Empirical Model Discovery and Theory Evaluation: Automatic Selection Methods in Econometrics (Arne Ryde Memorial Lectures)

By David F. Hendry, Jurgen A. Doornik

Empirical Model Discovery and Theory Evaluation: Automatic Selection Methods in Econometrics (Arne Ryde Memorial Lectures) By David F. Hendry, Jurgen A. Doornik

Economic models of empirical phenomena are developed for a variety of reasons, the most obvious of which is the numerical characterization of available evidence, in a suitably parsimonious form. Another is to test a theory, or evaluate it against the evidence; still another is to forecast future outcomes. Building such models involves a multitude of decisions, and the large number of features that need to be taken into account can overwhelm the researcher. Automatic model selection, which draws on recent advances in computation and search algorithms, can create, and then empirically investigate, a vastly wider range of possibilities than even the greatest expert. In this book, leading econometricians David Hendry and Jurgen Doornik report on their several decades of innovative research on automatic model selection. After introducing the principles of empirical model discovery and the role of model selection, Hendry and Doornik outline the stages of developing a viable model of a complicated evolving process. They discuss the discovery stages in detail, considering both the theory of model selection and the performance of several algorithms. They describe extensions to tackling outliers and multiple breaks, leading to the general case of more candidate variables than observations. Finally, they briefly consider selecting models specifically for forecasting.

Empirical Model Discovery and Theory Evaluation: Automatic Selection Methods in Econometrics (Arne Ryde Memorial Lectures)

By David F. Hendry, Jurgen A. Doornik

Empirical Model Discovery and Theory Evaluation: Automatic Selection Methods in Econometrics (Arne Ryde Memorial Lectures) By David F. Hendry, Jurgen A. Doornik

Economic models of empirical phenomena are developed for a variety of reasons, the most obvious of which is the numerical characterization of available evidence, in a suitably parsimonious form. Another is to test a theory, or evaluate it against the evidence; still another is to forecast future outcomes. Building such models involves a multitude of decisions, and the large number of features that need to be taken into account can overwhelm the researcher. Automatic model selection, which draws on recent advances in computation and search algorithms, can create, and then empirically investigate, a vastly wider range of possibilities than even the greatest expert. In this book, leading econometricians David Hendry and Jurgen Doornik report on their several decades of innovative research on automatic model selection. After introducing the principles of empirical model discovery and the role of model selection, Hendry and Doornik outline the stages of developing a viable model of a complicated evolving process. They discuss the discovery stages in detail, considering both the theory of model selection and the performance of several algorithms. They describe extensions to tackling outliers and multiple breaks, leading to the general case of more candidate variables than observations. Finally, they briefly consider selecting models specifically for forecasting.

Empirical Model Discovery and Theory Evaluation: Automatic Selection Methods in Econometrics (Arne Ryde Memorial Lectures) By David F. Hendry, Jurgen A. Doornik Bibliography

- Sales Rank: #1336057 in Books
- Published on: 2014-07-03
- Original language: English
- Number of items: 1
- Dimensions: 9.00" h x .63" w x 6.00" l, .0 pounds
- Binding: Hardcover
- 392 pages

Editorial Review

Review

Model discovery lies at the heart of modern econometrics. David Hendry and Jurgen Doornik provide a timely and important introduction to automated methods that aid the discovery process. They temper enthusiasm with erudition, provide good judgment, and offer balance in their discussions. Brilliantly written. An exciting new work in the field.

(Peter C. B. Phillips, Sterling Professor of Economics, Yale University)

In *Empirical Model Discovery and Theory Evaluation*, David Hendry and Jurgen Doornik break new ground in model specification, evaluation, and theory testing. This book has far-reaching potential in changing current practice in empirical modeling in economics.

(Aris Spanos, Wilson E. Schmidt Professor of Economics, Virginia Tech)

Empirical Model Discovery and Theory Evaluation is highly original and a significant contribution to the field in its careful discussion of the problems met in constructing an appropriate model of econometric data. A fascinating read!

(Søren Johansen, Professor of Econometrics, University of Copenhagen)

About the Author

David F. Hendry is Professor of Economics and Director of the Program in Economic Modeling, Institute for New Economic Thinking at the Oxford Martin School, University of Oxford. Jurgen A. Doornik is James Martin Fellow, Institute for New Economic Thinking, at the Oxford Martin School, University of Oxford, and a Director of OxMetrics Technologies Ltd.

