

Executive Summary

This report is divided into seven chapters. Chapter I defines the aims and scope of this study. It spells out that our study differs from previous investigations of small countries in that: it deals specifically with the international trading circumstances of small economies; it is focussed on the business costs of the private sector rather than on macro economic variables; and is based on a new and specifically collected dataset.

Chapter II presents the theoretical background. We briefly discuss various sources of potential economic disadvantages of small countries and explain how these disadvantages can undermine their intrinsic competitiveness. We note that if trading costs or production costs are high, small countries may not be able to make sustainable income levels even exploiting all the benefits of international trade. Thus if small countries lose the advantages of preferences and non-trade sources of earnings that they currently have, they may not be able to support themselves through commercial activity. Section II.2 introduces the methodology adopted, which is discussed in more detail and put into practice in chapter IV. We then justify our decision to define country size by population, and discuss the difficulties of disentangling size effects from those of insularity and region, all of which seem to be strongly collinear. None of our approaches to unscramble these effects proves entirely effective and so it is possible that some of the results we cite owe something to region and insularity as well as size.

Chapter III describes the surveys which collected our data and therefore our dataset. We elaborate on the characteristics of our sample and comment on possible errors and misrepresentations that weaken our empirical work. We also justify the need to build a coherent and compatible macroeconomic dataset (mainly population and GDP statistics) based on international sources such as the World Bank. In the Annex of the chapter we provide some summary statistics of our dataset.

In Chapter IV is the heart of the report. In it we try to test empirically the existence of relationships between different cost components and country size (population, and occasionally aggregate GDP). We start each section with an account of some of the data problems found and the decisions we took to overcome those problems. We present standard descriptive statistics and graphs to 'eyeball' the data for obvious errors such as mistyping or in units of measurement. After this stage, we run simple linear regressions (OLS) on size and other appropriate variables for the continuous variables, while estimating ordered logits for the categorical variables in which respondents classify their country to one of several categories. For the latter, we also analyse simple contingency tables of category against size-class to illustrate more clearly the impact of size (for this purpose, countries were classified in five different categories by population).

Given the regressions and ordered logit results, calculate the cost disadvantage for three specimen countries (chosen to represent micro, very small and small economies) relative to the median country of our sample, which has approximately 10 million inhabitants. The population values used for these representative countries were taken from Anguilla, Vanuatu, Singapore and Hungary, respectively. The calculations

report the effect of size holding all other features of a country constant and so do not refer to any specific country per se.

We conclude that there are significant size effects in most of the costs analysed (transportation costs, labour costs, etc.), although for some utilities we cannot assert securely that small countries have a competitive disadvantage, and in a very few cases we find that they actually have an advantage (true for some sunk-costs for utilities). Overall, the results are striking, pointing out to strong potential economic disadvantages of small size.

Summary of Cost Disadvantages

% deviation of costs in micro, very small and small economies from those in the median economy

Area of Cost	Micro	Very Small	Small
Airfreight Average	31.8	4.1	-1.7
Seafreight Average	221.6	71.7	9.4
Unskilled Wages Average	60.1	31.6	6.6
Semi-Skilled Wages Average	22.4	12.1	2.6
Skilled Wages Average	38.0	20.3	4.3
Telephone Average (marginal costs)	98.5	47.2	9.0
Electricity (marginal costs)	93.1	47.0	9.4
Water (marginal Costs)	0	0	0
Fuel Average	53.8	28.3	5.9
Personal Air Travel Average	115.7	56.8	11.0
Land Rent Average	-3.5	-17.2	-8.9

In Chapter V we aggregate our cost disadvantage results to evaluate the competitive disadvantage of three example industries (Electronics, Clothing and Tourism). These industries were chosen because that they represent the sectors in which small countries seem most likely to have comparative advantage and hence export potential. We collect data on the importance of particular costs in the overall cost of supplying exports to the world market (production and transportation costs), and roughly estimate the extent to which those costs are exposed to the disadvantages discovered in Chapter IV. Then, combining these data with the cost disadvantage factors, we calculate the excess costs of exports from small economies, which we term cost inflation factors.

Cost Inflation Factors – Central Case

The % by which target country costs of supplying exports exceed median country costs

Industry	Micro	Very Small	Small
Electronic Assembly	36.5	14.3	2.7
Clothing	36.4	14.4	2.7
Hotels and Tourism	57.5	28.6	6.2

On the whole, we can see that small countries are not severely handicapped in comparison with our fictional median country. However, it is equally clear that for the very or extremely small countries, these size disadvantages are huge. Moreover, if

these cost premia can not be passed onto customers (i.e. if small economies have to sell their goods and services at world prices) the only way they can export is if some component of costs accepts lower returns than it would get in the median economy. When we convert the inflation factors into such income penalties, they are huge for very small and micro economies. In most cases the data suggest that capital would earn zero returns if it invested in a micro economy and had to bear all the cost of the inefficiencies itself. Similarly, if the whole burden were visited on labour so that the wages were zero micro-economy, total costs in manufacturing would still exceed world prices.

In Chapter VI we try to test if small states have worse policies than the larger countries. Notwithstanding the fact that policy is a difficult to measure, we analyse the variables available in the survey such as bank interest rates, corporate tax rates and import and export duties to predict any size effect. There is no strong evidence of size effects. Interest rates seem to be lower in small economies, but there is neither compelling proof of higher tax rates for business nor higher import/export duties than in larger economies.

Chapter VII concludes with a brief overview of the results and the policy implications of these competitive disadvantages to the small countries. It concludes that what is required is not protection against the rest of the world (which effectively makes small economies smaller), but proactive policies from the international community. Without them small economies are likely to become progressively less attractive locations as the world economy globalise.