Macroeconometric & Financial Modeling and Forecasting Using EViews

3 - Day Professional Development Workshop
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Contents

East Asia Training & Consultancy Pte Ltd, invites you to attend a three day professional development training course in Singapore, covering the use of econometrics using the EViews, the well-known econometrics and statistical software package developed by Quantitative Micro Software (USA).

About EViews

"EViews provides sophisticated data analysis, regression, and forecasting tools on Windows-based computers. With EViews you can quickly develop a statistical relation from your data and then use the relation to forecast future values of the data. Areas where EViews can be useful include: scientific data analysis and evaluation, financial analysis, macroeconomic forecasting, simulation, sales forecasting, and cost analysis." (EViews User's Guide, p.5)

Course Programme

This course provides the training on using Eviews to do Macroeconometric & Financial Modeling and Forecasting. The modeling techniques taught in this course include OLS, 2SLS, GMM, IV, unit roots test, AR model, MA model, ARMA model, ARIMA model, Cointegration, Engle-Granger two step cointegration test, multivariate Johansen cointegration test, error correction model, VAR model, VARX model, VECM model, Granger block causality test, ARCH and GARCH family models etc.

This course has three objectives: (i) to provide participants with productivity enhancing ways to use the EViews© econometrics package (ii) to provide a practical 'hands-on' application to modern time series econometric techniques, including unit root tests, vector autoregressions, cointegration, and error correction

modelling and (iii) to apply these time series tools to macroeconomic relationships on the Singaporean economy . The focus will be on model selection, estimation and forecasting.

This well-received three-day training stresses more on application and leaves time for participants to have more experimentation with alternative datasets with the applied concepts. Participants are welcomed to bring their own datasets for country (ries) they are working on.

The course will take place in a PC training environment; the pedagogic approach is 'hands-on' and interactive. The instructor will first sketch the necessary theory, focusing on intuition building rather than formalism. Preselected datasets will then be used to go through actual applications with participants.

Who Should Attend

The course is aimed at forecasters and researchers in: Economic Research, Model Building; Financial Modelling, Arbitrage Trading; Quantitative Investment Management, Sales & Inventory Forecasting, Traffic Modelling, Energy Load Forecasting, University Instruction, Audit, Statistics, Budget Analysis, Financial Analysis, Market Research, Information Technology and Policy, Planning & Research.

Registration & Fees

The cost fee for the three-day course covers extensive course materials and databases, luncheons, and opportunities to meet with researchers and forecasters from different industries throughout Asia.

This is a "hands-on" course. Participants are required to bring your own laptops.

The number of delegates is restricted. Please register early to guarantee your place. Please complete the official registration form and email it to us at eviews@eastasiatc.com.sg to reserve your place. Confirmation will only be made upon receipt of payment. Further instructions will be sent to confirmed participants.

Financial Assistance

Participants may be eligible for MAS Financial Sector Development Fund (FSDF) support on a case by case basis. Interested applicants should submit their applications to the FSDF Secretariat directly. For enquiries, please contact the FSDF secretariat at 65- 6229 9396 or via email at fsdf@mas.gov.sg.

Course Outline (subject to minor changes)

DAY 1

Modeling and Forecasting with Non Stationary Time Series

1) Nonstationarity and Unit Root Tests
Including ACF, PACF, DF test, ADF test, KPSS test and PP test etc..

2) ARMA Modeling and Forecasting
Including Ljung-Box test, ARIMA specification selection, estimation and forecasting etc.

3) Spurious Regression and Cointegration
Including Engle-Granger two-stage cointegration test and Error Correction Model estimation

Case study 1: Estimating and forecasting GDP of USA and Singapore.

Case study 2: Examining the long run relationship between futures and spot markets in Malaysia.

DAY 2

Multivariate Time Series Modeling

4) Vector Autoregressive (VAR) Modeling
Including VAR model and VARX model estimation and diagnostics tests, Granger causality test, impulse response analysis and variance decomposition analysis.

5) Johansen's Multivariate Co-integration Test and Vector Error Correction Model (VECM)
Including Johansen test for co-integration rank, VECM estimation, diagnostics tests and analyses.

Case study 3: Testing lead-lag relation between futures and spot markets in Malaysia.

Case study 4: Examining the long run equilibrium and short run adjustment between A-share and B-share stocks in Shanghai Stock Exchange of China.

Case study 5: Co-movement of Stock Indices of Singapore and Malaysia.

DAY 3

Macroeconometric Modeling and Volatility Modeling

6) Macroeconometric Modeling
Including Macroeconometric modeling with OLS, ILS, IV and GMM.

7) ARCH and GARCH family modeling and Forecasting
Including ARCH, GARCH, TGARCH, EGARCH and GARCH-in-Mean estimating, diagnostics tests and forecasting.

Case study 6: Estimating the investment function and consumption function of Singapore economy.

Case study 7: Modeling and forecasting volatility of STI of Singapore and NASDAQ of USA.

Case study 8: Modeling Volatility of Interest Rates and Exchange Rates.