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Book review

Contemporary Bayesian Econometrics and Statistics, John Geweke, Wiley, New Jersey (2005), (Hardcover, 300 pages) ISBN: 0-471-67932-1

In the last decade there has been a huge increase in interest in Bayesian econometrics in several fields, like applied macroeconomics, finance, and marketing. Several textbooks on Bayesian econometrics have appeared in this period; see [Koop \(2003\)](#), [Lancaster \(2004\)](#), and [Rossi, Allenby, and McCulloch \(2005\)](#), among others, each targeting a different audience. The danger of writing yet another textbook on the subject is that one basically writes a copy of the existing textbooks. For the book under review this is certainly not the case, however, mainly because its focus is different from the above mentioned books. Instead of taking econometric models as a starting point, the book aims to provide tools which will improve decision making in an imperfect world.

The book contains 8 chapters. The first chapter motivates the use of Bayesian analysis in decision making. Chapter 2 deals with the basic elements which are necessary for a Bayesian analysis. More advanced topics, like hierarchical and improper priors, are discussed in Chapter 3. The most popular simulation algorithms like importance sampling and MCMC techniques for obtaining posterior results are introduced in Chapter 4. Chapters 5, 6 and 7 deal with Bayesian analysis of the linear regression model, models with latent variables, and time series models, respectively.

The final chapter discusses how the proposed techniques can be used for model building.

The style of the book is formal. Many concepts are introduced using formal definitions, and many results are stated in theorems, which are often followed by proofs. A nice feature of the book is that it is not necessary to focus on technical details to enjoy reading it. The notation is straightforward, which makes it possible to read and understand separate parts of the book without reading the whole book. The mathematical level of the book is higher than the above mentioned textbooks. This perhaps makes the book less accessible for students with a limited mathematical and statistical background, but it certainly fills a gap in the literature. The book is not only suitable for an advanced textbook, it is also an excellent reference for the Bayesian researcher. All Bayesian econometricians should have this book on their bookshelves.

References

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Lancaster, T. (2004). *An Introduction to Modern Bayesian Econometrics*. Malden: Blackwell.
Rossi, P. E., Allenby, G. M., & McCulloch, R. (2005). *Bayesian Statistics and Marketing*. New Jersey: Wiley.

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