possible impact on world trade, a few additional members is of little importance in economic terms.

29. The most important element of SDT as regards WTO disciplines that might be extended on the basis of the de minimis share of world trade is likely to be security from contingent protection, including antidumping measures and countervailing duties. The aggressive pursuit of anti-subsidy violations, to include for example Outward Processing Zones, now appears a priority among certain developed countries. Article 27 of the 1995 GATT allows for time extensions for LDCs and 20 other developing countries for their compliance with the Agreement on Subsidies. These extensions – together with any further derogations agreed in the implementation negotiations currently taking place in Geneva or at any forthcoming round of multilateral trade negotiations - could be extended to countries meeting the de minimis criterion. After all an SS government is limited in the extent to which it can subsidise an export, and, in any event, these exports will be minor in terms of world trade in the good in question. A safeguard clause to protect domestic suppliers of the goods in question against import surges, both defined in terms of the change in share of domestic consumption satisfied by the SS producer, and clearly related to the derogation might be necessary. Similar derogations on de minimis grounds from anti-dumping are also feasible though, perhaps, more difficult to defend on the grounds the smallness of the country in which a firm is based does not preclude that firm from engaging in dumping, though it must make it less likely given that the home market will provide limited opportunities for cross-subsidisation. The third of the contingent protection devices sanctioned by the GATT is safeguards action. This is unlikely to succeed against a country that met the de minimis overall trade share criterion, since such a country is unlikely present a systemic threat to the domestic industry. If it did it would be difficult to argue that it was inappropriate on the basis of that criterion.

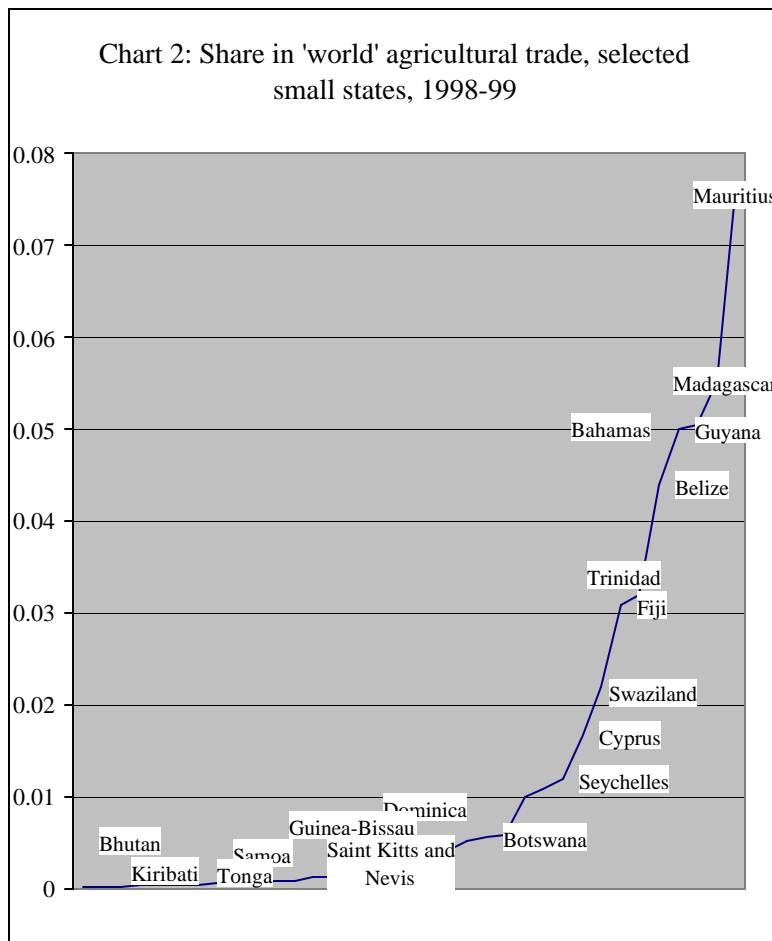
30. There are, no doubt, other areas where the de minimis principle might be appropriate to justify a measure of SDT as regards WTO disciplines. In the next round there are likely to be a number of new areas where special treatment of LDCs or other groups of developing countries is granted, and in some or all of these there is likely to be a role for de minimis principle. This report does not purport to present a catalogue of all the possible applications of the principle.

31. Finally there is the question of whether a de minimis rule based on the overall share in world trade could have any role in market access issues, in particular whether it might be used to qualify a country for 'special' or LDC or some other improved treatment under a country's GSP. GSP schemes are not WTO-negotiated but are 'concessions' on the part of each donor i.e. importing country and subject to the unilaterally-determined rules of that country. That however does not preclude the use of an overall world trade share de minimis criterion in those rules. Another approach would be through de minimis rules at a low level of product disaggregation. This is examined in the next section but one.

Analysis by sector

32. The de minimis principle is applicable at any level for which the appropriate statistics are available. The most telling of the arguments against the de minimis principle - that a country might have a small share in overall world trade but could still be a threat to domestic producers in particular sectors - can be countered by applying the principle at a disaggregated level. For purposes of SDT outside of market access, there is a case for examining trade variables at a sectoral level. For example a share in apparel trade of below a certain threshold could mean an accelerated timetable for the removal of MFA quotas. A share in world agricultural trade below a certain threshold could qualify for exemption from all quantitative restrictions on market access. Such an approach merits further study. This section will concentrate on the agricultural sector.

33. The Uruguay Round agreements relating to agricultural trade includes two derogations for subsets of the developing countries. There is already a special regime for developing countries as regards domestic support measures and other rules on agricultural trade (see Appendix B). These could be deepened for those countries with lower than a threshold share in world agricultural trade. In addition the LDCs have been given three additional years for the implementation of the Agreement on Sanitary and Phytosanitary Measures (SPS) given to LDCs. The question arises whether the same SDT might be given to countries whose share in world trade in all agricultural products - or in particular sub-groups - is below a certain threshold.



34. Several small countries have made proposals in the current agricultural negotiations

where the de minimis principle could be relevant. For example Swaziland (G/AG/NG/W/95) has proposed, *inter alia*, that small developing countries be guaranteed against any disadvantage from new SDT granted to other developing countries.⁹ This suggestion could largely be met through SDT based on de minimis rules. The adverse trade diversion effects from, say, the EU's new EBA or other improvements in access provided to LDC producers, could be largely prevented by granting the excluded countries tariff and quota-free access under carefully selected de minimis rules.

35. Agricultural trade is more affected by protection in the developed countries than is trade in other primary products or manufactures – other than apparel. Protection in agriculture is complicated by the widespread use of seasonal restrictions, specific duties and TRQs (tariff rate quotas). There is also residual protection in the form of reference prices, minimum entry price and variable levies. If the de minimis principle were adopted to reduce or eliminate tariff protection for marginal exporters, protection through other barriers to market access should be eradicated lest the same degree of protection is sustained through other instruments.

36. Consider first the use of share in world trade in agriculture as the criterion for the application of the de minimis principle to determine the beneficiaries of SDT in any of these areas. Here the imports of the EU plus those of the US constitute 'world' trade. Chart 2 and the detailed data in Appendix D show that in order to cover all the SS the threshold would have to be relatively high at 0.08 per cent. However such a threshold would mean that 58 non-SS developing countries, of which a minority are LDCs, would also qualify. If the threshold were set at 0.4 per cent, five SS would be excluded (see Chart 2) and 49 non-SS countries would be included. Given that in the case where 0.08 per cent was selected, only some 1.7 per cent of total world trade in agriculture would be covered and if the threshold were 0.04 per cent only a total of 0.9 per cent of world trade would be covered, it might be concluded that the appropriate threshold does indeed lie within that range. An alternative approach is the application of the de minimis principle at the section (2-digit) level.

37. In the current WTO negotiations on agriculture a number of proposals have been made on which the findings of this report have some bearing. A number of countries have proposed greater tariff reductions and the elimination of quantitative restrictions on products of interest to the developing countries, while others have emphasised liberalisation of trade in tropical products. SDT based on the de minimis principle would not substitute for, but could complement, a broader liberalisation of trade through deeper than average tariff cuts in products of special concern to the developing countries. The same de minimis rules might apply to SDT in the form of derogations from WTO rules in agriculture, such as on subsidies or on SPS regulations, to the extent that it is technically feasible to have different rules applicable in, say, the meat sector from those in the cereals sector.

38. The share of trade covered by alternative de minimis thresholds for different groups of countries are shown in Table E1. Here 'world' trade consists of EU plus US imports. It was found necessary to impose, as a secondary condition for inclusion in the analysis though not necessarily in the scheme were it to be implemented, a minimum percentage of the exporting country's total exports to the 'world' in order to exclude the huge number of very small trade flows, which might in many cases have arisen from the return of an import order, re-exports or errors in customs classification. This was set at 0.1 per cent.

39. Thus if the one per cent threshold were applied to agricultural 2-digit sections, nearly 12 per cent of SS total exports - including non-agricultural goods - would be covered. Whether the de minimis rule was used for SDT for preferential market access or for relief from WTO disciplines, it would be significant. The principal SS beneficiaries of this rule are shown in Table E2.

40. The results also have some bearing on the vexed issue of TRQs. Some developed countries, including the United States, are pressing for the gradual elimination of TRQs in favour of a tariff only regime. Others (Turkey, India) argue for their eventual abolition while, in the meantime, for expanded quotas and reduced in-quota tariff rates. Abolishing TRQs would result in more liberal trade only if above quota protection was significantly eased. And unless this were the case, major exporting countries have no incentive to agree to their abolition.

41. It would be undesirable if any imports from countries benefiting from tariff preferences on the basis of the de minimis principle were included in unchanged TRQs. That would mean that any expansion of trade resulting from the new preferences (trade creation) would be entirely or largely offset by reductions in imports from other suppliers (trade diversion). Imports from the new beneficiary countries should either be totally separate from existing TRQs or the TRQs should be increased by more than past imports from these countries to ensure that some expansion in their exports is not precluded. From the viewpoint of economic efficiency, allocating TRQs to particular countries is “second best” to a global allocation. Also, on balance, imports under the de minimis principle would be best excluded from TRQs and the issue of de minimis imports kept separate from the TRQ debate. However it could be argued that the SIDS proposal (G/AG/NG/W/97) to allocate certain increases in TRQs with zero in-quota rates to small island developing countries would cause minimal distortion since the amount of trade involved would be small. It is also true that TRQs have been largely “captured” by large exporters.

42. Thus one approach would be to provide country-specific TRQs with zero tariffs to countries from whom imports in a base year were less than some minimum share of total imports, with the TRQs equal to those imports (in volume terms) but with an added fixed percentage, say 20 per cent, to allow for expansion on the basis of the tariff preference. Table E3 shows the coverage by a 3 per cent de minimis rule of small states exports to the EU at the 8-digit level. If TRQs were set to cover all this trade, only 1.5 per cent of EU imports of agricultural goods would be affected, plus any increase in imports that might be allowed for and encouraged by the establishment of these preferences. (Some of the tariff lines included in Table E3 will have zero MFN tariffs in any event: but, because of the difficulties in linking the trade and the tariff data electronically that needs to be examined as a separate exercise).

43. In the case of security from contingent protection, a de minimis rule at the sectoral level – for might be easier to negotiate than one based on the overall share of world trade.

