CAUSAL RETURNS TO POSTSECONDARY EDUCATION IN CHILE:
FIELDS, SELECTIVITY, STUDENTS AND LUCK

by

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Abstract

We use new administrative data from Chile from 1985 through 2010 to estimate the causal returns to a college degree as a function of field of study, course requirements, selectivity, measures of school quality, and student socio-economic status. It is to our knowledge the first study to examine the causal impact of these factors on short and long-run labor market outcomes. Our data link high school records to entrance exam records to college applications, admission, matriculation, and finally labor market earnings from tax records. Because the Chilean admission system for most universities is centralized and test-score based, we are able to exploit hundreds of regression discontinuities to estimate the causal impacts of interest. We use the reduced-form estimates to estimate a simple wage model, which allows us to compare the earnings effects of each program to a common outside option. We find that returns are highly heterogeneous by field of study, with particularly large returns in health, technology and business. Earnings gains are larger for more selective programs, with little to no gains from admission to low-selectivity degrees or degrees with vocational curriculum focus. Heterogeneity in gains are not fully captured by differences in tuition across institutions and degrees. We do not find differential outcomes for students coming from low versus high SES backgrounds. Our results support the claim that persistent frictions exist in supply of institution-degrees relative to demand for skills, or in demand response to returns through informed student choice. Both suggest a role for public policy in decreasing frictions.

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