

Handbook of Research Methods and Applications in Empirical Macroeconomics

Edited by

Nigar Hashimzade

Durham University, UK

Michael A. Thornton

University of York, UK

HANDBOOKS OF RESEARCH METHODS AND APPLICATIONS

Edward Elgar

Cheltenham, UK • Northampton, MA, USA

Contents

<i>List of contributors</i>	vii
1 Introduction <i>Nigar Hashimzade and Michael A. Thornton</i>	1
2 A review of econometric concepts and methods for empirical macroeconomics <i>Kerry Patterson and Michael A. Thornton</i>	4
PART I PROPERTIES OF MACROECONOMIC DATA	
3 Trends, cycles and structural breaks <i>Terence C. Mills</i>	45
4 Unit roots, non-linearities and structural breaks <i>Niels Haldrup, Robinson Kruse, Timo Teräsvirta and Rasmus T. Varneskov</i>	61
5 Filtering macroeconomic data <i>D.S.G. Pollock</i>	95
PART II MODELS FOR MACROECONOMIC DATA ANALYSIS	
6 Vector autoregressive models <i>Helmut Lütkepohl</i>	139
7 Cointegration and error correction <i>James Davidson</i>	165
8 Estimation and inference in threshold type regime switching models <i>Jesús Gonzalo and Jean-Yves Pitarakis</i>	189
9 Testing structural stability in macroeconometric models <i>Otilia Boldea and Alastair R. Hall</i>	206
10 Dynamic panel data models <i>Badi H. Baltagi</i>	229
11 Factor models <i>Jörg Breitung and In Choi</i>	249
12 Conditional heteroskedasticity in macroeconomics data: UK inflation, output growth and their uncertainties <i>Menelaos Karanasos and Ning Zeng</i>	266
13 Temporal aggregation in macroeconomics <i>Michael A. Thornton and Marcus J. Chambers</i>	289

PART III ESTIMATION AND EVALUATION FRAMEWORKS IN MACROECONOMICS		
14	Generalized Method of Moments <i>Alastair R. Hall</i>	313
15	Maximum likelihood estimation of time series models: the Kalman filter and beyond <i>Tommaso Proietti and Alessandra Luati</i>	334
16	Bayesian methods <i>Luc Bauwens and Dimitris Korobilis</i>	363
17	Forecasting in macroeconomics <i>Raffaella Giacomini and Barbara Rossi</i>	381
PART IV APPLICATIONS I: DYNAMIC STOCHASTIC GENERAL EQUILIBRIUM MODELS		
18	The science and art of DSGE modelling: I – construction and Bayesian estimation <i>Cristiano Cantore, Vasco J. Gabriel, Paul Levine, Joseph Pearlman and Bo Yang</i>	411
19	The science and art of DSGE modelling: II – model comparisons, model validation, policy analysis and general discussion <i>Cristiano Cantore, Vasco J. Gabriel, Paul Levine, Joseph Pearlman and Bo Yang</i>	441
20	Generalized Method of Moments estimation of DSGE models <i>Francisco J. Ruge-Murcia</i>	464
21	Bayesian estimation of DSGE models <i>Pablo A. Guerrón-Quintana and James M. Nason</i>	486
PART V APPLICATIONS II: VECTOR AUTOREGRESSIVE MODELS		
22	Structural vector autoregressions <i>Lutz Kilian</i>	515
23	Vector autoregressive models for macroeconomic policy analysis <i>Soyoung Kim</i>	555
PART VI APPLICATIONS III: CALIBRATION AND SIMULATIONS		
24	Calibration and simulation of DSGE models <i>Paul Gomme and Damba Lkhagvasuren</i>	575
25	Simulation and estimation of macroeconomic models in Dynare <i>João Madeira</i>	593
	<i>Index</i>	609