Line by line analysis

44. If the use of variables relating to merchandise trade in the aggregate does not yield an acceptable set of criteria for determining which countries should be eligible for trade preferences, an alternative might be to give trade preferences line by line according to the exporting country’s weight in world imports. To some extent this idea has already been put into practice. The EU’s

current general GSP scheme (as opposed to the specific schemes for the least developed and the Andean countries) provides a preference for a given product mainly depending on a given product's "sensitivity", that is capacity to compete with the manufacturers of that product in the Community. But there are also a number of provisions that limit the preferential treatment for individual countries. The so-called "*graduation mechanism*" leads to the preferences being phased out for specific sectors of countries on the basis of a development index (based on income per capita and the level of exports of manufactured products) and a specialisation index (based on the ratio between the country's share of total EU imports and that country's share of EU imports in the sector in question). However if the imports from a given country in a specific sector exceeded 25 per cent of all imports in the EU from all beneficiary countries in that sector during the year 1992, exports from that country in that sector do not benefit from GSP treatment whatever its level of development. This provision is commonly known as the "*lion's share clause*". Likewise the graduation mechanism does not apply to countries whose exports to the EU in a given sector did not exceed 2 per cent of all beneficiary countries' exports to the EU in that sector. This exception is known as the "*minimal share clause*".

45. The LDCs have benefited from a special GSP scheme – whether members of the ACP group of countries or not – since 1998. Since March 2001 this has been enhanced with the so-called EBA (everything but arms) initiative, which, when the most important LDC exports to the EU - sugar, rice and bananas – are fully incorporated, means that all LDC exports to the EU will be admitted tariff-free, except in the event of an appeal to the safeguard clause. A "super GSP", which means tariff-free entry for all but sensitive agricultural products, has also been provided for the Andean countries plus Panama who have experienced negative effects in their campaign against illegal drugs.

46. In examining who would benefit from special tariff preferences – say completely tariff-free access similar to that ultimately available to LDCs under the EU's EBA rather than the existing standard GSP access - based solely on the smallness of their exports relative to total 'world' imports of that product group, world imports from developing countries were analysed firstly at the four-digit HS level. The OECD countries and non-sovereign states were excluded from the analysis, thus preserving the principle of preferential treatment for developing countries, while the loss in tariff revenues is significantly reduced. For the purposes of this preliminary study, the 'world' is again defined as the combination of the US and the EU.

47. A number of alternative threshold levels of a country's share in 'world' imports, one per cent, two per cent and three per cent, were tried. Only trade flows equal to at least one per cent of the country's total exports to the 'world' were included. The effects of applying de minimis criteria were examined, firstly, at the 4-digit HS level. The data set used was the import data for the European Union plus that for the US, averaging 1998 and 1999.¹⁰ The most generous 3 per cent rule implies a coverage of 5 per cent of all imports (including from OECD countries). The loss of tariff revenue would be considerably less than this because tariff-free products, either through zero MFN or GSP rates, are also included here. The costs in tariff revenue lost are discussed below.

48. The summary results are presented in Table E4 with country details in Table E5. With the 3 per cent threshold, on average the small states find that 74 per cent of their exports (unweighted average across countries) are covered which equates to 64 per cent of world imports from these

countries. Over 90 per cent of the exports of sixteen of these countries satisfy the de minimis criterion, while for two of these countries – Guyana and the Seychelles - less than 25 per cent of their exports qualify. Other countries where the share of covered exports is low include the Bahamas, the Comoros, Surinam and Vanuatu. Among the LDCs on average 62 per cent of exports are covered, 15 out of the 33 have more than 75 per cent of their exports covered but 9, Bangladesh, Chad, Malawi, Mali, Mauritania, Niger and DR Congo, have less than 25 per cent of their exports covered. In the cases of Niger and Chad less than five per cent are covered.

49. On the other hand, among ‘other developing’ countries, three - Cambodia, Lesotho and Nicaragua - have over 90 per cent of their exports covered, and another five – Congo, Cuba, North Korea, Oman, Syria and the West Bank/Gaza - have over 75 per cent covered. Of the countries in transition, Armenia, Azerbaijan, Kyrgyzstan, Tajikistan and Turkmenistan have over 90 per cent of their exports covered. Among the higher income group only Brunei has over 75 per cent of its exports covered but that consists of tariff-free petroleum.

50. Whether these countries receiving such benefits from a de minimis rule is considered appropriate, an unfortunate anomaly or simply ‘the luck of the draw’ is largely a matter of judgment. Of course, on many of the lines involved the MFN or at least the standard GSP tariff may already be zero. Such lines dominate the exports of Armenia (diamonds), Azerbaijan, Congo, Kazakhstan, Turkmenistan and Syria (petroleum and petroleum products), and Kyrgyzstan (gold). But the principal export of Cambodia, Lesotho, North Korea and Oman is in every case apparel, while Cuba exports a mixture of ‘sensitive’ products (shrimps, fruit juices and sugar) as does the West Bank/Gaza with its leather travel goods.*

51. The main reason for the low coverage of the exports of certain countries by the de minimis thresholds is that in those countries exports are dominated by one or two products and for those products they supply over the threshold percentage of world imports. In order to examine in greater detail the implications of implementing a de minimis rule, all the four-digit product groups covered by the 3 per cent threshold for at least one exporting country were broken down to six-digit HS level. Table E6 shows the lines not covered by the 3 per cent rule which account for the low (i.e. less than 40 per cent) overall coverage of the exports of eight small states.

52. It can be seen that for a number of the lines in question - copra, rum and vanilla - the relevant MFN tariff in both jurisdictions is zero. The Bahamas’ rum exports are, in any event, subjected to excise tax – for which there are no concessions for developing countries or LDCs. In other cases – though there are no examples in the table - the relevant GSP tariff will be zero even though the MFN tariff is significant. Here the loss associated with missing out on the de minimis criterion may be less serious. However the GSP schemes are not in general highly utilised, whether by reason of demanding, often unrealistic, rules of origin, ignorance of the availability of the preferential margin or, simply, that the opportunity costs of meeting the bureaucratic

* It would clearly have been desirable to exclude goods with an MFN tariff of zero throughout the ‘world’. However there is a conceptual problem in that since tariffs are set at the 8-digit level, if not higher, and international standardisation in HS codes does not reach beyond the 6-digit level. Secondly there is the perennial data processing problem of marrying the trade and tariff data electronically.

requirements for participation in the relevant scheme may be such as to discourage exporters from pursuing the opportunity.*

53. For the cane sugar exporters listed in Table E6, Guyana, Swaziland and Fiji, the main issue is the withdrawal of, or serious reduction in, the guaranteed price on their quotas of sugar exported to the EU which has been negotiated into successive Lomé Conventions. The commodity protocols are currently the subject of concern to the countries concerned. In the case of tuna from the Seychelles, the significance of the exclusion would depend on the treatment of tuna exports to the EU under whatever trade regime was in place for that particular ACP country. For non-LDCs, the Cotonou Agreement envisages either the establishment of reciprocal preferential trade arrangements between non-LDC ACP countries, either singly or in regional groupings, or standard GSP treatment. In the latter case the Seychelles would not qualify for better than standard GSP access on the 3 per cent de minimis rule for their tuna exports. These reservations simply make the obvious point that the gains to individual countries associated with market access preferences based on the de minimis principle will depend on the extent to which each country's export products qualify, and for those that do not, the details of any changes in the trade regimes in force that might accompany the introduction of the de minimis principle.

54. In order to examine the benefits that would accrue to the countries benefiting from the de minimis rules, the 4-digit product groups which were covered by the 3 per cent threshold (and constituting at least one per cent of world imports from that exporting country) were broken down into their 6 or 8-digit constituents with a view to examining more closely the actual products and the rates of tariff preference implied. Because there is no internationally standardised 8-digit code at which tariffs are set, Table E7 shows the tariff rates applied by the EU on the 18 4-digit products with the highest coverage under the 3 per cent rule (applied to 'world' imports).

55. These 18 lines account for some 75 per cent of EU imports covered by the de minimis 3 per cent rule (applied at the 'world' level). For many of these goods the MFN tariff is zero and for a large number of 6-digit lines the greater part are imported at zero MFN rates, the non-zero rates being reserved for a very small proportion, generally of further processed goods such as decaffeinated coffee, or wood veneers. For all the lines listed in Table E7 the EU LDC and ACP tariff rates are zero.

56. Table E8 shows the largest beneficiaries of the 3 per cent rule, in terms of the share of their world exports covered by the rule. The small states and the LDCs are well represented among the major beneficiaries. There is a scattering of gains for Eastern European and CIS member states. In many cases the SS and LDCs already benefit from tariff-free entry into the EU (as ACP members or LDCs) and US markets (as LDCs or under the Caribbean Basin Initiative).

* Facilitating the utilisation of the special GSP would clearly be of considerable value to existing beneficiary countries (LDCs, with in the EU's case, ACPs) and to any new beneficiaries under the de minimis scheme. The most important deterrent to using the schemes is probably the rules of origin. The small volumes of trade involved suggest that these could be easily liberalised if not abolished. The anti-surge clause in the EU EBA scheme, and similar provisions elsewhere, could be used to prevent the large scale 're-sourcing' of goods from other producers to benefit from tariff-free access. Secondly much could be done to reduce information gaps and bureaucratic hurdles. Appendix F gives some data on the utilisation of GSP schemes in the EU, Japan and the US over a recent period.

Under the de minimis rule they would now face competition from new beneficiaries. For example Tajikistan would now longer face the GSP 3 per cent tariff on its exports of aluminium oxide to the EU. Cuba and Yemen would be exempted from the 4.2 per cent EU GSP tariff on frozen shrimps. Table E8 also emphasises the major role that would be played by so-called 'sensitive' products, in particular apparel and footwear, among the qualifying trade flows. However the net effect would be to redistribute tariff-free entry into the EU from the major beneficiaries of EBA and ACP status, including Bangladesh and Mauritius, to countries that have hitherto had to contend with the limited preference margin on apparel in the standard EU GSP, including Guatemala, Mongolia and Sri Lanka. In the case of USD imports, garments from Bangladesh, currently excluded from the US GSP scheme, would benefit at the expense of Mexican and Caribbean producers. The effects of the implementation of the de minimis principle on different exporters using some simple partial equilibrium trade model would be relatively straightforward but is clearly beyond the scope of this study.

57. The opposite side of the coin is presented in Table E9 – those countries which are most likely to suffer from increased competition from the beneficiaries of the de minimis rule. These are listed in terms of their export dependence on each of the same tariff lines. In many cases these countries already have tariff-free access for these products to the principal industrialised countries either through GSP - though as has been indicated the utilisation of GSP is generally low - or, to the EU market, through ACP preferences. However they will still experience increased competition even if the new beneficiaries simply receive the same access terms as they already enjoy. In general, however, these are large suppliers and the increased competition from the small suppliers covered by the de minimis rule may be relatively unimportant. Again a partial equilibrium model would permit a rough estimate of the impact.

58. Bangladesh is the only LDC on the list. However while it would suffer increased competition in T-shirts on the US market – it already has zero-tariff GSP access to the EU market – under the de minimis rule it would gain improved access to the US markets for men's and women's suits (see Table E8). For a large country with diversified exports like Bangladesh the de minimis principle would likely bring pluses and minuses; it is the small countries with a limited range of export goods that will benefit the most.

59. Finally Table E10 looks at the cost to the importing country in terms of lost tariff revenue. The EU was taken as an example. The impact of the 3 per cent de minimis rule on customs duty receipts from the eight principal tariff lines were estimated applying the zero rate or the appropriate GSP rate for all qualifying countries (i.e. all countries except Myanmar and North Korea). The overall loss was calculated as Ecu 340 million on average in 1998/99. This compares with actual customs receipts by the EU of an average Ecu 11.911 billion over the two years. The cost of implementing the de minimis scheme for these eight products would then be 2.74 per cent of total customs revenues. These products cover 76 per cent of the total covered imports of the EU but, at the same time, they include clothing and footwear which have much higher than average tariffs. On the other hand some of the imports would have entered at the MFN rate owing to rules of origin and other obstacles to using the GSP. However the overall cost in tariff revenue would likely have been well under 4 per cent of total tariff revenues.

