

Some Characteristics of Small Economies

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I. Introduction

It cannot be stated that small economies are generally richer or generally poorer than large economies. Out of a total of fifty five economies with a population of less than one million, the World Bank [32] classifies twenty two as High-income economies, with a GNP per capita comparable to those of OECD countries, twelve as Upper-middle-income economies, fourteen as Lower-middle income ones and the remaining seven as Low-income economies. This distribution of small economies in terms of GNP per capita shows quite clearly that there is considerable variation in their economic performance.

However small economies do have certain similarities in view of their size. In this paper four issues associated with small economies will be dealt with. These are [1] degree of dependence on foreign trade [2] the degree of concentration on a few exported types of goods or services and [3] the size of the public sector and [4] the special vulnerabilities of small island economies. Since we are dealing with small, as against large, economies, it is necessary to define what is a small in this regard, and the paper starts with a description of the indices used to rank countries in terms of size.

II. What is a Small Economy

The first question that comes to mind when analyzing small economies is the definition of what is small. In fact what constitutes a small economy is subject to debate. Traditionally smallness has been associated with "price-taker" economies, that is those economies which cannot influence their terms of trade. This definition in a way corresponds with the concept of a small firm in microeconomics. Such a definition is not however of practical use in classifying economies according to size,

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since most developing countries, including some of the larger ones, are price takers in most of their exports.

There are three variables which, in empirical work on the subject, are usually associated with the size of an economy. These are the size of the population (see for example [21]), the size of the land area (see for example [9]) and the GNP of the country in question (see for example [24]).

Land area tends to be misleading at times as an indicator of economic size, since there are economies which cannot definitely be considered as large, but have a large land area.

Suriname, Guyana, Iceland and Greenland are some cases in point. GNP may also be a misleading index, since this depends on the stage of development, rather than on size. In fact, one finds economies which are considered as very large, but which have a GNP equivalent to that of economies considered to be much smaller. For example the GNP of China is comparable to that of Spain and that of India to that of the Netherlands.

Some authors have attempted to compute a composite index which takes into consideration land area, GNP and population size. Such an index requires the weighting of the three sub-indices, an exercise which, in the absence of statistical criteria, becomes somewhat arbitrary. Jalan [15], for example, has assigned equal weights, whereas Downes [10] has used the method of principal components to derive different weights for the different sub-indices. It has been suggested that, generally speaking, such a composite index of size tends in any case to classify as small those economies with a small population, say with less than 5 million, (see [25]) and that therefore it would be better to take population as an index of the size of the economy, rather than to construct complicated indices with dubious interpretation.

As a matter of fact, many authors prefer to use a population index when discussing the size of an economy. The use of this index has a number of advantages in this regard. From an economic point of view, it reflects to the size of the labour force, and therefore constraints associated with human resources. Population is also related to the potential number of consumers. Therefore this index is intuitively appealing because it conveys a measure of size based on the suppliers and the buyers of the goods and services produced.

From a statistical point of view, the index is less ambiguous than others associated with land area and GNP. Many analysts would agree, for example, that although Iceland has a large land area (bigger than Hungary) and a relatively large GNP (equivalent to that of Zimbabwe), it still remains a small economy because its

population is less than one third of a million.

Population Size Cut-Off Point

Even if one accepts population size as an index of the size of an economy, there remains the problem of what population cut-off point to take when grouping countries into small and large. Some authors prefer a relatively high upper limit. For example a UNIDO study [34] identified a 20 million population size as a reasonable dividing line between large and small countries whereas Kuznets [21] takes a population cut-off point of 10 million for this purpose. Chenery and Taylor [6] consider economies with a population of 15 million or less as small ones. Other authors, such as Jalan [15] and Demas [9] propose a population cut-off point of 5 million.

Some publications classify small economies as those having a population of 1 million or less. For example a study on vulnerability of small states published by the Commonwealth Secretariat [8] chose this upper limit to identify small economies because "almost all states within this limit tend to experience the special problems particularly associated with small size". This cut-off point was also used in a UNITAR study [37]. The World Development Report [32] and some UNCTAD publications (see for example [35]) also group countries with a population of less than 1 million in a special category.

It may be suggested that dividing economies into just two categories, namely large and small ones, may be too restrictive since very small economies with a population of under one million face a different set of disadvantages due to their very small size, when compared to economies with a population of a few million. Lloyd and Sundrum [25], for example, suggest that a three sub-set partition, large, small and micro, would be more meaningful, since this permits giving special attention to very small states.

Hein [12] categorises studies on small economies according to the population upper-limits which the various authors used to distinguish a small economy from a large one. One general conclusion that emerges is that the choice of the upper bound is very often made on an ad hoc but pragmatic basis, depending on the nature of the study and the group of countries that the author wants to focus on.

