1. Principal findings

The project focused on a possibility of implementing cost-sharing principle to financing higher education during the post-communist transformation, which -- according to the one of central hypotheses -- has brought a significant increase in socio-economic inequality in access to higher education. One of the most frequent arguments against the implementation of any form of cost-sharing (tuition fees and loans, deferred tuition, graduate tax, etc.) in tertiary education in post-communist countries has been that it would bring about a significant increase in inequality in access to higher education, blocking especially children from low income and working class families. The counter-argument could be raised, however, that the inequality in access to tertiary education has already increased after 1989, particularly due severe financial austerity of universities that could not expand the supply of educational opportunities to meet rapidly growing demand for tertiary after the collapse of the communist system. The growing imbalance between demand and supply of educational opportunities resulted in enormous competition at the entry to tertiary education, in which lower social classes tended to lose.

First of all, the analyses confirmed that one of the most important changes in social stratification that affected the demand and competition for higher education has been a steady a growth in the economic returns to higher education. Consequently, the perceived role of education among strategies for personal advancement significantly grew, and achieving higher education gradually developed into a principal strategy for life-success. All these processes that took place in the class structure and social stratification in the post-communist Czech Republic brought about a growing awareness of the costs, risks and benefits of achieving higher education.

The results of analyses of extensive data sets from various surveys confirmed that the level of inequality in access to higher education is significantly higher in formerly communist countries than in advanced OECD nations. The analysis of the long-term changes in the odds of making transition between secondary school and university between individuals of different social background revealed that, in the Czech Republic, the socio-economic inequality in the access to higher education significantly increased during the post-communist transformation.

We also asked, what structural conditions contributed to high social selectivity of school systems in formerly communist countries. To understand growing inequality in access to university education, we examined also lower levels of the educational system. Comparative studies have shown that the Czech education system appears to be one of the most selective among OECD countries also when we take into account primary and secondary schools. It is primarily due to the fact that the selection of students to various types of schools occurs at an early age. In the majority of advanced countries, the first selection occurs no earlier than once a child has reached fourteen years of age. Most of the post-communist countries went the opposite direction. As for the age at which the first selection takes place, the Czech Republic ranks right behind Austria and Germany (countries showing also very high selectivity), with eleven years of age being the point at which the transition of fifth grade students to a multi-year gymnasium (quite an elite type of school) takes place.
To understand the selection process that occurs at the early age, we used the data from the OECD Programme for International Student Assessment (PISA), which assessed the level of knowledge and skills among fifteen-year-old students in mathematics, science, and reading, and made a detailed record of the family background of the students. The analysis revealed that the Czech Republic belongs to the countries where the overall variation in the test results, which can be attributed to the differences between the schools, is extremely high. We have found that this is primarily due to the existence of multi-year gymnasia, which proved to be the most important source of variation in the results of students at individual schools at the end of compulsory education. However, decisive part of this effect of multi-year gymnasia on test results can be accounted for by the variations caused by the different socio-economic status of the students at the basic schools and the students at the multi-year gymnasia. Therefore, the results of our analyses seriously challenged the general idea that multi-year gymnasia significantly contribute to the increased development of the capabilities of the students, which explains their success in subsequent phases of educational career.

The analysis also revealed that the differences in the test scores of students at the end of compulsory education primarily reflect differences that existed between students at the time some of them entered the multi-year gymnasia. Thus, the differences in the results of students at basic schools and multi-year gymnasia can be largely explained by the different family background of their students. Therefore, we have found that multi-year gymnasia do not act as a tool of upward educational mobility, but instead contribute to preserving the existing state of affairs. While the dependence of aspirations on family background and even on student results was indeed found to be substantially weaker at the multi-year gymnasia, very few students will be able to profit from this fact, as the proportion of students at multi-year gymnasia who come from a socially disadvantaged environment is very small.

The results of analyses of lower levels of educational system confirmed that extremely strong competition at the entry the tertiary education (university) results in a strong support of the current elites to the existence of the multi-year gymnasia and other elite type of schools, because these schools, also very selective on a socio-economic basis, enable them to secure relative advantages for their children in the admission process for university.

This assumption was further elaborated by the analysis of the extensive data from the survey carried out on all secondary school students graduating in 1998, who were followed during the admission procedure to university in 1998 and 1999. It proved the existence of significant inequalities in access to education, specifically relatively strong effect of two factors on the secondary school graduates’ study aspirations as well as on the applicants’ success in the actual university admission procedure. These factors are: a) the type of secondary school attended and b) social background (their parents’ education). These factors affect the educational career decisions of many secondary school graduates, regardless of their measured study aptitudes.

