

**Unequal Chances in Education:
Educational Inequalities in the Czech Republic**

Edited by Petr Matějů and Jana Straková

MICHAEL L. SMITH

Education systems play a fundamental role in mitigating or transferring inequalities from one generation to the next. One would presume that the Czech Republic, given its egalitarian tradition and track record of redistributive social transfers, would also have developed an education system that equalises the educational opportunities of different socio-economic groups. Contrary to such presumptions, a wealth of data has shown that the Czech Republic has some of the greatest inequalities in educational access and attainment in the OECD. Students from poorer and less educated families systematically attain lower levels of education (and have a lower chance of being accepted to college) than students from richer and more educated households. Which factors best explain these educational inequalities, and what can be done to remedy them? *Unequal Chances in Education* [2006], edited by Petr Matějů and Jana Straková,¹ is the first major work of its kind to compare the educational inequalities in the Czech Republic with those of other countries, to offer compelling explanations of the causes of Czech educational inequalities, and to highlight possible remedies.

Unequal Chances in Education builds on some of the previous research findings by Matějů and his collaborators on the role of education in the processes of social stratification in the transition context. In 'Education as a Strategy of Life Success', Matějů and Řeháková [1996] used survey data before and after the Velvet Revolution to measure the increasing importance of the perceived role of education in achieving higher status. Such changing perceptions, which were linked to the rising economic returns of education during the early transition years, played a comparatively significant role in shaping life choices. In fact, these subjective evaluations of status mobility mattered even more than class-based determinants in explaining whether people saw themselves as winners or losers in the economic transition [Matějů 1996]. Since university graduates not only earned significantly more than non-graduates but also saw themselves as experiencing strong socio-economic ascent [Matějů and Večerník 1999: 157–181], it is not surprising that university education has experienced a significant supply-demand imbalance. While the number

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of seats at Czech universities has roughly doubled between 1994 and 2004, the increase in demand has been even higher, as evidenced by the continued high selectivity of the tertiary sector (about 50% of applicants to Czech universities are rejected). Due to the lack of educational reform and the apparent limitations of the state budget, educational attainment will continue to be a key differentiator of social status and economic prospects [Matějů and Simonová 2003].

One of the most original contributions of *Unequal Chances in Education* is its application of the social-psychological model of social stratification to the Czech context. Blau and Duncan's *American Occupational Structure* [1967] established the consensus view that a pupil's future educational and employment status is largely shaped by socio-economic status, such as their father's employment status or level of education. Sewell and Hauser [1972], using the Wisconsin Longitudinal Survey they were developing, built on that model, arguing further that 'social-psychological' variables – such as the role of significant others and educational aspirations – mediated the way social origin impacts future status. According to Sewell and Hauser, when rich kids have higher educational attainment than poor ones, this is largely because rich kids tend to live in environments that prescribe higher values to education than is the case of poorer households.

Unequal Chances in Education therefore tests the validity of the Wisconsin social-psychological model in the Czech context, particularly by identifying the determinants of pupils' educational aspirations. According to Tomáš Katrňák's analysis of PISA 2003, the educational aspirations of pupils and their parents are closely correlated: while only 38% of Czech ninth-graders aspire to a university education, that percent increased to 63% among the pupils whose parents had also aspired to obtain a university education (p. 180). By comparing the data of a 1989 family survey and the 2003 PISA-L, Matějů also discovered that the *direct* effect of the family's social origin on a pupil's educational aspirations has been declining, whereas the *indirect* effect of social origin as mediated by pupils' abilities and the significance they ascribe to education has been sharply increasing (p. 164). This suggests that social-psychological factors matter a great deal: pupils with similar social origin form similar beliefs about education, which in turn shapes their aspirations.

Another original contribution of the volume is its development of an analytical approach for measuring students' chances of educational attainment on the basis of social origin. The analysis by Matějů, Řeháková and Simonová focuses on three dependent variables: attainment of a secondary school diploma, students' successful transition from secondary to tertiary education, and the attainment of tertiary education. Respondent cohorts were differentiated by when they turned 18 years old (in five categories, from before 1948 up to the 1990s), which was made possible with the large combined dataset (over 6700 cases) they created from three different surveys in the 1990s. The main explanatory variables in the analysis were the class position of the father when the respondent was 16 years old, the student's gender, and the parents' highest attained education. A logit model, which is often used to assess the probability of success or failure of a given event, was used to es-

timate students' expected chances of educational success in terms of the independent and dependent variables above (p. 293–296). The model was quite useful for assessing educational inequalities: when the odds-ratio between two groups' chances of success increases (e.g. the ratio of the odds of success between students whose fathers are qualified versus unqualified workers), it can be said that the educational inequalities between those groups increase.

