

MICROSIMULATION IN GOVERNMENT POLICY AND FORECASTING

Edited by

I'

Anil GUPTA

*Applied Research & Analysis Division
Health Canada, Ottawa, Ont., Canada*

and

Vishnu KAPUR

Department of Finance, Ottawa, Ont., Canada

m

2000

C

ELSEVIER

Amsterdam - Lausanne - New York - Oxford - Shannon - Singapore - Tokyo

CONTENTS

Chapter 1: Introduction and Overview
Vishnu Kapur and Anil Gupta.....

PART I: MICROSIMULATION IN TAX POLICY

Chapter 2: The Tax Policy Analyst's Best Friend
John Wilkins..... 29

Chapter 3: Microsimulation and Sales Tax Reform in Canada
Anil Gupta, Vishnu Kapur and Tom McGirr..... 39

Chapter 4: Distributional Outcome of the Danish Welfare System
Tove Birgitte Pedersen..... 65

Chapter 5: The Use of Microsimulation Models for the Danish Tax
 Reform Act of 1993
Peter Foxman..... 85

Chapter 6: Marginal Effective Tax Rates and Expected Gains from
 Employment in Denmark
Frederik Hansen..... 95

Chapter 7: The Distributional Superiority of Tax Credits
Sophia Delipalla and Harry Papapanagos..... 115

Chapter 8: Modelling Corporation Tax in the United Kingdom
Richard J. Eason..... 133

PART II: MICROSIMULATION MODELLING: ISSUES AND DEVELOPMENTS

Chapter 9: Socio-Economic Microsimulation and Public Policy: Retrospect and
 Prospect
Michael Wolf son..... 155

Chapter 10: Eur3: A Prototype European Tax-Benefit Model
*F. Bourguignon, C. O'Donoghue, J. Sastre Descals, A. Spadaro,
 and F. Utili*..... 173

Chapter 11: Benefit Systems and Work Incentives: An OECD Database <i>Marco Doudeijns</i>	203
Chapter 12: Microsimulation Models - Credibility, Choice and Practical Use <i>Steve F. Barry and Gordon A. Keenay</i>	227
Chapter 13: Social Policy Microsimulation - What Makes a Difference? <i>Gary Bagley, Joseph E. Burpee and Stephane Jette</i>	241
Chapter 14: Using Dynamic Microsimulation Models for Policy Analysis and Research <i>LeifAndreassen and Inger Texmon</i>	265

PART III: RECENT ADVANCES IN DYNAMIC MODELLING

Chapter 15: Dynamic Microsimulation: Recent Trends and Future Prospects <i>Ann Harding</i>	297
Chapter 16: Modelling Immigrants to Australia - to Enter a Dynamic Microsimulation Model <i>Agnes Walker</i>	313
Chapter 17: DYNACAN: The Canada Pension Plan Policy Model: Demographic and Earnings Components <i>Richard J. Morrison</i>	341
Chapter 18: Alignment and Variance Reduction in DYNACAN <i>Christopher Neufeld</i>	361
Chapter 19: LifePaths: A longitudinal microsimulation model using a synthetic approach <i>Steve Gribble</i>	383
Chapter 20: Assessing Distributional Impacts of Social Security Using Microsimulation <i>Melissa M. Favreault and Steven B. Caldwell</i>	395
Chapter 21: The Distribution of Household Wealth in the U.S., 1962-1992: Estimation Using Dynamic Microsimulation <i>Lisa Keister and Steven B. Caldwell</i>	<.....427

PART IV: DATA ISSUES

Chapter 22: Some Perspectives on Data Issues in Microsimulation Modelling <i>Daniel Feenberg and Anil Gupta</i>	457
Chapter 23; Impute or Match? Strategies for Microsimulation Modelling <i>John F. O'Hare</i>	467
Chapter 24: Static Database Aging of Income Distributions in Canada <i>Emile A Hie and Brian Murphy</i>	487
Chapter 25: Statistics on Individual Taxation: The Individual Taxation Statistics Program of Revenue Canada <i>Ronald K. Naylor</i>	509
Chapter 26. The Use of Simulation Models in Forecasting Tax Revenues <i>Emmanuel Kitcher</i>	521
Chapter 27: Canada's Corporation Tax Model <i>Allan McGrath and Chris McCann</i>	537
Chapter 28: Forecasting the Number of Firms Using a Logit Regression Model <i>Jacob A. Rasmussen</i> ,.....	547

PART V: PRACTICAL MICROSIMULATION MODELS

Chapter 29: Practical Aspects of Microsimulation Modelling <i>John O'Hare and Anil Gupta</i>	563
Model 1: EUROMOD (EU) <i>Holly Sutherland</i>	575
Model 2: TRIM3 (U.S.A.) <i>John O'Hare</i>	581
Model 3: SPSD/M (Canada) <i>Brian Murphy</i>	587
Model 4: STIMVIOD (Australia) <i>Simon Lambert, Maren Child and Aim Harding</i>	5

Model 5: DYNACAN (Canada) <i>Richard J. Morrison</i>	599
Model 6: OECD TAX-BENEFIT MODEL (OECD) <i>Marco Doudeijns</i>	605
Model 7: ACITM (Australia) <i>Michael Zeithofer</i>	609
Model 8: LIFEPATHS (Canada) <i>Steve Gribble</i> .. '.....	615
Model 9: ASTER (Belgium) <i>Andre Decoster</i>	619
Model 10: SLOVAK (Slovak) ' <i>William B. Trautman</i>	623
Model 11: MAINE (U.S.A.) <i>Anil Gupta and Deborah Kroetsch</i>	631
Model 12: XECON (Canada) <i>Michael C. Wolf son</i> ——;.....	637
Index	641
Notes on Contributors	643
List of Discussants and Referees	651