Conclusions

60. This study has covered a lot of ground, albeit without going into some of the issues raised in as much detail as one would have liked. The task was to undertake a preliminary investigation of the possible role of the de minimis principle in the granting of SDT as regards both market access and WTO disciplines to the small states. Those states' own proposals for SDT have not been well received by other developing countries or by the developed world. However the argument for applying the de minimis principle is self evident: granting SDT to countries with a very small share of world trade - and largely because of that have difficulties in integrating into the world trading system - could be of major help to them but will have little impact on world trade flows or the overall impact of WTO disciplines. In the general area of market access, preferences - which could cover exemption from all quantitative import restrictions as well as tariff preferences - could be based on the application of the de minimis principle at alternative levels of trade disaggregation. The argument that trade will be minimally distorted carries most weight when the finest level of disaggregation of 'world' trade data, i.e. HS 6-digit codes, are used.

61. Simulating the effects of applying de minimis rules was both technically more complex and intellectually more provocative than had been expected. In general the conclusions as regards the feasibility of the de minimis approach are

- generally positive. The de minimis criteria at different levels of trade focus well on the SS. Even taking a maximum overall share in merchandise trade of 0.02 will include all but 6 of the World Bank list of 42 small vulnerable states (and among those six Estonia and Bahrain feature) while only 4 countries not on the list are included.
- Inevitably the results are not as tidy as one might have wished. If the de minimis threshold is set high enough to cover a predetermined group of SS, inevitably other countries will slip in under the threshold. This is true whether the threshold is set as a share of total world merchandise trade or as the share of trade in an 6-digit HS tariff line - given that world trade cannot be defined at any finer level of disaggregation. The question is how much does that matter - if the impact of other trade flows or of derogations as regards WTO disciplines is going to be minimal.
- Discriminant functions based on share in world trade, volatility of export earnings, concentration of exports and share of trade in GDP separate out the small states even more precisely. Though the exercise was weakened by missing data problems, the discriminant analysis did show that the SS were a clearly identifiable group of countries, while the cluster analysis showed that, apart from their much higher dependence on trade, they were in other objective respects very akin to the LDCs.
- As regards derogations from WTO disciplines, simple de minimis rules based on the overall share in world trade could play a major role in SDT regarding contingent protection, in particular the use of subsidies. In the agricultural area, where subsidies are also an important issue and the LDCs and other states with a per capita income of less than US\$ 1,000 have a longer period of adjustment to the WTO rules, de minimis criteria based on share of world trade in a

particular section, for example meat or fish or dairy goods or vegetable oils, might be appropriate.

- The sectoral level might also be most appropriate for the granting of certain SDT regarding contingent protection, in particular freedom from the threat of countervailing or antidumping actions for those suppliers with below a certain share in world trade in a 2 digit product group.

- As for TRQs, which are being much discussed in the current agricultural negotiations in Geneva, a system based on the de minimis principle, applied by an individual importing jurisdiction - the EU is used as an example - is feasible, though there are objections on grounds of economic efficiency. If TRQs were set to cover all EU imports of for countries supplying less than 3 per cent of all 8-digit tariff lines, only 1.5 per cent of EU imports of agricultural goods would be affected, plus any increase in imports that might be allowed for and encouraged by the establishment of these preferences.

- De minimis rules could also tackle the concerns of the developing countries about the diversion of trade associated with the new initiatives of the developed countries (including the EU, the US, Japan and Canada) in expanding their LDC GSP schemes. Trade diversion will result from newly formed or deepened free trade areas, such as is envisaged by the Cotonou Agreement and in the Free Trade Area of the Americas. One way of protecting small producers, who may be the most vulnerable to trade diversion, is through complementing these initiatives with preference schemes based on the de minimis principle. On the other hand preference schemes based on the de minimis principle would mean that existing preferential suppliers will find new competitors. Given, however, the size of the market and the smallness of the new preference holders, it is not clear how significant this is likely to be. This is an area for further work.

62. Inevitably the results call for more work, particularly in extending the 'world' to include, at least, the Quad countries (the EU, US, Canada and Japan). Secondly the simulations should be done initially at the HS 6 digit level. Thirdly the market access results should in some way be weighted by the size of the relevant tariffs and some measure of the cost to existing preference beneficiaries should be included. These two last points could be covered by building into the calculations some simple partial equilibrium model.

Appendix A: List of Small States recognised by the Commonwealth Secretariat/World Bank Task Force^a

	Population, 000s	A landlocked or island ACP state	On ECOSOC list of LDCs
Antigua and Barbuda	65	yes	no
Bahamas	268	yes	no
Bahrain	535	no	no
Barbados	260	yes	no
Belize	204	no	no
Bhutan	759	yes	yes
Botswana	1,401	yes	no
Cape Verde	370	yes	yes
Comoros	607	yes	yes
Cook Islands	20	yes	no
Cyprus	726	no	no
Djibouti	557	no	yes
Dominica	71	yes	no
Equatorial Guinea	379	no	yes
Estonia	1,450	no	no
Fiji	758	yes	no
Gabon	1,248	no	no
Gambia	1,042	no	yes
Grenada	92	yes	no
Guinea-Bissau	1,161	no	yes
Guyana	816	no	no
Kiribati	78	yes	yes
Maldives	236	yes	yes
Malta	361	no	no
Marshall Islands	62	yes	no
Mauritius	1,091	yes	no
Micronesia, Fed. States of	113	yes	no
Nauru	11	yes	no
Niue	2	yes	no
Palau	19	yes	no
Qatar	742	no	no
Samoa	167	yes	yes
Sao Tome and Principe	127	yes	yes
Seychelles	72	yes	no
Solomon Islands	354	yes	yes
St Kitts and Nevis	42	yes	no
St Lucia	139	yes	no
St Vincent & Grenadines	11	yes	no
Suriname	414	no	no
Swaziland	809	yes	no
Tonga	93	yes	no
Trinidad and Tobago	1,278	yes	no
Tuvalu	11	yes	yes
Vanuatu	161	yes	yes

a: Certain newly-independent countries have been added to the original list. These are the Cook Islands, the Marshall Islands, the Federation of Micronesia, Nauru, Niue, Palau, Tuvalu and Vanuatu.

b: as provided for in the Cotonou Partnership Agreement

**Appendix B: Summary of Special and Differential Treatment of developing countries and
LDCs in the Uruguay Round Agreements**

Agreements relevant to improved access	Relevant articles	Existing S&D treatment
Agreement on Agriculture	Art. 6: Domestic support commitments Art. 9: export subsidy commitments Art. 15: S&D treatment Annex 5: Special treatment to avoid tariffication	10% de minimis level for support to be included in AMS by DCs (5% for other countries) DCs free of commitments to reduce subsidies on marketing and transport costs Reduction commitments over ten years (5 for other countries) Exemption for LDCs Lower minimum access opportunities for DCs
Agreement on Sanitary and Phyto-sanitary measures	Art. 14	LDCs may delay implementation for five years; other DCs for two years
Agreement on Textiles and Clothing	Art. 6: Transitional safeguards	LDCs will be accorded significantly more favourable treatment
TBT Agreement	Arts. 11 and 12: Technical assistance and time-limited exceptions on request	TA effectively 'best endeavours'
TRIMS agreement	Art. 4	Temporary deviations for developing countries
Antidumping agreement	Art. 15	In case where exporting country is a developing country, 'constructive remedies' should be explored
Customs valuation	Art. 20	Developing countries not party to the 1979 Agreement on Implementation of Art. VII of GATT may delay application for 5 years, and of certain articles for a further 3 years

Agreements relevant to improved access	Relevant articles	Existing S&D treatment
Agreement on Subsidies	Art. 27	Various time extensions for compliance and prohibition on subsidies contingent on export performance does not apply LDCs plus 20 other developing countries. Other developing have an eight year extension. However once the share in world trade of a product at the section heading HS level reaches 2.25 per cent of world trade for two successive years, the relevant subsidies must be discontinued within two years.
Agreement on Safeguards	Art. 9	Vol. of imports less than 3% and vol of imports from all developing countries less than 9% of total imports of importing country. DC applying safeguard may extend period of application by two years beyond normal 8 year maximum.
GATS	Art. IV	Developed countries shall facilitate access of DC service suppliers to pertinent information and account should be taken of difficulties of LDCs in accepting negotiated commitments.
Agreement on TRIPS	Art. 66	Time extensions for LDCs on application and TA from developed countries
Understanding on Rules and Procedures governing the Settlement of Disputes	Art. 24	Due restraint when LDCs involved and 'good offices' of Secretary-General or chairman of DSB.

Notes: DCs: developing countries
LDCs: least developed countries

Appendix C: Cluster and discriminant analysis

1. The following variables were used:

- share in overall world trade, average 1996-98¹¹
- a measure of export earnings volatility: the coefficient of variation of merchandise export earnings about their trend between 1970 and 1998 (calculated by the author on the basis of World Bank data)
- the Hirschmann index of the concentration of exports, (1997)^{12*}
- the number of products exported at the 3-digit SITC, revision 2, level where the value of exports is greater than \$US 100,000 or represents at least 0.3 per cent of the country's total exports, and¹³
- the share of trade (imports plus exports of goods and services) in GDP, (1997).¹⁴

2. The cluster analysis method chosen used squared Euclidean distance to measure dissimilarity between unweighted pair-group centroids. The *centroid* of a cluster is the average point in the multidimensional space defined by the dimensions. In a sense, it is the *center of gravity* for the respective cluster. In this method, the distance between two clusters is determined as the difference between centroids.^{†15} There are a large number of other clustering methodologies, but time precluded a full investigation, and, in any event, it is unlikely that the results would have been radically different.

3. Various analyses were carried out. For example, where the OECD countries are excluded and a breakdown into five clusters was specified with a view to comparing the results with the groups, SS, LDC, 'other' developing, transition and high income[‡], most of the small states, LDCs, Central American countries and the Asian CIS member states, together with Albania, Syria and Algeria, were put in one cluster. The second cluster was made up of most other developing countries and most European countries in transition. The third group consisted of just Malta and Bahrain – small but diverse exporters. The fourth and fifth clusters were made up of Malaysia (abnormally high share of trade in GDP) and China (large and very diverse in exports) respectively. When the number of clusters is specified at four, Malaysia and China are grouped together and when three clusters are specified, the small states, LDCs and smaller other developing countries make up one cluster, the larger other developing countries a second and Malaysia and China the third. Even at the two cluster level, Malaysia and China are put together in one cluster and the rest of the developing world in another.

4. The results differed little whether the OECD countries were included and/or the countries in transition excluded. Essentially with no prespecified weighting of the variables, the analysis starts with the outliers breaking off into separate clusters, either individually or as pairs. There were clear indications that the smaller and poorer developing countries are 'different' from the other developing and richer transition countries, but the differences were less - in terms of squared Euclidean distance between cluster centroids – than between either group and Malta and Bahrain together or Malaysia or China separately. With a lot

* The export concentration index takes values between 0 (minimum concentration) and 1 (maximum concentration). It is calculated using the formula, $E_x = \frac{1}{n} \sum [x_i/X]^2$, where x_i/X is the share of product i in total exports, X , the summation is carried out over all i , from 1 to n , and n equals, 239, the number of products at the 3-digit SITC, revision 2, level.

† Sokal and Sneath (1967). use the abbreviation *UPGMC* to refer to this method as *unweighted pair-group method using the centroid average*. Euclidean distance is given by the formula: $\text{distance}(x,y) = \sqrt{\sum_i (x_i - y_i)^2}$, where x_i and y_i are the values of variable i in clusters x and y respectively.

