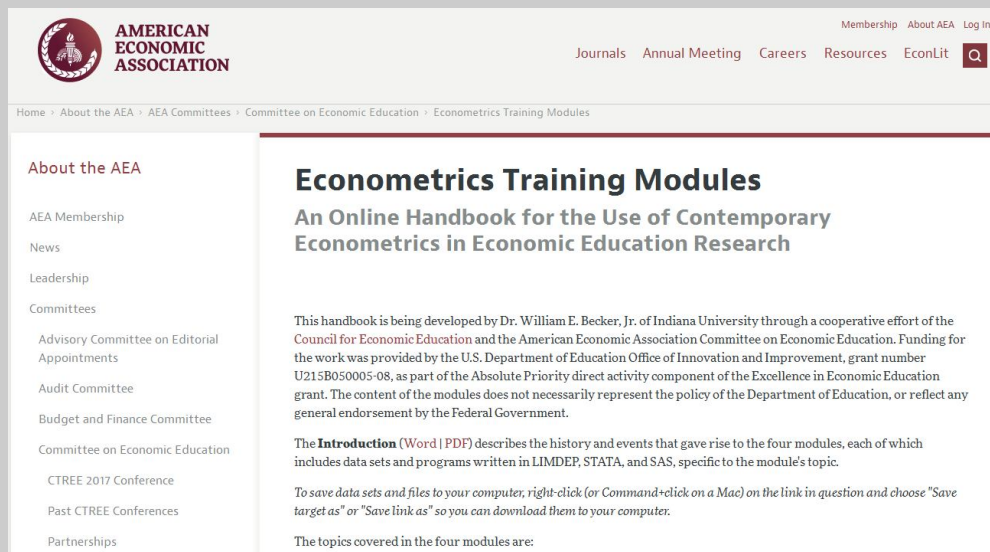


## Name of the Tool

# Econometrics Training Modules : An Online Handbook for the Use of Contemporary Econometrics in Economic Education Research

## Home Page



The screenshot shows the American Economic Association (AEA) website. At the top left is the AEA logo and name. To the right are navigation links: Journals, Annual Meeting, Careers, Resources, EconLit, and a search icon. Below the navigation is a breadcrumb trail: Home > About the AEA > AEA Committees > Committee on Economic Education > Econometrics Training Modules. On the left side, there is a sidebar menu titled "About the AEA" with links to AEA Membership, News, Leadership, Committees, Advisory Committee on Editorial Appointments, Audit Committee, Budget and Finance Committee, Committee on Economic Education, CTREE 2017 Conference, Past CTREE Conferences, and Partnerships. The main content area features the title "Econometrics Training Modules" and subtitle "An Online Handbook for the Use of Contemporary Econometrics in Economic Education Research". Below this is a paragraph describing the handbook's development by Dr. William E. Becker, Jr. of Indiana University, funded by the Council for Economic Education and the AEA. It also includes a section for "The Introduction" and instructions on how to save data sets and files to a computer.

## Logo



## URL

<https://www.aeaweb.org/about-aea/committees/economic-education/econometrics-training-modules>

## Subjects

Economics- Handbooks, manuals, etc.;  
Mathematical statistics- Handbooks, manuals, etc.;  
Economics- Handbooks, manuals, etc.

## Accessibility

Free

## Language

English

## Publisher

Dr. William E. Becker, Jr. of Indiana University

### ***Brief History***

This handbook is being developed by Dr. William E. Becker, Jr. of Indiana University through a cooperative effort of the Council for Economic Education and the American Economic Association Committee on Economic Education. Funding for the work was provided by the U.S. Department of Education Office of Innovation and Improvement; grant number U215B050005-08, as part of the Absolute Priority direct activity component of the Excellence in Economic Education grant. The content of the modules does not necessarily represent the policy of the Department of Education, or reflect any general endorsement by the Federal Government. The handbook was developed in 2009.

### ***Scope and Coverage***

This handbook series comprises of four modules. The topics covered in these modules are: **Econometrics Training: Module One.** It covers Data Management and Heteroskedasticity issues. **Econometrics Training: Module Two.** It covers endogenous regressors with natural experiments, instrumental variables, and two-stage estimators. The **Econometrics Training: Module Three** covers panel data and **the Econometrics Training: Module Four** includes sample selection issues.

### ***Kind of Information***

#### **Module one:**

The first of the four modules is designed to demonstrate and enable researchers to move beyond the basic regression methods to the more advanced techniques of the 21<sup>st</sup> century using any one of three computer programs: LIMDEP (NLOGIT), STATA and SAS. This module is broken into four parts. Part One introduces the nature of data and the basic data generating processes for both continuous and discrete dependent variables. Parts Two, Three and Four show how to get that data into each one of the three computer programs: Part Two for LIMDEP (NLOGIT), Part Three for STATA and Part Four for. Parts Two, Three and Four also provide the respective computer program commands to do least-squares estimation of the standard learning regression model involving a continuous dependent test-score variable but with the procedures to adjust for heteroscedastic errors.

#### **Module two:**

The second of four modules is devoted to endogeneity in educational studies. The part one of this module covers Endogeneity and Instrumental Variables related issues. Parts Two, Three and Four show how to perform and provide the commands for two-stage least squares estimation in LIMDEP (NLOGIT), STATA and SAS using data from a study of the relationship between multiple-choice test scores and essay-test scores.

#### **Module three:**

This third in the series of four modules provides an introduction to panel data

analysis with specific applications to economic education. The data structure for a panel along with constant coefficient, fixed effects and random effects representations of the data generating processes are presented. Consideration is given to different methods of estimation and testing. Finally, as in Modules One and Two, contemporary estimation and testing procedures are demonstrated in Parts Two, Three and Four using LIMDEP (NLOGIT), STATA and SAS.

#### **Module four:**

In the assessment of student learning that occurs between the start of a program (as measured, for example, by a pretest) and the end of the program (posttest), there is an assumption that all the students who start the program finish the program. There is also an assumption that those who start the program are representative of, or at least are a random sample of, those for whom an inference is to be made about the outcome of the program. This module addresses how these assumptions might be wrong and how problems of sample selection might occur because of unobservable or unmeasurable phenomena as well as things that can be observed and measured.

#### ***Special Features***

- Under this website of American Economic Association, user can browse hundreds of resources for economists.
- The website provides economics related job opening news.
- Users can browse American Economic Association Journal.

#### ***Arrangement Pattern***

The handbook is divided into four modules. The modules are further divided into parts. The contents of these modules are arranged topic wise.

#### ***Remarks***

This handbook enables researchers to employ the statistical techniques in their empirical studies of educational practices, with special attention given to the teaching and learning of economics. This is a very much helpful tool for Economic students and researchers.

#### ***Comparable Tools***

- The Oxford Handbook of Bayesian Econometrics  
(<http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199559084.001.0001/oxfordhb-9780199559084>)
- CCBS Technical Handbook - Applied Bayesian econometrics for central bankers  
([http://www.bankofengland.co.uk/education/Pages/ccbs/technical\\_handbooks/techbook4.aspx](http://www.bankofengland.co.uk/education/Pages/ccbs/technical_handbooks/techbook4.aspx))
- Handbook of econometrics  
(<http://www.popline.org/node/423519>)

*Date of Access*

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