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SMALL ECONOMIES: TRADE LIBERALIZATION, TRADE PREFERENCES, AND GROWTH

Michael Michaely and *Demetris Papageorgiou*[*]

I. INTRODUCTION

This paper discusses the relevance of size of the country for issues of trade liberalization and for the implications of trade-preferential agreements joined by the country. Its major headings are: salient attributes of small countries; issues of trade liberalization; and issues of trade-preferential agreements. For each subject, analytic considerations as well as empirical verification or illustration are offered.

The paper starts by discussing the meaning of "smallness of economies," selecting a quantitative criterion, and classifying nations into "large" and "'small" countries. To set the basis for consideration of the relevance of smallness for the issues on hand, it proceeds to observe the major attributes of structure and performance which are likely to differ significantly between small and large economies. These concern primarily income levels, growth rates, the role of foreign trade, its composition, its degree of diversification (particularly that of exports), the role of foreign capital, and the country's vulnerability to developments in the outside world.

Next, an analysis is offered of issues concerning trade liberalization. This includes a discussion of the desirability of liberalization in small economies (relatively to the case of large economies); of the transitional costs which may be associated with a small economic size; and with the likelihood of sustainability of trade liberalization in a country possessing the particular attributes of a small economy. It suggests on both ex-ante analysis and empirical evidence that trade liberalization is typically more desirable for a small country than it is for a large one. Sustaining trade

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* Note: The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors and should not be attributed in any manner to the World Bank, to its affiliated organizations, or to members of its Board of Executive Directors or the countries they represent.

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liberalization would depend to a large extent on the economic costs of transition – the lower these costs, the higher the chances of sustaining the reforms. Ex-ante analysis would suggest that transition costs are higher for small economies than for large ones, implying that a gradual implementation of trade liberalization is more necessary for the small economies. But the recent experience of trade liberalization in Latin American and Caribbean countries indicates a different story. The speed and intensity of implementation of trade liberalization on the one hand, and the transition costs on the other, were no different among these countries, regardless of their size.

Finally, a similar analysis is conducted for issues involved in the conclusion of a trade preferential agreement (particularly of the "free-trade area" type). A variety of considerations all lead to the important conclusion that the agreement most likely to be rewarding for a small economy is one with a very large economy, while an agreement among two small countries is likely to be neither rewarding nor of much consequence, one way or the other.

Some forty years ago, Simon Kuznets made the empirical statement that "the challenge of economic growth has particular overtures for small nations and ... in the current active concern with problems of economic growth more attention should be paid to the effect of size than has heretofore been the case" (Kuznets, 1958:10). This applies even more forcefully to the specific concern of the present study, namely, the relationship of size to major contemporary issues of trade policy: trade liberalization and trade preferential agreements.

II. Economic Attributes and Performance of Small Countries

What is a Small Nation?

"Smallness" could be defined by a number of criteria; and by each, the cutoff point between "small" and "large" would be determined by an arbitrary decision. An alternative approach would be to study the effect of size as a continuous variable, rather than resort to the classification of countries into one or another category. When possible and helpful, this alternative approach will also be used in this study.

A major variable – this requires practically no explanation – is the size of population. Kuznets adopted this as the sole criterion for classification: "By a small nation I mean an independent sovereign state, with a population of ten million or less." (Ibid.:9). He also ventured the proposition, based on demographic trends and forecasts, that "were I to draw it a hundred years hence, the dividing line would be far higher." In

the forty years that have passed, the demographic trends anticipated then have indeed materialized, and almost each of the nations existing in the 1950s is now larger, usually much more so, in terms of population (Western European countries, as a group, are an obvious exception). On the other hand, the number of independent countries has almost doubled during this period, and the proportion of small-size countries is particularly high among the more recent entrants. Hence, raising the bar for the classification of "small" countries would leave a substantially higher proportion of "small" countries now than it was before. Thus, if population has to serve as a criterion, maintaining the bar at ten million may be the best option – although, needless to say, this would be an entirely arbitrary cutoff point, not subject to any defense as a logical inference.

The Annex Table provides a classification of the world's countries, based on this criterion.[1] By this yardstick alone, using 1993 population data, over a half of today's independent nations would qualify as "small" – 112 out of a total of 183. This is roughly the same proportion as in Kuznet's classification, where, for the world of 1955, 47 out of a total of 80 nations were defined as "small".[2]

The size of territory should also be used as a criterion of "smallness". It is an indicator – probably the best predictor if resort had to be made to a single variable – of the size and variability of natural resources. Thus, a country with a small population but with a very large territory may be expected to have different patterns of specialization, as well as different other attributes, from a small-territory nation. As it happens – this is evidently not a matter of accident – no small population nation occupies a very large territory, although a large variance in the geographic size of such countries does exist (from tiny islands to territories such as those of Bolivia, Libya, or Sweden).[3] A taller study should probably pay separate attention to the role of the size of territory, but in the present context this will be dispensed with.

A third yardstick must be the economic size of a nation – best approached by the size of its aggregate income, or aggregate product. For many purposes (such as for the "size of the market" in Adam Smith's statement that the size of the market determines the extent of specialization) this is probably the best indicator – more important than the size of population (although the two must be partly related). But a problem may arise if large countries in terms of aggregate income and product (but small in population) are excluded from the list of "small" countries. The high aggregate-income countries must also be – given the small population – high per-capita economies. Presumably, they are also (they must have been, at some stage of their development) economies characterized by a

high rate of growth of income. Excluding such countries from the category of "small" nations would thus tend, by definition, to bias this category towards the inclusion of poor, low-growth economies. To overcome this dilemma, a compromise has been adopted here: "small" countries will be defined by, population alone; but the category, will be subdivided into "low (aggregate) income" and "high income" countries. In fact, the latter has been defined to include only 12 countries (out of 112 small countries altogether), ranging (in size of income) from Switzerland (with a 1993 GNP of US$ 254 billion) to New Zealand (with a GNP of US$ 545 billion).[4]

Attributes and Performance: *A Priori* Considerations

The small size of a nation may affect its attributes and performance in the following ways:

(i) If, as is sometimes argued, the limited ability of a small country to enjoy economies of scale constrains the efficiency of use of its resources, income levels should be lower, *ceteris paribus*, in smaller countries than in large ones.

(ii) Although this does not logically follow strictly from the former proposition, the restricted efficiency may (at least at some stage) lead also to a slower growth of the economy.

(iii) The limited size of the domestic market – both as a customer of the final product and as a provider of inputs – should grant a larger role in small countries to trade with the outside world. This is probably the most obvious proposition, and the one most often tested.

(iv) At the same time, the large exports (in relation to production and income) of a small country are expected to be more heavily concentrated among few commodities than the exports of a large country. This would be due to the small variety of national resources in the small economy; and the inability to exploit the potential of economies of scale only in a limited range of goods. This proposition should hold for agricultural and mineral products; as well as for industrial activities.

(v) Given the (presumed) large role of exports and their high commodity concentration,

(vi) a relatively high level of concentration may be expected also in the composition of production of a small economy.

(vii) Since a small economy exports (primarily) only a small range of goods, and since it has less of an impact on the prices of its exports than a large economy (more on this later), its exports may also be expected to display a high level of geographical concentration.[5]

(viii) Small countries are more vulnerable to foreign fluctuations – which may be the consequences of either "objective" market forces or

changes in policies of foreign governments (such as in tariffs or QR's). This is due to both the size and composition of foreign trade. First, trade constitutes a higher proportion of income, so that each change concerning it would have a larger impact on the typical small economy than on a large one. Second, due to the higher commodity (and possibly geographic) concentration of trade, particularly of exports, fluctuations of the terms of trade should be expected to be stronger for the smaller country. Hence, both the multiplier (the changes of prices) and the multiplicand (the proportion of trade) are higher in the small country, leading thus to an expected larger impact of foreign fluctuations on the country's fortunes.

(ix) Assuming that foreign investment is biased towards traded goods, and particularly towards export activities, the larger share of exports may be expected to lead to a relatively large share of foreign resources in financing the economy's investment. This would be reinforced if the presumption of a large concentration of production is valid: such concentration would make any given activity a larger borrower in terms of the country's financial system, and thus a higher risk. This would in turn lead to heavier reliance on a more-global financial system.

(x) Finally small economies may share a pattern of policies. Specifically, they may be expected to have less autonomy in the conduct of macroeconomic (fiscal, monetary, and exchange-rate) policies than large countries enjoy. As we have seen, small countries should manifest high trade ratios. "Optimum-currency area" literature discusses how a country with this attribute is more likely to share with others a currency system, or, at least to follow macroeconomic policies in concert with a large foreign country. One implication of such a presumption is that a small country is less likely than a large one to follow totally disruptive macroeconomic policies.

Empirical Verification

An empirical illustration or test of part of the attributes of structure and patterns of performance suggested here on a priori grounds would be clearly beyond the scope of the present study, due to its requirements of resources and time. In other cases, though, such work is feasible, and will not be discussed here.

Table 1 presents "typical" levels of several variables of attributes and performance for, separately, the three categories of countries (large, small low-income, and small high-income countries). These data are not sufficient to provide a rigorous verification of propositions or establishment of patterns: for that, a much more ambitious work, in detail and method of analysis, would be required to separate out the effect of

each factor.[6] These data rather suggest stylized facts, and may indicate whether the a priori expectations would appear to be of much relevance.

