

Contents

1	Introduction: What Is Multiregional Demography?	1
1.1	Modeling the Age and Spatial Dynamics of Multiregional Populations	2
1.1.1	A Multiregional Perspective	2
1.1.2	Multiregional Life Tables	6
1.1.3	Multiregional Population Projections	6
1.2	Estimating the Age and Spatial Structures of Migration Flows	7
1.2.1	Model Migration Schedules and Spatial Interaction Models	8
1.2.2	The Indirect Estimation of Migration from Inadequate Data	8
1.3	Outline of the Rest of the Book	9
	References	10
2	Does Model Specification Matter?	11
2.1	Introduction	11
2.2	The Net Migration Rate: How It Creates a Projection Bias	12
2.3	The Uniregional Fallacy and Bias	14
2.3.1	Aggregation Bias	14
2.3.2	Decomposition Bias	15
2.3.3	Numerical Illustration: A Simple Projection Model of Urbanization	16
2.3.4	The Simple Projection Model Expressed in Matrix Form	18
2.3.5	Bias: A Summary	20
2.4	Netting Out the Age Patterns of Directional Migration Rates	21
2.5	The Proximate Sources of India's Urban Population Growth: Mostly Migration or Mostly Natural Increase?	25
2.5.1	Introduction	25
2.5.2	The Problematic Net Migration Rate	27
2.5.3	A Disaggregation by Age	28
2.6	Discussion and Conclusion	28
	References	29

3	The Proximate Sources of Regional Elderly Population Growth: Mostly Migration or Mostly Aging-in-Place?	31
3.1	Introduction: An Aging Population	32
3.2	Methods of Analysis	33
3.3	Results	36
3.4	Discussion and Conclusion	38
	Reference	39
4	Origin Dependence: Does Birthplace Specificity in Migration Rates Matter?	41
4.1	Introduction	41
4.2	Origin-Dependent Migration Streams: Primary, Return, and Onward Flows	42
4.2.1	Definitions	42
4.2.2	Fundamental Calculations	44
4.2.3	A Historical Time Series	46
4.3	Return Migration: Measurement and Spatial Dynamics	48
4.3.1	The Positive Correlation: Why Do Attractive Regions Lose so Many Migrants?	48
4.3.2	Origin Dependence and the Vintage Effect: Are the Elderly More Likely to Return Home?	49
4.4	Multiregional Life Tables: Migration Histories	51
4.4.1	Multiregional Life Tables and Origin Dependence	51
4.4.2	Migration Life Histories	52
4.5	Discussion and Conclusion	53
	References	54
5	The Foreign-Born and the Native-Born: Are Their Elderly Migration and Settlement Growth Patterns Different?	55
5.1	Introduction	56
5.2	Historical Context, Data, and Models	57
5.2.1	Historical Context	57
5.2.2	Data and Models: Identifying the Sources of Elderly Population Growth, 1950–1990	61
5.3	What Drives Regional Elderly Population Growth: Migration or Aging-in-Place?	64
5.3.1	Have Interregional Elderly Migration Patterns Changed?	64
5.3.2	The Proximate Sources of Regional Elderly Population Growth	65
5.4	Discussion and Conclusion	69
	References	69
6	Multiregional Population Dynamics and Projections: Do Simple Models Outperform Complex Models?	71
6.1	Introduction	71
6.2	The Problematic Model Assessment Procedure	72

6.2.1	The Assessment of Model Performance	72
6.2.2	When Simple Models Outperform Complex Models.	73
6.2.3	Simplifying Complex Models and the Loss of Built-in Momentum Effects	75
6.3	Multiregional Population Projection Models with Uncertainty: An Example	77
6.3.1	Introduction	77
6.3.2	A Three-Region Projection Model of England's Subnational Population Growth and Distribution: 1976–2008	78
6.3.3	Forecasting Uncertainty in Component Rates	79
6.3.4	Results: Forecasted Regional Closed and Open Populations.	82
6.4	Parameterized Multiregional Forecasting Models: A Time Series Approach	85
6.4.1	Introduction	85
6.4.2	Parameterized Model Schedules	86
6.4.3	A Parameterized Forecasting Model	88
6.5	Discussion and Conclusion	90
	References	92
7	When Regions Are Status Categories: Does Longer Life Lead to Longer Ill Health?	95
7.1	Introduction	95
7.2	The Problematic Prevalence Rate Once Again.	96
7.2.1	A Simple Illustration	96
7.2.2	The Prevalence Rate Life Table Model	98
7.2.3	When Regions Are Status Categories: A Multistate Model of Active Life	99
7.3	Changes in Active Life Among the Elderly in the United States: 1984–1988	101
7.4	Another Application of Multistate Demography	106
7.5	Discussion and Conclusion	107
	References	108
8	Conclusion	111
8.1	Double Entry Bookkeeping	111
8.2	Incidence not Prevalence	112
8.3	A Final Word	113
	References	113

Applied Multiregional Demography: Migration and
Population Redistribution

Rogers, A.

2015, XV, 114 p. 24 illus., Softcover

ISBN: 978-3-319-22317-9