

COMPARATIVE EMPIRICAL EVALUATIONS OF INTERNAL MIGRATION MODELS IN SUBNATIONAL POPULATION PROJECTIONS

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Abstract

While population forecasters place considerable emphasis on the selection of appropriate migration assumptions, surprisingly little attention has been given to the effects on projection outcomes of the *way* internal migration is handled within population projection models. This paper compares population projections for Australia's states and territories prepared using ten different internal migration models but with identical assumptions for fertility, mortality and international migration and with the internal migration model parameters held constant. It is shown that the choice of migration model generates large differences in total population, geographical distribution and age-sex composition. It is argued that model choice should be guided by balancing model reality with practical utility and model performance is examined against these criteria. Of the ten models evaluated the authors argue that the migration pool, biregional, and biregional with net constraints models offer a good compromise between conceptual rigour and practicality. If the projected origin-destination flows are required then one of the versions of the standard multiregional model with reduced data inputs is preferred. The large variation in projection outputs points to the need for a better understanding of the spatio-temporal structure of migration in Australia.

Keywords

models; internal migration; population projections; Australia; sub-national populations; regional demography; comparative analysis

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