Table 1 - ECONOMIC ATTRIBUTES OF COUNTRIES, BY CATEGORY (IN PERCENT)

Attribute		Small Countries, Low Income (1)	Small Countries, High Income (2)	Large Countries (3)
Annual growth rate, aggregate GDP:	average	3.2	3.4	3.3
	median	3.3	3.5	3.3
Annual growth rate, per-capital GDP:	average	.8	2.5	1.1
	median	.9	2.5	1.6
Share of investment in GDP:	average	23.5	25.5	23.4
	median	23.8	25.0	22.0
Share of saving in GDP	average	11.9	23.1	19.0
	medium	11.9	22.7	19.2
Ratio of long -term capital in GDP flow:	average	5.6	2.1	2.1
	medium	4.5	2.4	2.5
Share of exports in GDP:	average	38.8	52.2	23.4
	medium	39.7	35.0	20.9
Coefficient of export concentrations:	average	.446	.216	.287
	medium	.455	.217	.247
Annual rate of Inflation (CPI):	average	47.1	14.2	52.9
	medium	9.1	8.1	12.5
Annual rate of nominal devaluation:	average	7.2	7.2	49.6
	medium	1.4	1.5	8.3

The raw data used for the findings of Table 1 (as well as for others that will follow later) were annual observations, for each individual country, for the period from 1970 or 1971 through 1993 (in a few instances, data for the earliest or latest years may be missing).[7] These data were then averaged, to get a single observation for each country. For each category of countries, the table presents two summary statistics: the average (mean), and the median. Both are shown despite a preference of the median over the mean: the latter is highly vulnerable to the effects of large deviations in extreme cases, whereas the median measure is free of such impacts. Thus, the median should be judged as a more reliable presentation of the "typical," or the likely attribute of countries within each group.

One finding which stands out from Table I is the absence of any distinction among the three categories of countries concerning the level of the rate of growth of aggregate GDP; the rates are practically identical, for the three when the averages of the groups are compared; and only slightly

higher for low-high-income countries than for others when the medians are observed.

The pattern is somewhat more involved when growth rates of per-capita income are compared. Here, the three categories of countries appear to be distinctly different: the lowest growth rate is observed for the small, low-income countries and the highest for the small, high-income countries, with the large countries in-between. Thus, for large countries and small countries as a whole (i.e., both low- and high-income), the growth rates of per capita are roughly equal; but they are distinctly different between low-income and high-income small countries. Causality could conceivably run either way. The high-income countries may have achieved that high level due to a faster rate of growth. Or, the other way around, the high income level – indicating a large market, a high per-capita income, high skills, and a highly diversified economy – may have led to the high growth rate. Given that the high-income small countries have mostly been relatively rich for generations (Singapore and Hong Kong are the main exceptions), it is reasonable to assume that it is the latter chain of causality, rather than the former, which mainly explains the relationship observed.[8]

An interesting pattern may be observed in the behavior of saving and investment. To start with, the share of investment in GDP is practically equal for large and small low-income countries. It is somewhat higher for the third category – small, high-income countries (about 25%, against approximately 22% for the other two groups).[9] The sources of financing this investment are, on the other hand, radically different, between large and small, high-income countries on the one hand, and small, low-income countries on the other. Financing through long-term capital inflow from abroad is substantially higher (by about 2 percentage points of GDP) for the latter group. This supports our *a priori* hypothesis of a larger role for foreign finance among small countries. A dramatic difference in the opposite direction appears, on the other hand, when the ratio of domestic saving is observed: the share of saving in income is only about 11.5% for small, low-income countries, vs. close to 19% among large countries, and over 21% for small, high-income countries.

The difference in domestic saving can partly be explained by the high ratio of foreign financing ("foreign saving") in the small, low-income group, which must displace domestic saving to at least some extent. When foreign capital finances private activities in a free capital market, such displacement will take place through the lowering of interest rates, which discourages private saving (particularly business saving, but probably also saving by households, which tend to increase consumption). When foreign finance takes the form of unilateral transfers to the private, household

sector, this would definitely increase private consumption and lower the share of private saving in earned income. When, finally, foreign financing consists of unilateral transfers to the government – as it is quite often – this flow to the government would lead to an excess of public sector expenditures over taxes (through increased spending or lower taxation), creating once more a dis-saving and fall in the rate of national saving out of earned income (the GNP). Having said that, however, we have to recognize that, as recorded, foreign finance could not provide a full explanation of the low saving of small, low-income countries– perhaps not even a major explanation: even an assumption of full displacement of domestic saving by capital inflow would provide for a reduction of only 2% of GDP in the rate of saving, whereas the observed deficiency of saving in this group (that is, the degree by which it falls below that of the other two groups) is in the range of 7-10% of GDP. With the information we possess at this stage, we cannot advance a reasonable hypothesis to explain this difference.[10]

The most obvious difference between categories of countries is found, as should be expected, in the role of trade – represented in Table 1, by the share of exports in GDP (by and large, exports and imports would commonly be roughly similar). Interestingly, almost no difference is found, in this respect, between low-income and high-income small countries: in both, the typical share of exports in GDP is around 34-35%, in comparison with just over 20% among large countries.[11] It appears, thus, that the size of the country is a major determinant of the likely importance of trade in its economy; whereas the level of economic development is not. The latter, on the other hand, does however play a predominant role in shaping the structure of exports, to which we now turn.

One of our strongest presumptions, stated earlier, is that exports are much less diversified in the trade of a small country than in a large one.[12] In fact, much of the expected implications of changes of policies, which will be discussed later, would depend on the validity of this presumption about structure. The presumption is borne out by the estimates summarized in Table 1, but the pattern revealed there is more involved than what would appear from just a "'small-large" comparison.

For all small countries, export concentration is indeed typically higher than for large countries; this is indicated by both the mean and the median statistics. Thus, the median level of the concentration coefficient among large countries, shown in Table 1, is .247; whereas for all small countries together the median (not shown in Table 1) is .368. It should be noted, however; that a radical difference exists, among small countries, between the "low-income" and the "high-income" groups: the median level

of the coefficient is as high as .455 for the first, and as low as .217 for the second. Indeed, if we separate out the large countries into low and high per capita income groups,[13] we find there, too, a similar distinction (this is not shown in Table 1): the median coefficient would be .308 for the low-income group, and only .175 for the high-income countries. What stands out very clearly from these comparisons is that the level of commodity concentration of exports is indeed much higher among small than among large countries when observation is confined to less-developed economies. Among the richer economies, size loses its impact: by and large, exports are as diversified among the small rich as among the large rich countries. It may be surmised that the reasons for this phenomenon are; first, the fact that a highly developed economy derives much less of its income from the product of natural resources - the small range of availability which constrains diversification in the small economy. Second, in the rich economy, aggregate income and the size of the market are large enough to make the small size of population of much less significance.

The last two comparisons of Table 1 address representations of macroeconomic policies; and they yield interesting findings. It appears that the "typical" rate of inflation is significantly lower among small countries of both low and high income levels, than among the large countries. This seems to support the presumption that small countries have less room for independent macroeconomic (fiscal and monetary) policies than large countries possess. Quite often small countries maintain, formally or informally, a "currency board" set of rules, where the center country involved presumably conducts "'responsible" fiscal and monetary policies; "'excesses" are thus avoided by the peripheral, small countries. The observation of the rate of devaluation, in Table 1, is also consistent with this view of a pattern of dependence: the typical annual rate of (nominal) devaluation is substantially lower for small countries (of both low- and high-income levels) than for large countries. Whether this dependence of macroeconomic policies of small countries on major economic centers (or on the global situation) is a desirable attribute is an open issue, a discussion of the pros and cons of which is beyond the scope of the present paper. The finding of a typically lower rate of inflation is probably the most important consideration in favor of such dependence; and is relevant, as we shall see later, for the discussion of attributes of trade liberalization in small countries.[14]

II. Trade Liberalization in a Small Economy

The Gains From Trade

The gains from international trade should be expected to be doubly large for a small country, for two reasons. First – to belabor the obvious – the gains from specialization which trade makes possible would be particularly large. Without trade, costs of local production of the otherwise imported good would be particularly high (in relation to the parallel comparison for a large country). Or, put differently, relative prices under autarky would be markedly different from what they are in the "world" (that is, in the potential partners for trade). Hence, a large gain from trade.

The other reason should be as obvious, but for various reasons – partly understandable for some countries – may not be fully accepted. It is often argued that small countries get a raw deal in trade with large countries: it is the large country which determines the price that would prevail in the exchanges between the two, fixing a set of prices most favorable to it (i.e., a high price for its export goods in terms of its imports from the small country), to the detriment of the small country. This viewpoint – still quite common in political rhetoric – is fallacious under most circumstances. It would apply where: (i) "countries" (i.e., normally governments), rather than private actors in each country, determine transactions and prices; or, alternatively, in each country (specifically, in the large country) trade is handled by one major monopolist; and (ii) the large country as a whole (i.e., acting as a singe unit) enjoys a monopolistic position in world trade (or at least in trade with the specific small country). Under such circumstances, the large country, acting as a monopolist (and, through the government, also introducing a wedge between prices in trade and in the home market), may indeed "dictate" prices which are biased towards its own welfare, reaping most or all of the gains from trade. There may have been circumstances applying in the past to parts of the colonial trade, biasing the outcome of the trade to the enrichment of the colonial power. Today (certainly in the second half of this century), such circumstances would be extremely rare. Normally, trade is conducted among private agents, under conditions not too far from full competition. In such a world, the scenario is entirely different, and the consequences of the process of trade are exactly opposite to those just described.

Suppose two autarkic economies open their borders to free trade between them (and ignore, for simplicity, transportation costs). Before trade is opened; relative prices are different in the two economies (in the unlikely case in which they are not, no trade would ensue). With trade, relative prices (as well as absolute prices, given an exchange rate) must be

equalized. The common set of prices would be somewhere within the range defined by the two autarkic sets. The larger the economy, however, the more the common set would resemble its autarkic price set. In the extreme case, in which one country is much smaller (in its market size) than the other, the common prices would be fully equal to the larger country's set of relative prices.[15] The "small" country would fully specialize, whereas the "large" country would only partly specialize, producing itself some of the goods which it also imports from the small country. The small country would in this case reap the whole benefit from the opening of trade; and the large country none.[16] In general, the smaller the country, the more it would be a "price taker" (i.e., the more prices in its trade transactions would be similar to the original prices in its partner's home market); and the higher would be its gain from foreign trade.