‡ Here the high income group consists in five countries/territories, Brunei, Hong Kong, Israel, Kuwait and Singapore.

more ‘data mining’ along these lines but with additional variables, alternative clustering techniques* and, probably, fewer missing data points, a more convincing taxonomy would certainly result. But whether, without the use of ‘prejudgmental’ variables like real *per capita* income or output volatility, one could end up with a grouping with a claim to serve as the basis for SDT is doubtful.

5. Discriminant analysis starts from the opposite perspective. The same five independent variables are combined into $(n-1)$ weighted linear functions that maximise the distance between the n groups. Again there are a number of different techniques, using different combinations of distance measures (in our case squared Euclidean distance), measures of group centrality (in our case centroids) and techniques for agglomeration or division (in our case agglomeration). The value of each function for each observation is called its discriminant score. Each set of scores is used to predict the group to which the observation (country) belongs. A statistic, Wilk’s Lambda, measures the proportion of the variance between the groups that the set of functions do *not* explain. This statistic follows an F-distribution and only when an independent variable contributes significantly - 5 per cent was used here – to the explanation of the between-group variance is it included.

6. The first of the analyses divided the developing world into five groups

- small states (the World Bank list),
- LDCs (the ECOSOC list less any small states),
- other developing countries i.e. claiming that status at the WTO except for
- countries in transition, the former communist Central European and East European countries, and those included among the
- high income countries, as classified by the World Bank.

The list of countries in each group is given in Appendix C.

7. The data were analysed in three different ways: firstly, all the five groups were included, secondly, the countries in transition group was eliminated with those countries being split into high income and developing countries using the World Bank classification, and finally, both the countries in transition and the high income countries were excluded, leaving just the three sets of developing countries.

8. In the first analysis four variables contributed to the discriminant functions at the 5 per cent significance level – the number of products, the volatility of export earnings, trade as a percentage of GDP and the percentage of world trade. The Hirschmann concentration index reduced Wilk’s Lambda from 0.172 to 0.149 (raising the explained variance from 83 per cent to 85 per cent) but that was not statistically significant, presumably because a large part of its explanatory power was shared by the number of products variable. Some technical results are given in Appendix D.

Table C2: Discriminant analysis; summary results with 5 groups

	Predicted group membership					
	Small states	LDCs	other developing	transition	high income	total
Small states	11	0	1	0	0	12
LDCs	0	7	0	0	0	7
other developing	2	0	32	0	2	36
Transition	0	1	4	11	1	17
high income	1	0	5	4	13	23

* Including monotonic transformations of the existing variables. The technique used here is not invariant to such transformations as standardisation.

Table C3: Discriminant analysis; summary results with 4 groups

	Predicted group membership				
	Small states	LDCs	other developing	high income	total
Small states	11	0	1	0	12
LDCs	0	6	1	0	7
other developing	2	1	34	7	44
high income	0	0	3	29	32

9. In the second exercise, the transition countries were excluded as a group and were reallocated into other developing or high income according to whether they were applicants for EU membership or not. * Again Trinidad was misallocated as other developing. Among LDCs Tanzania was put in the other developing group. Jamaica and Nicaragua were again classed as small states, but Colombia, Indonesia, Thailand and India as high income. Albania was classed as an LDC, Romania as other developing, Russia as developed and Iceland and Kuwait again as small states.

Table C4: Discriminant analysis; summary results with 3 groups

	Predicted group membership			
	Small states	LDCs	other developing	total
Small states	11	0	2	14
LDCs	0	6	1	7
other developing	2	0	34	36

10. Finally when the developed and countries in transition are excluded from the analysis, Tanzania, Trinidad and Estonia (still included as a small state) are classified as other developing and Nicaragua and Jamaica as small states.

11. These results are encouraging though more work could be clearly done towards an “objective” identification of trade disadvantage through the inclusion of other variables in cluster or, particularly, discriminant analysis. Whether such statistical exercises could ever yield a taxonomy accepted for SDT must remain doubtful, even if it is based on only trade variables. As the definitions of groups of countries become more complex and more difficult to interpret - as inevitably discriminant functions are - they will encounter increased resistance from countries who are excluded or simply believe in a simple and comprehensive international trade regime.

* This is clearly an arbitrary and arguable criterion. But the aim of this section of the paper is essentially experimental. Clearly there is scope for a lot more analysis in this area.

Table C1: Country data used in cluster and discriminant analysis^a

	share of world trade	export earnings volatility	export concentration	number of products	% share of trade in GDP	share 'world' trade in agric.
	1996/98	1980-1999	1996/98	1996/98	1996	1998-99
Small States						
Sao Tome and Principe	0.0002	0.58	n.a.	n.a.	117.6	0.0082
Comoros	0.0002	0.39	n.a.	n.a.	64.5	0.0048
Kiribati	0.0002	0.68	n.a.	n.a.	n.a.	0.0013
Cape Verde	0.0002	0.59	n.a.	n.a.	87.9	0.0017
Samoa	0.0002	0.43	n.a.	n.a.	n.a.	0.0067
Tonga	0.0003	0.31	n.a.	n.a.	n.a.	0.0032
Gambia	0.0003	0.41	n.a.	n.a.	143.0	0.0131
Grenada	0.0004	0.22	0.37	15	110.0	0.0132
Guinea-Bissau	0.0006	0.75	n.a.	n.a.	42.3	0.0069
Saint Kitts and Nevis	0.0006	0.38	0.63	11	122.7	0.0101
Saint Vincent/Grenadines	0.0009	0.55	0.43	25	116.5	0.0309
Dominica	0.0009	0.67	0.55	18	109.7	0.0252
Antigua and Barbuda	0.0012	0.51	n.a.	n.a.	n.a.	0.0016
Saint Lucia	0.0012	0.63	0.62	17	137.6	0.0504
Bhutan	0.0019	0.10	n.a.	n.a.	77.7	0.0001
Seychelles	0.0023	0.56	0.82	6	136.2	0.0926
Djibouti	0.0028	0.79	n.a.	n.a.	99.4	0.0015
Belize	0.0029	0.32	0.42	18	94.3	0.1567
Solomon Islands	0.0034	0.72	n.a.	n.a.	n.a.	0.0305
Bahamas	0.0040	0.36	n.a.	n.a.	n.a.	0.2371
Barbados	0.0050	0.50	0.19	69	n.a.	0.0362
Equatorial Guinea	0.0057	0.97	n.a.	n.a.	238.0	0.0076
Guyana	0.0100	0.27	n.a.	n.a.	206.7	0.1846
Suriname	0.0108	0.17	0.58	52	n.a.	0.0575
Fiji	0.0118	0.47	n.a.	n.a.	118.4	0.1444
Swaziland	0.0166	0.38	n.a.	n.a.	174.0	0.1265
Cyprus	0.0218	0.33	0.16	103	n.a.	0.1051
Mauritius	0.0308	0.28	0.32	93	129.2	0.3666
Malta	0.0319	0.18	0.51	101	186.7	0.0102
Trinidad and Tobago	0.0439	0.45	0.32	128	94.8	0.1458
Estonia	0.0498	n.a.	0.09	204	145.7	0.0617
Gabon	0.0503	0.38	0.81	65	96.1	0.0135
Botswana	0.0551	0.52	n.a.	n.a.	86.6	0.0453
Bahrain	0.0754	0.27	0.54	98	193.6	0.0018
average	0.0128	0.46	0.46	64	125.2	0.0642
minimum	0.0002	0.10	0.09	6	42.3	0.0001
maximum	0.0754	0.97	0.82	204	238.0	0.3666

	share of world trade	export earnings volatility	export concentration	number of products	% share of trade in GDP	share 'world' trade in agric.
LDCs (excluding small state LDCs)						
Sierra Leone	0.0005	0.33	n.a.	n.a.	49.5	0.0125
Burundi	0.0012	0.44	n.a.	n.a.	20.8	0.0448
Rwanda	0.0013	0.47	n.a.	n.a.	32.0	0.0299
Chad	0.0020	0.52	n.a.	n.a.	49.0	0.0111
Haiti	0.0021	0.42	0.27	32	35.4	0.0304
Mozambique	0.0032	0.35	0.40	62	62.3	0.0807
Somalia	0.0034	0.42	n.a.	n.a.	n.a.	0.0049
Niger	0.0050	0.10	n.a.	n.a.	40.4	0.0008
Central African Republic	0.0051	0.36	0.44	20	38.7	0.0123
Burkina Faso	0.0053	1.08	n.a.	n.a.	41.7	0.0098
Madagascar	0.0056	0.18	0.27	65	46.3	0.2432
Togo	0.0058	0.38	n.a.	n.a.	70.6	0.0336
Lao People's Dem. Rep.	0.0060	0.46	n.a.	n.a.	n.a.	0.0130
Dem. Rep. of the Congo	0.0067	0.45	n.a.	n.a.	50.0	0.0257
Benin	0.0075	0.68	n.a.	n.a.	58.9	0.0233
Nepal	0.0076	0.36	0.45	36	58.0	0.0016
Liberia	0.0093	0.27	n.a.	n.a.	n.a.	0.0036
Mauritania	0.0096	0.25	n.a.	n.a.	84.2	0.0779
Mali	0.0096	0.24	n.a.	n.a.	53.9	0.0054
Ethiopia	0.0099	0.31	n.a.	n.a.	40.5	0.2087
Malawi	0.0099	0.46	n.a.	n.a.	56.9	0.2385
Uganda	0.0103	0.34	n.a.	n.a.	35.0	0.0143
Sudan	0.0118	0.25	0.33	20	n.a.	0.1036
Cambodia	0.0130	1.70	n.a.	n.a.	68.8	0.0037
United Republic of Tanzania	0.0132	0.25	0.27	76	57.7	0.1817
Guinea	0.0159	0.38	n.a.	n.a.	38.1	0.0346
Zambia	0.0178	0.22	n.a.	n.a.	73.7	0.0441
Senegal	0.0194	0.44	n.a.	n.a.	71.5	0.2977
Yemen	0.0451	0.60	n.a.	n.a.	67.6	0.0099
Bangladesh	0.0689	0.83	0.30	78	30.0	0.1957
Angola	0.0757	0.21	n.a.	n.a.	134.9	0.0296
average	0.0134	0.44	0.34	49	54.3	0.0000
minimum	0.0005	0.10	0.27	20	20.8	0.0125
maximum	0.0757	1.70	0.45	78	134.9	0.0448

	share of world trade	export earnings volatility	export concentration	number of products	% share of trade in GDP
Other developing countries					
Lesotho	0.0036	0.41	n.a.	n.a.	142.0
Nicaragua	0.0120	0.34	0.26	83	84.4
Panama	0.0130	0.44	0.32	82	n.a.
Lebanon	0.0146	0.23	n.a.	n.a.	69.3
Dominican Republic	0.0153	0.30	0.79	100	96.3
Paraguay	0.0195	0.55	0.40	96	46.5
Bolivia	0.0209	0.21	0.21	85	49.0
El Salvador	0.0223	0.31	0.30	145	54.7
Jamaica	0.0247	0.19	0.53	79	127.1
Namibia	0.0251	0.06	n.a.	n.a.	116.2
Honduras	0.0264	0.47	0.39	118	88.3
Congo	0.0276	0.57	n.a.	n.a.	163.2
Ghana	0.0330	0.42	n.a.	n.a.	59.5
Jordan	0.0332	0.68	n.a.	n.a.	135.2
Cameroon	0.0365	0.52	0.37	91	44.7
Kenya	0.0371	0.33	0.26	155	69.8
Papua New Guinea	0.0402	0.50	n.a.	n.a.	109.0
Guatemala	0.0407	0.20	0.25	162	40.4
Zimbabwe	0.0447	0.44	0.27	182	72.7
Uruguay	0.0489	0.35	0.18	160	42.4
Egypt	0.0645	0.19	0.28	159	46.1
Syrian Arab Republic	0.0671	0.55	0.57	109	73.7
Côte d'Ivoire	0.0810	0.20	n.a.	n.a.	78.9
Costa Rica	0.0828	0.85	0.22	166	91.9
Sri Lanka	0.0835	0.15	n.a.	n.a.	78.9
Ecuador	0.0876	0.21	0.36	172	53.9
Tunisia	0.1031	0.68	0.21	180	85.3
Peru	0.1104	0.28	0.23	181	28.3
Oman	0.1250	0.68	0.74	147	n.a.
Morocco	0.1299	0.69	0.18	152	55.5
Viet Nam	0.1559	0.47	n.a.	n.a.	100.0
Pakistan	0.1628	0.22	0.23	143	37.5
Libyan Arab Jamahiriya	0.1706	0.41	0.77	29	n.a.
Colombia	0.2027	0.12	0.26	199	34.0
Algeria	0.2346	0.31	0.56	86	54.8
Chile	0.2895	0.25	0.30	207	58.4
Nigeria	0.2915	0.30	n.a.	n.a.	75.6
Iran, Islamic Rep. of	0.3728	0.26	n.a.	n.a.	n.a.
Venezuela	0.3814	0.28	0.57	165	57.9

