



African Heritage Institution

2018 Train the Trainer (TtT) Workshop Series

Theme:

Econometrics for Policy Analysis II

Introduction

African Heritage Institution (AfriHeritage) is a thinktank that is committed to research, evidence-based advocacy, and capacity building. To fulfil its goal of enhancing capabilities and skills for cutting-edge economic research and policy analysis, it seeks to nurture a critical mass of highly rated and internationally competitive economists and policymakers in the country with the capacity to drive transformative development in Nigeria and across Africa. Towards that, AfriHeritage organises periodic policy trainings for academia, bankers, political leaders, CSOs, civil servants, and others from different sectors. AfriHeritage training workshops are valuable tools packaged for rapid development of skills tailored to enhance holistic individual growth and development. However, they are most effective with sustained and scaled engagement or practice to achieve embeddedness and expertise.

The AfriHeritage Econometrics for Policy Analysis is one out of many such training workshops. It is appropriate for lecturers in a wide array of disciplines such as Economics, Banking and Finance, Agricultural Economics, and Statistics. Usually, our trainings bring together individuals from different universities in the country. AfriHeritage TtT workshop is unique in the sense that it has a strong measure of real-world application of econometrics tools for policy purposes, developed and delivered by instructors with years of practical experience in the field.

Training Structure

Econometrics for Policy Analysis II is different from Econometrics for Policy Analysis. While both are designed to facilitate participant development of skills needed to be an expert analyst and lecturer, their focal reaches are different. Basically, Econometrics for Policy Analysis II is designed as a self-contained training program. It seeks to strengthen, deepen, upgrade and enhance participants' skills in econometric theories, analyses, forecasting, and policy applications. This workshop will lay greater emphasis on application of panel data regression techniques for policy analysis.

Panel data or longitudinal data typically refer to data containing time series observations of a number of individuals. Therefore, observations in panel data involve at least two dimensions: a cross-sectional dimension, indicated by subscript 'i', and a time series dimension, indicated by subscript 't'. Hence, panel and pool data involve observations that possess both cross-section and within-cross-section identifiers. The difference between the two is that pooled time-series, cross-section data refer to data with relatively few cross-sections, where variables are held in cross-section specific individual series, while panel data correspond to data with large numbers of cross-sections, with variables held in single series in stacked form.

Objectives

Econometrics for Policy Analysis, as a training (TtT) programme of the African Heritage Institution, seeks to achieve the following objectives with respect to each participant:

- ✦ Gain more understanding of the main techniques of econometrics, including their strengths and limitations;
- ✦ Develop an advanced capacity on how to use data to test economic models and quantify parameters of interest;
- ✦ Gain more practical experience on the application of econometrics and statistical methods using packages such as: E-views, GAUSS, SAS, SPSS, STATA, R, RATS, TSP, WinBUGS, LIMDEP, MIROFIT, NLOGIT, MATLAB, Dynare, Nvivo, Octave, Ox, PcGets, PcGive, PcNaive, REG-X, SHAZAM, WinSolve etc.; and
- ✦ Develop the capacity to apply econometrics techniques to test economic theories and measure relevant economic parameters and factors for economic policy and other decisions.

Training Module

This series of the AfriHeritage TtT will cover the following topics:

- ✦ Linear Model Estimation and testing
- ✦ Endogeneity in the Linear Model
- ✦ Models with Individual Effects: Fixed Effects and Hierarchical, and Random Effects Models
- ✦ Random Effects Models: MLE
- ✦ Treatment of balanced and unbalanced panel data
- ✦ Panel causality, Unit root, and Cointegration Testing
- ✦ Panel Covariances
- ✦ Advanced Treatment of panel data analysis
- ✦ Minimum Distance Estimation
- ✦ Heterogeneous Parameter Models
- ✦ Classical Estimation of Non-Linear Effects Models
- ✦ Panel Long-run variances
- ✦ Panel principal Component Analysis
- ✦ Panel resampling
- ✦ Panel Stacked Analysis
- ✦ Hazard Function and duration model
- ✦ Pooled Estimation

Date: Monday 21st to Friday 25th May 2018, 9am-5pm each day.

Venue: African Heritage Institution Conference Hall, 54 Nza Street, Independence Layout, Enugu,

Registration is FREE but must be done before April 30, 2018, 24.00 Nigerian Time (GMT+1).

Free Lunch will be provided but participants will take care of their accommodation, transportation,