Users Review

From reader reviews:

Susan Jun:

Book is to be different for each and every grade. Book for children until eventually adult are different content. As we know that book is very important for us. The book Empirical Model Discovery and Theory Evaluation: Automatic Selection Methods in Econometrics (Arne Ryde Memorial Lectures) seemed to be making you to know about other expertise and of course you can take more information. It is very advantages for you. The publication Empirical Model Discovery and Theory Evaluation: Automatic Selection Methods in Econometrics (Arne Ryde Memorial Lectures) is not only giving you considerably more new information but also to become your friend when you feel bored. You can spend your own personal spend time to read your e-book. Try to make relationship using the book Empirical Model

Discovery and Theory Evaluation: Automatic Selection Methods in Econometrics (Arne Ryde Memorial Lectures). You never feel lose out for everything if you read some books.

Andrew Comer:

Nowadays reading books are more than want or need but also be a life style. This reading practice give you lot of advantages. The benefits you got of course the knowledge the actual information inside the book this improve your knowledge and information. The details you get based on what kind of guide you read, if you want have more knowledge just go with education books but if you want truly feel happy read one together with theme for entertaining like comic or novel. Typically the Empirical Model Discovery and Theory Evaluation: Automatic Selection Methods in Econometrics (Arne Ryde Memorial Lectures) is kind of reserve which is giving the reader unforeseen experience.

Pedro Dillon:

Do you really one of the book lovers? If so, do you ever feeling doubt if you are in the book store? Try and pick one book that you find out the inside because don't determine book by its deal with may doesn't work here is difficult job because you are afraid that the inside maybe not since fantastic as in the outside appearance likes. Maybe you answer can be Empirical Model Discovery and Theory Evaluation: Automatic Selection Methods in Econometrics (Arne Ryde Memorial Lectures) why because the fantastic cover that make you consider about the content will not disappoint a person. The inside or content is definitely fantastic as the outside or maybe cover. Your reading 6th sense will directly assist you to pick up this book.

Chad Wood:

Many people spending their time period by playing outside using friends, fun activity along with family or just watching TV the whole day. You can have new activity to spend your whole day by examining a book. Ugh, think reading a book can really hard because you have to take the book everywhere? It alright you can have the e-book, having everywhere you want in your Touch screen phone. Like Empirical Model Discovery and Theory Evaluation: Automatic Selection Methods in Econometrics (Arne Ryde Memorial Lectures) which is getting the e-book version. So , why not try out this book? Let's observe.

Download and Read Online Empirical Model Discovery and Theory Evaluation: Automatic Selection Methods in Econometrics (Arne Ryde Memorial Lectures) By David F. Hendry, Jurgen A. Doornik #OYSQ0H2IXGF

Read Empirical Model Discovery and Theory Evaluation: Automatic Selection Methods in Econometrics (Arne Ryde Memorial Lectures) By David F. Hendry, Jurgen A. Doornik for online ebook

Empirical Model Discovery and Theory Evaluation: Automatic Selection Methods in Econometrics (Arne Ryde Memorial Lectures) By David F. Hendry, Jurgen A. Doornik Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Empirical Model Discovery and Theory Evaluation: Automatic Selection Methods in Econometrics (Arne Ryde Memorial Lectures) By David F. Hendry, Jurgen A. Doornik books to read online.

Online Empirical Model Discovery and Theory Evaluation: Automatic Selection Methods in Econometrics (Arne Ryde Memorial Lectures) By David F. Hendry, Jurgen A. Doornik ebook PDF download

Empirical Model Discovery and Theory Evaluation: Automatic Selection Methods in Econometrics (Arne Ryde Memorial Lectures) By David F. Hendry, Jurgen A. Doornik Doc

Empirical Model Discovery and Theory Evaluation: Automatic Selection Methods in Econometrics (Arne Ryde Memorial Lectures) By David F. Hendry, Jurgen A. Doornik Mobipocket

Empirical Model Discovery and Theory Evaluation: Automatic Selection Methods in Econometrics (Arne Ryde Memorial Lectures) By David F. Hendry, Jurgen A. Doornik EPub

OYSQ0H2IXGF: Empirical Model Discovery and Theory Evaluation: Automatic Selection Methods in Econometrics (Arne Ryde Memorial Lectures) By David F. Hendry, Jurgen A. Doornik