Its gains from trade being prominent, so should be the interest of a small country in liberalizing its foreign trade when starting from a regime of trade restrictions. The only qualifying argument might be – indeed, this was a popular argument for constraining trade in the heyday of restrictive regimes in the post-war world – the potential damage of "vulnerability" of a country engaged deeply in foreign trade. But even this argument is not clear cut. It depends, we recall, partly on the presumption of a highly concentrated trade particularly exports) in the small country. But the degree of concentration is itself, in a large measure, a function of trade policy: the more open the trade, the more diversified it should be. This may be easily illustrated through the following diagram – greatly simplifying the nature of production and trade, but nevertheless yielding the correct inferences.

Take a world of ten goods – a through j – arranged in the diagram from left to right according to the extent of comparative advantage which the home country has in the good, in relation to the rest of the world (the "other"' country).[17] Without further information we can be sure only that the home country will export good a, and import j; and that whatever good is exported by the country, the goods to its left on the diagram would definitely be exported. Demand conditions will determine the precise cutoff between exported and imported goods; and, in the complete absence of transportation costs or other barriers to trade, any good will either be exported or imported. Suppose the actual cutoff is between f and g: goods a through f are exported, and g through j are imported. Introduce now transportation costs and assume, for simplicity, that they are proportional to the costs of production of each good, so that the ranking of goods remains unchanged.[18] This will make the exports and imports of some goods unprofitable. Suppose the cutoff points become, then between d and

e and between g and h: goods a through d are still exported and g through j are still imported; these are the "tradable" goods, "exportables," and "importables." Goods e through i become, on the other hand, "nontradables": they are produced in both the home and the foreign countries, and are not traded between the two. At this stage, introduce also policy barriers to trade - say, tariffs, which will be assumed again to be uniform.[19] These are added costs to the movement of goods and will restrict further the range of actual exports (which will fall short of the range of "exportables") and imports (again, only a section of the range of "importables"). The cutoff points will then become between b and c and between h and j: a and b will exported, and i and j will be imported. Goods c and d will be "exportables" which are not in fact exported – they are produced for sale only in the home market; whereas good h becomes an "importable" which is not in fact imported: it is locally produced, due to the protection afforded by the tariff.[20]

Figure I

Exportables				Nontradables			Importables		
a	b	c	d	e	f	g	h	i	j
Exports							Imports		

Thus, like transportation costs, barriers to trade serve to shorten the range of goods which are actually exported and imported; that is, they work to lower diversification, and increase commodity concentration of the trade flows (concentration of exports, rather than of imports, will normally be the more important factor). In this way, they tend to make the country more vulnerable to fluctuations abroad. Trade liberalization would thus also have a favorable effect on the consequences of foreign trade: while increasing the (relative) size of trade would make the country more "vulnerable," increasing the dispersion in the commodity composition of trade (mainly of exports) would make it less "vulnerable." Gauging the net impact is not a matter of logical deduction, but of the observation of experience. A guess may be ventured, though, that the effect of higher diversification would be dominant, so that freer trade would not only increase the "average" gains from trade but also lower the loss due to foreign fluctuations.[21]

A separate point about the benefits of liberalization in small countries is concerned with the existence, prior to liberalization, of tariff duties on imported inputs. In the absence of a drawback scheme for such duties in export activities – and, indeed, such schemes are frequently absent or are highly imperfect – tariffs on inputs amount to taxation of

exports. In small economies, as one of the manifestations of the large role of trade, the import component of exports (particularly exports of manufactured goods) would typically be higher than in large economies; hence, the element of tax on exports involved in input duties would be higher. Liberalization (which will almost always include the removal, or drastic reduction, of duties on imported inputs) should thus have a stronger promotion effect on exports – particularly of the "'non-traditional" nature – in small than in large economies.

Trade liberalization, thus, seems to be even more desirable for the typical small nation than it is for a large one; in its long-term impact on the economy's welfare and growth. An issue that should be addressed, though, is whether the transitional costs of trade liberalization may not be different for the small economy than they are for others. To this issue we now turn.

The Cost of Adjustment

The transition costs of trade liberalization may indeed be expected to be different in a small economy, on several scores.

The size of shifts of resources. Since the gains from trade, and the loss from trade restriction, are more obvious in a small economy, trade barriers prior to liberalization may be expected to be lower in the "typical" small economy than in its large counterpart. If this is true the extent of liberalization would be smaller, for any given level of trade freedom maintained following the liberalization; and, hence, the cost of adjustment to the new trade regime would be smaller. But, by the same token, the longer-term gains from liberalization would also be smaller, since the extent of liberalization is smaller. A more meaningful question may hence be whether for any given size of liberalization (ignoring here the issue of what precisely this means, or how it is to be estimated), the process of adjustment may be more costly in a small economy.

A major consideration which may indeed indicate a presumption of higher adjustment costs, is the high degree of commodity concentration of activities in a small economy, combined with the generally small number of firms in each activity. This would imply stronger friction in the process of adjustment. The ability of each given firm to adjust to new circumstances by changing the composition of its production may be more limited than in the large economy; and, indeed, empirical observation suggests that, following liberalization, much of the adjustment takes place in the activities of existing firms.[22] Second, the activity of each firm would tend to be highly localized, taking place in just one plant; in one specific location (or in a very small number of locations); this – would hold more, naturally, for manufacturing activities and for – minerals, and less so for

agricultural production. And, in turn, the firm's activity is likely to form a major part of total economic activity in that specific location. The elimination or drastic reduction of the activity of the firm would thus create a need for the geographical mobility of factors (primarily of the labor force) – a particularly painful element of the process of adjustment. In addition, the smaller variety of activities in which firms are engaged, presumably, in the small economy, would mean that the activities which are encouraged by the process of liberalization are less likely to expand through the growth of an already existing branch of production: they are more likely (than in the large economy) to require the establishment of new firms in new lines of production - again, presumably, a more difficult and slow process of adjustment. Thus, a presumption does exist that adjustment to a liberalization policy may carry hither transition costs in the small economy ; and, hence, that a more gradual process of liberalization may be recommended in such an economy than, *ceteris paribus*, in a large economy.

An entirely different element of the "cost" of liberalization may be the fiscal cost: the loss of revenues from import duties (or, sometimes, from export taxes). Experience shows that most of the time this loss is absent, or is minimal: removal of highly-protective tariffs does not significantly change the amount of revenues, which is low in any case; and import expansion following liberalization tends to increase tariff revenues. Where there is a loss, however, it would tend to be relatively higher in small economies which, due mostly to the relative size of foreign trade, tend to rely more on trade taxation than do large economies. If true, this would indicate a need not so much for gradualism in reform as for the replacement of trade taxes by other taxes – such as value-added tax or general sales tax.

The Likelihood of Success

From general experience with trade liberalization – as well as *a priori* considerations – can any judgment be made about the question of whether liberalization is likely to be more or less sustainable in a small economy than in a large one?

To start with, when the question posed concerns not the fate of a single liberalization episode but the general drift of a country's trade policy, the size of nations does indeed seem to be a factor. In the findings of the Bank's study of the liberalization experience (Michaely, Papageorgiou, and Choksi, 1991), small countries are distinguished by territory rather than by size of population. Then, on the basis of long-term performance, countries are categorized as "liberalizers" vs. "non-

liberalizers", the size of territory is concluded to be related systematically – to the policy trend: most of the "liberalizers" have been definitely small countries (Indonesia is the clearest exception), and most small countries have been "liberalizers" whereas, of the "non-liberalizers," only two: Portugal and Sri Lanka – have been small countries (in the present paper Sri Lanka is defined as a "large" economy). On the other hand, classification of countries by income levels would not reveal a systematic difference: "The economy's aggregate income (...) appears to have little bearing on the long-term fate of liberalization. (...) The median size of income in the two categories of countries ('liberalizers' vs. 'non-liberalizers') is almost identical"(Ibid.:122). The distinction by territory would agree with our *a priori* assumption that small countries would be more willing to adopt liberalization policies, due to the higher gains from trade - and from free rather than restricted trade – expected in a small economy.

We turn now to see whether the size of the country may have any bearing on the likelihood that when liberalization is undertaken, it would be of a sustainable nature. The overall experience of liberalization indicates that the following attributes contribute to the likelihood of sustained liberalization (Ibid.):

- Trade liberalization should be introduced with a major move rather than a halting step
- When trade liberalization is introduced under conditions of macroeconomic instability, it must be accompanied by a (contemporaneous) stabilization policy.
- The initial move should normally be accompanied by a substantial nominal devaluation.
- A real depreciation and, particularly, a stable real exchange rate should be maintained for several years following the introduction of trade liberalization.
- This requires, above all, a restrictive monetary policy and, most important, a consistently tight fiscal policy.

In asking whether the size of a country might play a role in the likelihood of fulfilling these conditions, the degree of social coherence and political stability seems to be of crucial importance. The policies enumerated above are almost inevitably painful to one segment of the population or another, and they are more likely to be undertaken, and to be adhered to, where the sociopolitical system facilitates the adoption of policies which are deemed desirable for the community as a whole.

Kuznets (1958) postulated that small countries do indeed enjoy a higher measure of sociopolitical stability; but this remains to be tested.

Beyond this, several specific considerations suggest themselves. One, concerning the strength of liberalization, is implied by what already has been said. If adjustment is less smooth, and transitional costs higher, in a small economy, it would be less likely that its government adopts a strong liberalization policy; i.e., one which starts with a major, bold first step. If true, this would lower the likelihood of an introduction of a sustainable liberalization policy in a small economy.