Turkey	0.4622	0.49	0.10	223	49.0
Argentina	0.4622	0.40	0.14	221	18.1
Philippines	0.4714	0.45	0.37	204	89.8
South Africa	0.5313	0.21	0.16	227	n.a.
India	0.6140	0.13	0.12	222	27.1
Brazil	0.9308	0.33	0.09	222	16.3
Indonesia	0.9382	0.17	0.16	215	52.3
Thailand	1.0293	0.24	0.09	220	84.4
Saudi Arabia	1.0735	0.35	0.74	167	73.4
Malaysia	1.4121	0.45	0.19	226	183.0
Mexico	1.9198	0.45	0.12	229	62.8
Korea, Republic of	2.4463	0.65	0.15	221	68.7
China	3.1730	0.34	0.07	232	39.9
average	0.3692	0.37	0.31	162	72.0
minimum	0.0036	0.06	0.07	29	16.3
maximum	3.1730	0.85	0.79	232	183.0

Countries in transition

Albania	0.0034	0.45	0.20	75	54.8
Georgia	0.0039	0.33	n.a.	n.a.	30.1
Armenia	0.0046	0.21	0.24	93	78.8
Kyrgyzstan	0.0101	0.13	0.17	137	87.3
Azerbaijan	0.0121	0.20	n.a.	n.a.	62.3
Moldova, Republic of	0.0173	0.11	0.31	117	131.2
Former Yug. Rep. of Macedonia	0.0231	0.07	0.13	150	78.1
Latvia	0.0300	0.11	0.16	191	109.9
Lithuania	0.0669	0.16	0.12	212	116.5
Croatia	0.0811	0.07	0.12	207	95.5
Uzbekistan	0.0852	0.61	n.a.	n.a.	n.a.
Bulgaria	0.0901	0.06	0.09	211	122.7
Kazakhstan	0.1088	0.20	0.30	181	71.3
Belarus	0.1224	0.41	n.a.	n.a.	100.4
Romania	0.1521	0.40	0.12	203	65.1
Slovenia	0.1577	0.06	0.11	211	109.5
Slovakia	0.1701	0.18	0.11	210	128.1
Ukraine	0.2524	0.18	n.a.	n.a.	93.9
Hungary	0.3204	0.18	0.10	215	78.8
Czech Republic	0.4375	0.17	0.06	228	143.9
Poland	0.4765	0.19	0.07	227	52.5
Russian Federation	1.5427	0.10	0.25	227	44.2
average	0.1895	0.21	0.16	182	88.3
minimum	0.0034	0.06	0.06	75	30.1
maximum	1.5427	0.61	0.31	228	143.9

	share of world trade	export earnings volatility	export concentration	number of products	% share of trade in GDP
High income countries (exc. small states)^a					
Iceland	0.0348	0.13	0.38	86	72.1
Greece	0.1658	0.14	0.10	216	39.2
Kuwait	0.2344	0.48	0.66	148	92.6
New Zealand	0.2487	0.08	0.17	209	56.6
Israel	0.4098	0.20	0.27	200	77.8
Portugal	0.4369	0.23	0.12	222	69.2
United Arab Emirates	0.5184	0.32	n.a.	n.a.	n.a.
Finland	0.7364	0.33	0.20	222	67.4
Norway	0.8448	0.12	0.35	218	72.6
Denmark	0.8840	0.08	0.08	226	65.9
Ireland	1.0162	0.43	0.18	221	137.5
Austria	1.0922	0.05	0.07	n.a.	82.2
Australia	1.0988	0.02	0.14	233	40.0
Switzerland	1.3737	0.12	0.12	221	67.9
Sweden	1.5457	0.11	0.14	230	73.2
Spain	1.9344	0.14	0.12	233	50.1
Singapore	2.2060	0.39	0.23	225	n.a.
Belgium					
Luxembourg	3.1820	0.05	0.10	236	n.a.
China, Hong Kong SAR	3.3271	0.21	0.17	175	284.6
Netherlands	3.6227	0.05	0.07	235	100.9
Canada	3.8639	0.06	0.13	235	75.3
Italy	4.5161	0.19	0.05	234	48.2
United Kingdom	5.0057	0.12	0.07	236	59.9
France	5.4179	0.11	0.07	236	45.4
Japan	7.4768	0.18	0.13	225	19.4
Germany	9.6672	0.04	0.09	236	47.2
United States	12.2389	0.09	0.08	235	24.7
average	2.7074	0.17	0.17	216	73.7
minimum	0.0348	0.02	0.05	86	19.4
maximum	12.2389	0.48	0.66	236	284.6

Note: a: Where data for only two or fewer factors were available, the country was excluded from the analysis

Appendix D: Statistics of Cluster and Discriminant Analysis

Table D1: Variables selected by stage^a; 5 classes: small states, LDCs, other developing, transition and high income

step	variable	F to enter	Wilk's Lambda
0	no. of products	39.12	.365
	concentration	13.79	.620
	volatility of expts.	12.12	.650
	share world trade	10.39	.684
	trade as share GDP	7.12	.760
1	volatility of expts.	6.58	.282
	share world trade	6.37	.284
	trade as share GDP	6.01	.287
	concentration	3.71	.313
.2	trade as share GDP	6.15	.220
	share world trade	5.95	.222
	concentration	3.29	.245
3	share world trade	6.06	.172
	concentration	3.28	.191
4	concentration	3.39	.149

Note: a: At each stage the variable with the highest F value (lowest Wilk's Lambda or unexplained variance) is included in the discriminant functions, until no further variable makes a significant contribution to reducing the variance between group centroids.

Table D2: Variables selected by stage; 4 classes: small states, LDCs, other developing and high income^a

step	variable	F to enter	Wilk's Lambda
0	no. of products	60.57	.334
	concentration	18.32	.623
	volatility of expts.	11.03	.733
	trade as share GDP	8.20	.787
	share world trade	7.24	.807
1	trade as share GDP	7.31	.268
	volatility of expts.	4.07	.294
	share world trade	2.71	.306
	concentration	2.43	.309
.2	volatility of expts.	4.03	.236
	share world trade	3.47	.240
	concentration	1.95	.252
3	share world trade	2.92	.215
	concentration	1.74	.223

Note: a: transition economies were divided between other developing and high income

Table D3: Variables selected by stage; 3 classes: small states, LDCs and other developing

step	variable	F to enter	Wilk's Lambda
0	no. of products	39.32	.398
	trade as share GDP	17.43	.599
	Concentration	7.54	.775
	share world trade	3.60	.878
	volatility of expts.	0.35	.987
1	trade as share GDP	12.33	.268
	concentration	3.14	.354
	share world trade	1.44	.377
	volatility of expts.	0.10	.396
.2	concentration	2.19	.247
	share world trade	1.22	.256
	volatility of expts.	0.36	.264

Appendix E: Results of line-by line de minimis analysis

Table E1: Results of de minimis analysis; shares of exports and ‘world’ (EU plus US) imports covered by country group, 2-digit HS agricultural sections, average 1998-1999, per cent

maximum share in 'world' imports %	1.0	2.0	3.0
Small states (42)			
average share exports covered (simple average of country shares) ^a	32.0	35.5	35.5
number with share > 90%	2	3	3
number with share > 75%	5	7	7
number with share < 25 %	26	23	23
share of 'world' imports from SS covered ^a	10.2	13.6	13.6
LDCs (exc. small states) (34)			
average share exports covered ^a	27.5	30.9	33.5
number with share > 90%	2	2	2
number with share > 75%	3	4	5
number with share < 25 %	19	18	17
share of 'world' imports from LDCs covered ^a	9.6	13.3	14.9
Other developing countries (52)			
average share exports covered ^a	6.4	10.7	14.6
number with share > 90%	0	0	0
number with share > 75%	0	0	2
number with share < 25%	52	48	46
share of 'world' imports from other DCs covered ^a	1.2	2.3	3.5
Transition countries (18)			
average share exports covered ^a	5.1	5.4	5.6
number with share > 90%	0	0	0
number with share > 75%	0	0	0
number with share < 25%	23	23	23
share of 'world' impts from trans. countries covered ^a	2.3	2.7	3.0
High income countries (exc. small states) (6)			
average share exports covered ^a	0.2	0.5	1.1
number with share > 90%	0	0	0
number with share > 75%	0	0	0
number with share < 25 %	5	5	5
share of 'world' imports from high inc. c's covered ^a	0.4	0.7	1.4
All countries (152)			
average share exports covered ^a	17.3	20.5	22.4
number with share > 90%	4	5	5
number with share > 75%	8	11	14
number with share < 20	125	117	114
share of 'world' imports from non-industrialised. c's covered ^a	1.6	2.7	3.8

Source: Author's calculations

Note: a: share based on total, not only agricultural, trade

Table E2: Major beneficiaries from de minimis rule (one percent 'world' trade) applied to agriculture at 2-digit level

	No. of sections covered	Covered exports , ecu 000	Per cent total, 1998-99
Solomon Isls	7	31,199	97.0
Vanuatu	6	16,880	95.9
S.Tome,Princ	4	8,351	81.0
Bissau	8	7,091	76.4
West. Samoa	10	6,907	75.1
St Vincent	5	31,669	73.3
Kiribati	4	1,284	71.5
St Lucia	4	51,568	67.7
Belize	5	124,281	66.5
Dominica	7	25,713	65.0
Tonga	10	3,297	59.5
Comoros	3	4,900	59.1
Tuvalu	4	3,230	59.0
Grenada	7	13,561	51.3

Table E3: Coverage of 3 per cent de minimis rule, 8digit tariff lines in agriculture (HS sections 01-24), EU imports, 1998-99

	Number of 8-digit tariff lines	Covered exports, ecu 000	Percent total exports
Solomon Isls.	9	29,886	93.0
S.Tome,Princ.	13	8,335	80.8
St Vincent	10	31,000	71.7
Guinea-Bissau	20	6,391	68.9
St Lucia	6	51,313	67.4
Dominica	8	22,648	57.2
Barbados	7	25,531	31.4
Belize	17	56,563	30.3
Kiribati	6	538	29.9
Antigua, Barb	14	1,116	22.4
Maldives	4	13,581	21.5
St.Christop. & Nevis	3	8,768	21.4
Djibouti	22	1,205	19.8
Vanuatu	7	2,684	15.3
Cape Verde	19	1,582	15.1
Gambia	14	12,559	14.5
Surinam	7	30,913	11.7
Grenada	11	2,614	9.9
West. Samoa	2	828	9.0
Seychelles	10	7,821	7.7
Swaziland	17	12,094	7.2
Tonga	5	361	6.5
Cyprus	15	19,664	6.2
Cook Is., Tokelau Is.,	9	308	5.4

