

Age, period and cohort effects: statistical analysis and the identification problem /

Bell, Andrew, editor

Monografía

https://rebiunoda.pro.baratznet.cloud;28443/OpacDiscovery/public/catalog/detail/b2FpOmNlbGVicmF0aW9uOmVzLmJhcmF0ei5yZW4vMzY1MDc4MjY

Título: Age, period and cohort effects statistical analysis and the identification problem [edited by] Andrew Bell

Edición: 1st ed

Editorial: New York, New York Oxford, England Routledge [2021] 2021

Descripción física: 1 online resource

Bibliografía: Includes bibliographical references and index

Contenido: Cover -- Half Title -- Endorsement -- Title Page -- Copyright Page -- Dedication -- Table of contents --Contributors -- 1 Introducing age, period and cohort effects -- What are age, period and cohort effects -- Different types of data and identifying APC -- The identification problem -- What we should and shouldn't do: the chapters that follow -- Where this book came from -- Note -- References -- 2 The pros and cons of constraining variables --Introduction -- Typical features of the Constrained Variables Method -- Omitted variable approach -- Equality constraints -- Multiple constraints -- Pitfalls of the Constrained Variables Method -- It is impossible to statistically verify the constraint(s) -- Estimates are only valid if the constraint is correct -- Interactions between age, period and cohort -- Can CVM be successfully applied, and when? -- Make the assumptions explicit -- Use theoretical and empirical information to ground constraints -- Compare results across models with different constraints -- Accept uncertainty and be cautious about conclusions -- Conclusion -- Notes -- References -- 3 Multilevel models for ageperiod-cohort analysis -- Introduction -- What are multilevel models? -- Why use multilevel models for age-periodcohort analysis? -- The Hierarchical Age-Period-Cohort model -- Why do multilevel APC models produce the results that they do? -- Which multilevel APC models should researchers use? -- Example 1: mental health in the UK, 1991-2008 -- Example 2: mortality in the UK through the 20th century -- Conclusion -- Note -- References -- 4 The Lexis surface: A tool and workflow for better reasoning about population data -- Introduction -- Key arguments -- The Lexis surface and APC effects: an introduction -- Proposition one: we should look at Lexis surfaces as a matter of routine Proposition two: we should look at Lexis surfaces of population data in order to produce informal models of population structur -- Proposition three: we should use our emergent knowledge of informal models to produce formal models -- Proposition four: we can and should use Lexis surfaces again at the stage of statistical model diagnostics -- Prediction and residual surfaces for ARD -- Prediction and residual surface for DRD --Beyond the 'naive' benchmark: fitting 'smart' models naively and smartly -- What does formal modelling add? --

Discussion -- References -- 5 Detecting the 'black hole' of age-period excess mortality in 25 countries: Age-periodcohort residual analysis -- Introduction -- Part I: introducing the new method -- Data -- Results -- Part II: explaining the mortality increases in Spain, southern Europe and the U.S. -- Discussion -- Strengths and limitations --Conclusions -- Funding -- Notes -- References -- 6 Learning from age-period-cohort data: Bounds, mechanisms, and 2D-APC graphs -- Introduction -- Background of APC analysis -- Brief history -- APC effects as bundles of unmeasured causes -- The logic of the APC identification problem -- Modeling APC effects -- Organizing temporal data -- Classical APC model -- Linearized APC model -- A three-stage approach to analyzing APC data -- Stage 1: analysis without assumptions -- Nonlinear effects: no assumptions needed -- Constraints on linear effects absent assumptions -- The canonical solution line -- 2D-APC graphs -- Combining the linear and nonlinear effects -- Stage 2: partial identification using bounds -- Stage 3: mechanism-based models of APC effects -- Incorporating observed mechanisms in an APC analysis -- Mechanism-based analysis of religious intensity -- Conclusion -- Notes --References 7 Modeling factors affecting age, period and cohort trends: The effect of cigarette smoking on lung cancer trends -- Introduction -- Method for describing the effect of exposure in a population -- Disease model --Exposure trends -- Cross-sectional estimates of ever smokers -- Smoking initiation probability -- Smoking cessation probability -- Current, former and never-smoker prevalence -- Cigarettes smoked per day -- Estimating population rates using exposure data -- Model-based estimate of rates -- Age-period-cohort calibration of model estimate --Discussion and conclusions -- References -- 8 Bayesian age-period-cohort models -- Introduction -- Basics of the Bayesian approach -- The classical APC regression model -- The Bayesian C-APC model -- The identification problem -- Transparent reparameterization of the classical APC model -- The linearized APC model -- Transparent reparameterization of the classical model -- Bayesian interpretation of the APC identification problem --Introducing the linearized Bayesian APC model -- Typology of priors -- Previous Bayesian APC models --Example: political party strength -- Conclusion -- Notes -- References -- 9 Age-period-cohort analysis: What is it good for? -- On cohort analysis -- Identification entails a constraint on linear terms -- From bounding to overidentification: further perspectives on linear trends -- Against concomitant linear trends in cohort and period -- Into the future -- What is it good for? -- Notes -- References -- 10 The line of solutions and understanding age-periodcohort models -- Introduction -- The line of solutions -- The line of solutions and constrained solutions -- The line of solutions and estimable functions -- The line of solutions and variance decomposition -- The relationship among the linear trends for ages, periods and cohorts The line of solutions: mixed models and characteristic models (approximations) -- Conclusions -- Notes -- References -- Index

ISBN: 0-429-05681-8 0-429-61506-X

Materia: Social sciences- Statistical methods Age groups- Statistical methods Cohort analysis

Autores: Bell, Andrew, editor

Enlace a formato físico adicional: 0-367-17442-1

Baratz Innovación Documental

• Gran Vía, 59 28013 Madrid

• (+34) 91 456 03 60

• informa@baratz.es