3 Country Size in Regional Economics

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3.1 Introduction

Does economic theory suggest that small countries are inherently different to big countries in the determination of output and the distribution of income? Should economists relate analytically to small countries, such as those analysed in this volume, differently to large countries such as the UK and the US? Or is it the case that small countries simply happen to be miniatures of an ideal economic type, while big countries happen to be larger versions? There is no separate medical theory for short and tall people. Should the same apply to economic theory, and economic size? Surprisingly, these questions have not been previously addressed in any systematic fashion, and the answers to them are not clear.

A possible reason for this omission is that size is a non-issue, which does not merit attention. But it obviously is an issue for some. Small country economists are frequently berated by their large country counterparts, “We can fit the whole of your pint-sized country into New Jersey, not to mention Texas, so what is the sense in applying regional economics there?” The answer may, of course, be that it is worth applying regional economics to New Jersey too instead of simply treating it as a homogeneous economic entity. On the other hand there may be some wisdom in the “New Jersey Critique”.

My own view is that size in itself is not important. What matters is regional heterogeneity. It may or may not be sensible to treat a small country as a “New Jersey”. If it happens to be regionally homogeneous it will be sensible, but if its regions are heterogeneous in terms of demographic and economic structure, the opposite is true. The same applies to large countries. The case for regional disaggregation in large countries does not simply follow from their size. If regions are homogeneous there will be no case. Therefore, there may be more sense to regional economics in a small country, where there is regional diversity and little economic integration, than in a large country, which is well integrated and homogeneous.

In this chapter I attempt to bring together various strands of economic theory, which suggest that size might matter for the determination of aggregate output, its volatility, and for economic inequality. In doing so I distinguish between two aspects of size, population and territory. For given territory, more populated countries are obviously larger. However, territorial size might matter too. If A and B are two countries with the same population size, but A has more territory than B, we might expect A and B to have different income generating processes for
reasons that go beyond the obvious differences in the supply of land and the
greater distances in A.

The issues raised are treated separately, although in principal they are related.
This is obviously done for the sake of simplicity. I begin by considering two
microeconomic issues. The first concerns the effect of labour market size upon the
level of income and its distribution. To motivate the discussion I consider the
unification of two separate, small labour markets into one large one. After
critically examining the predictions of the influential Roy Model, which turns out
to be insufficiently general, we are nevertheless able to make theoretical
predictions of the effects of labour market size upon the level of income and its
distribution. In particular, we can bound any increase in economic inequality that
results from enlargement. However, in many cases inequality may vary inversely
with size.

The second microeconomic issue concerns the relationship between size and
social interaction. In this case I consider population density, which determines
physical distance between individuals. For given populations a large country has
more territory. If the forces of social interaction are weaker in more dispersed
populations, the level of income will tend to be higher in countries with greater
population density and economic inequality will be lower.

Four macroeconomic issues are considered. The first is concerned with
economies of scale, according to which total factor productivity should be greater
in larger economies. In this case size is measured by the labour force, which is in
turn related to population size. There are several separate issues that are involved
with this claim, which, however, do not seem to carry much empirical support.
Therefore, it does not appear to be the case that larger countries enjoy greater
scale economies.

The second macroeconomic issue is concerned with the relationship between
size and the volatility of output growth. In this case size is measured by the
number of business establishments. Since risks are more diversified in larger
economies, we expect that the volatility of output should vary inversely with size.
However, these size effects are rapidly exploited so that for all practical purposes
there is unlikely to be less volatility in larger economies. In short, this issue turns
out to be red herring.

The third macroeconomic issue, which also turns out to be something of a red
herring, concerns the effect of population size on the distribution of income. It is
well known that if the income data are independent, asymptotic convergence upon
the limiting distribution occurs rapidly. Indeed, it occurs much too rapidly to be of
any practical relevance for present purposes. However, if the data are dependent,
due to social and macroeconomic phenomena that induce correlation among
individuals, matters may be different and asymptotic convergence may be slower.
Since income data are likely to be dependent we ask whether dependence is
sufficiently strong to be of any practical relevance for our present concerns. The
answer seems to be that it is of no practical relevance.

This catch of red herrings is not entirely valueless. It is important to know a red
herring when you see one. This was not apparently the case in Chandra (2003),