Applied Financial Economics Letters ›
Volume 2, 2006 - Issue 2

Original Articles

Flexible Dynamic Conditional Correlation multivariate GARCH models for asset allocation

Monica Billio, Massimiliano Caporin & Michele Gobbo

Pages 123-130 | Published online: 23 Aug 2006

Cite this article https://doi.org/10.1080/17446540500428843

Abstract

This paper introduces the Flexible Dynamic Conditional Correlation (FDCC) multivariate GARCH model which generalizes the Dynamic Conditional Correlation (DCC) multivariate GARCH model proposed by Engle (2002). The FDCC model relax the assumption of common dynamics among all assets used in the DCC model. In fact, we cannot impose that the correlation dynamics of, say, European sectorial stock indexes are identical to the corresponding US ones. We thus extend the DCC model introducing a block-diagonal structure; in the FDCC the dynamics are constrained to be equal among groups of variables. We present an application to a sectorial asset allocation problem

Acknowledgements

The first [illegible] MIUR project 'Econom[illegible]Process in

the Area of the Euro'. The authors wish to thank Michael McAleer, Domenico Sartore, and the participant to the SCO2003 conference, the Forecasting Financial Market 2003 conference and the Second European Deloitte Conference in Risk Management for helpful comments and suggestions.