The set of issues concerned with macroeconomic conduct – fiscal, monetary and exchange rate policies – would seem to be relevant to the distinction of small vs. large nations; but considerations of contradictory directions are indicated. We recall the presumption – supported by empirical observation that small countries, owing to their smaller scope for independent macroeconomic policies, are more likely to avoid the excesses of such policies. Hence, in the case of a typical small country, it is less likely that a thorough redressing of such policies should be required when trade liberalization is undertaken. Indeed, the empirical finding of a strong association of sustainability of liberalization with an initial nominal devaluation is drawn from experiences of countries with volatile macroeconomic policies; whereas such devaluation is not likely to be called for in a country following a "'currency board" regime. When redirection of policies is required, on the other hand, it may prove to be more difficult. Specifically, if the small country shares with others a common currency – formally or at least effectively – it would not be possible to change its exchange rate when a nominal devaluation is indicated. Changing the real exchange rate would then have to be effected through a fall (relative to other nations) of domestic prices – normally a much more difficult and costly undertaking.

Lessons From Recent Experiences in LAC

A thorough study of liberalization experiences, to test the validity of the *a priori* considerations mentioned thus far, would be a major project. An attempt has been made here, on the other hand, to study in a cursory manner the recent experience of countries in the region of Latin America and the Caribbean. Fortunately, from more than one viewpoint, almost all LAC countries have implemented in recent years at least some measure of trade liberalization, so that their combined experiences provide a reasonably large number of observations – sufficiently large to suggest at least some tentative conclusions.

To start with, we determined the dates (years) in which trade liberalization has been introduced in each country; and whether each liberalization experiment has been strong.[23] This information is presented in Table 2.

Table 2 - EPISODES OF TRADE LIBERALIZATION, LAC COUNTRIES[24]

Country	Year of Introduction of Policy (1)	A "Strong" Policy Package? (2)
Argentina	1989	Yes
Bahamas	n.a	n.a.
Barbados	1991	No
Belize	1986	No
Bolivia	1985	Yes
Brazil	1990	Yes
Chile	1974	Yes
Colombia	1990	Yes
Costa Rica	1991	Yes
Dominican Republic	None	n.a.
Ecuador	1990	No
El Salvador	1989	Yes
Guatemala	1991	Yes
Guyana	1989	Yes
Haiti	None	n.a.
Honduras	1990	No
Jamaica	1991	Yes
Mexico	1985	Yes
Nicaragua	1991	Yes
OECS	1991	No
Panama	1995	Yes
Paraguay	1989	Yes
Peru	1990	Yes
Suriname	None	n.a.
Trinidad and Tobago	1990	No
Uruguay	1989	Yes
Venezuela	1989	Yes

n.a.: Not applicable

Next, we have looked at the pattern of behavior of several crucial variables during these episodes of liberalization. This has been done through a "before-during-after" observation; that is, by comparing the performance of each variable during: (i) the last three years prior to liberalization; (ii) the year of introduction of liberalization; and (iii) the three years following liberalization.[25] We note again that an analysis along these lines does not constitute a rigorous test of causality; it hopefully provides, on the other hand, a pattern of "stylized fact;" and some clues about the consequences of liberalization.

The variable which might have been most instructive about transition costs of liberalization is the ratio of unemployment. Unfortunately, data on this measure of performance are hard to come by: they are often missing altogether, unreliable, or are not comparable, so that

their use might be misleading rather than illuminating. Consequently, we have had to dispense with the use of this variable, and be content with the observation of two other variables of real performance: the rate of growth of GDP, and the rate of expansion of exports.[26] These are presented in Table 3, along with data of two other variables, which indicate the nature of macroeconomic performance.

Table 3 - GROWTH OF GDP DURING EPISODES OF LIBERALIZATION, LAC COUNTRIES

		Rate of Growth of GDP (per cent per year)		
Country	Year of Liberalization	Average of 3 Preceding Years	Year of Liberalization	Average of 3 Following Years
Small Countries				
Belize	1986	-.4	7.3	10.3
Bolivia	1985	-3.0	- 2.8	2.4
Costa Rica	1991	5.0	3.6	6.1
El Salvador	1989	1.8	1.4	4.4
Grenada	1991	4.5	5.1	.4*
Honduras	1990	5.3	- .6	3.3
Jamaica	1991	5.6	.1	4.1*
Nicaragua	1991	-5.5	-10.6	1.8*
Paraguay	1989	3.3	7.0	2.1
St. Kitts and Nevis	1991	5.8	.3	4.1
Trinidad and Tobago	1990	-4.3	.8	.8
Uruguay	1989	6.7	1.0	5.6
Average		2.1	1.1	3.8
Large Countries				
Argentina	1989	3.3	-10.3	8.3
Brazil	1990	2.7	- 4.2	1.6
Chile	1974	1.7	.1	1.8
Colombia	1990	4.2	3.8	4.0
Ecuador	1990	1.8	2.3	5.0
Guatemala	1991	3.6	4.4	4.6*
Mexico	1985	-.9	3.8	.1
Peru	1990	-4.2	- .6	2.3
Venezuela	1989	5.7	-10.3	8.0
Average		2.0	-1.2	4.0

* Averages of only 2 years

Starting with the rate of growth, a common pattern is apparent: it has several exceptions, but is nevertheless frequent enough to be considered "typical." During the year in which trade liberalization is introduced, a decline of the growth rate of income takes place. On occasion (particularly in the episodes of Argentina, Nicaragua, and Venezuela), the drop is quite sharp. This may be interpreted as a transition cost of liberalization. But from other knowledge we possess, it would be safer to assign this fall of growth to restrictive macroeconomic policies, which have commonly been adopted concurrent with the introduction of trade liberalization (this is definitely true for the three aforementioned extreme cases). In fact, the presumed discouraging effect of trade liberalization on production may

hardly be expected when the policy is just introduced – when the expansion of imports, and changes in decisions of entrepreneurs, have barely begun. Be it as it may, we note that the decline of the rate of growth is less common among the small than among the large countries. On average, the growth rate falls by only 1%; and remains positive, for the group of small countries; whereas it turns negative, falling by 3% from its pre-liberalization level, for the large countries. This difference may be related to differences in patterns of change of macroeconomic policies, which will be mentioned shortly.

Beyond the year in which liberalization is introduced, growth resumes its pre- liberalization pace and then exceeds it. In this, the groups of small and large countries behave, on average, remarkably alike: in both, the rate of growth about doubles, from a pre-liberalization level of 2% per year to around 4%. Partly, this compensates for the slack during the year of liberalization itself; but even if this year is added to the three years following it, growth in the post-liberalization period would still exceed its pre-liberalization level, by about 1%. Thus, even in the short run, growth appears to accelerate following the liberalization.[27] From this evidence, hence, no transition costs appear to have been paid; and this, once more, applies to the small countries in LAC at least as much as to the large countries. So far as this evidence goes; it does not therefore support our *a priori* presumption of higher transition costs of trade liberalization among small countries.

It may be expected that this absence of support for the presumed difference originates in liberalization policies having been less intensive among small countries. Indeed, some difference of this nature does exist. In the judgments of country economists who have identified the liberalization episodes – as they are recorded in Column (2) of Table 3 - the liberalization policies introduced were "strong" in only eight out of thirteen experiences among the small countries (they were "weak" in Belize, Grenada, Honduras, St. Kitts and Nevis, and Trinidad and Tobago),whereas among the eight experiences of large countries, in only one instance (Ecuador) was the policy judged to be "weak" To what extent this biases indeed the inferences about transition costs among small countries is hard to tell.[28] It is interesting to note, though, that the lower incidence of strong liberalization policies among the small LAC countries does give some support to another hypothesis we have postulated earlier, namely, that a presumed lower level of trade barriers, among small countries (as well as a lower frequency of disruptive macroeconomic environment) would call forth less intensive trade liberalization policies in the smaller countries.

Table 4 - EXPORT PERFORMANCE DURING EPISODES OF LIBERALIZATION, LAC COUNTRIES

Percentage Change of Share of Exports in GDP

Country	Year of Liberalization	Average of 2 Early Years	Year of Liberalization	Average of 3 Following Years
Small Countries				
Belize	1986	.03	.15	.03
Bolivia	1985	-.06	.19	.04
Costa Rica	1991	.03	.13	.01*
El Salvador	1989	-.10	-.16	.03
Grenada	1991	-.02	0	.01*
Guyana	1989	.15	.44	.15
Honduras	1990	.05	.21	-.02
Jamaica	1991	.01	.09	.04*
Nicaragua	1991	.37	-.15	0*
Paraguay	1989	.17	.07	-.14
St. Kitts and Nevis	1991	-.07	.13	--
Trinidad and Tobago	1990	.09	.02	-.04
Uruguay	1989	-.03	.07	- .05
Average		.06	.08	.02
Large Countries				
Argentina	1989	-.04	.37	-.02
Brazil	1990	-.01	-.13	.06
Chile	1974	-.01	.49	.02
Colombia	1990	-.01	.14	-.06
Ecuador	1990	.09	.11	-.07
Guatemala	1991	.10	-.13	-.01*
Mexico	1985	.21	-.11	.04
Peru	1990	.04	-.11	-.08
Venezuela	1989	-.05	.62	-.06
Average		.04	.20	-.02

* Averages of only 2 years

The share of exports in GDP is another measure of performance, recorded in Table 4. The pattern of change of this variable which emerges from these data is quite different from the one revealed for the rate of income growth; and it is rather disappointing, for both small and large economies. In both categories, an acceleration of the rate of growth of exports (as a share of GDP) appears to take place in the year of liberalization – much more among large than among small countries.[29] It may be presumed that the main reason for this immediate reaction of exports is the slack domestic market at this time (indeed, we have seen that the contraction more severe, typically, among the large economies).[30] Beyond that year, exports expand less than prior to the liberalization; this, once more, is true for both large countries (where export expansion turns to become negative) and small. This pattern is remarkably different from

that of earlier liberalization experiences, in which export growth appeared to have increased dramatically from the pre- to the post-liberalization era.[31] The explanation for this difference must lie in the behavior of the real exchange rate. In the earlier experiences, a real depreciation – and a consequent growth of exports – were necessary elements for the success and sustainability of trade liberalization. In the world of the early 1990's, on the other hand, with rather free and large-scale capital movements, capital inflows into the liberalizing countries have helped to maintain low real exchange rates, with their discouraging impact on exports, without disrupting the sustainability of liberalization. This pattern of behavior of the real exchange rate and of exports distinguishes, thus, the recent wave of trade liberalizations among LAC countries from the experience of preceding decades.[32] But no distinction is apparent, in this respect, between small and large countries.

