

Polish high-school graduates' decision to enroll  
college—an analysis within the framework of identity  
economics

Here's a typical explanation of the choice of college major: the utility of choosing a major comes, first, from the present value of the student's expected future earnings, had she chosen this major, and, second, from how interesting she finds this major. Choosing a major, she maximizes the sum of these two kinds of utility (Montmarquette et al., 2002; Arcidiacono et al., 2012). But consider a student in the last row of your lecture theatre. Always on his phone, he seems pained having to attend any classes. Moreover, he is majoring in a field whose graduates struggle to get a well-paid job. The typical explanation seems to fail here.

To account for this behavior, I invoke the framework of identity economics (Akerlof & Kranton, 2000; 2002; 2010) and extend students' utility function to include a third element: utility gained from observing the norm “study!”—or the s-norm for short. Therefore, students enroll in college partially because they think one ought to have a college degree, regardless of any additional perks that come with it. In my thesis, I present an empirical study testing this hypothesis.

In the first chapter, I present the assumptions of identity economics, and illustrate them with three studies within this framework: one on social exclusion (Akerlof & Kranton, 2000), one on the relation between national identity and redistribution (Shayo, 2009; Klor & Shayo, 2010), one on equity (Henrich et al., 2005), and one on high-school students' behavior (Akerlof & Kranton, 2002).

In the second chapter, I discuss classic models in the economics of education: Mincer's model founding human capital theory (Mincer, 1958; 1974), Spence's model founding signaling theory (Spence, 1973), and Lazear's model treating education as both a consumption and investment good (1977). I conclude the chapter with Manski's argument, on which educational models should be estimated using data on subjective expectations, for data about revealed choices alone cannot distinguish between different models (Manski, 1993).

In the third chapter I discuss models of major choice. I begin by explaining McFadden's multinomial logit model, a statistical tool used to estimate models of discrete choice; all models of major choice that I present use this tool. The first model of major choice, by Montmarquette, Cannings and Mahseredjian (2002), assumes that, choosing a major, college students maximize the present value of future expected earnings. The second model expands on the first one—its authors, Szreder et al. (2012), add nonpecuniary benefits to prospective students' utility function. Both models are estimated using data on observed choices. Therefore, I subsequently present a model by Arcidiacono, Hotz, Kang (2012), who estimate their model with data on subjective expectations. I conclude the chapter with a discussion of a study by Gajderowicz et al. (2015)—plausibly, the most comprehensive hitherto study of college major choice in Poland.

In the two last chapters, I describe my own study on more than one thousand undergraduate full-time students at Polish public schools. I devote the fourth chapter to justifying the choice of the

sample, the construction of the questionnaire, and my classification of majors into categories using hierarchical cluster analysis. In the fifth chapter, I present my model and its estimation. Following previous work, I include the utility of future earning and of the major's fit with the individual's interests in the prospective students' utility function. However, drawing on the assumptions of identity economics, I expand the utility function with the utility of following the norm *study!* The results of estimating the model suggest that, when choosing a major, students consider both the standard features of the major—expected earnings and the major's fit with the students' interests—as well as the motivation from the norm. Particularly, students strongly motivated by the norm tend to avoid choosing math-heavy majors.

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