

## **Book Review**

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Key words: Économétrie; Régis Bourbonnais; exercices; time series



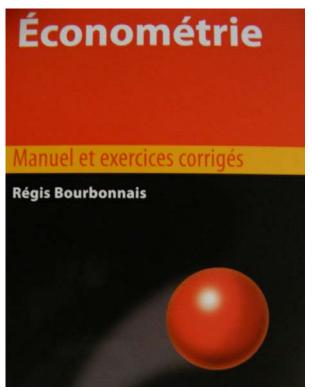
## Book Review on ECONOMETRICS. COURSE AND SOLVED EXERCISES ("ÉCONOMÉTRIE. MANUEL ET EXERCICES CORRIGES" 7e édition), by Régis BOURBONNAIS, Maison d'Edition DUNOD, Paris, 2009

The book (edited in French) is built on the previous editions. This, the seventh edition, adds a new chapter to the previous –one, "Introduction to econometric Panel- data analysis

This new edition book is structured in 13 chapters in which there are combined in a well-balanced measure the theoretical and practical econometrics.

In the **first chapter** there are briefly presented the concepts, ideas, definitions, role, advantages and disadvantages of econometrics.

After the general overview of econometrics approach the **second chapter** presents in a detailed but simply way the simple regression model. Studying examples, brief mathematical demonstration combined with economical



application the reader can obtain solid information about parameters estimations, effects and tests of the regression model's hypotheses, about the validity and quality of the regression model and in the end of chapter we may find the description of one goal of the econometric approach: the forecast.

The **third chapter** extends the econometric analysis to the multiple regression. In the eight subchapters there are presented general problems of the multiple regression such as: parameters estimation, statistical tests, analysis of variance and forecasting, and also

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some particular discussion such as: the influence and role of binary variable, the stability and model specification tests. The chapters end with a set of exercises which helps the reader to complete and consolidate his knowledge about econometric extended application.

In the **chapters four and five** the author describes in an extended way the violation of the simple and multiple regression hypotheses. In the fourth chapter there is a focus on the partial correlation and multiple correlation. There is a special approach of the multicollinearity process by treating presence/detection, effects and possibility of correction  $\rightarrow$  optimal model selection. In the next chapter the focus is changed to autocorrelation, heteroskedascity and variables errors. These problems are treated in sense of detection, effects and possibility of avoiding/eliminations or at least of reduction of the negative effects.

A short chapter about non-linears models is the **sixth chapter**. The chapters has a general overview about parameters estimation with particular analyses about exceptions given by non-linear approach. Here we can meet the terms of exponential and polynomial regression function and also the diffusion models.

In the **chapter seven** there are presented the LAG models and their particularities regarding specification, estimation, hypotheses testing and prediction.

Times series in a detailed description are presented in the **chapters nine**, ten and **eleven**. The description starts with an introduction in time series. The reader will be familiar with concepts like white noise, unit root, stationary process, random walk, non-stationary process, autoregressive (AR), moving averages (MA), ARMA, ARIMA, SARIMA models and Box-Jenkins methodology for model identification. The models VAR, ARMAX and Granger or Sims causality with their particularities are described in the tenth chapter. Concepts tests and model estimation about cointegrated series can be found in the eleventh chapter.

An introduction in econometric approach with qualitative variables is described in the **twelfth chapter**. Here there are presented the particularities of the models which include qualitative variables with more specified cases for the Logit, Probit or Tobit models.

In the **last chapter, the thirteenth** can be found an introduction in panel data econometric analysis. A short presentation of model specifications, homogeneity tests and parameters estimation is also described in a global form. All the examples are made with specific programs used in econometric analysis like RATS, EXCEL, Eviews, etc.

The book ends with a case study and a collection of exercises.

The combination between mathematic theories, economic implication, case studies along with general or particular exercises recommend the book to a large area of readers from many domains.

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2009