

1. Record Nr.	UNINA9910463819403321
Autore	O'Donoghue Cathal
Titolo	Handbook of microsimulation modelling // Cathal O'Donoghue
Pubbl/distr/stampa	Bingley, England : , : Emerald, , 2014 ©2014
ISBN	1-78350-570-2
Edizione	[First edition.]
Descrizione fisica	1 online resource (563 p.)
Collana	Contributions to Economic Analysis, , 0573-8555 ; ; 293
Disciplina	352.33011
Soggetti	Political planning - Mathematical models Decision making - Mathematical models Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Cover; Contributions to Economic Analysis 293; Handbook of Microsimulation Modelling; Copyright page; Contents; List of Contributors; List of Tables; List of Figures; About the Authors; Chapter 1 Introduction; 1.1 Introduction; 1.1.1 Target audience; 1.1.2 Modelling complexity; 1.2 Overview of the handbook; 1.2.1 Population complexity; 1.2.2 Behavioural complexity; 1.2.3 Temporal and spatial complexity; 1.2.4 Policy complexity; 1.2.5 Unit of analysis; 1.3 Future directions; Acknowledgement; References; Chapter 2 Hypothetical Models; 2.1 Introduction; 2.2 Context and uses 2.2.1 Context of the hypothetical models2.2.2 Policy scope; 2.2.3 Geographical scope; 2.2.4 Analytical scope; 2.3 Methodological characteristics and choices; 2.3.1 Interaction with another model; 2.3.2 Unit of analysis; 2.3.3 Period of analysis; 2.3.4 Unit of variation; 2.3.5 Analytical measure; 2.3.6 Methods to update the underlying attributes; 2.3.7 Limitations; 2.4 Summary and future directions; References; Chapter 3 Static Models; 3.1 Introduction; 3.2 The use of static microsimulation models; 3.2.1 Policy scope; 3.2.2 Geographic scope; 3.2.3 Analytical scope 3.3 Methodological characteristics and choices3.3.1 Parameterisation in static microsimulation models; 3.3.2 Baseline data in static microsimulation models; 3.3.3 Indexation and updating; 3.3.4

Updating tax-benefit rules; 3.3.5 Reweighting; 3.3.6 Projections and static ageing; 3.3.7 Maintenance and other issues; 3.4 Summary and future directions; References; Chapter 4 Multi-Country Microsimulation; 4.1 Introduction; 4.2 Context; 4.3 Methodological characteristics and choices; 4.3.1 A fundamental choice; 4.3.2 Software; 4.3.3 Data; 4.3.4 Simulations; 4.4 Uses and applications  
 4.4.1 Comparisons of the effects of existing policies  
 4.4.2 Comparisons of the effects of policy changes; 4.4.3 Supra national microsimulation; 4.5 Summary and future directions; Acknowledgements; References; Chapter 5 Decomposing Changes in Income Distribution; 5.1 Introduction; 5.2 Context; 5.2.1 Tax-Benefit Microsimulation; 5.2.2 Assessing the Effect of Policy Changes Using Decomposition by Income Types; 5.2.3 Assessing the effect of policy changes using microsimulation; 5.3 Methodological characteristics and choices; 5.3.1 Methodology; 5.3.2 Choice of nominal adjustments  
 5.3.3 Choice of definition of the policy effect  
 5.3.4 Other choices; 5.3.5 Data requirements and tax-benefit microsimulation; 5.4 Uses and applications; 5.4.1 Quantifying the contribution of past policy reforms; 5.4.2 Sensitivity to base versus end year data and approximating future policy effects; 5.5 Summary and future directions; References; Chapter 6 Distributional Change during Development; 6.1 Introduction; 6.2 Context; 6.3 Methodological considerations; 6.3.1 A characterization of the statistical approach; 6.3.2 A nonparametric method; 6.3.3 Using regression models  
 6.3.4 Using reduced-form models

---

## Sommario/riassunto

Microsimulation Modelling involves the application of simulation methods to micro data for the purposes of evaluating the effectiveness and improving the design of public policy. The field has been applied to many different policies within both government and academia. This handbook describes and discusses the main issues within the field.

---