Abstract: Why do individuals choose different types of post-secondary education, and what are the labor market consequences of those choices? We show that answering these questions is difficult because individuals choose between several unordered alternatives. Even with a valid instrument for every field, instrumental variables estimation of the payoffs requires information about individuals’ ranking of fields or strong additional assumptions, like constant effects or restrictive preferences. These results motivate and guide our empirical analysis of the choice of and payoff to field of study. Our context is Norway’s post-secondary education system where a centralized admission process covers almost all universities and colleges. This process creates discontinuities which effectively randomize applicants near unpredictable admission cutoffs into different fields of study. At the same time, it provides us with strategy-proof measures of individuals’ ranking of fields. Taken together, this allows us to estimate the payoffs to different fields while correcting for selection bias and keeping the next-best alternatives as measured at the time of application fixed. We find that different fields have widely different payoffs, even after accounting for institutional differences and quality of peer groups. For many fields the payoffs rival the college wage premiums, suggesting the choice of field is potentially as important as the decision to enroll in college. Another finding is that individuals tend to choose fields in which they have comparative and absolute advantage. In contrast, a choice model with one-factor ability-as-IQ is inconsistent with the pattern of selection we estimate. We also test and reject assumptions of constant effects or restrictive preferences, suggesting that information on next best alternatives is essential to identify payoffs.

Keywords: Field of study, earnings, self-selection, treatment effects; unordered choice

JEL codes: J24, J31, C31