Thus, we were able to support our initial hypothesis that inequalities in access to university education are probably formed at the students’ young age already. Parents who have attained tertiary education usually send their children to special track classes already in the third or fourth year of primary school. Only about 10 percent of pupils leave for multiyear gymnasia after the fifth year - rather early in the course of compulsory schooling and the education system lacks sufficient space for the development of the less motivated pupils. In special track classes and at multiyear gymnasia, more attention is devoted to the students’ study enthusiasm and they are artificially integrated into an elite community. This undoubtedly influences their further development. Throughout their studies, they are systematically supported in their interest in further (university) study and guided towards it - the preparation for university studies is the most frequent reason for the choice of multiyear gymnasium studies.
Apart from the secondary school type attended, the students’ social background may represent another kind of disadvantage in the course of the university admission procedure. This may prove a burden especially if the student is interested in a faculty with limited capacity. At such faculties, children of parents with tertiary education are more successful regardless of the study aptitude they have demonstrated.

Our analysis has shown that though the admission process itself is the subject of justified skepticism as for its transparency and objectivity, the problem of inequalities in the chances for success in the university admission procedure does not lie exclusively therein. The scarcity of university education opportunities compared to the aspirations for its attainment remains the utmost problem. In the fully publicly financed system schools are not stimulated to admit as many applicants as possible. This logically substantiates admission procedure methods aiming to justify the rejection of as many candidates as possible instead of the reverse, of finding sufficient study aptitude in as many candidates as possible and giving them the opportunity to prove it during their studies. One of the consequences is the increasing inequality in access to higher education, we documented at all levels of the Czech educational system.

2. Major policy recommendations

Relatively high and still growing level of inequality in access to higher education begins to be reflected by the population as a problem that has to be resolved. The problem is that the ability of universities and other institutions of higher education to accommodate the growing numbers seeking and deserving higher education is increasingly limited by a worsening financial austerity. These limitations are especially acute in the countries of Eastern and Central Europe. If the imperative for the countries of Eastern and Central Europe is to expand educational opportunities, particularly at the tertiary level, then the governments have to pursue a deep reform of financing higher education, which would significantly increased revenues of educational institutions.

The analysis of OECD data suggests that there are three relatively distinct types of systems of financing higher education: a) systems in which the relatively high share of private funds is offset by the strong programs of student financial aid (Australia, USA, Canada), b) systems in which the state, in addition to covering the majority of the costs of higher education, also considerably contributes to covering the costs of study (the Scandinavian countries); c) systems in which the share of private funds directly devoted to higher education is low and where very little assistance is offered by the state to cover the costs of study (post-communist countries, Portugal, France, Germany). The same sources of data further indicate that the inequality in access to higher education tends to be higher in countries without tuition fees and weak programs of student financial aid (type c) than in the other two types of countries (type a and b).

Therefore, the post-communist countries, the implementation of cost-sharing, which is a shift from higher educational costs being borne exclusively or predominately by governments and taxpayers, to being shared by parents and students as well, seems to be inevitable step. An effective and equitable policy of cost sharing policy requires a modest fee that can either be deferred and repaid out of the presumably higher earnings of university graduates or paid for by those parents or students who are financially able or prefer the up-front payment (parents can assume responsibility for students, but should not be required to do so).

In any event cost sharing must expand accessibility and opportunity rather than limiting these important social and political goals. This policy would require that the additional revenue from parents and/or students be always the revenue of the universities, supplementing rather than supplanting their revenue currently available from governments/taxpayers. Also, due to the increasing socio-economic inequality and relatively inequality in access to higher education in East-Central European countries (compared with the advanced OECD countries), strong programs of student financial assistance should be designed and implemented. These programs should
correspond with the chosen model of cost-sharing. Allowances, grants and/or other programs of financial assistance to students from low-income families must be designed to help them with covering their living costs. Attempts to introduce fees without implementing strong and well designed programs of financial assistance to low-income students would only blemish the whole idea of cost-sharing in these countries.

Large representative survey carried out in October 2003 in the Czech Republic shows that while maintaining the ideal of full public financing of higher education (“university education should be free of charge”), the majority of the Czech population believes that the implementation of tuition fees and student financial aid would raise the access to higher education, and that there is only very little variation in this opinion among respondents of different political orientation and electoral preferences. It shows that the Czech population has begun to outrun its political elite in understanding the dilemma between raising educational aspirations of the population and declining ability of governments to meet this growing demand for higher education within the existing system relying solely on public financing.