

*The Econometrics of Income and Social Mobility*

## Introduction

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### **Abstract**

Mobility can be measured between generations and is then based on scales of professional prestige or within a generation using income classes. The measurement of mobility implies the definition of transition matrices, requiring a first set of axioms for internal consistency. Mobility becomes socially desirable if transition matrices comply to the property of progressivity. Statistical inference, for estimation and testing is based on the use of panels and eventually on the use particular econometric models such as the ordered multinomial probit.

# 1 Introduction

12 hours, divided in 6 sessions of two hours each, in the morning from 10:00 to 12:00, Room 17, except for the last session in Room 24

1. Wednesday January 16th
2. Friday January 18th
3. Wednesday January 23rd
4. Friday January 25th
5. Wednesday January 30th
6. Friday February 1st

I will try to put my slides and the quoted papers on my web page

<http://www.vcharite.univ-mrs.fr/PP/lubrano/>

## 2 Detailed outline

### 2.1 Elephant curve and corresponding tools: 2h

The new literature about the World Income Distribution initiated by Lakner and Milanovic (2016) is concerned about the temporal evolution of the World Income Distribution. It aims at understanding if growth pro-poor, which means if the lower quantiles increased more the average growth rate. At the world level, this led to the elephant curve. However, when using the Growth Incidence Curve of Ravallion and Chen (2003), no assumption is made about the composition of each decile of the income distribution. There is no reason to assume that the same persons have moved or remained in the same quantiles. This is the Anonymous Growth Incidence Curve which ignore the question of social mobility. Two distributions are compared, without considering them as coming from a joint bivariate distribution. Bourguignon (2011) introduced the non-anonymous growth incidence curve, starting this time from a joint bivariate distribution and deriving a modified growth incidence curve, having different properties.

*Done with the Introduction First lecture.*

### 2.2 Social mobility and transition matrices: 2h

This new strand of literature relies in fact on the notion of income mobility, without treating it in details. The question of income and social mobility is an old one as it dates back to Prais (1955). This paper relies on the definition of a scale defining the prestige of professions with Erikson et al. (1979). It is thus more sociologically oriented. But it allows to define a certain number of interesting tools such as transition matrices, Markov processes and mobility indices.

*Done second lecture.*

### 2.3 Properties of transition matrices: 2h

Social mobility is not a desirable process in itself if it is just at random. Transition matrices have to comply to a certain number of axioms in order to be socially desirable as detailed in Shorrocks (1978). There is first the notion of monotonicity of a matrix with Conlisk (1990). The notion of progressivity of a matrix is more difficult to define. There are basically two different approaches: Benabou and Ok (2001b,a) on one side and Atkinson (1981, 1983)

or Dardanoni (1993) on the other side.

*Third lecture*

## **2.4 Statistical inference: 2h**

Statistical inference for measuring mobility relies first on the definition of income classes. There are three ways of doing this as detailed in Formby et al. (2004). Depending on the chosen way, mobility measurement may present opposed characteristics: absolute, relative to the mean or the median and finally transition matrices based on quantiles. Matrices can be estimated directly using panel or can be the result of an ordered multinomial probit.

*Fourth lecture*

## **2.5 The dynamics of poverty: 2h**

Les notes de cours sur les concepts essentiels Bane and Ellwood (1986), Kuchler and Goebel (2003). Long panel needed.

Le papier de Cappellari et Jenkins. Cappellari and Jenkins (2004). Two years are enough.

*Fifth lecture*

## **2.6 The subjective perception of mobility: 2h**

Individuals have a biased perception of the income distribution as shown in Forsé and Parodi (2007). This mis-perception is extended to income mobility. The book of Alesina and Glaeser (2004) gave astonishing examples, comparing Europe and the US. The perception or miss-perception of mobility has dramatic consequences on the desire for redistribution and on the perception of the causes of poverty.

*Presentation by the students of two papers during the sixth lecture*

1. Last chapter of Alesina and Glaeser (2004): I have the pdf
2. Chen and Cowell (2017) on income mobility in China
3. A last solution could be the Chinese paper with Zhou: the desire for redistribution

## References

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