Niue			
Federat.Micronesia	2	505	4.6
Fiji	3	5,835	2.7
Equat. Guinea	2	7,279	2.3
Nauru	2	21	2.2
Trinidad, Tub	3	27,079	2.0
Marshall Islands	1	108	1.6
Comoros	1	106	1.3
Estonia	5	14,405	0.9
Tuvalu	4	48	0.9
Bhutan	3	18	0.8
Botswana	3	1,863	0.8
Guyana	3	1,599	0.6
Bahamas	2	1,966	0.5
Gabon	2	7,205	0.4
Mauritius	1	2,826	0.2
Malta	1	1,119	0.1
Bahrain	1	409	0.1
Palau	0	0	0.0
Qatar	0	0	0.0
Total	294	420,686	1.5 ^a

Source: Author's calculations

Note: a: percentage of total EU 1998-99 imports of agricultural products (HS sections 1-24)

Table E4: Summary results of de minimis analysis; shares of exports and ‘world’ (EU plus US) imports covered by country group, 4-digit HS products groups, average 1998-1999, per cent

De minimis share in 'world' imports %	1.0	2.0	3.0
Small states (42)			
average share exports covered (simple average of country shares)	61.4	72.9	74.6
number with share > 90%	13	17	19
number with share > 75%	23	29	29
number with share < 25 %	9	2	2
share of total exports covered ^a	30.8	58.9	63.7
LDCs (exc. small states) (34)			
average Share exports covered	40.4	53.2	61.7
number with share > 90%	5	7	10
number with share > 75%	9	13	15
number with share < 25 %	15	10	7
share of total exports covered ^a	16.5	24.2	53.8
Other developing countries (52)			
average share exports covered	19.1	30.5	36.5
number with share > 90%	1	2	3
number with share > 75%	5	8	8
number with share < 25%	42	32	23
share of total exports covered ^a	2.8	6.5	10.8
Transition countries (18)			
average share exports covered	41.5	51.4	57.2
number with share > 90%	1	3	5
number with share > 75%	4	5	6
number with share < 25%	8	5	4
share of total exports covered ^a	10.8	14.9	18.4
High income countries (exc. small states) (6)			
average share exports covered	13.5	23.4	42.5
number with share > 90%	0	0	1
number with share > 75%	0	1	2
number with share < 25 %	4	4	3
share of total exports covered ^a	1.4	5.2	14.3
All countries (152)			
average share exports covered	38.2	49.6	55.3
number with share > 90%	20	29	38
number with share > 75%	41	56	60
number with share < 25 %	78	53	39
share of total exports of non-OECD covered ^a	4.3	8.6	13.9
share of total 'world' imports covered	1.5	3.1	5.0

Source: Author's calculations

Note: a: The share of the exports of the group in question to the ‘world’ (EU plus US) covered by the de minimis rule

E5: Detailed results of de minimis analysis; shares of exports and 'world' (EU plus US) imports covered by country group, 4-digit HS products groups, average 1998-1999, per cent

Share in 'world' imports	1.0				2.0				3.0			
	Total exports	no. pdts. covered	value of trade covered, ecu '000	% covered	Total exports	no. pdts. covered	value of trade covered, ecu '000	% covered	Total exports	no. pdts. covered	value of trade covered, ecu '000	% covered
Small states												
Antigua and Barbuda	4,987	21	3,929	78.8	21	3,929	78.8	21	3,929	78.8		
Bahamas	370,823	5	52,995	14.3	6	113,147	30.5	7	118,556	32.0		
Bahrain	408,820	11	237,155	58.0	13	265,310	64.9	13	265,310	64.9		
Barbados	81,179	14	43,638	53.8	15	70,040	86.3	15	70,040	86.3		
Belize	186,817	7	67,305	36.0	10	144,087	77.1	11	178,533	95.6		
Bhutan	2,222	14	2,026	91.2	14	2,026	91.2	14	2,026	91.2		
Bissau	9,279	7	8,657	93.3	7	8,657	93.3	7	8,657	93.3		
Botswana	236,138	3	177,285	75.1	4	192,472	81.5	5	221,656	93.9		
Cape Verde	10,493	7	9,436	89.9	7	9,436	89.9	7	9,436	89.9		
Comoros	8,287	3	3,240	39.1	3	3,240	39.1	3	3,240	39.1		
Cook Is., Tokelau Is., Niue	5,741	22	3,948	68.8	22	3,948	68.8	22	3,948	68.8		
Cyprus	315,087	17	130,905	41.5	17	130,905	41.5	18	157,311	49.9		
Djibouti	6,094	23	5,103	83.7	23	5,103	83.7	23	5,103	83.7		
Dominica	39,579	12	34,225	86.5	13	35,160	88.8	13	35,160	88.8		
Equatorial Guinea	314,038	5	310,613	98.9	5	310,613	98.9	5	310,613	98.9		
Eritrea	13,052	11	12,021	92.1	11	12,021	92.1	11	12,021	92.1		
Estonia	1,536,822	10	353,224	23.0	13	638,748	41.6	15	698,014	45.4		
Federat.Micronesia	10,863	13	9,763	89.9	14	10,174	93.7	14	10,174	93.7		
Fiji	215,577	8	71,933	33.4	8	71,933	33.4	8	71,933	33.4		
Gabon	1,709,160	1	20,433	1.2	2	1,362,446	79.7	2	1,362,446	79.7		
Gambia	86,351	5	77,538	89.8	6	82,199	95.2	6	82,199	95.2		
Grenada	26,427	8	7,307	27.7	9	15,946	60.3	9	15,946	60.3		
Guyana	290,147	5	51,838	17.9	5	51,838	17.9	5	51,838	17.9		
Kiribati	1,796	8	1,747	97.3	8	1,747	97.3	8	1,747	97.3		
Laos	116,175	13	103,424	89.0	13	103,424	89.0	13	103,424	89.0		
Madagascar	545,270	12	244,228	44.8	14	341,724	62.7	14	341,724	62.7		
Maldives	63,020	10	59,876	95.0	10	59,876	95.0	10	59,876	95.0		
Malta	748,494	11	387,593	51.8	14	569,080	76.0	14	569,080	76.0		

Marshall Islands	6,564	7	6,185	94.2	7	6,185	94.2	7	6,185	94.2
Mauritius	1,333,724	5	154,637	11.6	10	617,902	46.3	12	851,147	63.8
Nauru	916	8	862	94.2	8	862	94.2	8	862	94.2
Palau	13,597	5	12,801	94.1	5	12,801	94.1	5	12,801	94.1
Qatar	323,615	12	257,067	79.4	12	257,067	79.4	13	288,801	89.2
S. Tome and Principe	10,315	9	9,752	94.5	9	9,752	94.5	9	9,752	94.5
Seychelles	101,330	5	15,550	15.3	6	16,766	16.5	6	16,766	16.5
Solomon Is.	32,151	7	31,050	96.6	7	31,050	96.6	7	31,050	96.6
St. Lucia	76,120	9	16,567	21.8	12	68,507	90.0	12	68,507	90.0
St. Vincent	43,224	6	12,236	28.3	7	40,829	94.5	7	40,829	94.5
St. Christopher and Nevis	40,878	13	37,177	90.9	13	37,177	90.9	13	37,177	90.9
Surinam	264,443	7	71,162	26.9	8	82,697	31.3	8	82,697	31.3
Swaziland	167,559	8	39,462	23.6	10	54,154	32.3	10	54,154	32.3
Tonga	5,541	7	4,489	81.0	8	5,171	93.3	8	5,171	93.3
Trinidad and Tobago	1,345,478	3	340,819	25.3	6	718,878	53.4	8	809,698	60.2
Tuvalu	5,480	10	5,206	95.0	10	5,206	95.0	10	5,206	95.0
Vanuatu	17,596	4	1,460	8.3	5	5,264	29.9	5	5,264	29.9
West. Samoa	9,202	6	6,122	66.5	6	6,122	66.5	6	6,122	66.5

Share in 'world' imports	1.0				2.0				3.0			
	Total exports	no. pdts.	value of trade covered, ecu '000	% covered	no. pdts.	value of trade covered, ecu '000	% covered	no. pdts.	value of trade covered, ecu '000	% covered		
LDCs (exc. small states)												
Afghanistan	38,959	7	18,406	47.2	7	18,406	47.2	7	18,406	47.2		
Angola	2,794,590	1	65,946	2.4	1	65,946	2.4	3	2,752,175	98.5		
Bangladesh	3,749,398	0	0	0.0	1	47,257	1.3	5	797,391	21.3		
Benin	55,147	9	9,740	17.7	10	30,197	54.8	10	30,197	54.8		
Burkina Faso	70,362	2	9,184	13.1	4	15,939	22.7	6	26,589	37.8		
Burundi	51,465	3	50,080	97.3	3	50,080	97.3	3	50,080	97.3		
Central African Republic	181,245	5	178,043	98.2	5	178,043	98.2	5	178,043	98.2		
Chad	74,961	0	0	0.0	0	0	0.0	0	0	0.0		
Ethiopia	260,267	3	13,381	5.1	4	16,397	6.3	6	210,836	81.0		
Guinea	523,078	7	188,416	36.0	7	188,416	36.0	7	188,416	36.0		
Haiti	286,331	15	133,271	46.5	17	239,616	83.7	17	239,616	83.7		
Liberia	336,665	1	6,337	1.9	3	294,476	87.5	4	325,535	96.7		
Malawi	247,759	1	9,951	4.0	2	35,967	14.5	2	35,967	14.5		
Mali	99,234	6	20,730	20.9	6	20,730	20.9	6	20,730	20.9		
Mauritania	307,994	2	23,303	7.6	3	40,140	13.0	4	73,899	24.0		
Mozambique	124,900	5	12,634	10.1	9	103,456	82.8	9	103,456	82.8		
Myanmar	373,748	17	299,077	80.0	19	316,952	84.8	19	316,952	84.8		
Nepal	288,095	9	113,472	39.4	9	113,472	39.4	10	125,190	43.5		
Niger	133,102	2	5,430	4.1	2	5,430	4.1	2	5,430	4.1		
Rwanda	50,233	5	47,619	94.8	5	47,619	94.8	5	47,619	94.8		
Senegal	352,131	3	59,851	17.0	7	141,057	40.1	8	184,555	52.4		
Sierra Leone	68,921	8	63,789	92.6	8	63,789	92.6	8	63,789	92.6		
Somalia	5,559	7	5,066	91.1	7	5,066	91.1	7	5,066	91.1		
Sudan	206,710	5	74,920	36.2	8	102,944	49.8	8	102,944	49.8		
Tanzania	266,004	14	144,939	54.5	17	230,100	86.5	17	230,100	86.5		
Togo	54,527	13	45,426	83.3	14	49,556	90.9	14	49,556	90.9		
Uganda	16,201	4	14,455	89.2	4	14,455	89.2	5	15,540	95.9		
Yemen	78,607	8	67,676	86.1	9	70,907	90.2	9	70,907	90.2		
DR Congo	968,059	4	154,226	15.9	4	154,226	15.9	4	154,226	15.9		
Zambia	217,217	7	31,417	14.5	10	105,389	48.5	12	138,563	63.8		

