AN INTRODUCTION TO TIME SERIES ANALYSIS WITH EVIEWS
21 & 22 FEBRUARY 2017 (TUESDAY & WEDNESDAY)
SEMINAR ROOM, SEFB
FACILITATOR: MR. RIZAUDIN SAHLAN

Time series analysis comprises methods for analyzing time series data in order to extract meaningful statistics and other characteristics of the data. Time series data have a natural temporal ordering. This makes time series analysis distinct from cross-sectional studies, in which there is no natural ordering of the observations. Time series analysis is also distinct from spatial data analysis where the observations typically relate to geographical locations. A stochastic model for a time series will generally reflect the fact that observations close together in time will be more closely related than observations further apart. In addition, time series models will often make use of the natural one-way ordering of time so that values for a given period will be expressed as deriving in some way from past values, rather than from future values

This course reviews methods for time-series analysis and shows how to perform the analysis using EViews. The course covers methods for data management, estimation, model selection, hypothesis testing, and interpretation

http://rizaudinsahlan.blogspot.my/

TENTATIVE

(For further information please refer next page)

DAY 1 : 21 February 2017 (Tuesday)		DAY 2 : 22 February 2017 (Wednesday)
08.30 am – 09.00 am	Registration	Workshop
09.00 am – 10.30 am	Workshop	
10.30 am – 10.45 am	Tea break	Tea break
10.50 am – 12.50 pm	Workshop	Workshop
12.50 pm – 2.30 pm	Lunch/break	Lunch/break
2.30 pm – 04.30 pm	Workshop	Workshop

DAY 1 : 21 February 2017 (Tuesday)			
SESSION 1: Introduction to EViews	SESSION 2: Regression Model	SESSION 3: Hypothesis Testing & Modelling Issues	SESSION 4: Regression Analysis With Time-Series Data
1.1 Getting started (open, create new variable) 1.2 Load data from Excel 1.3 Descriptive statistics	2.1 Plotting the variables 2.2 Estimating a simple regression model 2.3 Plotting a simple regression model 2.4 Plotting least squares residual 2.5 Estimating the variance of the error term 2.6 Modelling Issues 2.7 Prediction	3.1 Interval estimation 3.2 Two and one tail tests 3.3 *F* and Chi-Square tests 3.4 Model Misspecification: RESET test 3.5 Correlation matrix.	4.1 Intro: Econometric theory on time-series analysis 4.2 Basic regression analysis 4.3 Autocorrelation 4.3.1 The Durbin-Watson test 4.3.2 DW's alternative test for serial correlation 4.3.3 Breuch-Godfrey test for higher-order serial correlation. 4.4 Estimation with auticorrelated errors 4.5 The Newey-West covariance matrix estimator 4.6 Cochrane-Orcutt and Prais-Winsten method 4.7 Lagged dependent variables as regressors 4.8 Dummy variables and additive seasonal effects.

DAY 2 : 22 February 2017 (Wednesday)	
SESSION 5: ARMA Modelling: ARMA Processes	SESSION 6: Estimation and Forecasting: Box-Jenkins Methodology
5.1 Intro: Econometric theory on ARIMA process 5.2 Correlogram and partial correlogram 5.3 Fitting ARIMA model 5.4 ARIMA postestimation 5.5 AIC and SBIC information criteria 5.6 Errors white noise? 5.7 Graphing the errors 5.8 Breuch-Godfrey test 5.9 White noise test.	6.1 Identification 6.2 Estimation 6.3 Diagnostic checking 6.4 Forecasting.