III. The Small Country in a Trade-Preferential Agreement

Gains and Losses: *A-Priori* Considerations

Trade-preferential agreements could obviously come in a variety of forms. We shall discuss here mostly the "free-trade-area" type j that is an agreement through which the partners remove completely tariffs and other barriers on their mutual trade, but follow separate policies concerning the trade flows with non-partners. At the end, a few words shall be said about the additional component contained in a "customs union" – the setting by the partners of a common external tariff and other barriers) on trade with the rest of the world.

The well-known "customs-union theory," based primarily on Viner (1950) and Meade (1953), shows the "union" (in fact, the "free trade area") to have three effects on each of the participants: a "trade-diversion" effect, a "trade-creation" effect, and a "'consumption" effect. The first of these will work to lower the welfare of the economy concerned; whereas the other two will work in the opposite direction - to raise welfare. In the general case, the net result could turn either way. But presumptions may be established; indicating under what circumstances a welfare gain or a welfare loss are more likely. Thus, on *a priori* grounds, we may state that a net gain becomes more likely (or a net loss, if there is one, becomes smaller):[33]

(i) The higher the initial level of tariffs (or other NTBs) when the preferential agreement is introduced (a level which following the agreement continues to be applied to the rest of the world).

(ii) The higher the tariff level of the partner country; that is, the higher the concession the home country gets on exports to its partner(s).

(iii) The smaller the size of imports from the rest of the world (the non-partners): the smaller this is; the less room would be found for trade diversion.

(iv) The higher the proportion of imports from the partner country, at any given level of the home country's aggregate imports: such a high proportion also makes trade diversion less prevalent.

(v) The closer the relative prices in trade with the partner country to what they are in the rest of the world. The more true this is, the more trade creation rather than trade diversion is likely, and the lesser the loss from trade diversion. In the extreme case, when relative prices at the partner's market are equal to what they are in the rest of the world, the preferential agreement is equivalent to a complete move to free trade.

(vi) The larger the economic size of the partner (measured by its income and trade). The larger this is, the more likely it becomes that relative prices in the partner's economy would indeed be similar to what they are in the rest of the world.

(vii) The less unique the partner; that is, the more it resembles in its attributes the rest of the world. Absence of uniqueness leads, again, to similarity of relative prices.

We shall examine here the position of the small country in light of these considerations. But prior to that, we shall look at the small country from another angle, which does not form an integral part of the "customs-union" theory. To analyze the significance of smallness in a trade-preferential agreement, we shall start by looking at a small country as the potential partner to an agreement with a large country : what should the large country expect from such an agreement?

To start with, most of our propositions are based on the "small-country" assumption. They imply that the home country is small, in relation to its partner (and to the rest of the world): that it is a pure price taker, which could have no impact on the prices in its trade with foreign countries. In the case now examined, this is not true: the home country is large, and the partner is small, so that prices faced by the home country are no longer constant. This adds another dimension to the analysis.

When the partner country is small, and the home country large, the new imports from the partner (whether replacing home production – trade creation; or displacing imports from the rest of the world – trade diversion) would not take place at an existing, constant price: the added demand by

the home country would serve to increase the price it pays for imports from its partner (due to an increased cost of production). This is an added loss, beyond the one conventionally defined as the loss from trade diversion (which is just the expression of a shift of imports from a less to a more expensive source, at given and unchanged foreign prices). In the extreme case, the price at the partner's market will reach the *cum tariff* price of the rest of the world, from which some imports will continue even after the agreement (alongside imports from the partner).[34] The home price would then remain what it had been prior to the agreement. Thus, no trade creation would take place, nor any consumption effect, so that the potential favorable impact of the agreement cannot materialize. Trade diversion, on the other hand, would not only be the sole consequence of the agreement but would be at its maximum height.[35] This is, thus, a case of clear and definite loss to the home country.

We now reach the examination of the impact of small size of the partner country through the criteria indicated earlier – keeping all throughout the small size of the partner as defining the case on hand. The first criterion appears to be neutral (or irrelevant) to the phenomenon on hand: when the contemplated partner is small, there is no reason to expect – in the general case – the home country's initial tariff level to be either higher or lower than would be the case when the partner is a large country. There may be a reason why – coming to the second criterion – the partner's tariff level may be initially low: this would be true were it found that small countries, due to higher losses from the imposition of trade barriers, tend to maintain lower levels of such barriers. In that case, the expected gain of the home country from the reduction of tariffs in the partner's market – the improved terms of trade coming from the source – would be smaller. But whether such presumption about initial tariff levels is valid must be established through empirical observations.

Criteria (iii) and (iv) may be combined, and they clearly point out a bias against the small partner. Trade with the small partner must itself be small, *ceteris paribus*. Hence, a stronger presumption of trade diversion exists when the contemplated partner is small, with a potentially larger loss on this score from the preferential agreement.

The indication of loss is probably strongest when we come to the next set of criteria - those relating to the similarity of the partner country to the rest of the world. This is of crucial importance. In the best case, the partner's attributes are identical with those of the rest of the world, leading to similar patterns of relative prices : under such circumstances, the trade-preferential agreement would be equivalent, from the home country's viewpoint, to a move to a universal and non-discriminating free trade. This

is, for obvious reasons, more likely the larger the partner country; and – strongly related to it – the more diversified the structures of its production and exports. A small economy, with highly concentrated and specialized structures would clearly be an undesirable partner; on this score, an agreement which is likely to lead to a loss. The level of development of the economy should be highly relevant here: the more developed the economy and the higher its per capita and aggregate incomes, the more diversified will be the structure of its production and exports. If size is defined, as we have done here, by population, the best potential partner would be a large and highly-developed economy (such as the U.S., the European Union, or Japan), whereas a small and poor economy would be the worst partner.

In concluding our *a priori* considerations, we see that the most promising agreement is one concluded by a "small" country with a "large" partner. In having the least impact on its terms of trade through the country's own trade, in achieving maximum trade creation and trade expansion, a minimum level of trade diversion, and a minimum loss from any given level of such diversion; this would be the most promising preferential agreement. This by itself does not guarantee, however, that any agreement of a small country with a large one - even the largest – would be beneficial; it merely – states that, without further specific knowledge, the probability of a beneficial agreement (from the point of view of the small partner) is higher than in any other partnership.

A partnership of a small economy with another small one is definitely less likely to be beneficial (to both small partners). The same considerations that have been offered earlier to suggest that for a large country – an agreement with a small one is likely to lead to a loss apply also to the case in which the "home" country is small rather than large – save one: the detrimental effect on the home country's terms of trade, that was found in the case of a large home country does not exist here. A similar way of stating it is that the terms of trade effect applies in such a case to both sides of the agreement – hence tending to cancel such effect for them.

Finally, although this falls beyond the scope of this paper, an agreement between two large economies is likely to be the most rewarding combination for the two partners taken together. For each of them, however, it would rank below the agreement of a small home economy with a large partner: in this case, too, the favorable impact of an agreement on the home country's terms of trade would be generally absent.[36]

This analysis may thus be summed up as follows. In a general way and with no knowledge of the specific elements of a trade preferential agreement, an agreement of a small economy with a large one is the most

promising for the home country; and the larger the partner, the better. The obverse of this statement: an agreement of a large economy with a small partner is the least likely to be of benefit, and the most likely to lead to a loss, to that economy. An agreement between two small countries is not likely to bring a gain to either – it would have the attributes of a losing proposition. It is also the agreement least likely to be of substantial consequence – a point we shall dwell upon shortly.

At this juncture, we should emphasize again that these inferences have been derived for a trade preferential agreement of the free trade area nature. For a customs union, however, an important qualification must be added. When a common external tariff is established, it is likely to reflect little, if at all; the desires and needs of the small country (at least as they are perceived by its government): it would reflect, predominantly, the tariff schedule land other trade barriers – of the large partner. In a general way – again, with no access to the attributes and information of any specific case – it may be stated that for a small nation contemplating a trade-preferential agreement with a much larger partner, a free trade area form of agreement should be preferable to a customs union.

Effectiveness of a Preferential Agreement: Compatibility of Trade Flows

The considerations offered thus far indicate that a small economy is not a promising partner for a potential trade-preferential agreement, in the sense of presenting a high probability of a loss from the agreement and a low probability of a gain. Related to it is the issue of the effectiveness of a trade agreement – its potential to lead to an extra amount of trade between the partners. This could be assessed in concrete terms only on a case-by-case basis; but a prior knowledge of the structural attributes of each country's trade flow may indicate the potential for trade expansion. A synthetic index which is indeed capable of providing such clues has been devised on an earlier occasion (see Michaely, 1995); and we shall use it here for the analysis of the issue at hand.

