

Review for the *Short Book Reviews* of the International Statistics Institute of:

MODELING FINANCIAL TIME SERIES WITH S-PLUS. Eric Zivot and Jiahui Wang. New York: Springer, 2003, pp. xix + 632.

Contents:

1. S and S-Plus
2. Time Series Specification, Manipulation, and Visualization in S-Plus
3. Time Series Concepts
4. Unit Root Tests
5. Modeling Extreme Values
6. Time Series Regression Modeling
7. Univariate GARCH Modeling
8. Long Memory Time Series Modeling
9. Rolling Analysis of Time Series
10. Systems of Regression Equations
11. Vector Autoregressive Models for Multivariate Time Series
12. Cointegration
13. Multivariate GARCH Modeling
14. State Space Models
15. Factor Models for Asset Returns
16. Term Structure of Interest Rates
17. Robust Change Detection

Readership: The intended audience (*c.f.* page v) comprises practitioners, researchers and students in empirical finance and financial econometrics. Basic familiarity with S-PLUS is required, as is a basic background in mathematical statistics and time series.

Review: With *Modeling Financial Time Series with S-PLUS*, Zivot and Wang deliver an impressive *tour de force* covering many relevant topics in modern financial econometrics. As the table of contents above outlines, the book includes anything from modern time series methods (unit roots, cointegration, long memory modeling) to recent advances in risk management (extreme value analysis), multivariate data analysis as applied to portfolio management, yield-curve modeling to two detailed chapters on the already classic univariate and multivariate GARCH-type volatility models. The topics are generally introduced in a succinct manner with brief formal discussions complemented by numerous references to the literature that are provided on a per-chapter basis. In general, the emphasis is on actual applications and examples using the S-PLUS FinMetrics package, exemplifying the various available functions using included example datasets.

However, the book really is just a manual to the software package FinMetrics — and in fact included as a large (5.8mb) pdf file with the FinMetrics software. Users with access to both S-PLUS and FinMetrics will find it very helpful. But those without the software are left wondering how much more useful the book could have been if only the authors had followed the lead of Venables and Ripley (2002, 4th ed.) and provided code for both implementations of the S language, S-PLUS as well as R.

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