
Preface

Emperor Joseph II: “*Your work is ingenious. It’s quality work. And there are simply too many notes, that’s all. Just cut a few and it will be perfect.*”

Wolfgang Amadeus Mozart: “*Which few did you have in mind, Majesty?*”

from the movie *Amadeus*, 1984 (directed by Milos Forman)

The field of econometrics has developed rapidly in the last two decades, while the use of up-to-date econometric techniques has become more and more standard practice in empirical work in many fields of economics. Typical topics include unit root tests, cointegration, estimation by the generalized method of moments, heteroskedasticity and autocorrelation consistent standard errors, modelling conditional heteroskedasticity, models based on panel data, and models with limited dependent variables, endogenous regressors and sample selection. At the same time econometrics software has become more and more user friendly and up-to-date. As a consequence, users are able to implement fairly advanced techniques even without a basic understanding of the underlying theory and without realizing potential drawbacks or dangers. In contrast, many introductory econometrics textbooks pay a disproportionate amount of attention to the standard linear regression model under the strongest set of assumptions. Needless to say that these assumptions are hardly satisfied in practice (but not really needed either). On the other hand, the more advanced econometrics textbooks are often too technical or too detailed for the average economist to grasp the essential ideas and to extract the information that is needed. This book tries to fill this gap.

The goal of this book is to familiarize the reader with a wide range of topics in modern econometrics, focusing on what is important for doing and understanding empirical work. This means that the text is a guide to (rather than an overview of) alternative techniques. Consequently, it does not concentrate on the formulae behind each technique (although the necessary ones are given) nor on formal proofs, but on the intuition behind the approaches and their practical relevance. The book covers a wide range of topics that is usually not found in textbooks at this level. In particular, attention is paid to cointegration, the generalized method of moments, models