UNIVERSITÉ DE NAMUR

FACULTÉ
DES SCIENCES ÉCONOMIQUES,
SOCIALES ET DE GESTION

2014-2015

Applied Econometrics (ECONM826)

Professor: Vincenzo VERARDI, Vincenzo.Verardi@unamur.be

Calendar: TBD

Credits: 5 ECTS

Objective and content

The course proposes an up-to-date presentation of methods to model, analyze and test continuous, discrete and partially observed (censored or truncated) cross section and panel data models. For panel data models, both static and dynamic approaches are considered. The course includes an introduction to the treatment of sample selection and attrition. If time permits some variable open topics such as multinomial and ordered response models, semi-parametric approaches to static models and non-stationary panels can be included in the course according. Econometric modelling and statistical inference are presented at an advanced level. The course also includes an introduction to an econometric software (such as Stata®), which is used to illustrate all methods through applications.

Specific Content:

1) Introduction. The nature of panel data.

2) Linear, static model for panel data. Estimating System of Equations by OLS and GLS. Modelling individual heterogeneity. Fixed effect, Random effect models. Specification test. First difference meth-ods. Random effect with correlated unobserved effect. The approach of Mundlak and Chamberlain. The GMM approach (Haussman and Taylor types of estimator)

3) Linear, dynamic model for panel data. The bias of usual estimators. Estimator of Anderson-Hsiao, estimator of Arellano-Bond, estimator of Blundell-Bond.

4) Discrete panel data. Refreshing on multiple response model. Random effect models for a binary de-pendent variable. Fixed effect models. Incidental parameter problem.

5) Limited dependent variable and selection models. Truncated/censored data. Tobit I, II and III models. Attrition and selection bias. Random effect Tobit model. Fixed effect in truncated regression

Teaching Method

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Lectures and exercises

Support and evaluation

A take home exam consisting of an empirical implementation of methods covered during the lectures, and an oral exam. No specific support. Some mandatory readings from the literature in micro-econometrics.

References