

# PROBLEMS AND SOLUTIONS SERIES

## *EDITORIAL NOTE*

Problem solving is a part of all scientific work. It takes place at every level of instruction, and it is a vital ingredient of research. As teachers of econometrics, we want to give our students exercises that help them to learn; we want to provide them with a challenge at the right intellectual level, to stretch their capabilities, to develop their cognitive skills, yet retain their interest and enthusiasm; we want our problem sets to reflect up-to-date concerns in econometrics and its ongoing research. Advanced students and researchers in econometrics have their own related needs: to gain experience in tackling problems at the research level through learning by doing and through the close observation of experts.

The object of the Problems and Solution Series of *Econometric Theory* is to provide an intellectual resource for students, teachers, and researchers in econometrics in this important and rather neglected area. In each issue we will publish student exercises in econometrics and research-level problems. Student exercises will include anything from interesting undergraduate or elementary problems right up to advanced course problems. Research-level problems will report interesting problems that have arisen in the course of research work in econometrics. These research problems may relate to mathematical, statistical, or probabilistic issues that are encountered in research as well as those that are more specifically econometric in nature. For example, a research problem may introduce the reader to a new strong law or limit theorem that may be useful in theoretical econometric research. There will be no clear dividing line between advanced course problems and research problems; but, in the case of the latter, authors are encouraged to describe the research context in which the problems actually occurred with reference to the literature whenever possible.

After the publication of a problem, solutions are invited from the readership for publication in the following issue. All problems and solutions will be refereed and solutions will be selected on a competitive basis that takes into account the correctness, conciseness, generality, and elegance of the solution. In this way, the series is intended to promote interaction between

problem proposers, problem solvers, and the readership of this Journal at large. We hope that this format will work to achieve a useful exchange of ideas among scholars in different research and teaching schools.

Most of all, we want this series to serve an important pedagogical purpose. We hope that each of the problems we publish will be crafted in such a way that the reader will come to learn an aspect of econometrics by trying to find a solution. The solutions we publish will also be helpful in this learning process. Sometimes, this may amount to the discovery of a simple way of obtaining known results; sometimes, it may involve the partial extension of results that have already appeared in the literature; at other times, it may amount to an introduction to a whole field of studies through the working out of a stylized example. These are only a few of the many different possibilities. Our object is to promote education in econometrics in a wide sense and we are receptive to any vehicle that seeks this end.

In particular, contributions to this Problems and Solutions Series are now actively encouraged and welcomed. With the support and participation of our readers, we hope to make this Series into a stimulating and valuable educational resource for the econometrics community.

### **Information for Authors**

All problems should be submitted in triplicate with a clear title, relevant references, and a complete solution to:

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After publication of a problem, solutions are invited for publication in a following issue and will be selected on a competitive basis that takes into account the correctness, conciseness, and elegance of the solution. Solutions should also be submitted to the Editor in triplicate with the title and reference number of the relevant problem. All problems and solutions will be referred.

*Alberto Holly*  
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