Presenter: Dr. Andrey Vasnev from Department of Operations, Management and Econometrics, University of Sydney

Title: Forecast combination in discrete choice models: predicting FOMC monetary policy decisions

Place and time: room 523, 8 October 2-3:30pm.

Abstract:
This paper provides a new methodology to combine forecasts based on several univariate discrete choice models. This is achieved primarily by combining one-step-ahead forecast of probabilities associated with each univariate model. The paper applies well-established scoring techniques for qualitative response models in the context of forecast combination. The scoring functions, such as log-score and quadratic score, are used to evaluate the forecasting performance of the diverse discrete choice models. Furthermore, the combination of probabilities relies on a set of weights constructed from the forecasting scores of each model. This approach is also robust to the inclusion of nonstationarity covariates in each model. We apply this methodology to forecast the outcomes of Federal Reserve board meetings decisions in changing the federal funds target rate. The original and extended Hu and Phillips (2004, JAE) data set and model are employed as a reference point to conduct the empirical studies. The results show that (1) equal weight probability forecast combination performs better than forecasts based on multivariate models and (2) combining probability forecasts using scores as weights mostly outperforms equal weight combination.