INSTITUTO TECNOLÓGICO AUTÓNOMO DE MÉXICO

Departamento Académico de Estadística
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Seminario Aleatorio

Sesión 418

Forecasting conditional covariance matrices in high-dimensional time series via general dynamic factor models: portfolio allocation and risk measures

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https://ctruciosm.github.io/

Abstract

Based on a General Dynamic Factor Model with infinite-dimensional factor space and MGARCH volatility models, we develop new estimation and forecasting procedures for conditional covariance matrices in high-dimensional time series. The finite-sample performance of our approach is evaluated via Monte Carlo experiments and outperforms the most alternative methods. This new approach is also used to construct minimum one-step-ahead variance portfolios for a high-dimensional panel of assets as well as to forecast the Value-at-Risk and Expected Shortfall in large portfolios. The results suggest that the new proposal is quite competitive, outperforming several other competitors.

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Transmisión en línea:
https://itam.zoom.us/j/94446870531?pwd=cnBuakIwWDFmR2lvZkxLSU5hcFQyUT09

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El Seminario Aleatorio del Departamento de Estadística del ITAM está destinado tanto a profesores como a estudiantes, por lo que se agradece a los profesores que colaboren invitando a sus alumnos a estas sesiones.