The analysis confirmed many of the hypotheses by the three authors. First, in terms of attaining a secondary school diploma, the authors found that the role of the parents' education declined in importance during the communist period in determining their children's educational success, though it is still quite high: even in the 1990s the odds of finishing secondary education among students whose parents studied at a college versus those without a secondary school diploma were about eleven times higher. On the other hand, in the late communist period, the role of the father's class position significantly increased in importance in determining their daughter's (but not their son's) chances of getting a secondary school diploma. Second, in terms of getting into college, the authors' most significant finding was that the father's class standing sharply increased their children's (both boys and girls) chances of getting into college in the 1990s compared to the communist period. This was even the case when parents' education was controlled (p. 301). Finally, in terms of attaining tertiary education, the role of the parents' educational background continued to play a significant role in shaping their children's chances throughout the entire communist and post-communist period; however, the model came up with conflicting interpretations of the role of the father's class position in this regard (p. 304).

The book's case about increasing educational inequalities does not rest only on data-based models. The authors of *Unequal Chances in Education* also employed other survey and empirical data to measure different types of educational success based on social origin. The sheer amount of survey data it incorporates is impressive: not only does the book make use of PISA 2000, PISA 2003 and PISA-L (the longitudinal supplement to the PISA survey), but also the 1998 Survey of Graduates (*Sonda Maturant*), a 2004 survey of students at Czech private and public colleges, along with ISSP data and additional aptitude tests (TIMSS 1995 and 1999). Many of these surveys were even implemented with the active involvement of the authors. For anyone who has doubts about the soundness of the quantitative analysis, the book also comes with a CD of the main questionnaires and datasets (PISA 2003, PISA-L and the 2004 college survey, in .sav and .por formats), enabling students and scholars to do the computations themselves.

One of the constant threads throughout the book is the authors' analysis of two types of factors in creating educational inequalities: the social, cultural and economic variables mentioned above, and the structural features of the educational system. By keeping with Procházková's institutional analysis (Chapter 1.4), the authors reveal how pupils of low social origin face constant barriers to their educational attainment *throughout* their educational career. The remaining part of this essay will survey those key findings.

The rigidity of the Czech education system discriminates pupils on the basis of social origin at a very early age. Primary compulsory education is taught at two main types of schools: basic schools and special schools (which have recently been renamed as basic schools with a special education programme), the latter of which are oriented towards students with low aptitude or educational handicaps. But social origin also matters. Roma children are often sent to special schools at an age before which they can overcome the barriers caused by their insufficient preparedness for basic school, such as their command of the Czech language (p. 99). Students attending special schools are much less likely to be accepted at a diploma-conferring secondary school, significantly affecting their future life prospects. Czech men who never continued on to a secondary school have an unemployment rate roughly three times the national average (p. 96).

The more specialised tracks an education system has, the more likely social origin will influence the educational attainment of pupils. In the Czech Republic, an extreme case of this can be observed in the gymnasia and multi-year gymnasia (grammar schools), to which pupils at primary schools can apply from as early as the end of the fifth grade. It is often thought that only outstanding students can get into these 'elite' gymnasia. However, Procházková found that among the top 9% of pupils taking the PISA 2003, less than 40% of those pupils studied at gymnasia, with the rest studying at basic schools (p. 103). The analysis of PISA 2003 by Straková, Potužníková, and Tomášek also revealed that economic, social, and cultural status (ESCS) accounted for 9% of the variance of ninth-graders' test results (at all types of schools), but also found that the schools' ESCS accounted for 84% of the variance of the test results of pupils among those schools (p. 135). Thus what is definitive for explaining the differences in the aptitude of pupils at individual schools is the *social composition* of the pupils at those schools, not the rigor of the studies or the learning methods used.

