The Bayesian Approach to Poverty Measurement
Syllabus

Michel LUBRANO

Course's objective

This lecture is based on a paper to appear in the Handbook on Measuring Poverty and Deprivation, edited by Jacques Silber. The title of the course is identical to the title of the published. Of course the content of the published paper might appear rather cryptic to the novice reader. The purpose of this lecture is to give the necessary clues for reading it. In words, the first part of the lecture will be devoted to an introduction to Bayesian inference in econometrics and its use for modeling the income distribution, and the other part to poverty measurement from an econometric point of view. The course will be illustrated by several empirical applications.

Outline

The course lasts 12h divided in six sessions of two hours each.

> Lecture 1: General introduction and a first look at Bayesian statistics

> Lecture 2: Modelling the income distribution using mixtures

> Lecture 3: Revising the International Poverty Line

> Lecture 4: Poverty indices and poverty curves

> Lecture 5: Restricted stochastic dominance

> Lecture 6: Poverty dynamics

Course materials

Lectures' notes and other materials will be available at

https://perso.amse-aixmarseille.fr/lubrano/

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Grading

Students will be graded on the basis of a final exam consisting in an oral examination with simple questions covering all the lectures.

References

Because the lecture is about a research paper, there is no single reference. An enlarged version of the published paper is available as an Amse working paper number 2021-33 by Michel Lubrano and Zhou Xun.

Concerning Bayesian inference, you can access my lecture notes given in China that will be made available on my web page. You can also have a look at the book:

Bauwens L, M. Lubrano and J.F. Richard (1999) Bayesian Inference in Dynamic Econometric Models. Oxford University Press.

For notions on poverty measurement, you have my former lecture notes which are perhaps too much detailed and are concerned with much more than poverty. They are available at

https://perso.amse-aixmarseille.fr/lubrano/poverty.htm

The following articles will be usefull as a complementary material:

Foster, J., Greer, J., and Thorbecke, E. (1984). A class of decomposable poverty measures. *Econometrica*, 52:761–765.

Fourrier-Nicola¨ı, E. and Lubrano, M. (2020). Bayesian inference for TIP curves: an application to child poverty in Germany. *The Journal of Economic Inequality*, 18:91–111.

Kakwani, N. (1980). On a class of poverty measures. *Econometrica*, 48(2):437–446.
Ravallion, M. and Chen, S. (2003). Measuring pro-poor growth. *Economics Letters*, 78:93–99.

Sadeq, T. and Lubrano, M. (2018). The wall's impact in the occupied West Bank: A Bayesian approach to poverty dynamics using repeated crosssections. *Econometrics*, 6(2):9.

Xun, Z. and Lubrano, M. (2018). A Bayesian measure of poverty in the developing world. *Review of Income and Wealth*, 64(3):649–678.

Zheng, B. (1997). Aggregate poverty measures. *Journal of Economic Surveys*,11(2):123–162.