8 Export-Led Growth, Regional Problems and Cumulative Causation

INTRODUCTION

In this chapter we use the ideas of Kaldor, already introduced in Chapter 7, to consider the role of the Verdoorn relationship in a model of 'circular and cumulative causation'. Kaldor was a long-standing critic of the application of neoclassical modes of thought to the analysis of economic growth and development. He supported Myrdal's (1957) notion of vicious circles of success and failure (the principle of 'cumulative causation'), and attacked the predictions of neoclassical theory that regional (national) growth rate differences would tend to narrow with trade and the free mobility of the factors of production. The essence of the argument is that once a region gains a growth advantage it will tend to sustain that advantage through the process of increasing returns that growth itself induces - the Verdoorn effect. Kaldor first articulated his theory in a purely verbal way in a lecture given to the Scottish Economic Society in 1970 (Kaldor, 1970). We discussed the structure of the model in the previous chapter. Here we shall use the model to consider such questions as: the role of the Verdoorn effect in contributing to regional growth rate differences; whether regional growth rate differences will tend to narrow or diverge through time; and how policies of regional 'devaluation' can raise a region's growth rate (if at all).

Kaldor sets up the problem by assuming two regions, initially isolated from one another, each with an agricultural area and an industrial and market centre. Trade is then opened up between the two regions with the effect that the region with the more developed industry will be able to supply the needs of the agricultural area of the other region on more favourable terms so that the industrial centre of the second region will lose its market and will tend to be run down without any compensating advantage in the form of increased agricultural output. The way that we can capture the spirit of this idea is to model an individual region's growth rate and then to consider the sources of
interregional differences – stable or divergent – in terms of the parameters of the model. For example, in the two-region case a necessary condition for the persistence of stable regional growth rate differences is that the steady-state equilibrium growth rates of the two regions differ. For the growth rates of two regions to diverge, a necessary condition is that the growth rate of one of the regions diverges from its own equilibrium rate. It is also a sufficient condition if the growth rate of the other region is stable or diverges from equilibrium in the opposite direction. If Kaldor’s arguments are first used to examine equilibrium growth in one region, therefore, the assumptions implicit in the hypothesis that regional per capita incomes and/or growth rates may diverge can then be readily seen. This is the approach adopted here in an attempt to formalise the model without violating its spirit. His more complex verbal argument is easily accommodated within the framework outlined. The approach is essentially partial equilibrium in the sense that each region is considered in isolation from all others, and interregional relationships are not considered explicitly. Interregional relationships are considered implicitly, however, since we argue that it is the Verdoorn effect which can sustain high growth in one region once it obtains an initial growth advantage, which then makes it difficult for other regions to compete on equal terms.

In discussing the model, we have four specific purposes in mind: first, to make clear the role of the Verdoorn relationship as it affects regional growth rate differences; secondly, to suggest that while the model in theory can generate divergent or convergent regional growth paths, in practice, given reasonable parameter values for the model, regional growth divergence is not likely, and that the model is best interpreted as predicting constant persistent regional growth rate differences sustained by the Verdoorn effect; thirdly, to bring out the importance of regional structure in determining the equilibrium growth rate, a feature of regional growth which Kaldor does not stress, and fourthly, to evaluate wage subsidies as a policy device for reducing persistent regional growth rate differences.

THE KALDOR MODEL

As we saw in the previous chapter, the structure of the model can be reduced to four equations, viz, equations (8.1) to (8.4):