## **Book Review:** *Patterns of Speculation. A Study in Observational Econophysics*

**Patterns of Speculation.** A Study in Observational Econophysics. Bertrand M. Roehner, Cambridge University Press, Cambridge, 2002.

As the title of the book indicates, one of the main features of this book, as compared to other recent books on the subject, is the accent on "observational" econophysics. Indeed, the book dedicates only the last two chapters to more technical and mathematically oriented matters. In the remainder of the book the author presents many empirical cases, some of them as far back as 1691 for the prices of wheat in France. In all of these experimental cases, B. M. Roehner looks for regularities and similarities in bubbles, crashes and speculative peaks in stock or commodity prices. The author presents an excellent description and some static and dynamic consequences of these phenomena associated not only with finance but to other phenomena in the social sciences as well. The author is a professional physicist but with a long experience in economics. In fact the author worked in the field of econophysics well before this name was coined. The resulting book can be of great help in bridging the still existing gap between physics and econometrics. One of the clues to this view is provided by the author himself who, at the end of the book, states (quote): "In several parts of physics there are many models which do not contain any adjustable parameter. For instance if one neglects external perturbations the vibrations of a pendulum are determined by its length, its mass, and the acceleration of gravity; the important point being that all of these parameters can be measured independently in separate experiments. Most econometric models in contrast contain a huge number of adjustable parameters. One of the main innovations of econophysics was precisely to try to keep the number of adjustable parameters to a minimum."

The book contains 9 chapters in a little bit over 200 pages. It is a very pleasant read, although I personally miss the deeper insight provided by more technical models and especially the exploration of the effects of

randomness in the dynamics of peaks and crashes. In any case the book is worth reading to anyone interested on these matters.

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