



## Financial Econometrics using EViews

3-day Professional development workshop

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East Asia Training & Consultancy Pte Ltd invites you to attend a three day workshop on Financial Econometrics using the latest EViews7, the well-known econometrics 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)

### Workshop Programme

The focus will be on the statistical modeling of financial time series (asset prices and returns) with an emphasis on non-normal distributions for asset returns, modeling volatility and correlation, risk measurement and management techniques, high frequency data and continuous time models.

### Learning Objectives

The learning goals/objectives of the course are to

- (1) survey the relevant theoretical and empirical econometric literature;
- (2) introduce current research topics;
- (3) use statistical software to get hands-on experience with real world data.

### Topics Covered

#### **Topics to be covered include:**

Asset returns

- o Empirical properties and stylized facts
- o Non-normal distributions for asset returns

Volatility modeling

- o Univariate and multivariate autoregressive conditional heteroskedasticity (ARCH) family of models

- o Stochastic volatility models
- o Applications to risk management and derivatives pricing

Ultra high frequency time series

- o Market microstructure models
- o Realized variance, covariance and bi-power variation
- o Applications to volatility modeling and market microstructure models

Continuous time models

- o Common models for equity and interest rates
- o Applications to derivatives pricing
- o Relationship to realized variance

**Target audience**

Economists interested in applied quantitative financial economic research.

**Prerequisites**

Knowledge of (1) an introductory course in econometrics, (2) matrix algebra and (3) statistics, especially estimation of parameters and hypotheses testing, is necessary.

The participants need laptops with EViews installed.

Delegates are also welcome to bring their own datasets to discuss with our expert trainer during tea breaks or after class.

**General Notes**

- Ø All sessions will have 45 minutes of discussion on the topic and Eviews functions and 45 minutes of hands-on tutorial with data sets
- Ø The data sets discussed in the examples will be provided. However, participants are welcomed to bring their own data sets.
- Ø All case studies and examples will use real data sets, which were taken from financial and econometric applications.