

# Introduction to Bayesian Econometrics

2nd edition

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This textbook explains the basic ideas of subjective probability and shows how subjective probabilities must obey the usual rules of probability to ensure coherency. It defines the likelihood function, prior distributions and posterior distributions. It explains how posterior distributions are the basis for inference and explores their basic properties. Various methods of specifying prior distributions are considered, with special emphasis on subject-matter considerations and exchangeability. The regression model is examined to show how analytical methods may fail in the derivation of marginal posterior distributions. The remainder of the book is concerned with applications of the theory to important models that are used in economics, political science, biostatistics and other applied fields. New to the second edition is a chapter on semiparametric regression and new sections on the ordinal probit, item response, factor analysis, ARCH-GARCH and stochastic volatility models. The new edition also emphasizes the R programming language.

## Key features

- New chapter on semiparametric regression, new sections on ordinal probit, item response, factor analysis, ARCH-GARCH and stochastic volatility models
- New edition emphasizes the R programming language, the most widely used environment for Bayesian statistics
- Clear, concise explanation of how Bayesian approach arises from basic principles of probability theory emphasizing Markov chain Monte Carlo methods

## Resources

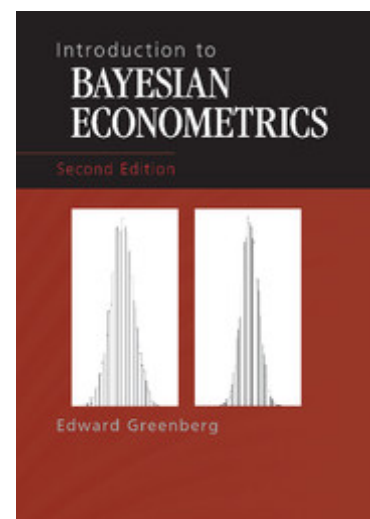
There are free resources available for this textbook [from the resources page](#).

## About the book

Subjects: [Computational Science](#), [Econometrics and Mathematical Methods](#), [Economics](#), [Mathematics](#)

Format: Hardback , Price: US\$67.99

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Format: Paperback , Price: US\$51.99

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