Equal opportunities to access the university in Chile? An application with a spatial Heckman probit model

Patricio Aroca\(^a\), Coro Chasco\(^b\), Ludo Peeters\(^c\), Juan Luis Quiroz\(^d\)* and Andrés Vallone\(^e\)

\(^a\) Department of Economics, Adolfo Ibáñez University (Chile); patricio.aroca@uai.cl

\(^b\), \(^d\), \(^e\) Department of Applied Economics, Autonomous University of Madrid (Spain); \(^c\) coro.chasco@uam.es

\(^c\) juan.quiroz@predoc.uam.es; \(^d\) andres.vallone@predoc.uam.es

\(^e\) Department of Economics and Policy Management, Hasselt University (Belgium); ludo.peeters@uhasselt.be

**Corresponding author:**
Department of Applied Economics, Autonomous University of Madrid; Avda. Francisco Tomás y Valiente 5, 28049 Madrid, Spain; phone number: +34914974266; e-mail: juan.quiroz@predoc.uam.es

Abstract

The accessibility of university education is a real concern for policy-makers all over the world. This is particularly true in the case of Chile where the government has made strong efforts to provide equal access for students from families with different socioeconomic status levels. However, unfortunately, the OCDE, in its 2009 report on Chile, concludes that accessibility and student performance differences persist depending on the socioeconomic level of families, the type of school chosen and even the region of origin. As far as we know, this outcome has not been tested with real micro-data in Chile. Therefore, in this paper, we test the conditionings of university accessibility in Chile using a cross-sectional database of almost 300,000 pre-university examination candidates in 2016, with information about the students’ scores and attributes. To this aim, we specify a spatial version of the Heckman probit model with sample selection to analyze the two-stage process of (i) application and (ii) admission to university education in Chile. In the first stage, we model the students’ decision to apply to a university and career of their choice, conditional upon approval of the corresponding pre-university examination. In the second stage, we model the decision of the Department of Evaluation, Measurement and Educational Registration (DEMRE) on acceptance or refusal to the university education, conditional upon a previous application of the students to a university and career of their choice. We find evidence of the existence of significant differences in accessibility to university education in Chile, depending on gender, socioeconomic status, school type and spatial location.

**Keywords:** Chile, education, Heckman probit, spatial autocorrelation, university

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