The Hong Kong University of Science and Technology

Seminar on Business Data Science

Department of ISOM

Asset-Pricing Factors with Economic Targets

by

Prof. Victor DeMiguel

London Business School

Date: 18 April, 2024 (Thursday)

Time: 11:00am – 12:00pm

Venue: Case Room G001 (LSK Business Building)

Abstract

We propose a novel method to estimate latent asset-pricing factors that incorporate economic structure. Our estimator generalizes principal component analysis by including economically motivated cross-sectional and time-series moment targets that help to detect weak factors. Cross-sectional targets may capture monotonicity constraints on the loadings of factors or their correlation with fundamental macroeconomic innovations. Time-series targets may reward explaining expected returns or reducing mispricing relative to a benchmark reduced-form model. In an extensive empirical study, we show that these targets nudge risk factors to better span the pricing kernel, leading to substantially higher Sharpe ratios and lower pricing errors than conventional approaches.

Bio

Prof. Victor DeMiguel is a Professor at London Business School, which he joined in 2001 after earning a PhD from Stanford University and an MS from Universidad Politecnica de Madrid. Victor's main research interest is portfolio selection and asset pricing in the presence of parameter uncertainty and market frictions. His papers have been published in top journals such as *Management Science, The Review of Financial Studies, and The Journal of Financial Economics*. One of his most popular papers is "Optimal Versus Naive Diversification: How Inefficient is the 1/N Portfolio Strategy", which received the Best Paper Award from the Institute for Quantitative Investment Research and has more than 3,500 citations in Google Scholar. Victor serves as an Associate Editor of Management Science and an external consultant to asset-management firms such as SYZ and Goldman Sachs.

All interested are welcome!

Enquiries: Dept of ISOM