School Heterogeneity, Parental Background and Tracking: Evidence from PISA 2006

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July 2010

Abstract: So far the empirical literature using large international students' assessments neglects the

role of school composition variables in order not to incur in a misidentification of peer effects. However, this leads to an error of higher logical type since the learning environment crucially depends on peers' family background and on school heterogeneity. In this paper, using PISA 2006, we show how school heterogeneity is a key determinant of student attainment and of opportunity equalization. Interestingly, the effect of school compositional variables differs depending on the country tracking policy. School heterogeneity reduces efficiency in comprehensive schooling systems whereas it has a non-linear impact in early-tracking ones. In turn, linear peer effects are higher in early-tracking systems. Besides, higher heterogeneity tends to equalize student differences related to family background. Results remain robust in school- and student-level regressions suggesting that the impact of heterogeneity is correctly identified. Results are also robust when we add school-level dummies, school compositional variables and several controls correlated with the school choice to alleviate the selectivity bias of linear peer effects.

Key words: school heterogeneity, peer effects, schooling tracking, educational production function, equality of opportunities