Share in 'world' imports	1.0				2.0				3.0	
	Total exports	no. pdots.	value of trade covered, ecu '000	% covered	no. pdots.	value of trade covered, ecu '000	% covered	no. pdots.	value of trade covered, ecu '000	% covered
Other developing countries										
Algeria	7,005,123	0	0	0.0	0	0	0.0	1	2,173,414	31.0
Argentina	6,335,044	3	495,342	7.8	4	714,510	11.3	7	977,232	15.4
Bolivia	469,987	10	146,561	31.2	11	321,687	68.4	11	321,687	68.4
Brazil	20,936,737	0	0	0.0	3	904,186	4.3	4	1,214,764	5.8
Cameroon	1,409,449	2	455,777	32.3	5	796,954	56.5	8	882,833	62.6
Chile	5,928,118	1	66,020	1.1	3	405,429	6.8	3	405,429	6.8
China	103,522,068	0	0	0.0	0	0	0.0	0	0	0.0
Colombia	7,123,013	0	0	0.0	2	415,579	5.8	4	2,777,091	39.0
Congo	664,624	8	551,911	83.0	9	565,896	85.1	9	565,896	85.1
Costa Rica	4,159,098	5	284,660	6.8	7	538,061	12.9	8	1,594,700	38.3
Cuba	292,864	6	49,141	16.8	13	205,760	70.3	13	205,760	70.3
Dominican R.	4,205,683	3	243,855	5.8	5	469,102	11.2	7	928,302	22.1
Ecuador	2,540,884	3	471,004	18.5	5	548,631	21.6	5	548,631	21.6
Egypt	2,780,458	6	1,023,928	36.8	11	1,586,287	57.1	12	1,659,066	59.7
El Salvador	1,577,578	8	397,036	25.2	12	578,310	36.7	13	641,841	40.7
Ghana	1,201,337	3	237,030	19.7	8	626,393	52.1	8	626,393	52.1
Guatemala	2,393,705	5	192,534	8.0	9	640,583	26.8	12	1,047,162	43.7
Honduras	2,735,596	3	164,953	6.0	9	789,913	28.9	10	929,576	34.0
India	16,916,511	0	0	0.0	0	0	0.0	3	757,691	4.5
Indonesia	16,291,893	4	1,108,587	6.8	4	1,108,587	6.8	6	1,781,714	10.9
Iran	4,149,577	0	0	0.0	0	0	0.0	0	0	0.0
Iraq	5,279,402	0	0	0.0	0	0	0.0	0	0	0.0
Cote d'Ivoire	2,373,890	1	44,275	1.9	3	383,663	16.2	3	383,663	16.2
Jamaica	1,108,997	6	177,069	16.0	8	252,273	22.7	9	385,983	34.8
Jordan	147,996	9	44,929	30.4	10	49,585	33.5	12	78,680	53.2
Cambodia	660,894	11	230,328	34.9	15	596,357	90.2	15	596,357	90.2
Kenya	856,329	7	80,146	9.4	9	99,165	11.6	13	332,074	38.8
Lebanon	197,198	17	105,489	53.5	20	131,174	66.5	20	131,174	66.5
Lesotho	113,277	8	111,133	98.1	8	111,133	98.1	8	111,133	98.1
Libya	6,234,491	1	111,097	1.8	1	111,097	1.8	1	111,097	1.8

Malaysia	24,345,253	0	0	0.0	0	0	0.0	3	1,114,226	4.6
Morocco	4,637,686	3	226,672	4.9	6	510,714	11.0	10	876,154	18.9
Namibia	419,127	4	99,299	23.7	5	106,381	25.4	8	194,471	46.4
Nicaragua	569,242	10	284,479	50.0	13	500,761	88.0	14	512,328	90.0
Nigeria	6,692,934	0	0	0.0	1	389,406	5.8	1	389,406	5.8
North Korea	41,285	16	33,084	80.1	16	33,084	80.1	16	33,084	80.1
Oman	288,834	22	250,684	86.8	22	250,684	86.8	22	250,684	86.8
Pakistan	3,788,116	4	240,948	6.4	7	671,761	17.7	9	835,476	22.1
Panama	622,377	4	117,341	18.9	8	248,203	39.9	8	248,203	39.9
Papua New Guinea	477,206	3	76,825	16.1	5	244,717	51.3	5	244,717	51.3
Paraguay	248,898	9	60,684	24.4	10	64,430	25.9	10	64,430	25.9
Peru	3,050,255	7	448,016	14.7	8	549,532	18.0	9	760,045	24.9
Philippines	13,652,415	1	151,235	1.1	5	952,490	7.0	9	3,592,070	26.3
Saudi Arabia	13,436,264	0	0	0.0	1	375,875	2.8	1	375,875	2.8
South Africa	11,504,067	0	0	0.0	0	0	0.0	0	0	0.0
Sri Lanka	2,792,490	2	149,140	5.3	7	641,302	23.0	13	1,286,019	46.1
Syria	1,855,072	2	122,440	6.6	4	1,556,736	83.9	5	1,581,211	85.2
Taiwan	40,444,470	0	0	0.0	2	919,638	2.3	3	1,446,135	3.6
Thailand	18,959,215	1	249,621	1.3	4	1,694,449	8.9	7	2,512,391	13.3
Tunisia	3,959,710	3	307,904	7.8	9	851,994	21.5	13	1,106,208	27.9
U.A.Emirates	1,918,599	16	873,501	45.5	21	1,119,485	58.3	23	1,271,219	66.3
Uruguay	635,943	7	118,530	18.6	10	173,381	27.3	11	185,348	29.1
Venezuela	10,952,938	1	145,190	1.3	1	145,190	1.3	3	499,869	4.6
Vietnam	3,293,801	5	274,896	8.3	7	477,652	14.5	8	596,534	18.1
West Bank/Gaza	3,809	13	3,294	86.5	13	3,294	86.5	13	3,294	86.5
Zimbabwe	834,844	6	102,167	12.2	8	137,803	16.5	11	237,416	28.4

Share in 'world' imports	1.0				2.0				3.0	
	Total exports	no. pdts. covered	value of trade covered, ecu '000	% covered	no. pdts. covered	value of trade covered, ecu '000	% covered	no. pdts. covered	value of trade covered, ecu '000	% covered
Transition countries										
Albania	222,506	21	112,140	50.4	21	112,140	50.4	22	121,387	54.6
Armenia	93,466	8	79,577	85.1	9	84,327	90.2	9	84,327	90.2
Azerbaijan	254,554	5	236,942	93.1	5	236,942	93.1	5	236,942	93.1
Belarus	538,094	20	224,211	41.7	23	292,604	54.4	27	344,202	64.0
Bosnia-Herzegovina	296,033	17	214,428	72.4	18	220,925	74.6	18	220,925	74.6
Bulgaria	2,233,604	7	441,098	19.7	11	577,280	25.8	15	759,054	34.0
Croatia	1,711,254	11	510,003	29.8	14	680,829	39.8	15	741,360	43.3
F. R. Of Yugoslavia	764,202	14	278,781	36.5	17	362,576	47.4	19	405,254	53.0
Former Yug. Rep. of Macedonia	674,531	10	207,740	30.8	16	477,052	70.7	16	477,052	70.7
Georgia	103,446	12	84,217	81.4	12	84,217	81.4	13	86,675	83.8
Kazakhstan	1,380,687	4	679,213	49.2	5	721,944	52.3	6	772,586	56.0
Kyrghistan	160,949	2	5,243	3.3	3	153,696	95.5	3	153,696	95.5
Latvia	1,487,906	7	195,136	13.1	10	478,910	32.2	11	528,123	35.5
Lithuania	1,414,087	13	603,351	42.7	16	666,203	47.1	17	689,154	48.7
Moldova	213,559	17	107,557	50.4	18	115,869	54.3	19	145,180	68.0
Mongolia	81,356	12	49,914	61.4	12	49,914	61.4	12	49,914	61.4
Romania	5,187,015	2	141,109	2.7	6	592,029	11.4	9	1,288,896	24.8
Russia	25,293,296	0	0	0.0	0	0	0.0	0	0	0.0
Slovenia	3,593,187	5	397,305	11.1	7	612,693	17.1	13	895,064	24.9
Tajikistan	94,932	5	61,385	64.7	5	61,385	64.7	6	93,296	98.3
Turkmenistan	188,871	4	142,864	75.6	4	142,864	75.6	5	174,312	92.3
Ukraine	2,344,406	8	422,673	18.0	9	469,372	20.0	12	622,723	26.6
Uzbekistan	438,473	7	95,773	21.8	7	95,773	21.8	7	95,773	21.8

Share in 'world' imports	1.0			2.0			3.0			
	no.	value of trade covered, ecu '000	% covered	no.	value of trade covered, ecu '000	% covered	no.	value of trade covered, ecu '000	% covered	
High income countries (exc. small states)										
Brunei	423,529	7	270,598	63.9	8	368,778	87.1	8	368,778	87.1
Hong Kong	16,499,433	1	317,506	1.9	4	1,436,876	8.7	7	3,093,360	18.7
Israel	13,891,416	1	209,293	1.5	3	674,721	4.9	4	1,117,038	8.0
Kuwait	2,225,290	0	0	0.0	2	361,501	16.2	3	2,073,937	93.2
Singapore	22,049,935	0	0	0.0	0	0	0.0	3	1,214,563	5.5

Table E6: Principal exports of small states with lowest coverage by 3 per cent de minimis rule, 1999, %

	% expts. covered by de minimis	HS code	product	% of country's exports	US tariff rates, %	EU tariff rates, %	share in US imports	share in EU imports
Seychelles	16.5	160414	tuna	78.8	MFN: 4.9 - 35.0 LDC: zero	MFN: 24.0 LDC: zero	n.s.	12.0
Guyana	17.9	170111	cane sugar	39.2	TRQ at zero	zero, quota and price guarantee	1.0	12.6
Vanuatu	29.9	120300	copra	65.3	MFN: zero	MFN: zero	n.s.	65.3
Surinam	31.3	281820	aluminium oxide	62.6	MFN: zero	MFN:4.0 GSP:3.0 ACP:zero	12.7	18.3
Bahamas	32.0	220840	rum	47.3	MFN:zero excise tax	MFN : zero excise tax	9.4	73.8
Swaziland	32.3	170111	cane sugar	56.4	TRQ at zero	zero, quota and price guarantee	n.s.	9.8
Fiji	33.4	170111	cane sugar	51.4	TRQ at zero	zero, quota and price guarantee	1.7	13.2
Comoros	39.1	090500	vanilla	49.1	MFN: zero	MFN: 6.0 GSP: 2.1 ACP: zero	15.9	5.5

Note: n.s. : not significant

Table E7: Principle products covered by 3 per cent de minimis threshold, 'world' imports, average 1998-99, 4 and 6-digit classif.

