

Migrants, Natives and a New Measure of Assimilation

Ira N. Gang (Economics, Rutgers University), John Landon-Lane (Economics, Rutgers University), and Myeong-Su Yun (Economics, Tulane University)

Assimilation of migrants in host countries has become more important as the international migration and globalization becomes more and more wide-spread. One of the main aspects of assimilation is economic assimilation. A large number of papers have studied the economic assimilation of migrants into host countries typically asking whether the wages (or some other measure of income) of migrants catch up to native wages as time passes. Typically this question has been studied based on a linear model.

This paper re-examines how to define assimilation. Indeed, the assimilation can be defined from various aspects of the wage (or any other measure of income) distribution of natives and migrants. For example, looking at wages, three types of assimilation can be achieved (1) convergence in the level of wages, (2) convergence in the dispersion of wages, and (3) convergence in both level and dispersion of wages, between migrants and natives. Previous papers have primarily focused on the first aspect of assimilation.

We develop a new measure in order to examine whether there is assimilation or not, by implementing a discrete-state Markov chain to model the dynamics of the cross-sectional wage or income distribution of migrants and natives. The discrete-state Markov chain model has been widely used for the studying dynamics of economic activities including e.g., income and social mobility. It can also be used to measure the change in the degree of concentration of the cross-sectional distribution over time. To do this we define a measure of concentration/dispersion that is robust to the presence of multiple modes in the cross-sectional wage/income distribution. We employ Bayesian methods in this paper which allow us to fully characterize the limiting cross-sectional wage distribution for migrants and natives, thus allowing us to compare our measures of assimilation in the limiting case.

We define three types of assimilation as having been achieved if the limiting distributions of the natives and migrants have the same wage level (definition 1), the same wage dispersion (definition 2) and both (definition 3). We formally test the hypothesis of assimilation at the limiting distribution under each definition using migrant and native samples from German Socio-Economic Panel. Furthermore, we introduce covariates to the discrete-state Markov chain model to analyze the causes of assimilation or dis-assimilation, or the persistence of distance between migrants and natives.

Corresponding Author: Professor Ira Gang, Rutgers University, Economics Department NJH, 75 Hamilton St, new Brunswick NJ 08901-1248 USA Phone: +1 732 932-7405 Fax: +1 732 932-7416 Email: gang@economics.rutgers.edu