# ZEW Expertenseminar

# **Econometrics in Action Introduction to Econometrics**

Econometric methods are important tools to verify and quantify economic relationships. In order to assess the quality of studies using these methods mainly in economics as well as in social sciences, econometric skills are necessary. The primary objective of this course is to provide a practice-oriented introduction to econometrics. The first part of the course contains an extensive review of the basic statistical ideas necessary for econometric analysis. Subsequently, the course builds on this and imparts basic knowledge in econometric methods. Using practical examples, these methods are applied in order to learn how to interpret the results of econometric estimations in a meaningful way. The examples used in this course are mainly microeconomic problem sets.

#### Required Knowledge

Basic knowledge in mathematics or statistics

#### Target Group

Experts from the EC, administration and enterprises without formal education in econometrics as well as journalists who need to interpret empirical work on economic topics

### **Seminar Benefits**

- This course gives confidence in interpreting empirical work and helps to overcome any inhibitions relating to statistical and econometric methods.
- It will supply the basic tools which enable critical evaluation of empirical work.

#### Seminar Date and Location

7-8, March 2007, Vertretung des Landes Baden-Württemberg bei der Europäischen Union, Rue Belliard 60-62, 1040 Brussels

# Seminar Fee

The seminar fee is EUR 850,- (plus Belgian VAT).

### Tutors

PD Dr. Bernhard Boockmann, ZEW Dr. Stephan Thomsen, ZEW

#### Programme, Wednesday, March 7, 2007

09:00-09:10	Welcome Address		
09:10-10:30	<ul><li>Introduction and Preliminaries</li><li>Purpose of econometrics</li><li>Basic concepts</li><li>Types of data</li></ul>		
10:30-11:00	Coffee break		
11:00-12:30	<ul><li>The Simple Regression Model</li><li>Assumptions</li><li>Derivation of the OLS estimator</li></ul>		
12:30-13:45	Lunch break		
13:45-15:15	<ul> <li>Multiple Regression Analysis</li> <li>Simple versus partial correlation</li> <li>The multiple regression estimator and omitted variable bias</li> <li>The R-squared measure</li> </ul>		
15:15-15:30	Coffee break		
15:30-17:00	<ul> <li>Hypothesis Testing</li> <li>Principles of statistical hypothesis testing</li> <li>t-Test and confidence intervals</li> </ul>		

#### Programme, Thursday, March 8, 2007

09:00-10:30	<ul><li>Properties of the OLS estimator</li><li>Properties of estimators</li><li>Gauss-Markov Theorem</li></ul>
10:30-11:00	Coffee break
11:00-12:30	<ul><li>Specification issues</li><li>Functional form</li><li>Dummy variables</li></ul>
12:30-13:45	Lunch break
13:45-15:15	<ul> <li>Problems with the OLS estimator</li> <li>Heteroscedasticity</li> <li>Measurement Error</li> <li>Non-random sampling</li> </ul>
15:15-15:30	Coffee break
15:30-17:00	<ul><li>Regression and Causality</li><li>Example: Programme evaluation</li><li>Identification strategies</li></ul>

#### Seminar Fee

The seminar fee is EUR 850,- (plus Belgian VAT). The seminar fee includes refreshments as well as lunch on all complete seminar days. Teaching materials are also included in the price.

#### Discount System

If several persons of an institution book the same seminar, ZEW will grant a discount of 10% on the regular seminar fee for the second and each subsequent participant. A single participant who simultaneously books more than one seminar will receive a discount of 10% on the regular fee for the second and each subsequent seminar. These discounts do not apply to half-day seminars. Members of universities, universities of applied sciences (Fachhochschulen) and non-university research institutes (Leibniz Gemeinschaft) as well as employees of federal and state ministries or agencies from Germany receive a discount of 30% on the seminar fees. Please note that these individual discounts are not cumulative. All prices are subject to an additional Belgian VAT.

## Organisation of the seminar

In case of questions concerning the organisation of the seminar please contact:

Vera Pauli

Telephone: 0049 (0)621/1235-240, Fax: 0049 (0)621/1235-224

E-mail: pauli@zew.de

#### Terms and Conditions

Please send this form as a fax to the following number: +49(0)621/123-224. You can also register via internet (www.zew.de/professionaltraining.de). Once an application is received, it is considered binding.

In the event of cancellation 14 days or less before the start of the seminar, the full participation fee applies. For cancellations before this deadline, we charge an administrative fee of EUR 50 plus 7% VAT (as of Aug 1, 2006). Cancellation must be submitted in written form. If you are unable to attend in person, another person may take part on your behalf.

The ZEW reserves the right to cancel the seminar in the case of certain unexpected events, for example illness of the lecturer or insufficient number of participants. In this event any fees paid will be refunded.

#### Hotel

If you need accommodation please contact Vera Pauli.

ZEW

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To participate please fill out the following form and send it to +49(0)621/1235-224

# Econometrics in Action – Introduction to Econometrics March 7-8, 2007, Brussels

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