In fact, the type of secondary school students attend is highly correlated to the socio-economic background of their parents, thus questioning the degree to which pupils freely choose their educational and vocational tracks. According to Matějů and Straková's analysis of the PIRLS 2001 survey, the most important reason parents have for wanting their children to attend multi-year gymnasia is because it is the surest path towards being accepted to a university (p. 201). The competition for admission to gymnasia is immense, not because they are simply good schools, but also because they have a high level of prestige attached to them and because they enable access to tertiary education. This has also left its mark on the degree of social, cultural and economic homogeneity of pupils at those schools.

In a similar vein, the chapter by Münich and Mysliveček reveals how the structure and admissions process of secondary education poorly corresponds to the wishes and interests of pupils. This is partly because the type of secondary school pupils attend has a strong impact on their educational and career prospects. The Czech Republic has three main types of secondary schools: gymnasia (20% of students), secondary professional schools (44%), and secondary vocational schools (36%). Since most gymnasia are located in the cities, the limited geographic mobili-

ty of pupils in the countryside means that they can be tracked into a school unsuitable to their needs or interests. It also leads to supply-demand gaps in the labour market, as there are no guarantees that jobs will be available in the vocational tracks pupils choose. According to Festová [2004], the unemployment rate of recent graduates of vocational schools was 23% in April 2004, compared to 15% for graduates of professional schools and 6% for graduates of gymnasia.

The authors of *Unequal Chances in Education* demonstrate that two factors determine educational inequalities in university admissions: the type of secondary school students attended and the social origin of their parents. According to 1998 data analysed by Matějů, Procházková and Burdová, while 71.6% of students from multi-year gymnasia who applied to college were accepted, only 37.4% of students from vocational schools were. When the authors controlled for aptitude, they also found that 83% of students with the highest aptitude at multi-year gymnasia were accepted, compared to 53% of their equally smart peers at the vocational schools. Gymnasia students whose parents were the most educated were 1.45 times more likely to get into college than gymnasia students whose parents were the least educated. Focusing just on social origin, 61% of college applicants whose parents had a university education were accepted, compared to 37% of applicants whose parents did not have a secondary school diploma (p. 333). Overall, the authors calculated that students whose parents were most educated had about 1.65 the chances of getting into college compared to applicants whose parents were least educated. These inequalities in university access also have a major impact on future life chances, as Czech workers with tertiary education earn approximately 1.8 times more than workers with a secondary school diploma (this compares to the 1.63 OECD average).

The discriminatory nature of the admissions process is further facilitated by its selectivity. Roughly 50% of college applicants fail the entrance exams (p. 327). In fact, approximately 11% of applicants failed to enter a college or university at least five times previously. Only 33% of Czechs aged 19–24 are in tertiary education (compared to 80% in Sweden and 63% in the USA), which is at the bottom of the list of developed countries. The highly selective nature of the admissions process means that universities have to draw virtually arbitrary lines between equally competitive applicants, which in turn increases the influence of social origin on admissions. In fact, as Josef Basl revealed, university students from households with high socioeconomic status constitute over 40% of the student population in the lucrative fields of the natural sciences, medicine, arts, and law (p. 349). Students from households with lower status dominate in the field of agriculture, which arguably provides the least chances for economic advancement later in life.

These numbers will probably sound alarming to the lay Czech audience. According to a 2006 survey by CVVM and the Institute of Sociology, only 36% of respondents think Czech primary and secondary education needs reform. Despite the inequalities discussed above, 59% of Czechs are satisfied with the system of primary and secondary education. And despite significant problems in university access and performance (not a single Czech university ranks among the top 300 in the

world), only 19% of Czechs are dissatisfied with the universities. Popular discourse on educational reform is equally polarising, as in the 2006 parliamentary election campaigns, during which the governing Social Democrats sought to demonise proposed reforms in university financing as policies that would benefit the rich and harm the poor. The problem, however, is that the current 'free' system of university education *already* benefits the rich and harms the poor, since poor students are less likely to get into college to begin with. Given the public's lack of desire for reform, is there any way out of this mess?

