Applied Financial Economics ›
Volume 18, 2008 - Issue 15

4,959 Views | 132 CrossRef citations to date | 0 Altmetric

Original Articles

Estimating stock market volatility using asymmetric GARCH models

Dima Alberg, Haim Shalit & Rami Yosef

Pages 1201-1208 | Published online: 21 Jul 2008

Cite this article https://doi.org/10.1080/09603100701604225

Sample our Economics, Finance, Business & Industry Journals
>> Sign in here to start your access to the latest two volumes for 14 days

Abstract

A comprehensive empirical analysis of the mean return and conditional variance of Tel Aviv Stock Exchange (TASE) indices is performed using various GARCH models. The prediction performance of these conditional changing variance models is compared to newer asymmetric GJR and APARCH models. We also quantify the day-of-the-week effect and the leverage effect and test for asymmetric volatility. Our results show that the asymmetric GARCH model with fat-tailed densities improves overall estimation for measuri t-t distribut

About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click "Settings". For further information about the data we collect from you, please see our Privacy Policy

Accept All
Essential Only
Settings

Notes

[1] The TA25 Index is a value-weighted index of the shares of the 25 companies with the highest market capitalization that are traded on the TASE.

[2] The TA100 Index is a value-weighted index of the shares of the 100 companies with the highest market capitalization that are traded on the TASE.

[3] The BFGS method approximates the Hessian matrix by analyzing successive gradients vectors.

[4] The estimated values for the four models are available from the authors.

[5] The Prob[1] and Prob[2] are the probability values for P(50), the first using 49 degrees of freedom and the second 49 minus the number of estimated parameters.

[6] MSE and MAE are generally affected by larger errors such as in the case of outliers. MedSE and AMAPE have the advantage of reducing the effect of outliers.

Related research

People also read | Recommended articles | Cited by 132

About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click “Settings”. For further information about the data we collect from you, please see our Privacy Policy

Accept All

Essential Only

Settings

Copyright © 2024 Informa UK Limited Privacy policy Cookies Terms & conditions Accessibility

Taylor & Francis Group an informa business

Registered in England & Wales No. 3099067
5 Howick Place | London | SW1P 1WG

About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click “Settings”. For further information about the data we collect from you, please see our Privacy Policy

Accept All

Essential Only

Settings