III. Dependence on International Trade

A common characteristic of small economies is their relatively large dependence on international trade. This dependency is usually measured in terms of the ratio of exports, imports or exports plus imports to GDP.

A cursory look at international trade statistics would confirm the tendency that small economies tend to have a relatively larger foreign sector. The present author [3] has tested this relationship on a sample of 110 countries, using the Spearman Rank Correlation. The countries were divided into four main groups, according to income per capita as given in the World Development Report [32], so as to compare like with like in terms of stage of development. The results indicate that there is a statistically significant negative correlation between population size and foreign trade ratios for all per-capita groupings, indicating that the dependency on foreign trade tends to be bigger as the size of the economy becomes smaller. Other studies which have produced similar results or assumed a similar relationship include Chenery and Taylor [6], Chenery and Syrquin [5] and Kuznets [22].

One reason for such a higher dependence on foreign trade in small economies is their small land area. Small economies tend to lack natural resources, and hence their import bill tends to be relatively large when compared to the total final expenditure. In many of these countries, the drive towards industrialisation has given rise to a form of production with a relatively small value added content and a relatively large import content. In Malta, for example, imports account for about 45% of total final expenditure, and about 60% of imports are associated with industrial production.

Another factor influencing the size of the foreign sector is the small size of the domestic market. Small domestic markets cannot support efficient production in many industrial enterprises, and this forces small countries to expand their markets via exports of goods and services. Again taking Malta as an example, about 40% of total final goods and services are purchased by non-residents. It might strike one as odd that a country like Japan, normally associated with foreign trade, exports only 10% of its total final sales, whereas many small countries export over 50% of their final sales.

Is such a relatively high dependence on foreign trade a disadvantage? Most authors associate one principal undesirable effect of this characteristic, namely that it renders the countries in question too much exposed to what happens in the rest of the world, rendering them economically vulnerable to external shocks. They tend to reap huge benefits when the international market expands, but at the same time they lose more than proportionately when their "clients" pass through a recessionary phase.

A related problem is that the degree of openness of small economies gives rise to a relatively high degree of export instability. There is empirical evidence to suggest that larger economies tend to have more stable export receipts than smaller economies (see [26], [29] and [11]) although some authors have argued that the

reason for export instability in small economies may also be related to the types of products exported (see Helliener [13]). Many small countries depend on exports of primary products such as sugar, petroleum, ferro-nickel and alumina - and the prices of such products have a tendency to vary more than the prices of manufactured products.

The discussion on exports in small economies often focuses on merchandise exports. Some small countries however depend to a very large extent on export of services, particularly tourism. In Malta and Cyprus and in many Caribbean and Pacific islands, tourism plays an important role as a source of foreign exchange earnings and a generator of employment. Tourism is a volatile industry, since it depends on the whims and fancies of non-residents, which in turn depend on many non-economic factors outside the country's own control, such as changes in the political environment in the region, and changes in the financial interest of foreign tour operators and foreign airlines. For these reasons, earnings from tourism tend to be relatively unstable (see [7] and [31]).

IV. Concentration on a Narrow Ranges of Goods and Services

It has been observed that the industrial set-up and the export market of small economies tend to be concentrated on a few commodities (see for example [28] and [33]). A number of authors (see for example [25]) argue that this is the result of the size constraint. A small economy finds it difficult to support a large variety of industries requiring very large scale production or vast quantities of natural resources. Some small countries depend on one major primary industry, such as sugar, others on a few secondary industries such as clothing and electrical components, and others on tourism.

Thomas [33] has produced a table showing groups of exported goods which account for a very large percentage of exports of small economies. These groups include food, textiles, wood, chemicals and metal/machinery products. Thomas found that the degree of export concentration tends to increase as the economy gets smaller.

Bennathan [1] has tested the hypothesis that smaller economies tend to have a higher degree of export concentration than larger economies. He found that population size tends to be negatively correlated with an index of export concentration - suggesting that the smaller the economy the more it is likely to depend on a few exported products.

The consequences of too much dependence on a few products constitute serious disadvantages on the countries in question, most of all because of the dangers

associated with having too many eggs in one basket. Too much concentration on one or a few products may also lead to excessive fluctuations in export receipts. (See [20] and [27]). If demand for a particular product group changes, the country depending to a large extent on the exports of that product would be faced by a large decrease in its foreign exchange earnings and a large decline in its GDP. Such a decline would have serious consequences on employment as well.