Jaroslav Kalous' conclusion of *Unequal Chances in Education* lists a number of ambitious recommendations, such as promoting general education at secondary schools and increasing university access. However, it is difficult to imagine how those goals can be achieved without a comprehensive reform in education financing. The Czech Republic could follow one of two models: the Scandinavian model of very high levels of state financing (at least high enough to reduce educational inequalities), or the liberal model of implementing tuition and means-tested scholarships and promoting private sector participation in tertiary education financing. The first model may simply be too unrealistic: while the Czech government has sought to increase funding for higher education over the last decade, it has not even been able to keep up with inflation and with the number of students, causing the state subsidy per student in real terms to drop by over 30%. While OECD countries invest on average 1.6% of GDP in their tertiary education systems, Czechs invest only .9%, putting the country near the bottom of the scale [OECD 2006]. Czechs also lag significantly behind in terms of public funding for research and development (at a miserly .56% of GDP). Even at a GDP growth rate of 6%, it could take decades for the Czech Republic to catch up.

That brings the liberal model into play. As part of the 2004 survey *Studium na vysoké škole (University Study Survey)*, the authors measured the hypothetical reaction of students at public universities to different amounts of tuition (if it were imposed) and student loans. According to Basl's analysis, if tuition were 8000 Czk per semester, 76% of the students would be able to pay it (mostly through their parents' earnings), 16% would take a student loan, and 8% would not study. Disaggregating responses by the social class of the student's father, 63% of students whose father is an unqualified worker would be able to pay it, 22% would take a loan, and 14% would not study. By comparison, 79% of students whose father has a professional career would be able to pay it, 15% would take a loan, and 6% would not study (p. 362). Thus, the students' hypothetical reaction is not nearly as extreme as suggested by the daily press. At the same time, the differences in responses by social origin suggest that scholarships or tuition waivers for low-income students would help equalise opportunities while also expanding educational access. It may force some students to work, which is not a bad thing, given that students at public institutions earn only a fraction of the amount (about 20%) of the earnings of students at private colleges.

Though *Unequal Chances in Education* anticipates how the educational inequalities it documents will shape future social status and life success, the fact of the mat-

ter is that there are no longitudinal data available on the social and educational development of specific cohorts over the life cycle. The need for such data clearly motivated the authors of the volume to participate in the international PISA-L project, the longitudinal survey initiated in 2003 that was given to over 9800 Czech 15-year-olds and to their parents. Those pupils have now gone down different educational and career paths, and so the second wave of the survey on those students (now 18-year-olds), to be conducted in the fall 2006, will shed important light on the relationship between the educational aspirations, educational attainment and life success of the first 'post-communist' generation of Czechs.

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References

- Blau, Peter and Otis Duncan. 1967. *American Occupational Structure*. New York: Wiley.
- Festová, Jena. 2004. *Nezaměstnanost absolventů škol se středním a vyšším odborným vzděláním – 2004*. (Unemployment of Graduates from Secondary and Tertiary Professional Schools) Prague: NÚOV.
- Matějů, Petr. 1996. 'Winners and Losers in the Post-communist Transformation: The Czech Republic in Comparative Perspective.' *Innovation: The European Journal of Social Sciences* 9 (3): 371–391.
- Matějů, Petr and Blanka Řeháková. 1996. 'Education as a Strategy of Life Success in the Postcommunist Transformation: The Case of the Czech Republic.' *Comparative Education Review* 40 (2): 158–176.
- Matějů, Petr and Natalie Simonová. 2003. 'Czech Higher Education Still at the Crossroads.' *Czech Sociological Review* 39 (3): 393–410.
- Matějů, Petr and Jana Straková (eds.). 2006. *Nerovné šance na vzdělání. Vzdělanostní nerovnosti v České republice*. (Unequal Chances in Education: Educational Inequalities in the Czech Republic) Prague: Academia.
- Matějů, Petr and Jiří Večerník (eds.). 1999. *Ten Years of Rebuilding Capitalism: Czech Society after 1989*. Prague: Academia.
- OECD. 2006. *OECD Thematic Review of Tertiary Education: Country Background Report for the Czech Republic*. Paris: OECD.
- Sewell, William and Robert Hauser. 1972. 'Causes and Consequences of Higher Education: Models of the Status Attainment Process.' *American Journal of Agricultural Economics* 54 (5): 851–861.

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