

Abstract

The concepts and methods of demographic accounting applied to multiregional population analysis are summarized with the illustrations drawn from a recently constructed set of accounts for the East Anglia and South East regions of Britain. The analysis of multiregional population systems necessitates the assembly of a variety of data sets on regional populations, regional births, regional deaths, interregional migration, and external migration to and from the regions. From the data assembled probability matrices of 2 kinds are derived: the survival probability matrix, P , measures the chances of making region to region transitions (and surviving) between exact ages; and the survivorship proportions matrix, S , computes the chances of making region to region transitions (and surviving) between discrete age groups. The discussion outlines how P and S matrices may be estimated by initially organizing the relevant input data into population accounts. Direct estimation of the S matrix from population accounts is possible, and the P matrix can be interpolated from the S matrix. This approach is compared with that of Rogers (1975) and Willekens and Rogers (1976) in which the P matrix is estimated from a specially arranged migration and death rates matrix, M . The S matrix is subsequently derived from the P matrix. Both points of similarity and of difference between the approaches are identified. The multiregional accounts framework of demographic accounting is when to be consistent, give or take a few details, with the framework of multiregional population analysis that was developed by Rogers and his colleagues. The question arises then as to why bother following the route of demographic accounting with all its fastidiousness about data collection and data arrangement. It is because the accounting methods described here represent a way of making sure that the base period data in multiregional population analysis is correctly estimated and correctly reproduces the observed population change. Demographic accounting represents the way in which multiregional population analysis can be "calibrated."