Essays on Microeconometrics and Immigrant Assimilation

av

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Abstract

Paper I. Asymptotic bias reduction for a conditional marginal effects estimator in sample selection models.
In this article we discuss the differences between the average marginal effect and the marginal effect of the average individual in sample selection models, estimated by the Heckman procedure. We show that the bias that emerges as a consequence of interchanging the measures could be very significant, even in the limit. We suggest a computationally cheap approximation method, which corrects the bias to a large extent. We illustrate the implications of our method with an empirical application of earnings assimilation and a small Monte Carlo simulation.

Paper II. Local Unemployment and the Earnings-Assimilation of Immigrant Men in Sweden: Evidence from Longitudinal Data, 1990-2000.
The earnings-assimilation of first-generation immigrant men in Sweden was analyzed using eleven waves of panel-data, 1990-2000. Employment-probabilities and earnings were estimated simultaneously in a random-effects model, using Mundlak's formulation to control for both individual effects and panel-selectivity due to missing earnings-information. Assuming equal-period effects produced bias which could distort the findings. To correct the bias, local unemployment-rates were used to proxy for changing economy-wide conditions. Labour-market outcomes differed considerably across immigrant arrival cohorts, region and country of origin, and educational levels.

Paper III. Monte Carlo Investigation of the Initial Values Problem in Censored Dynamic Random-Effects Panel Data Models.
Three designs of Monte Carlo experiments are used to investigate the initial-value problem in censored dynamic random-effects (Tobit type 1) models. We compared three widely used solution methods: naive method based on exogenous initial values assumption; Heckman's approximation; and the simple method of Wooldridge. The results suggest that the initial values problem is a serious issue: using a method which misspecifies the conditional distribution of initial values can cause misleading results on the magnitude of true (structural) and spurious state-dependence. The naive exogenous method is substantially biased for panels of short duration. Heckman's approximation works well. The simple method of Wooldridge works better than naive exogenous method in small panels, but it is not as good as Heckman's approximation. It is also observed that these methods performs equally well for panels of long duration.

Paper IV. Dynamics of Employment- and Earnings-Assimilation of First-Generation Immigrant Men in Sweden, 1990-2000.
The employment- and earnings-assimilation of first-generation immigrant men in Sweden was estimated using a dynamic random-effects sample-selection model with eleven waves of unbalanced panel-data during 1990-2000. Endogenous initial values were controlled for using the simple Wooldridge method. Local market unemployment-rates were used as a proxy in order to control for the effect of changing macroeconomic conditions. Significant structural (true) state-dependence was found both on the employment-probabilities and on the earnings of both immigrants and native Swedes. The size of structural state-dependence differed between immigrants and Swedes. Failure to control for the structural state-dependence could have caused bias not only in the assimilation measures but also in the cohort-effects. For example, standard (classic) assimilation model seriously overestimates short-run marginal assimilation-rates and underestimates long-run marginal assimilation-rates. The model controlling for structural state-dependence shows that the earnings of all immigrants in Sweden (except Iraqis) eventually converge to those of native Swedes, but only Nordics and Westerners are able to reach the employment-probability of native Swedes.

Keywords: *Average marginal effect, Marginal effect of the average individual, Employment and earnings assimilation, Quasi-fixed effects approach, Initial value problem, Dynamic censored random-effects model, Monte Carlo experiment, Heckman's approximation, Simple method of Wooldridge, Dynamic random-effects sample-selection model, wage-curve method.*

J.E.L Codes: C13, C15, C23, C25, C33, J15, J40, J61.

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