MSGARCH: Markov–Switching GARCH Models in R

David Ardia
Institute of Financial Analysis, University of Neuchâtel, Switzerland
Département de Finance, Assurance et Immobilier, Université Laval, Québec, Canada

Keven Bluteau
Institute of Financial Analysis, University of Neuchâtel, Switzerland

Kris Boudt
Vrije Universiteit Brussel
Vrije Universiteit Amsterdam

Denis–Alexandre Trottier
Laval University

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Summary

MSGARCH is an R package (R Core Team, 2016) which implements Markov–switching GARCH–type models very efficiently by using C++ object–oriented programming techniques. It allows the user to perform simulations as well as Maximum Likelihood and Bayesian estimation of a very large class of Markov–switching GARCH–type models. Risk management tools such as Value–at–Risk and Expected–Shortfall calculations are available. We refer the reader to Ardia et al. (2016) for a full description of the package's usage. The latest version of the package is available at `https://github.com/keblu/MSGARCH`.

References

David Ardia, Keven Bluteau, Kris Boudt, and Denis-Alexandre Trottier. Markov-switching GARCH models in R: The MSGARCH package, 2016. Working paper.

R Core Team. *R: A Language and Environment for Statistical Computing.* R Foundation for Statistical Computing, Vienna, Austria, 2016. URL `http://www.R-project.org/`.