V. Problems Related to Public Administration

It is often argued that small economies face administrative disadvantages in view of their size. Jacobs [16],[17] lists a number of problems in this regard. These include:

- (a) small manpower resource base from which to draw experienced and efficient administrators
- (b) diseconomies of scale in public administration
- (c) certain specialized services cannot be economically predivided for a small population
- (d) the practices inherited from the colonial power have resulted in a top heavy public service, which was affordable under colonial rule, but which is very costly (though difficult to dismantle) for the small state itself
- (e) in small states people know each other well, and are often related to each other. This tends to work against impartiality and efficiency in the civil service and against a merit-based recruitment and promotions policy.

The question of the inability of small countries to reap economies of scale in administration merits special consideration. A small country, for example, cannot do with a fraction of a prime minister, and although the staff required in the Prime Minister's office would be small in a small economy, it is not always possible to work on the law of constant proportions.

Certain overhead costs in public administration cannot be proportionally divisible according to population size. The present author (see [3]) has analyzed the relationship between population size and the ratio of government current expenditure to total final expenditure using the Spearman Rank Correlation test. The exercise was applied to 110 countries classified into four divisions of per capital income as given in the World Development report. The overall tendency was that the government current expenditure ratio tends to decrease as the population size increases.

This aspect has also been treated in Butter [4]. He notes that the number of agencies, institutions and bureaus do not decrease proportionately with size, and that given

the fact that a government department requires a minimum size to operate, the number of clients per government department is relatively low, giving rise to a high average cost per client.

VI. The Special Problems of Small Island Countries

Many small states are islands. These face the problems of smallness just described, but in addition they also encounter disadvantages because they are islands. In particular, islands tend to have more transport and communications problems, to be more prone to natural disasters and to be environmentally more fragile and then non-island states.

Islands are constrained to using air and sea transport only for their imports and exports. Land transport is of course out of the question, and this reduces the options available for the movement of goods and of people. Moreover, a number of islands are located in remote areas and are archipelagic, and this causes delays and unreliability in transport servicing. Producers in island economies are often forced to tie considerable capital in stocks of material and finished products to offset delays in delivery. As already noted, small economies tend to depend on international trade to a higher extent than larger ones, and the transport disadvantages just described therefore are of particular relevance to smaller economies because they affect a larger proportion of final sales.

However it is not just remoteness that effects transport costs. Many islands cannot exploit modern technologically advanced means of transport, since the relative small and fragmented cargoes required by such countries excludes them from the major sea and air transport routes [35].

Natural disasters in many islands are caused by a number of factors including hurricanes, earthquakes, landslides and volcanic eruptions. In tropical areas, cyclones hit smaller islands with more intensity than larger land masses. Islands located in the oceans are quite often tips of submarine mountain ranges which have a high propensity to erupt into volcanic activity. These natural disasters often devastate the economy of island countries, and can wipe out entire villages and cultivable areas [36].

A related problem faced by islands is their environmental fragility. For example, if the predicted global warming were to materialise, many small islands states would face large land losses as a result of the rising of sea level. The requirements of economic development in islands, such as building coastal regions for the promotion of tourism, and using pesticides and fertilizers to improve agricultural yields,

tend to have a stronger negative effect on small island economies, where the ecosystem tends to be very fragile. An additional danger faced by many small remote islands is that their location renders them attractive for dumping of toxic and non-bio-degradable wastes, a requirement becoming increasingly important for the industrialised countries.

VII. Other Factors

There are other factors which may be associated with small size. These include the extent to which the size of a country renders it more or less a price taker and therefore unable to influence its terms of trade [23], the constraints imposed by the inability to exploit technological advancement [23], the scarcity of expert personnel due to the small population from which such personnel can be drawn [25], the extent to which international aid and capital flows are directed towards small economies [13], the degree of welfare that small economies can enjoy in comparison to large countries [30], and the extent to which small states are politically vulnerable [8].

All these factors pose serious disadvantages on small economies. However, there is no evidence to suggest that small economies tend to grow at a slower rate than larger ones, or that GNP per capita in small economies is generally lower than in larger ones (see [8]). On the contrary, it has been shown that small countries have been among the most rapidly growing developing countries [2]. This would seem to suggest that there are compensating factors at work. One possible advantage enjoyed by small economies is that, as a result of their openness and small size, such economies tend to become increasingly specialised and competition becomes a way of life among their populations.

Some authors (See for example [2]) have noted that producers in small countries tend to be very flexible in their response to sudden changes as a result of the experience gained from having a large foreign trade orientation from the earliest stages of development. On the socio-political level, small countries tend to exhibit a high degree of cultural homogeneity, and everything else remaining equal, it is easier in small countries to reach a consensus regarding social and political issues.

However, the relatively good performance of many small economies in terms of economic growth and GNP per capita, should not be interpreted as a sign of economic strength. Small size is in itself a sign of a fragile and vulnerable structure, exposed to what happens in the rest of the world, and depending to a very large extent on developments outside its control. Many small countries have managed to grow and improve the standard of living of their population in spite of, and not because of, their small size.

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