# **Concepts of Social Mobility**

Gary S. Fields
Cornell University, IZA, and UNU-WIDER
gsf2@cornell.edu

Presentation at the UNU-WIDER Workshop on Social Mobility Helsinki, Finland

**September 5-6, 2019** 

## **Two Purposes of This Chapter**

- 1. To define clearly the different social mobility concepts and components.
- 2. To embed these concepts of social mobility and their components into a larger context of social mobility research.

## What "Social Mobility" Is For This Project

Definition of "Social Mobility": The ability to 'move from a lower to a higher level of education or occupational status, or from a lower to a higher social class or income group.' 'Social mobility' thus subsumes economic mobility in general and income mobility in particular as well as many other notions of status. For the project, 'social mobility . . . is the hope of economic development and the mantra of a good society.' I agree wholeheartedly with the hope and mantra.

#### Questions to be asked:

Q1: Is upward movement an important part of social mobility?

Q2: Is this all that goes into social mobility?

## **Two Fundamental Methodological Concerns**

1. "But that is not what income mobility is."

## 1. "But that is not what income mobility is."

Guilty as charged.

Fields and Ok (1996) did not state clearly enough that the concept of mobility that we were characterizing at that time was non-directional income movement, also known as income flux.

Fields and Ok (1999b): distinguished flux from directional income movement

Fields, Leary, and Ok (2002): distinguished these from positional movement, share movement, and origin-independence.

# 2. "Doing a social mobility study", e.g., measures of mobility, axiomatizing mobility, empirical studies of mobility

Compare with "do an income distribution study".

We could conceptualize, measure, axiomatize, and produce empirical data on:

- Inequality
- Poverty
- A particular concept of mobility
- Comparisons of economic well-being

But we would never conceptualize, measure, axiomatize, and produce empirical data on "income distribution".

Likewise for "social mobility". Let's be specific about which concept we are examining *before* we examine it.

## The Relationship between Concepts and Measures

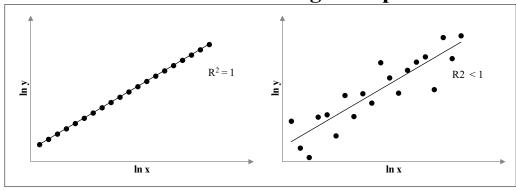
A typical social/economic mobility paper proceeds roughly like this:

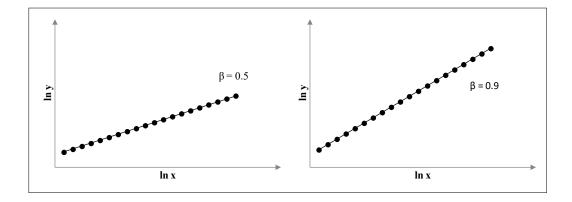
- i. "Here is what I am calculating."
- ii. "When I calculate it, here is what I find."
- iii. It often is left to the reader to infer what mobility concept the author had in mind.

An example goes like this: "Here is my estimating equation, in which beta is the intergenerational elasticity. My empirical findings show that the intergenerational elasticity has been rising over time. Therefore, social mobility has been falling."

In such a statement, for the author and therefore for the reader, "social mobility" is that which the intergenerational elasticity measures. This is unsatisfactory; authors have the responsibility of telling their readers what mobility concept they are studying. It is bad enough when an author has in mind the concept of origin-independence but fails to use that term. It is even worse when the author has in mind a different mobility concept – for example, the extent of upward income movements – but measures the intergenerational elasticity.

## Consider the following examples:





- 1. What English language question is most interesting to ask with these data?
- 2. Which data are the most relevant for answering the question of interest?
- 3. What is the English language answer to the question asked?

## **Trying To Do Better**

My chapter suggests a **better way** for analysts to address social and economic mobility in preference to the aforementioned calculation-result-inference approach. In essence, we need to proceed through several stages:

#### 1. Preliminaries

- Need for panel data.
- **Context:** intergenerational or intragenerational?
- Level of analysis:
  - o Macromobility
  - Mobility components
  - o Micromobility

## • Mobility of what?

- o Education, occupational status, social class, or income group
- o Outcome
- o Status
- My emphasis: Income and earnings

## 2. Main Steps

- Question
- Mobility concept(s)
- Mobility measure(s)
- Empirical findings

## **Six Mobility Concepts and Measures of Them**

- The first, **origin-independence**, is one macromobility concept in common use. It asks the question, in the economy as a whole, how dependent is current income on past income?
- The next four positional movement, share movement, income flux, and directional income movement ask the question, how much economic movement has taken place, either for a single individual or for the entire economy?
- The sixth, **mobility as an equalizer**, asks: to what extent has the mobility that has taken place equalized longer-term incomes in the economy as a whole relative to single-year incomes?

