

INTERNATIONAL MONETARY FUND
Joint Vienna Institute / ICD Institute – European & Middle East Division
Course on Advanced Macroeconomic Forecasting (MF-A JV15.14)
Vienna, Austria
May 25–29, 2015
PROGRAM

Monday, May 25, 2014

9:00 a.m. – 9:30 a.m.		<p>Opening Session</p> <p>Mr. Charis Christofides, Senior Economist European & Middle East Division, IMF Institute</p> <p>JVI Representative</p>
9:30 p.m. – 12:30 p.m.	L-1	<p>Structural Vector Autoregression</p> <p>This lecture covers the use of stationary vector autoregressive regression (VAR) models as a tool for analyzing the effects of policy shocks and forecasting. The morning session will go review the theoretical background of VAR models, including structural VAR models and the sign restriction approach for impulse response functions.</p> <p>Presenter: Mr. Mikhail Pranovich, Economist, Joint Vienna Institute</p>
2:00 p.m. – 5:30 p.m.	W-1	<p>Workshop: Structural Vector Autoregressions</p> <p>Facilitators: Pranovich, and Ms. Adina Popescu, Economist, IMF Institute</p>

Tuesday, May 26

9:00 a.m. – 12:30 p.m.	L-2	<p>Working with I (1) Variables</p> <p>This lecture will focus on estimating and forecasting linear regression equations involving I(1) (non-stationary) variables. It reviews the theoretical underpinnings of non-stationary econometrics, comparing and contrasting various estimation techniques for non-co integrated and co-integrated forecasting systems.</p> <p>Presenter: Popescu</p>
2:00 p.m. – 5:30 p.m.	W-2	<p>Workshop: Working with I (1) Variables</p> <p>Facilitators: Popescu and Christofides</p>

Wednesday, May 27		
9:00 a.m. – 12:30 p.m.	L-3	<p>Forecasting with Bayesian Techniques</p> <p>This lecture will focus on how to use Bayesian Vector Autoregressive (BVAR) models for forecasting macroeconomic time series. It covers the theoretical background of Bayesian econometrics, as well as practical aspects in time series analysis such as how to select priors and compare forecasting performance.</p> <p>Presenters: Pranovich</p>
2:00 p.m. – 5:30 p.m.	W-3	<p>Workshop: Forecasting with Bayesian Techniques</p> <p>Facilitators: Popescu and Pranovich</p>
Thursday, May 28		
9:00 a.m. – 12:30 p.m.	L-4	<p>Combination Forecasts</p> <p>Theoretical results and empirical evidence suggest that combining forecasts from different sources yields more precise forecasts than using a single model. This lecture will review the techniques available to combine forecasts from different sources, with the aim of improving forecasting accuracy. It surveys the theoretical underpinnings of forecast averaging, specific weighting schemes (both parametric and non-parametric) and the practical aspects in implementing them.</p> <p>Presenter: Christofides</p>
2:00 p.m. – 5:30 p.m.	W-4	<p>Workshop: Combination Forecasts</p> <p>Facilitators: Christofides and Pranovich</p>
Friday, May 29		
9:00 a.m. – 12:30 p.m.	L-5	<p>Using the Kalman Filter</p> <p>This lecture reviews the state space representation and the Kalman filter. The state space representation is a way to describe the law of motion of unobservable (latent) variables and their linkage with actual observations or signals. The Kalman filter is a computational algorithm that uses conditional means and expectations to obtain exact (from a statistical point of view) finite sample linear predictions of unobserved latent variables, given observed variables. Maximum Likelihood Estimation (MLE) and Bayesian methods are often used to estimate such models and draw statistical inferences.</p> <p>Presenter: Christofides</p>
2:00 p.m. – 5:00 p.m.	W-5	<p>Workshop: Using the Kalman Filter</p> <p>Facilitators: Popescu and Christofides</p>
5:00 p.m. – 5:30 p.m.		Closing Session