The index of compatibility of a home-country's imports with the partner' s exports,designated as S_{mjxk}, is defined as:

$$1 - \frac{\sum_i |m_{ij} - x_{ik}|}{2}$$

where

$|\ \ |$ indicates absolute values (i.e., regardless of sign)

m_{ij} = share of good i in total imports of country j ("home country"); and

x_{ik} = share of good i in total exports of country k ("partner")

The index will be higher the closer the two commodity structures of the trade flows (one country's imports and the other's exports). At one extreme, the partner country exports none of what the home country imports: in this case, the index will be zero. The other extreme is where the partner country exports goods in precisely the same proportions that the home country imports them, in which case the index will be 1.

The more the exporting country offers goods in similar proportions to those demanded by the importing country – and the higher, thus, the index of compatibility between the two trade flows – the stronger the potential for trade expansion between the two economies, in the present context, as a response to a trade-preferential agreement. Related to our earlier analysis, it should be evident that the index should be higher the less unique the export structure of the exporting country – the more, that is, that it resembles the structure of major traders and of the world as a whole.[37] This, in turn, is closely related to the degree of commodity concentration of exports: the more diversified the exports, the more they should resemble the global structure of exports.[38]

We have estimated the indices of compatibility of each country's exports with each other's imports for close to 80 countries, for which the required data are available (1993 data have been used). It would be too cumbersome to present all the individual indices (the number of entries would exceed 6000!). Instead, Table 5 provides the averages relevant in the present context. The countries are listed by groups, where the large countries are subdivided into two – the poorer and the richer (following our earlier discussion of the degree of commodity concentration). Thus, we have four groups: (i) small countries of low aggregate income; (ii) small countries of high aggregate income; (iii) large countries of low per-capita income; and (iv) large countries of high per capita income.[39] For each country, five average measures of the index of compatibility are presented: separate averages for the importing countries belonging to each of the four country categories; and an overall average for all (importing) countries. These findings are, in turn, summarized in Table 6 which presents a matrix of the averages of the indices of each group. Thus, for instance, the table shows the average index of compatibility of exports of small, low-income countries with imports of small, low-income countries; with, next, imports of small, high-income countries; and so on, including the overall average index of this group (small, low-income countries) with all importing countries. Next, the table presents similar indices of compatibility of the exports of countries belonging to the small, high-income group with the imports of countries belonging to the four categories; and so on.

Table 5 - COUNTRY INDICES OF TRADE COMPATIBILITY

	Average Index, by category of Importing Countries				
Country, by Category	Small Countries, Low Income (1)	Small Countries, High Income (2)	Large Countries, Low Income (3)	Large Countries, High Income (4)	All Countries (5)
A. Small countries, low income					
Barbados	.23	.23	.15	.20	.20
Belize	.05	.06	.03	.08	.05
Bolivia	.10	.12	.10	.18	.12
Costa Rica	.26	.26	.20	.28	.24
Cyprus	.28	.25	.15	.22	.22
El Salvador	.29	.29	.22	.26	.26
Faeore Islands	.03	.03	.02	.02	.03
Fiji	.13	.15	.09	.13	.12
Guadeloupe	.18	.18	.14	.16	.16
Greenland	.04	.04	.03	.04	.03
Honduras	.14	.14	.10	.14	.13
Iceland	.06	.07	.05	.07	.06
Jordan	.22	.21	.16	.19	.20
Martinique	.24	.19	.17	.17	.20
Mauritius	.13	.16	.10	.14	.13
Nicaragua	.13	.13	.12	.14	.13
Panama	.22	.21	.16	.20	.20
Papau -New Guinea	.06	.07	.07	.08	.07
Paraguay	.10	.09	.09	.10	.09
Reunion	.19	.20	.17	.20	.19
Senegal	.22	.17	.18	.16	.19
Seychelles	.02	.02	.02	.02	.02
Suriname	.03	.04	.03	.04	.04
Trinidad and Tobago	.23	.17	.21	.19	.21
Tunisia	.28	.31	.26	.30	.28
Uruguay	.26	.26	.20	.25	.24
B. Small Countries, High Income					
Austria	.51	.60	.47	.56	.51
Denmark	.48	.52	.40	.50	.48
Finland	.41	.46	.39	.43	.41
Hong Kong	.26	.38	.24	.33	.29
Ireland	.37	.42	.30	.40	.38
Israel	.31	.43	.32	.40	.34
New Zealand	.27	.28	.23	.30	.28
Norway	.31	.33	.31	.35	.32
Portugal	.39	.44	.33	.42	.39
Singapore	.40	.48	.36	.45	.41
Sweden	.49	.50	.46	.55	.49
Switzerland	.40	.48	.39	.45	.41
C. Large Countries, Low Income					
Algeria	.13	.09	.13	.12	.13
Bangladesh	.08	.11	.06	.09	.08
China	.39	.47	.33	.44	.39

continued ...

Table 5 - COUNTRY INDICES OF TRADE COMPATIBILITY (...continued)

Country, by Category	Average Index, by category of Importing Countries: Small Countries, Low Income (1)	Small Countries, High Income (2)	Large Countries, Low Income (3)	Large Countries, High Income (4)	All Countries (5)
C. Large Countries, Low Income					
Colombia	.28	.31	.26	.31	.28
Ecuador	.13	.13	.13.	.15	.14
Egypt	.28	.28	.28	.29	.28
Ghana	.08	.09	.07	.09	.08
Guatemala	.29	.27	.21	.25	.26
India	.31	.36	.28	.33	.31
Indonesia	.29	.33	.26	.33	.30
Kenya	.22	.18	.18	.17	.19
Madagascar	.16	.17	.13	.16	.15
Malaysia	.32	.41	.31	.40	.34
Morocco	.20	.23	.17	.22	.20
Nepal	.06	.08	.05	.08	.07
Pakistan	.13	.18	.11	.14	.14
Peru	.16	.17	.14	.16	.16
Philippines	.24	.31	.21	.30	.25
South Africa	.23	.27	.26	.28	.25
Sri Lanka	.14	.20	.12	.18	.15
Syrian Arab Republic	.17	.15	.16	.18	.17
Thailand	.34	.43	.27	.39	.34
Turkey	.31	.33	.27	.30	.30
Zimbabwe	.20	.22	.18	.22	.20
D. Large Countries, High Income					
Argentina	.33	.30	.31	.33	.32
Australia	.28	.29	.29	.33	.29
Belgium-Luxembourg	.52	.57	.46	.56	.51
Brazil	.39	.43	.38	.45	.40
Canada	.42	.46	.41	.53	.45
Chile	.17	.19	.15	.20	.17
Germany	.54	.66	.52	.66	.57
Greece	.32	.32	.28	.30	.30
Italy	.52	.62.	.47	.53	.53
Japan	.41	.53	.48	.53	.45
Korea (Rep. of)	.40	.51	.30	.46	.41
Mexico	.45	.54	.41	.56	.47
Netherlands	.53	.59	.46	.56	.52
Spain	.52	.58	.45	.56	.52
U.K.	.54	.66	.51	.66	.58
U.S.	.48	.61	.46	.63	.52
Venezuela	.20	.17	.20	20	.20

Table 6 - AVERAGE INDICES OF TRADE COMPATIBILITY, BY CATEGORIES OF SIZE AND INCOME.

Category of Exporting Countries	Category of importing Countries: Small Countries, Low Income	Small Countries, High Income	Large Countries, Low Income	Large Countries, High Income	All Countries
Small countries, low income	.16	.15	.12	.15	.15
Small countries, high income	.38	.45	.35	.43	.39
Large countries, low income	.21	.24	.19	.23	.22
Large counties, high income	.41	.47	.39	.48	.42

The results are illuminating, and mostly conform with our *a priori* expectations – perhaps calling further attention to the role of income (as could already be gathered from the discussion of commodity concentration). It appears that small countries are indeed less promising as trade partners than large countries but that a distinction by income would be much more relevant than a mere distinction by size. The lowest indices are found for the exports of small, low-income economies; and these indices are almost equally low whatever the attributes (size and income) of the importing countries. The next lowest indices are found for the exports of countries belonging to the group of large, low-income economies: these are only somewhat higher than the indices of exports of countries in the former group. But this distinction by size pales in comparison with the contrasts found when distinction is made by income levels. Among the high-income countries, it is again true that somewhat higher indices are found among the large than among the small nations; but both groups of high-income countries manifest much higher indices of compatibility of their exports than either group (large or small) of the low-income countries. The indices are particularly high when both the exporting and the importing countries are high-income countries - whether large or small: these indices range from .43 to .48 – in sharp contrast to the case in which both the exporters and the importers are low-income countries (again, large or small), where the indices range from .12 to .21.

These inferences are reinforced by tests of significance of the differences (not shown in the table). When we compare average indices of compatibility for low-income countries, all the relevant comparisons (i.e., those made along the columns of Table 6 show significantly higher indices for the large than for the small countries; that is, the probability of these differences being a matter of accident is zero. When similar comparisons are made for the two categories of high-income countries, all indices are again higher for the large countries but the differences are, this time, of

low significance. Thus, the probability of accidental results (that is, of the apparently different averages in fact representing samples drawn from the same population) lies in the range of .23 to .65. Once more, it appears that size matters much for low-income countries, but only little for the rich economies.

Thus, partnerships with high-income countries, whether large or small, promise to have a high potential of expanding the size of trade among the partners – especially (but not exclusively) when both partners are high-income nations. Conversely, only a low potential for trade expansion may be expected when the partner is a low-income country – and in particular when both countries are poor. A small exporting country presents only a weak promise for trade expansion when it is a low-income country. When, on the other hand, its aggregate income is high (implying also, most often, a high per capita income), the country's small size seems to be losing most of its relevance: it is almost as promising a partner as a large, rich country; and is definitely far superior, in this sense, to a large but poor economy.