## An example: the concept of positional movement

The *essence* of positional movement is the extent to which persons change positions (quintile, decile, centile, or rank) within the distribution. Denoting the *i*'th person's position in the *x* distribution by  $\pi(x^i)$  and in the *y* distribution by  $\pi(y^i)$ , *zero positional movement* arises in an economy if and only if everyone's position in the income distribution remains the same, i.e.,  $\pi(x^i) = \pi(y^i) \ \forall i, i = 1, ..., n$ . *More positional movement* takes place when the non-directed distances between  $\pi(x^i)$  and  $\pi(y^i)$ , i = 1, ..., n, increase. One *measure of total positional movement in an economy* is the average absolute value of positional changes  $m_{pos\ mvmt} = (1/n) \ \Sigma \ |\ \pi(y^i) - \pi(x^i)|$ .

## **Macromobility Components and Measures of Them**

- Upward, downward, and zero mobility
- Structural mobility
- Exchange mobility
- Growth mobility
- Transfer mobility
- Dispersion change

## An example: the exchange mobility component

The *essence* of exchange mobility is that income recipients change places within a structure in which all income amounts are held constant but the final distribution is permuted to preserve the initial order. We have *zero exchange mobility* if and only if the vector of final incomes arrayed in ascending order of initial incomes  $y^c$  is identical to the vector of final incomes arrayed in ascending order of final incomes y, i.e.,  $y^{c} = y^i \forall i$ ,  $i = 1, \ldots, n$ . We have *more exchange mobility* the greater are the non-directed distances between  $y^c$  and  $y^i$ ,  $i = 1, \ldots, n$ . An *example of an index of total exchange mobility* is the average absolute value of the differences between  $y^c$  and  $y^i$ :  $m_{exchange\ mob} = (1/n) \sum |y'|^i - y^i|$ .

## **Remarks on Mobility Concepts**

- Social mobility and economic growth
- Decomposability
- Comparison with some of the major papers in the mobility literature
- On relative and absolute mobility
- Welfarist approaches, Markov chains, and pseudo-panels

## **Conclusion**

- I myself used to do what I have cautioned you not to do: talk about economic mobility without adding a modifier like directional income movement or whatever was being examined.
- The solution is straightforward: for authors *always* to use as many modifiers as are needed to clarify what is being studied and for readers and listeners (and editors) *always* to insist on such clarification.
- Following these precepts, an abstract of one of my papers might read like this: This is a study of intragenerational income mobility, using panel data from countries around the world to ask which income groups experienced the largest directional changes in dollars and in percentages. We find in the panel data that in the great majority of countries, those individuals who gained the most in dollars and in percentages were those who started *lowest* in the initial year's income distribution; those who started highest in the distribution had the largest *losses* in dollars and in percentages.

Does this little abstract make sufficiently clear which mobility concept is being examined and what the empirical work is about? Did it get you interested in reading the study?

## A suggested checklist moving forward:

- Specify the **social/economic outcome(s) of interest**: examples are total income, labor earnings, consumption, wealth, occupation, social class, etc.
- Specify the **context**: intergenerational or intragenerational.
- Specify the **level of analysis**; these include macromobility concepts, macromobility components, and micromobility patterns.
- Specify the **question(s) under investigation**; example: what is the time path of various measures of economy-wide income mobility in country X?
- Specify the **mobility concept(s) being examined**: origin-independence, directional income movement, income flux, share movement, positional movement, and/or mobility as an equalizer of longer term incomes.
- Specify the **sub-components**, **if any**, **being examined**: upward and downward movement, structural mobility, exchange mobility, growth mobility, transfer mobility, and dispersion change.
- Specify one or more **indices** of the chosen mobility concept(s).
- Choose a dataset that measures the variables of interest.

- Combine all of the preceding to **pose a question** such as: What has been happening to economy-wide intragenerational upward income movement and downward income movement over time in country X?
- Be as rhetorically precise as possible in **stating conclusions**: Example: "More people are moving up more dollars and fewer people are moving down now in country X than was the case before."
- And finally, avoid using terms like "mobility", "absolute mobility", and "relative mobility" without modifiers or definitions.

Readers and listeners should not have to work so hard to be able to figure out which mobility concept or component an author or speaker is talking about. It can only be good for the advancement of social science for us to stop talking past one another.