



The Practice of Econometrics & Financial Analysis Using EViews

3 - Day Professional Development Workshop

[East Asia Training & Consultancy Pte Ltd](http://www.eastasiatc.com.sg), invites you to attend a three day professional development training course, covering the use of econometrics using 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 3-day workshop provides a selective review of basic econometric concepts, their application in economics and finance and their implementation using the EViews software program. Topics cover include Cross-Section and Time-Series Regression Analysis: Specification, Estimation and Hypothesis Testing, Robust Estimation Review of Single-Equation Analysis with Various Applications, Univariate Models for Economic Time Series (such as GDP growth, inflation, interest rates, stock market returns), Stochastic Simulations Programming and Economic Modeling and Forecasting Using EViews. The approach is ‘hands on’ and interactive, with the instructor discussing relevant concepts and then illustrating in EViews with participants replicating each step at their own PCs.

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 US & Asian economies . 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 professional development course covers extensive course materials and databases, luncheons, reception and opportunities to network with economists and forecasters from different industries throughout Asia.

This is a “hands-on” course. Delegates 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 administrator@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 **Morning Session**

Overview of the EViews Software

- Navigating in EViews 6 – views and menus
- Importing cross-section time series into EViews from Excel spreadsheets and ASCII files; Data exporting
- Examining the data and performing simple statistical analysis; data transformations
- Using regression analysis to model, estimate and forecast a statistical relationship
- Performing specification and hypothesis testing
- Plotting results
- Transferring Tables and Graphs to MS Word for report writing.

Afternoon Session

Cross-Section and Time-Series Regression Analysis: Specification, Estimation and Hypothesis Testing

- Assumptions of the classical linear regression model and the importance of residual diagnostics
- Estimation of cross-section regression equations
- Residual diagnostics: testing for heteroskedasticity and normality; implications.
- Specification and hypothesis testing (linear and nonlinear hypotheses)
- Alternative model selection criteria
- Estimation of time series regression equations
- Residual diagnostics for serial correlation: Breusch-Godfrey test, ACFs/PACFs, Ljung-Box Q statistics.
- Alternative approaches for modeling first and higher-order serial correlation (AR, MA, ARMA)
- Specification and hypothesis tests in time series models.

DAY 2 **Morning Session**

Robust Estimation

Review of Single-Equation Analysis with Various Applications

- A modern generalization of the classical assumptions: robust estimation of the error covariance matrix; hypothesis testing.
- Estimating the equations in a Simple Macro Model of the U.S. Economy from Pindyck and Rubinfeld:
- consumption function, investment equation, interest rate equation.
- Estimating Monday Demand
- Estimating Cobb-Douglas and translog production functions for primary metals (cross-section application)

Afternoon Session***Univariate Models for Economic Time Series***

- Various uses, including forecasting
- Comparisons with multivariate approaches
- Alternative specifications for modeling trends and cycles
- Estimation and model selection criteria
- Application/Illustrations: Estimating AR and ARMA models for GDP growth or inflation
- Reexamining the specification of government spending and the money supply in the Simple Macro Model.
- Stationary vs. Nonstationary Time Series; Unit Root Processes

DAY 3**Morning Session*****Stochastic Simulations Programming Using EViews***

- Simulating white noise, AR processes, and unit root process
- Spurious regressions

Afternoon Session***Economic Modeling and Forecasting Using the EViews***

- Using the Model Object to Analyze Univariate Forecasting Models
- Developing Model Simulations/Forecasts using the Simple Macro Model
- Static vs. dynamic forecasts
- In sample vs. out-of-sample forecasts
- Model inadequacies to discuss; possible solutions/alternatives.