Contents

Preface ix

PART 1 COMPARATIVE METHODOLOGY 1

1 Comparative Methodology and Statistics in Political Science 3
1.1 Introduction 3
1.2 The comparative approach to political and social science: theory and method 6
1.3 Comparing data: selecting cases and variables 8
1.4 Developing empirical-analytical comparative analysis 13
1.5 How to use this book 15
1.6 Endmatter 16

2 The Comparative Approach: Theory and Method 18
2.1 Introduction 18
2.2 Comparative research and case selection 19
2.3 The use of comparative analysis in political science: relating politics, polity and policy to society 23
2.4 Endmatter 28

3 Meaning and Use of the Comparative Method: Research Design 30
3.1 Introduction 30
3.2 The problem of variables, cases, and interpretations 32
3.2.1 Context matters 35
3.2.2 Logics of comparison 36
3.3 The role of space and time 39
3.3.1 Time and history 40
3.3.2 Space and Cross-Sections 41
3.4 Developing a research design 42
3.5 Transforming concepts into units of measurement 48
3.6 Conclusion 50
3.7 Endmatter 51

PART 2 STATISTICS IN POLITICAL SCIENCE 53

4 Concepts, Cases, Data and Measurement 55
4.1 Data and data collection in political science 56
4.1.1 Data obtained from official statistical agencies 56
4.1.2 Verbal and visual accounts, content analysis 58
4.1.3 Questionnaires and surveys 59
4.2 Sampling and the basics of statistical testing 60
4.2.1 Statistical inference from a random sample 60
4.2.2 Random samples and non-random samples 61
4.3 Operationalization and measurement: Linking data with concepts and units 62
4.3.1 Handling missing data 65
4.4 Criteria to evaluate the quality of operationalization and measurements 66
4.4.1 Multiple indicators: the scalability (reliability) problem 69
4.5 Scalability and cluster analysis 70
4.5.1 Likert scales and Cronbach's alpha 74
4.5.2 Factor analysis 75
4.5.3 Principal axis factoring and confirmative factor analysis 78
4.5.4 Digression: an unknown number of dimensions 80
4.5.5 Explorative cluster analysis 82
4.5.6 Summary 85
4.6 Conclusion 86
4.7 Endmatter 86

5 Explorative and Descriptive Statistics 88
5.1 The univariate distribution of a nominal variable 89
5.1.1 Measures of central tendency for nominal variables: the mode 90
5.1.2 Measures of dispersion for nominal variables: entropy and the Herfindahl Index 91
5.2 The univariate distribution of ordinal, interval and ratio variables 92
5.2.1 Measures of central tendency 93
5.2.2 Measures of dispersion 94
5.2.3 The shape of the entire distribution of a variable with interval measurement 97
5.3 Relationships between variables with nominal measurement levels 99
5.3.1 The chi-square measure of association in a cross-table 100
5.4 The bivariate distribution of two ordinal, interval or ratio variables 103

5.4.1 Exploring the bivariate distribution the scattergram 104
5.4.2 Bivariate regression analysis 106
5.5 The relation between an interval or ratio variable and a nominal variable 114
5.5.1 An interval variable and a bivariate nominal variable: the comparison of two means 114
5.5.2 Analysis of variance: an interval variable by a nominal variable with j values 115
5.6 Populations, samples and inferential statistics 119
5.6.1 The urn model 120
5.6.2 Unbiasedness, efficiency and robustness of an estimator 121
5.6.3 The general procedure used in hypothesis testing 123
5.6.4 Four common probability distributions of test statistics 124
5.6.5 Degrees of freedom 127
5.6.6 Sense and nonsense of statistical tests 128
5.7 Summary 128
5.8 Endmatter 129

6 Multivariate Analysis and Causal Inference 132
6.1 Causality and multivariate relations 133
6.2 Overview of multivariate data analysis techniques 136
6.3 The case-oriented approach 137
6.4 Nominal dependent and independent variables 141
6.4.1 Cross-table elaboration 142
6.5 Nominal dependent variable, interval independent variables 145
6.5.1 Discriminant analysis example: explaining the type of government 146
6.6 Interval dependent variable, nominal independent variables: analysis of variance 150
6.7 Interval dependent and independent variables: regression analysis 152
6.7.1 The multiple regression model 153
6.7.2 Assumptions of the ordinary least squares estimation method 157
6.7.3 Direct causes, intervening variables and antecedent variables 164
6.7.4 Interactions in the multivariate regression model 164
6.7.5 Time series analysis: the autocorrelation problem 166
6.7.6 Pooled time series analysis: autocorrelation and heteroscedasticity 174
6.7.7 Reciprocal causal relations: linear structural equation models 180
6.8 Epilogue 180
6.9 Endmatter 181

PART 3 DOING POLITICAL RESEARCH **183**
Introduction to Part III: Doing political research 183

7 How problems arise **187**
7.1 Processes of electoral change 187
7.1.1 The problem of change 187
7.1.2 Measuring electoral change 189
7.1.3 Modelling change 193
7.2 Processes of party change 198
7.2.1 The role of parties 198
7.2.2 Parties and ideology scales 200
7.2.3 Parties and issues 206
7.2.4 Public opinion and party responsiveness 209
7.3 Conclusions 213
7.4 Endmatter 214

8 How Decisions are Made **217**
8.1 Introduction 217
8.2 Types of democracies 219
8.3 Party systems 225
8.4 Cabinet formation and duration 229
8.5 Interest intermediation 239
8.6 Federalism, centralism and institutional autonomy 243
8.7 Presidentialism 248
8.8 Conclusions 252
8.9 Endmatter 252

9 How Problems are Solved **258**
9.1 Introduction 258
9.2 Welfare-related outputs and performance 260
9.3 Actors and socio-economic problem-solving 263
9.4 Institutions and socio-economic problem-solving 270
9.5 Electoral cycles and macro-economic policy 276
9.6 Democratic performance 279
9.7 Parties and accountability 289
9.8 Conclusions 293
9.9 Endmatter 295

Appendix 299

Bibliography 305

Index 317