**Reviews for Hassan:**

**Reviewer#1**

**1. What is the technical level of this book?**

Masters to PhD.

**2. Is the material well-organized? Please indicate any problems with the organization and suggest ways of solving them.**

The overall layout of the book, based on TOC seems fine.

**3. Should any of the material in the book be omitted?**

No. I will note though that I was put off right away when the author made the common mistake of assuming that P(A|B)=1-P(A|B^c). This was implicit in his numerical example, but it is well known that such a probabilistic relationship only holds in special cases, not generally.

**4. Does the author neglect to include any key material in the book?**

Yes, the author should specify how exactly inference will be discussed in the book (I did not see a specific chapter) nor is there any discussion of endogeneity and how to handle this. I would also recommend more dedicated time to the computational issues, things like storage, loop management, writing functions, ensuring replicability and other practical aspects of Bayesian methods and simulation in general.

**5. Would the book benefit from supplementary material, such as a solutions manual or material available on-line? Please specify what material you feel would be useful to the intended market.**

I think the flow of the book is disrupted by long pieces of code. Some of these code snippets, depending on length should be removed and put in an online supplementary appendix. Further, all exercises should have an online answer key available.

**6. Is the author a recognized authority in this field?**

Yes, Andres is a technically gifted Bayesian econometrician with outstanding computation skills.

**7. Is there a real need for this book, and what are the principal markets? Please indicate the level at which the book would appeal and identify the main buyers (quantify if possible).**

It is difficult to say if there is a need for this book. The reason is that very few graduate programs teach dedicated courses on Bayesian econometrics. I am not sure the way the book is structured that it would change this narrative in higher education (not the author’s fault or problem of course, just the reality). Having more books out in the space certainly helps.

**8. Would this book be suitable for the student market? If so, please identify some of the relevant courses and institutions, and indicate whether main text or supplementary reading. What would be the level (Masters, undergraduate, graduate), length of course and average number of students?**

I can see this book being intriguing to students from the angle of coding. Many graduate students who are using these methods can very easily learn the ins-and-outs of computational aspects. In fact the author may want to spend more time on these issues.

**9. What are the principal related/competing titles, and how do they compare with the proposed book? What particular advantages/disadvantages does the proposed book have over them?**

1. Geweke, J. (2005). Contemporary Bayesian Econometrics and Statistics. John Wiley & Sons, INC. Similar in style but already almost 20 years old.

**10. How quickly is the proposed book likely to become out of date?**

The core aspects will not change, but there are always improvements in simulation techniques that help to improve these methods.

11. Do you recommend that we publish this book?

1. Subject to changes? See some of my changes listed above.

**Reviewer#2**

**1. What is the technical level of this book?**

Graduate students and advanced undergrads.

**2. Is the material well-organized? Please indicate any problems with the organization and suggest ways of solving them.**

The material is well organized.

**3. Should any of the material in the book be omitted?**

No.

**4. Does the author neglect to include any key material in the book?**

This chapter is called “Basic Formal Concepts”.

**5. Would the book benefit from supplementary material, such as a solutions manual or material available on-line? Please specify what material you feel would be useful to the intended market.**

Absolutely. Books at this level generally have solutions manuals but often don’t have other supplementary material available. Putting additional material (sample tests, in class exercises, notes) would help separate this book from others.

**6. Is the author a recognized authority in this field?**

Yes, the author is accomplished in the field.

**7. Is there a real need for this book, and what are the principal markets? Please indicate the level at which the book would appeal and identify the main buyers (quantify if possible).**

I assume the book would primarily be used in graduate programs in economics and possibly other social science departments. The competition in this area in statistics departments would be difficult since there are several established books and don’t have the social science emphasis this one does.

**8. Would this book be suitable for the student market? If so, please identify some of the relevant courses and institutions, and indicate whether main text or supplementary reading. What would be the level (Masters, undergraduate, graduate), length of course and average number of students?**

This would be a good book for any grad program in economics for students after they have taken graduate econometrics. For undergrads, the students would have need to take calculus based probability, possibly mathematical statistics and some sort of applied stat class.