HS code	Short description	MFN rate	GSP rate	EU covered imports ecu m.	EU total imports, ecu m.	% of EU imports	% of covered imports, %	ditto, cumulated
2709	petroleum	0.0	0.0	7,024	32,450	21.6	20.8	20.8
710210/39	diamonds	0.0	0.0	2,001	6,878	29.1	5.9	26.7
2710	Petr. fuels	4.7	0.0	1,923	6,322	30.4	5.7	32.4
611010/90	jerseys, etc.	10.5-12.8	8.9-10.8	1,528	3,532	43.3	4.5	36.9
0901 ^a	coffee	0.0	0.0	1,387	4,569	30.3	4.1	41.0
440710/99	wood	0.0	0.0	1,349	2,394	56.3	4.0	45.0
620311/49	men's suits, etc.	12.8	10.8	1,316	3,748	35.1	3.9	48.9
620411/69	women's suits, etc.	12.8	10.8	1,275	4,371	29.2	3.8	52.7
710811/20	gold	0.0	0.0	1,229	3,732	32.9	3.6	56.3
640312/99	footwear	8.0	5.6	1,073	2,695	39.8	3.2	59.5
760110/20	aluminium/alum. oxides	6.0	6.0	851	2,291	37.2	2.5	62.0
847110/90	data processing eqpt.	0.0	0.0	804	20,038	4.0	2.4	64.4
610910/90	cotton T-shirts	12.0	10.0	798	1,929	41.4	2.4	66.7
940310/90	furniture	0.0	0.0	746	2,184	34.2	2.2	69.0
620510/90	men's shirts	12.0	10.2	696	1,846	37.7	2.1	71.0
847310/50	machinery parts	0.0-3.0	0.0	692	13,821	5.0	2.0	73.1
0306 ^b	frozen shrimps	12.0	4.2	598	1,608	37.2	1.8	74.8
2711	liqd. natural gas	0.0	0.0	283	3,905	7.3	0.8	75.7
	others			8,224	265,840	3.1	24.3	100.0
	Totals			33,797	384,152	8.8	100.0	
	Totals excl. zero MFN-rated pdts. identified above			18,974	189,645	10.0		

Source: Author's calculations

Note: a: 98 per cent of the 4-digit group enters tariff-free. The other 2 per cent consists of decaffeinated coffee etc for which there is a non-zero tariff. This has been ignored.

b: A large number of other crustaceans are included in this 4-digit group. However the tariffs are all similar to that for frozen shrimps, which make up 75 per cent of the total. The 4-digit group was treated together with the tariffs for frozen shrimp.

Table E8: Share of major beneficiaries' total exports of principal tariff lines covered by 3 per cent de minimis rule, %

Frozen shrimps	Cotton T-shirts	Jerseys, etc.	Footwear	
Mozambique	42.5 Haiti	33.6 Cambodia	32.0 Cape Verde	13.3
Tuvalu	28.9 Mauritius	12.3 Palau	23.4 Bosnia-Herzegovina	7.5
Guinea-Bissau	26.8 Jamaica	12.1 Laos	20.5 Romania	5.8
Somalia	21.5 Lesotho	6.4 Myanmar	20.3 Croatia	4.4
Cuba	18.8 Cambodia	5.1 Lesotho	18.7 Albania	3.9
Bahamas	16.2 Maldives	3.8 Fiji	15.9 Form.Jug.Rep.Maced	3.6
Belize	14.9 Laos	3.8 Mongolia	14.4 Tunisia	2.9
Panama	14.1 Myanmar	3.7 Madagascar	14.1 F. R. o f Yugoslavia	2.4
Nicaragua	13.3 Federat.Micronesia	3.7 Brunei	13.6 Moldova	2.4
Madagascar	12.4 Egypt	3.0 Mauritius	13.4 Sierra Leone	2.2
Senegal	11.8 Madagascar	2.9 Honduras	8.9 Morocco	2.2
Antigua, Barb	10.2 Morocco	2.7 Federat.Micronesia	8.0 Bulgaria	2.0
Guyana	9.1 Albania	2.5 El Salvador	7.9 Thailand	1.7
Yemen	6.0 U.A.Emirates	2.5 Sri Lanka	7.0 India	1.6
Cape Verde	5.4 Palau	2.2 Swaziland	6.9 Tuvalu	1.5
Togo	4.7 Tunisia	2.1 Jamaica	6.9 Uruguay	1.5

Men's Suits Etc.	Women's Suits Etc.	Men's Shirts	Aluminium, Al. Oxide	
Federat.Micronesia	34.1 Oman	17.6 Cape Verde	17.7 Tajikistan	39.5
Lesotho	31.8 Lesotho	16.2 Laos	10.6 Bosnia-Herzegovina	11.8
Cambodia	19.0 Guatemala	12.7 Form.Jug.Rep.Maced	9.5 Ghana	11.1
Maldives	16.4 Kampuchea	11.6 Myanmar	7.3 Bahrain	8.4
Malta	15.6 Sri Lanka	10.9 Mauritius	7.3 Surinam	8.4
Nicaragua	13.7 Bahrain	10.6 Nepal	7.1 U.A.Emirates	6.8
Laos	13.1 Maldives	10.6 Nicaragua	6.4 Cameroon	5.9
Mauritius	10.0 Qatar	9.8 Qatar	6.0 F. R. Of Yugoslavia	4.6
Nepal	9.9 Form.Jug.Rep.Maced	9.8 Honduras	5.1 Egypt	4.2
Oman	9.6 Cyprus	9.7 El Salvador	5.0 Antigua, Barb	3.5
Bangladesh	8.8 Nicaragua	9.7 Mongolia	5.0 Djibouti	3.3
Croatia	7.6 Nepal	9.0 Sri Lanka	4.8 Romania	2.8
Jordan	7.0 El Salvador	8.3 Oman	4.0 Slovenia	2.3
Albania	7.0 Lithuania	8.3 Guatemala	3.8 Ukraine	2.0
Madagascar	6.9 Bangladesh	8.2 Albania	3.0 Venezuela	1.8
Mongolia	6.7 Moldova	7.6 Morocco	2.7 Latvia	1.3

Table E9: Share of major non-industrialised non-beneficiary suppliers' total exports of principal tariff lines covered by 3 per cent de minimis rule, %

Frozen shrimps	Cotton T-shirts	Jerseys, etc.	Footwear	
Ecuador	25.7 Honduras	18.1 Hong Kong	11.3 Vietnam	14.0
Bangladesh	4.8 El Salvador	16.1 Bangladesh	11.0 Brazil	4.7
Thailand	4.4 Bangladesh	9.7 Indonesia	2.7 Indonesia	4.6
Indonesia	1.5 Dominican R.	4.6 Thailand	2.3 China	4.4
India	1.1 Hong Kong	1.3 China	1.6	
Haiti	1.0 India	1.1 Taiwan	1.5	
Colombia	1.0	Malta	1.0	

Men's Suits etc.	Women's Suits etc.	Men's Shirts	Aluminium, Alum. Oxide	
Tunisia	16.3 Tunisia	14.1 Bangladesh	15.8 Russia	7.2
Dominican R.	16.2 Morocco	12.1 Hong Kong	3.4 Brazil	2.2
Morocco	10.0 Romania	10.1 India	2.2 South Africa	1.0
Romania	8.8 Hong Kong	6.3 Indonesia	1.4	
Hong Kong	3.6 India	3.2		
	China	1.9		

Table E10: Estimated revenue loss to EU of giving tariff-free access on existing quantities of imports for principal tariff lines covered by 3 per cent de minimis rule, ECU million and %

	HS code	EU imports, total	Estimated EU tariff revenue	Estimated revenue under de minimis	. difference
Shrimps	0306	3,529	252	165	87
Cotton T-shirts	6109	3,731	263	209	54
Jerseys etc.	6110	4,362	346	280	66
Footwear	6403	1,928	121	117	4
Men's suits etc.	6203	1,845	122	73	48
Women's suits etc.	6204	2,692	122	88	34
Men's shirts	6205	1,456	33	22	12
Aluminium, alum. oxide	7601	2,288	99	79	21
Total		21,831	1,359	1,032	326
Average tariff			6.2	4.7	

Appendix F

Table F1: Utilisation of GSP, agricultural and textile products, 1994-96, US\$ million and %

	Canada						EU					
	Total	dutiable	covered	receiving preferential treatment	potential coverage percent	utilisation percent	total	dutiable	covered	receiving preferential treatment	potential coverage percent	utilisation percent
live animals and products	4798	148	0	0	0.0	0.0	207778	205486	205265	96273	98.8	46.3
vegetable products	20407	70	70	2	0.3	0.0	68556	37796	37728	20449	55.0	29.8
fats and oils	2	2	1	0	50.0	0.0	589	589	590	458	100.2	77.8
prepared foodstuffs, beverages etc.	1795	1643	1626	1517	90.6	84.5	199252	196974	174515	7381	87.6	3.7
hides and skins, leather etc.	596	578	578	246	97.0	41.3	77587	63877	63880	49182	82.3	63.4
textile and textile articles	101478	84131	2348	1544	2.3	1.5	2568320	2462000	2459199	770491	95.8	30.0
footwear, headgear, umbrellas etc.	3204	1487	1314	507	41.0	15.8	82803	82798	82798	63357	100.0	76.5
Totals	132280	88059	5937	3816	4.5	2.9	3204885	3049520	3023975	1007591	94.4	31.4
	Japan						United States					
	Total	dutiable	covered	receiving preferential treatment	potential coverage percent	utilisation percent	total	dutiable	covered	receiving preferential treatment	potential coverage percent	utilisation percent
live animals and products	421903	417503	135886	135171	32.2	32.0	107952	1736	1736	1512	1.6	1.4
vegetable products	184355	6882	2203	1966	1.2	1.1	162058	7359	7105	4961	4.4	3.1
fats and oils	1484	1484	1022	1022	68.9	68.9	807	0	0	0	0.0	0.0
prepared foodstuffs, beverages etc.	43309	9678	9554	9488	22.1	21.9	41581	36298	36247	25621	87.2	61.6
hides and skins, leather etc.	16898	12998	12990	12775	76.9	75.6	14789	13759	2317	2127	15.7	14.4
textile and textile articles	57172	38840	38659	13739	67.6	24.0	1840306	1831717	14432	13676	0.8	0.7
footwear, headgear, umbrellas etc.	17857	17857	17759	16974	99.5	95.1	130429	13049	1010	697	0.8	0.5
Totals	742978	505242	218073	191135	29.4	25.7	2297922	1903918	62847	48594	2.7	2.1

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Endnotes

- 1 See for example Grynberg (forthcoming)
- 2 South Pacific Forum (2001)
- 3 United Nations (1998a) and United Nations (1998b).
- 4 Commonwealth Secretariat (1997)
- 5 Over the two years 1998 and 1999, only in ten non-agricultural 4-digit product groups did any SS exceed the 3.25 per cent threshold on the combined EU and US markets. These were Cyprus (other clays), Estonia (wood in the rough: packing cases etc.: prefabricated buildings), Guyana (aluminium ores and concentrates), Malta (unused postage and similar stamps), Mauritius (synthetic precious and semi-precious stones), Suriname (aluminium oxide etc.) and Trinidad and Tobago (ammonia: acyclic acids). As an indication of their generally low sensitivity on EU and US markets, all the tariff lines in four of these groups had zero MFN rates on both the EU market and the US markets (other clays, aluminium ores and concentrates, wood in the rough, unused stamps). Furthermore all the synthetic stones tariff lines in the EU and all the ammonia tariff lines in the US were rated zero MFN. Two further product groups were entirely tariff free under GSP in the EU (packing cases etc.: prefabricated buildings), and four in the US (aluminium oxide, acyclic acids, packing cases etc., and prefabricated buildings).
- 6 WTO (2000).
- 7 See UNCTAD/Commonwealth Secretariat (2001) for a discussion of trade diversion in the context of improving GSP for LDCs, particularly in the context of EBA.
- 8 *op. cit.* p. 5
- 9 For a summary of the proposals put to the Agricultural Committee, see Shirotori (2001)
- 10 The Eurostat CD-ROM, *Intra and Extra EU Trade*, was used.
- 11 Taken from UNCTAD (2001)
- 12 See UNCTAD (2001), Table 4.5 and notes for the source of the data and a definition of the index.
- 13 Taken from UNCTAD (2001), Table ??
- 14 Taken from World Bank (2001).
- 15 Everitt, Brian (1980) and Sokal and Sneath (1967).