

Forecasting in Macroeconomics and Finance

Time: Tuesday April 23 to Friday April 26, 2019.

Place: University of Jyväskylä, School of Business and Economics.

Topics and learning objectives: The course in Forecasting Macroeconomics and Finance is a 4 day Ph.D. course for doctoral students in economics and finance. The main focus of the course is in time-series econometrics with a special emphasis on forecasting. Both single equation methods based on ARMA and ARMAX models are presented, as well as multiple equation models based on VARs and VECMS. Also covered are Bayesian VARs, Structural VARs and dynamic latent factor models as additional methods designed to improve forecast precision. The last part of the course focuses on volatility modelling and forecasting using GARCH and MGARCH models, as well as recent methods based on realized volatility including the HARA model. The course material will be demonstrated using a number of empirical applications, case studies and datasets. Students are expected to have their own laptops with them and at least some familiarity of software packages of e.g. R, EViews, RATS or equivalent is expected.

Reference books:

Vance L. Martin, Stan Hurn and David Harris (2013) Estimation, Modelling with Time Series, Specification, Estimation and Testing. Cambridge University Press.

Stan Hurn, Vance L. Martin, Peter C.B. Phillips and Jun Yu (2019) Financial Econometric Modeling.

Teachers: Professor **Vance Martin**, University of Melbourne, Australia,
Teaching assistant NN

Content: 24 hours lectures, laboratory session 7 hours, assignments and term paper.

Credit units: 5 ects.

Lectures:

Tuesday, 23.04.2019, 12-18 Ag C231

Wednesday, 24.04.2019, 9- 12 and 13- 16, Ag D225.1

Thursday, 25.04.2019, 9-12 and 13-16, Ag Lea Pulkkisen Sali

Friday, 26.04.2019, 9-12 and 13-16, Ag C331.3

Assignments:

Tuesday, 23.4.2019, 19-20, Ag B112.1 (Africa)

Wednesday, 24.4.2019, 17-20, Ag B112.1 (Africa)

Thursday, 25.4.2019, 17-20, Ag B112.1 (Africa)

Registration: For further information and registration, please send an e-mail to kari.heimonen@jyu.fi

Participation for the course is free. Students need to cover their travel expenses and accommodation.