Notes

1 The tables include several territories which are not fully "sovereign" nations. They are taken from the World Bank Atlas for 1995.

2 Chenery and Syrquin (1975) used a cutoff population point of 15 million. This definition would have added 14 more countries to the -"small" category, bringing it to 126 out of 183. But making this category, of such proportions would reduce the uniqueness of the group, and the scope for a separate study, of its attributes. In a more recent study, Srinivasan (1986) used a cutoff point of a population of 5 million, adding a subcategory of "very small" countries with a population below 1.5 million people.

3 The most obvious case of a nation with a very large territory and a modest-sized population is Australia, a continent of 17.7 million people.

4 The next country, in terms of aggregate income, would be Tunisia, with a 1993 GNP of $15 b. (and a per-capita income of $ 1,780, in comparison with 7,890 in Portugal, the poorest of the list of twelve); a clear cutoff point is thus indicated. Note that the income level of the countries at the bottom of the list - around $ 45 b. - is close to the median level of GNP of the "large" countries. Income considerations blur more the category (as defined by population) of "small" than of "large" countries. Thus, for instance, 10 of 96 "small" countries have an aggregate income which exceed the median income of "large" countries; whereas only 3 out of 57 "large" countries display, an income level lower than the median of the "small" group.

5 This inference appeared to be validated in a study of a few decades ago. See Michaely (1962), Table 6, p. 25.

6 For instance, along the lines of the analysis in H. Chenery and M. Syrquin (1975).

7 Export concentration is indicated by data of a single year, 1992. It is represented by the Gini-Hirschman coefficient of commodity concentration (see Michaely, 1962).

8 For the purpose on hand, we have separated the large countries into two income groups: low per capita income (1993 level of per capita income below $ 2,000 – 29 countries altogether); and high per capita income (19 countries) (this is not shown in Table 1). This grouping of countries does not correspond to the World Bank definition of low-and middle-income countries. For the low-income group, the average annual rate of growth of per capita income is .6%. and the median is .9. These are quite similar to the statistics for small low-income economies 1.8 and .9, respectively. Similarly, for the richer large countries the average growth rate is 2.0%, and the median 2. 1 – quite close to the observations of the small high- income group of countries (2.5% for both the average and the median). Thus, for both large and small countries, per capita income grew substantially faster among the high-income than among the low-income countries. But no clear distinction, for countries in the same income range, appears between large and small economies.

9 The higher investment share among small, high-income countries provides at least a partial explanation of the higher rate of per capita income growth in this group. In addition, it should be noted that the richer the country, and the higher then, presumably, its stock of capital in relation to other factors of production (such as labor), the higher the proportion of investment out of income which would maintain a given rate of growth of income.

10 But we underlined as recorded: an inadequate recording, particularly, of the capital inflow, may be suspected. We note that for the two groups of large and small, high-income groups, the addition of foreign capital inflow ("foreign saving") to domestic saving yields, roughly, the rate of investment – as, indeed, national-income identities would require. For the category of small, low-income countries, on the other hand, such addition would fall short of investment by about 6 per cent of GDP – a very large discrepancy indeed. It is likely, that the recording of long-term financing is an understatement missing much of foreign financing; particularly the components originating in unilateral transfers. If this is true, the large inflow from abroad may, still be found to provide a major explanation of the low rate of domestic saving among the small, low-income economies.

11 This is based on comparisons of the medians. In this instance, a particularly large deviation exists between the mean and the median for the group of small, high-income countries: the former statistic is 35% of exports in GDP, and the latter is 52. The size of the mean is very heavily influenced by, two extreme observations: Singapore (where the export/GDP share is 160%!) and Hong Kong (where it is over 100%). In both economies, particularly in Singapore, exports include a heavy dose of transit trade.

12 Diversification of imports is quite similar among all countries, with only slight differences between small and large, or even between poor and rich economies. A coefficient of commodity concentration exceeding .200 is quite rare for imports.

13 Among small economies, the distinction was made by aggregate rather per capita income: but using the latter yardstick would yield almost the same list of countries.

14 We have tried to test the significance of observed differences in the "typical" attributes among the separate categories of countries. In essence, the test consists of asking what is the probability that two sets of observations are actually samples drawn from the same population, so that the apparent difference between the means of the two sets is a matter of accident. The available statistical test can, unfortunately, be applied only to differences between means (averages) and not between medians. For this reason, we have not used the test for the two attributes of macroeconomic behavior - the rates of

inflation and of devaluation - where the means are quite misleading as indicators of a "typical" level. We have also not applied the test in those instances where the differences among groups of countries are so stark as to make a rigorous test redundant: this concerns differences in export shares and in export concentration. For the rest, the results of the test are shown in the table below:

Attribute	Observed Difference	Probability of an Accidental Outcome
Share of Saving	* Lower for small, low-income than for large countries.	.00
	*Lower for small, low-income than for small, high-income countries.	.00
Share of Investment	*Lower for small. low-income than for small, high-income countries.	.14
Share of Capital Inflow	*Lower for small, low-income than for large countries.	.00
	* Lower for small, low-income than for small, high-income countries.	.00

Thus, the difference indicated in the text between the group of the small, low-income countries and the other too groups are definitely not the result of accident. The only exception concerns the observed difference in the share of investment, which is in fact slight and which seems to be in some doubt.

15 An elementary exercise using the Marshallian "'offer curves" would easily demonstrate this outcome.

16 This implicitly assumes a Ricardian world of constant costs. With increasing costs, this inference of the analysis should be qualified; but the tenor of the argument would remain unchanged.

17 That is, in a Ricardian world: Define units of the good so that a unit of each good requires for its production in the rest of the world the same basket of factors (units of "labor"). Good a will require in its production in the home country the smallest amount of resources: good b - the second smallest: and so on, through good j. which requires the largest amount of resources in home production.

18 Changing this assumption would invalidate the proposition that whatever good is exported, the goods to its left will definitely also be (and similarly for imports). It would make the presentation much more cumbersome, without affecting its central inferences.

19 We know from the "Lerner theorem" that import tariffs and export taxes are equivalent: the existence of one implies the existence of the other.

20 If tariffs are not uniform - and they mostly are not before liberalization - it is likely that higher tariffs would be imposed on goods which are most easily (i.e., at a lesser loss) replaced by local activity. These are the goods closer to the cutoff point; in Figure I, a higher tariff is likely to be imposed on good h than on goods further to its right. This would only tend to reinforce the inference that the imports of h (rather than of i or j would be discontinued.

Whether import tariffs are uniform or not, if they are the trade barrier used they imply a uniform rate of export taxes: these would be "imposed" by an exchange rate adjustment which is equivalent (or the purpose on hand) to a uniform export tax. This statement obviously ignores complications such as those due to the existence of non-refunded tariffs on imported inputs used in exports.

21 Concrete estimates of such impacts would be hardly feasible. But one proxy measure would be the extent to which trade liberalization leads heavily to the expansion of

"traditional" or of "non-traditional" exports. Casual observation would suggest that it is the latter.

22 See Michaely, Papageorgiou, and Choksi (1991). Chapter 6 and p. 271.

23 Ibid. Mainly pp. 279-284. We list here only the attributes which may be relevant to the issue on hand.

24 Ibid. "strength" of liberalization, as well as other attributes are discussed. The delineation of liberalizations, as well as decisions about their intensities, are based primarily on judgments of country economists at the World Bank and IDB- Some modifications have been made by consulting other sources. primarily Edwards (1993); Alam (1992) and Papageorgiou and Michaely (1995).

25 This follows again, the procedure used in Michaely, Papageoriou and Choksi (1991). Since some liberalization episodes were introduced in 1991, and our data finish with 1993, the "last three years" sometimes in fact means only two.

26 To analyze export performance, constant-prices estimates should have been used. But these are scarce or are of poor quality. Instead, we have examined changes in the share of exports in GDP. This measure still suffers, however, from being affected by changes in foreign prices: or, in a more general way, from the impact of changes in the relative price of exports.

27 This pattern roughly agrees with the findings of the Bank's comprehensive study of experiences of trade liberalization prior to the 1980's (Michaely, Papageorgiou. and Choksi, 1991. See especially Tables 7-2 and 7-3, pp. 88-89). The main difference is that in the analysis of earlier experiences, no decline of the rate of growth appears, on average, even during the year of introduction of trade liberalization. Interestingly, though, if we confine our observations to Latin American countries only, the same pattern would appear for the earlier experience as we find now - with Colombia, where a sharp fall of growth occurring in the year after the year of introduction of liberalization, being the only exception. In the combined observation of the earlier experiences of Argentina, Brazil, Chile, Peru, and Uruguay, the average rates of growth were as follows: pre- liberalization (3.9%), year of liberalization (1.1%) and post-liberalization (4.8%).

28 Observing only the eight "strong" liberalization experiences among the small LAC countries, the pattern of change of the average rate of growth for the group would look as follows: pre-liberalization (2.0%), year of liberalization (-.4%) and post-liberalization (3.8%). This is roughly the same pattern as for the group of small countries as a whole, except for a somewhat sharper drop of the rate of growth in the year of liberalization. This pattern, again does not indicate higher transition costs among the small economies.

29 But the statistic of the average among large countries is heavily influenced by the extreme case of Venezuela, where export performance is determined in the short-run primarily by external shocks in the oil market.

30 On the technical level, it should also be noted that we analyze the share of exports, which should go up whenever the denominator, the GDP, goes down.

31 See Michaely, Papageorgiou, and Choksi (1991). Table 12-3, p. 191.

32 For another discussion of these phenomena, see Papageorgiou and Michaely (1995).

33 These criteria are taken from Michaely (1977).

34 In a two-country analysis, this would be represented by the foreign (partner) country's Marshallian offer curve intersecting the home country's offer curve at the latter's flat section.

