

Demand for Tertiary Education in the Russian Federation. Influence of Family Background and Labor Market Expectations.

Natalia Kyui

Extended Abstract

Current paper is dedicated to the analysis of the demand for tertiary education on a free (state-subsidized) and a full-tuition (chargeable, fee-based) basis in the Russian Federation. The purpose of this study is to construct and estimate a model describing households' schooling choices in the Russian Federation (choice of technical schools and colleges) and to conduct post-estimation simulations of possible outcomes if changes in tuition policies occur (changes towards the models of educational systems in developed countries). I focus on the influence of students' expectations about their future labour-market outcomes (job opportunities, wages) on educational choices as well as on the influence of current tuition policies of Russian education establishments. In the frame of this study, I compare the models of educational systems and admission processes in Russia with those in France and USA. Below I present a brief description of the situation in the Russian educational system and core interests of current research. Then, I describe in a few words the research background and the main points of the current study.

During the Soviet period, state universities were the only higher education institutions in the Russian Federation. The admission tests selected high-ability candidates for study, so students' choices for school were restricted by their abilities levels. The return to tertiary education has been increasing substantially after market liberation. This in turn led to a significant increase in the demand for tertiary education and, therefore, to an increase in the number of private universities and creation of non-budget studying options (on a full-tuition basis) in the state universities. Thus, in 2006 the percentage of full-tuition students reached 59% (including 43% studying in state universities and 16% studying in private universities). Today individual educational choices are limited not only by personal abilities but also by families' capacities to finance education. In the both types of tertiary education admission tests are mandatory, but the required level of knowledge is lower for full-tuition posts. Thus, families' financial capacities to pay for tertiary education weaken the minimum abilities requirements. Nevertheless, the educational process is the same for state-subsidized and full-tuition students, as well as final certificates of degrees obtained. The existing educational system provides two possibilities for Russian youth: either they should be smart enough to enter the universities, or their parents could "buy" the university entrance for them. In the current study, the main interest is to analyse the choice of families for their children's tertiary education and the influence of expected labour-market outcomes and existing tuition policies on these choices. Another aim of this study is to test whether the return to "full-tuition" education is expected to be the same as for "free" education, or it is lower / higher for lower abilities students (who actually paid for tertiary education attainment).

Two main directions represent the theoretical and empirical framework of this study: analysis of educational choices and future labour-market outcomes, and analysis of tuition policies and its influences on educational attainment. The first set of papers analyses the educational attainment and influence of expected labour-market outcomes (such as the possibility to find a job and earnings) on these choices. Willis and Rosen (1979) presented the pioneer work on this subject where they allowed the demand for college education to depend on expected future earnings. Later following the work by Keane and Wolpin (1997) several econometricians have estimated structural dynamic models of schooling decisions (Keane and Wolpin (2001), Belzil and Hansen (2002) and others). More recently, Arcidiacono (2004, 2005) has considered sequential models of college attendance. In my current study, I will follow the Arcidiano model. As an addition to his model, I will take into account the options of obtaining state-subsidized education or paying in full tuition fees. A second set of papers that makes up the framework of my analysis presents an analysis of tuition policies. Recent studies provide evidence on tuition policies and education attainment from the general equilibrium model of student choices and university decisions (Epple, Romano, Sieg (1999, 2003, 2006), Fernandez and Rogerson (1998) and others).

The case of the Russian Federation is interesting in light of existing studies on educational choices as it provides a natural experiment of changes in tuition and admission policies.

I construct and estimate a model describing household decisions. Following previous researchers, I conduct the estimation in the form of sequential choices. Firstly, households make a choice among three alternatives after secondary school graduation: working, continue to study and obtaining the first level of tertiary education or continue to study and obtaining the second level of tertiary education. At this stage the households' decisions are influenced by the expected future earnings as well as expected probabilities of finding a job in general and one corresponding to the education obtained (the significant education-occupation mismatch on the Russian labour market is analysed in the first chapter of my thesis). Secondly, households make a decision about financing the tertiary education (conditionally on the possibility to enter universities on the state-subsidized basis).

I take into account the unobserved heterogeneity of candidates. I suppose that higher-abilities students tend to choose the state-subsidized education, and lower-abilities students need to pay full tuition fees. Therefore, I divide all the young population entering the tertiary education system into these two groups. Such grouping allows us to use the information about student abilities in order to analyse the demand function for tertiary education and factors determining this function for both groups (higher-abilities and lower-abilities youth).

I use the data from the Russian Longitudinal Monitoring Survey and Russian Survey of Education. I have this information for 1995-2006 – the time of above discussed changes in admission and tuition policies.