**9. What are the principal related/competing titles, and how do they compare with the proposed book? What particular advantages/disadvantages does the proposed book have over them?**

1. Bayesian Econometrics by Goop
2. Bayesian Econometric Methods by Chan et al.
3. Not sure of a third

I like the R code is well written and placed conveniently throughout the text. This is a useful addition in modern stat textbooks.

**10. How quickly is the proposed book likely to become out of date?**

Software changes relatively rapidly, but, having an accompanying website that updates examples as R updates would be helpful.

11. Do you recommend that we publish this book?

a) As it is?

1. Subject to changes?
2. Not at all?

My main issue with chapter 1 is it assumes a **lot** of the reader. It bounces back and forth between several relatively advanced ideas, but acts like it is introducing them (Bayes factors, decision theory). I think a little more content on these advanced topics would be useful. Though to be fair, I only have the one chapter. Perhaps these ideas are fleshed out more fully in later chapters, but that should be more clear in this first chapter.

**Reviewer#3**

**1. What is the technical level of this book?**

Based in chapter 1 the technical level is intermediate. I would see the book appropriate for Masters students.

**2. Is the material well-organized? Please indicate any problems with the organization and suggest ways of solving them.**

The material in chapter 1 is well organized. I would provide more explanations and details in Chapter 1 for easier understanding of material.

The table of contents is not detailed enough to know the topics in the sub-sections of each chapter.

**3. Should any of the material in the book be omitted?**

No, all the listed topics are important in econometrics

**4. Does the author neglect to include any key material in the book?**

The table of contents does not include machine learning which becomes increasingly important. The table of contents is not detailed enough to know the sub-sections of each chapter, thus, it is hard to say which material will be covered. For example, the time series regression may include both univariate and multivariate (VAR) topics as well as models of time series volatility.

In chapter 1 or elsewhere I would also introduce popular model selection criteria such as log predictive density score and DIC.

**5. Would the book benefit from supplementary material, such as a solutions manual or material available on-line? Please specify what material you feel would be useful to the intended market.**

Theoretical and empirical exercises using actual and simulated datasets. The author has developed a Bayesian graphical user interface for several models which is useful. Also, R libraries such as MCMCpack and rstan could be used for empirical examples.

**6. Is the author a recognized authority in this field?**

Yes, the author has many econometrics publications as well as new software development.

**7. Is there a real need for this book, and what are the principal markets? Please indicate the level at which the book would appeal and identify the main buyers (quantify if possible).**

There is a need for applied Bayesian econometrics textbook using R. I would see the book appropriate for Masters students. It depends on detailed topics and applications covered in the book how appealing it is for economics Masters students.

**8. Would this book be suitable for the student market? If so, please identify some of the relevant courses and institutions, and indicate whether main text or supplementary reading. What would be the level (Masters, undergraduate, graduate), length of course and average number of students?**

Masters students Bayesian Econometrics course. This is usually an elective course and number of students would vary by school, e.g. 20-30 students.

**9. What are the principal related/competing titles, and how do they compare with the proposed book? What particular advantages/disadvantages does the proposed book have over them?**

Koop, G. (2003). Bayesian Econometrics. John Wiley & Sons, INC

1. Geweke, J. (2005). Contemporary Bayesian Econometrics and Statistics. John Wiley & Sons, INC.

Two textbooks above are classical references. Since these books were published there were many developments in Bayesian statistics, e.g. MCMC methods using Hamiltonian and other methods. Machine Learning would be an important topic for a new book as well. Also, there were many developments in open-source software R, STAN, etc. Thus, new book may cover more recent developments. The use of software with examples is a particular advantage.

**10. How quickly is the proposed book likely to become out of date?**

It depends on the details of topics covered, in particular, chapter 13 (Recent Developments). Generally, books that illustrate software need revision probably every 5 years or so.

11. Do you recommend that we publish this book?

a) As it is?

1. Subject to changes?
2. Not at all?

b) I would provide more explanations and details in Chapter 1 as mentioned earlier. Can’t judge other chapters.