35 This statement refers to the loss per unit of trade diversion. The size of trade diversion is another component: when it is added, the effect of "smallness" of the partner is ambiguous. The home country - granting that we are in the range of this maximum price loss - would be less worse off the smaller the size of the partner; since the smaller would then be the size of trade diversion. The worst case for the home country is where its partner is just small enough to lead to the outcome of a price for its imports equal to the *cum tariff* price of imports from the rest of the world. This ambiguity of the consequences of smallness is pointed out in a forthcoming paper by Halevi and Kleiman (1995).

36 A complete absence is obviously improbable: there is likely to be some net impact on the terms of trade, one way or another; but we do not know which of the two partners will be the gainer and which the loser.

37 In principle, this is true also for uniqueness of the import structure (of the importing country). But, as we have noted earlier, countries resemble each other much more - and the world as a whole - in import than in export structures.

38 See Michaely (1995), for a more extensive analysis of the relationship between compatibility of a country's exports with others' imports and the extent of diversification of these exports.

39 We should note once more that while we classify small countries by aggregate income and large countries by per capita income, classifying the former, too, by per capita income would yield largely the same list.

Annex Table - COUNTRIES BY CATEGORY: POPULATION AND INCOME (1993 DATA)

Category and Country	Population (millions) (1)	Aggregate GNP ($ billion) (2)	GNP per capita ($) (3)
a. Small Countries, Low Income	3.4	1.2	340
Albania	0.1	0.4	6 390
Antigua and Barbuda	3.7	2.5	660
Armenia	---	3.7	2.5
Azerbaijan	7.4	5.4	730
Bahamas, The	0.3	3.1	11 500
Bahrain	0.5	4.3	7 870
Barbados	0.3	1.6	6 740
Belize	0.2	0.5	2 440
Benin	5.2	2.2	420
Bhutan	1.5	0.3	170
Bolivia	7.1	5.5	770
Bosnia and Herzegovina	4.4	---	---
Botswana	1.4	3.6	2 590
Brunei	0.3	---	---
Bulgaria	8.5	9.8	1 160
Burkina Faso	9.8	2.9	300
Burundi	6.0	1.1	180
Cambodia	9.6	---	---
Cape Verde	0.4	0.4	870
Central African Republic	3.3	1.3	390
Chad	6.1	1.3	200
Comoros	0.5	0.3	520
Congo	2.5	2.3	920
Costa Rica	3.3	7.0	2 160
Croatia	4.8	---	---
Cyprus	0.7	7.5	10 380
Djibouti	0.6	0.5	780
Dominica	0.1	0.2	2 680
Dominican Republic	7.5	8.0	1 080
El Salvador	5.5	7.2	1 320
Equatorial Guinea	0.5	0.2	360
Estonia	1.6	4.7	3 040
Fiji	0.8	1.6	2 140
Gabon	1.2	5.0	4 050
Gambia	1.0	0.4	360
Georgia	5.5	3.3	560
Grenada	0.1	0.2	2 410
Guadeloupe	0.4	---	---
Guinea	6.3	3.2	510
Guinea-Bissau	1.0	0.2	220
Guyana	0.8	0.3	350
Haiti	6.8	---	---
Honduras	5.6	3.2	580
Iceland	0.3	6.2	23 620
Jamaica	2.4	3.4	1 390
Jordan	4.1	4.9	1 290
Kuwait	1.5	34.0	23 350

Continued...

Annex Table - COUNTRIES BY CATEGORY: POPULATION AND INCOME (1993 DATA) - ...Continued

Category and Country	Population (millions) (1)	Aggregate GNP ($ billion) (2)	GNP per capita ($) (3)
a. Small Countries, Low Income			
Kyrgyz Republic	4.5	3.8	830
Lao PDR	4.5	1.3	290
Latvia	2.6	5.3	2 030
Lebanon	3.9	---	---
Lesotho	1.9	1.3	660
Liberia	2.4	---	---
Libya	5.0	--	---
Lithuania	3.8	4.9	1 320
Luxembourg	0.4	14.2	35 850
Macedonia	2.2	1.7	780
Malawi	9.3	2.0	220
Maldives	0.2	0.2	820
Mali	9.2	2.7	300
Malta	0.4	---	---
Martinique	0.4	---	---
Mauritana	2.1	1.1	510
Mauritius	1.1	3.3	2 980
Moldova	4.4	5.2	1 180
Mongolia	2.4	0.9	400
Namibia	1.6	2.6	1 660
Netherlands Antilles	0.2	---	---
New Caledonia	0.2	---	---
Nicaragua	4.0	1.4	360
Niger	8.4	2.3	270
Oman	1.7	9.6	5 600
Panama	2.6	6.6	2 580
Papua New Guinea	4.2	4.6	1 120
Paraguay	4.7	7.0	1 500
Quatar	0.5	---	---
Reunion	0.6	---	---
Rwanda	7.5	1.5	200
St. Kitts and Nevis	0.1	0.2	4 470
St. Lucia	0.2	0.5	3 040
St. Vincent	0.1	0.2	2 130
Sao Tome and Principe	0.1	0.1	330
Senegal	8.1	5.9	730
Seycheles	0.1	0.4	6 370
Sierra Leone	4.5	0.5	140
Slovak Republic	5.4	10.1	1 900
Slovenia	2.0	12.6	6 310
Solomon Islands	0.4	0.3	750
Somalia	8.5	---	---
Suriname	0.4	0.5	1 210
Swaziland	0.8	0.9	1 050
Tajikistan	5.7	2.7	470
Togo	4.0	1.3	330

Continued...

Annex Table - COUNTRIES BY CATEGORY: POPULATION AND INCOME (1993 DATA) - ...Continued

Category and Country	Population (millions) (1)	Aggregate GNP ($ billion) (2)	GNP per capita ($) (3)
a. Small Countries, Low Income			
Trinidad and Tobago	1.3	4.8	3 730
Tunisia	8.6	15.3	1 780
Turkkenistan	4.0	---	---
United Arab Emirates	1.7	38.7	22 470
Uruguay	3.2	12.3	3 910
Western Samoa	0.2	0.2	980
Zambia	8.5	3.2	370
b. Small Countries, High Income			
Austria	7.9	183.5	23 120
Denmark	5.2	137.6	26 510
Finland	5.9	96.2	18 970
Honk Kong	5.9	104.7	17 860
Ireland	3.6	44.9	12 580
Israel	5.3	72.7	13 760
New Zealand	3.5	44.7	12 900
Norway	4.3	113.5	26 340
Portugal	9.9	77.8	7 890
Singapore	2.9	55.4	19 310
Sweden	8.7	216.3	24 830
c. Large Countries			
Afghanistan	22.1	---	---
Algeria	26.9	44.4	1 650
Angola	10.0	---	---
Argentina	33.5	244.0	7 290
Australia	17.7	310.0	17 510
Bangladesh	116.7	25.9	220
Belarus	10.3	29.3	2 840
Belgium	10.1	213.4	21 210
Brazil	156.4	472.0	2 020
Cameroon	12.6	9.7	770
Canada	27.8	574.9	20 670
Chile	13.8	42.5	3 070
China	1 175.4	581.1	490
Colombia	35.7	50.1	1 400
Côte d'Ivoire	13.4	8.4	630
Cuba	10.9	---	---
Czech Republic	10.3	28.2	2 730
Ecuador	11.2	13.2	1 170
Ecaudor	11.2	13.2	1 170
Egypt Arab Republic	55.8	36.7	660
Ethiopia	53.3	---	---
France	57.7	1 289.2	22 360
Germany	80.8	1 903.0	23 560
Ghana	16.3	7.0	430
Greece	10.4	76.7	7 390
Guatemala	10.0	11.1	1 130
Hungary	10.3	34.3	3 330
India	900.5	262.8	290

Continued...

Annex Table - COUNTRIES BY CATEGORY: POPULATION AND INCOME (1993 DATA) - ...Continued

Category and Country	Population (millions) (1)	Aggregate GNP ($ billion) (2)	GNP per capita ($) (3)
c. Large Countries			
Indonesia	187.2	137.0	730
Iran Islamic Republic	61.4	---	---
Iraq	19.8	---	---
Italy	57.8	1 135.0	19 620
Japan	124.9	3 926.7	31 450
Kazakhstan	17.2	26.5	1 540
Kenya	25.4	6.7	270
Korea Dem. Republic	23.1	---	---
Korea Republic	44.1	338.1	7 670
Madagascar	12.7	3.0	240
Malaysia	19.0	60.1	3 160
Mexico	86.7	325.0	3 750
Morocco	26.7	27.7	1 030
Mozambique	16.9	1.4	80
Myanmar	44.7	---	---
Netherlands	15.3	316.4	20 710
Nigeria	104.9	33.0	310
Peru	22.8	34.0	1 490
Philippines	65.8	54.6	830
Poland	38.5	87.3	2 270
Romania	22.8	25.4	1 120
Russian Federation	148.5	348.4	2 350
Saudi Arabia	17.4	---	---
Spain	39.1	534.0	13 650
Sri Lanka	17.6	10.7	600
Sudan	27.3	---	---
Syrian Arab Republic	13.4	---	---
Tanzania	26.7	2.5	100
Thailand	58.8	120.2	2 040
Turkey	59.5	126.3	2 120
Uganda	18.0	3.5	190
Ukraine	52.1	99.7	1 910
United Kingdom	58.0	1 042.7	17 970
United States	258.1	6 387.7	24 750
Uzbekistan	22.0	21.1	960
Venezuela	20.8	58.9	2 840
Viet Nam	70.9	12.0	170
Yemen Republic	13.4	---	---
Yugoslavia, Federal Republic	10.7	---	---
Zaire	41.0	---	---
Zimbabwe	10.6	5.8	540

---: Data not available

Source: The World Bank Atlas, 1995.

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